

***Exxon Valdez* Oil Spill**

State Trial Transcript

Case Number 3AN-89-2533 civil

1994

Volume 25 - Volume 36

Includes State Court Hearing Excerpts

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- (11) IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (12) THIRD JUDICIAL DISTRICT
 (14) In re) Case No 3AN 89 2533 Civil
) Anchorage Alaska
 (15) The EXXON VALDEZ) Thursday July 28 1994
) 8 52 a m
 (16))
 (18) VOLUME 25 Pages 3865 through 4028
 (101) TRANSCRIPT OF PROCEEDINGS (Continued)
 (111) TRIAL BY JURY
 (121) BEFORE THE HONORABLE BRIAN C. SHORTELL
 Superior Court Judge
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- (1) PROCEEDINGS
 (2) (Jury in at 8 52 a m)
 (3) (Call to Order of the Court)
 (4) MR DIAMOND May we approach on one matter
 (5) THE COURT Yes uh huh
 (6) (Sidebar conference held out of the presence of the jury)
 (7) MR DIAMOND I understand that Mr Fortier is going
 (8) to try introduce a document not identified as an exhibit for
 (9) this witness and not previously produced in this case I
 (10) thought we were going to take this up prior to the arrival of
 (11) the jury but apparently -
 (12) THE COURT What is the document?
 (13) MR FORTIER The document is this junk and I
 (14) wouldn't have introduced it without seeking the Court's
 (15) position We did not mark it as an exhibit that is true It
 (16) is a document that relates to Northwestern Lagoon We believe
 (17) that it is a Park Service document This is a 7 million dollar
 (18) alleged mistake The documents had been previously
 produced to
 (19) the defendants
 (20) MR DIAMOND May I have a moment to get my file?
 (21) THE COURT Sure
 (22) MR FORTIER I'll get mine too Your Honor
 (23) THE COURT You want me to send the jury out?
 (24) (Sidebar concluded)
 (25) THE COURT This is really a quick one

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- (1) (Jury out at 8 55 a m)
 (2) THE COURT All right Counsel I see the document
 (3) What - the objection is -
 (4) MR DIAMOND The objection is threefold
 (5) Number one this document was never produced to us in
 (6) discovery It was expressly withheld on the grounds of
 (7) privilege
 (8) Number two it is not relevant for any purpose because this
 (9) witness knew nothing about it in terms of developing any
 (10) opinions It was discovered by Mr Fortier's office amongst
 (11) their files sometime late last night and first sent to me at
 (12) quarter to 10 00 in the evening last night
 (13) Number three there's no foundation for this document
 (14) Nobody knows what it is
 (15) THE COURT I can't tell what it is
 (16) MR DIAMOND And we've never seen it before Nobody
 (17) on our side of the case has seen a document like it We don't
 (18) know where it came from who created it what the indicia for
 (19) liability might be We have no way of cross examining it No
 (20) way to challenge it We don't know whether we can attack it as
 (21) a bogus document - not that I'm suggesting anybody over here
 (22) created it - but for all we know it could have been created
 (23) on a word processor in the last year by some well intended
 (24) person
 (25) THE COURT Counsel what is it?

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- (1) MR FORTIER Your Honor it is a document from the
 (2) National Park Service Relates to Northwestern Lagoon We
 (3) produced it first I believe on May 29 of 1992 Mr Diamond
 (4) has indicated that it was initially withheld as privileged It
 (5) is unfortunate - and I will concede that the document in 1992
 (6) was withheld as privileged - however because - see I know
 (7) what happened Your Honor And what happened was that the
 -
 (8) my office did not submit TAPA documents in 1992 In May of
 (9) 1992 documents that had been produced to the Trans Alaska
 (10) Liability Fund weren't produced to the defendants I found out
 (11) that they weren't produced did a supplemental production two
 (12) weeks later in which all the documents were produced That
 (13) document comes from a production from Port Graham
 Corporation
 (14) with production number on it of 1609414 this particular
 (15) volume
 (16) MR McCALLION The date?
 (17) MR FORTIER The date of it I believe Your Honor
 (18) of that production was May 29th - yeah the 29th of May
 (19) So In addition Your Honor the defendants have taken the
 (20) position consistently taken the position the documents that
 (21) were available as part of the public - or generally publicly
 (22) available need not be produced by the defendants This
 (23) document is a National Park Service document They would
 have
 (24) received it from us through Port Graham's production And I
 (25) believe that they would have received it through the National

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- (1) Park Service as well It's available in the reading room of
 (2) the cultural resources library
 (3) We need it in order to establish that when Ms Johnson or
 (4) when Dr Johnson testified that there was oil in Northwestern
 (5) Lagoon that she wasn't just dreaming it up So it goes to the
 (6) issue of a prior consistent statement as well
 (7) THE COURT Of whom?
 (8) MR FORTIER I beg your pardon?
 (9) THE COURT Prior consistent statement of whom?
 (10) MR FORTIER Of Dr Johnson that she recalls seeing
 (11) documents relating to oiling of Northwestern Lagoon
 (12) THE COURT I'm having a problem understanding your
 (13) prior consistent statement theory Would you explain it in a
 (14) little more detail?
 (15) MR FORTIER I don't want to do that again Your
 (16) Honor What I'd rather do is discuss - that's my argument on
 (17) the document You know I'd like - I think that if I -
 (18) THE COURT This is a document of the Park Service?
 (19) MR FORTIER That's correct
 (20) THE COURT That contradicts the admission she made
 (21) yesterday about Northwestern Lagoon right
 (22) MR FORTIER I don't think it contradicts it Your
 (23) Honor It's consistent with her testimony that she thought
 (24) there was some oiling in Northwestern Lagoon The testimony
 (25) yesterday was that there was a document which indicated there

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- (1) was oiling on the eastern side of the Harris Peninsula which
 (2) is a - it's a bay over it's called Aialik Bay It's a bay
 (3) over from Northwestern Lagoon in the Kenai Fjords
 (4) THE COURT Where on this document does it show that
 (5) the Northwestern Lagoon was oiled?
 (6) MR FORTIER Towards the bottom of the document Your
 (7) Honor there's a reference to clean up workers picking up
 (8) mousse at Northwestern Lagoon on around June 15th of 1989
 (9) THE COURT Counsel you can't use the document
 (10) MR FORTIER Okay
 (11) THE COURT For all of the reasons Mr Diamond gave
 (12) Anything else?
 (13) MR DIAMOND No Your Honor
 (14) THE COURT All right bring the jury in
 (15) THE COURT This is Court's exhibit next in order
 (16) 21 That document will be marked as Court's next in order
 (17) number 21
 (18) (Jury in at 9 02 a m)
 (19) THE COURT All right The jury is present Go
 (20) ahead counsel
 (21) MR FORTIER Thank you Your Honor
 (22) REDIRECT EXAMINATION OF LORAL JOHNSON Ph D
 (23) BY MR FORTIER
 (24) Q Dr Johnson I want to cover a few questions with you try
 (25) and clear some things up There was some discussion
 regarding

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- (1) Northwestern Lagoon yesterday
 (2) Can I have the Elmo please?
 (3) One of the documents you were shown was an archaeological
 (4) clearance surveillance - or survey form Do you recall that
 (5) document?
 (6) A Yes I do
 (7) Q Now Dr Johnson you weren't asked about the second - or
 (8) a portion of the second page of the document I'd like to
 (9) refer you to the portion of the second page and particularly
 (10) to Paragraph Number 15
 (11) A Yes
 (12) Q Now Dr Johnson what was your concern about
 Northwestern
 (13) Lagoon?
 (14) A Well based on - on this document and my mistake with the
 (15) other document that we talked about yesterday I was under
 (16) the - well I had thought that there was mousse - excuse me
 (17) that there was oil in the area of Northwestern Lagoon I do
 (18) recall this particular paragraph and it had stuck in my mind
 (19) but I wasn't sure whether it was this particular document or
 (20) some other - some other site that I was remembering it from
 (21) so I didn't - didn't bring it up yesterday But what it says
 (22) is that there was a recommendation for a monitor - or that -
 (23) that there should be monitoring for the effect of mousse coming
 (24) ashore and to increase visitation related to clean up
 (25) activities in Harris Bay

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- (1) Q Can I interrupt you just a moment? Sorry Dr Johnson
 (2) A Okay
 (3) Q But for just a moment I just wanted to refer you to
 (4) Increased visitation related to clean up operations in Harris
 (5) Bay for right now
 (6) A Okay
 (7) Q Okay yes
 (8) A That that was - that was a general concern
 (9) Q Okay And this was a document generated by whom do you
 (10) know?
 (11) A I believe it's the National Park Service
 (12) Q Just show you -
 (13) MR DIAMOND Sam hold on for a second
 (14) MR FORTIER We're having a ringing over here
 (15) MR OPPENHEIMER We're reasonably certain nothing's
 (16) going to blow up here
 (17) THE COURT I think that's a clue to you Mr Diamond
 (18) you're supposed to object now
 (19) MR FORTIER Something -
 (20) MR DIAMOND Either that or catch a plane
 (21) MS SMITH It won't die
 (22) MR DIAMOND Would you have the bailiff remove the
 (23) computer from the courtroom?
 (24) THE COURT I am going to hold it in contempt
 (25) MR PETUMENOS Is there a hammer back there Judge?

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- (1) MR OPPENHEIMER Whatever we did worked
 (2) MR FORTIER The hammer wasn't necessary
 (3) BY MR FORTIER
 (4) Q Dr Johnson I just wanted to know whether you knew
 whether
 (5) this was a National Park Service form?
 (6) A Yes
 (7) Q So the Park Service too was concerned about -
 (8) A Yes
 (9) MR DIAMOND Objection no foundation
 (10) THE COURT Sustained The jury is to disregard that
 (11) last question
 (12) BY MR FORTIER
 (13) Q Did you talk with the Park Service?
 (14) A Not specifically no
 (15) Q Now Dr Johnson you were also asked some questions
 (16) concerning an area where there were midden places Do you
 (17) recall that?
 (18) A Yes I do
 (19) Q At Granite Bay was it?
 (20) A Yes
 (21) Q Now Dr Johnson when you prepared your exhibits
 (22) including Exhibit 1366A that's this exhibit here?
 (23) A Yes
 (24) Q Now that exhibit concerned sites on Chenega lands?
 (25) A Yes it did

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- (1) Q And in preparing the document did you look at records of
 (2) the - of the Exxon Cultural Resource Program?
 (3) A Yes I did
 (4) Q And did you rely upon archaeologists' field notes?
 (5) A Yes I did
 (6) Q When you were looking at the - at the field notes
 (7) concerning the Granite Bay area the bed springs one did you
 (8) find anything in the Exxon archaeologists' field notes
 (9) concerning the likelihood or probability of additional cultural
 (10) remains in the Granite Bay area?
 (11) A Yes I believe it's on the cultural resource evaluation
 (12) sheet that has the archaeologists' field notes or some of
 (13) them a shorter summary of them where he indicates the high
 (14) probability of finding sites or finding additional cultural
 (15) materials in this area
 (16) Q Let me show you some of the backup to this part of 1366
 (17) if I could Dr Johnson Can you tell me what this form is?
 (18) A Yes it's the cultural resource evaluation that's prepared
 (19) by the archaeologists
 (20) Q By the Exxon archaeologists?
 (21) A Exxon archaeologists yes
 (22) Q Towards the middle of the page Dr Johnson there's a
 (23) reference to the probability of undiscovered artifacts in the
 (24) beach zone do you see that?
 (25) A Yes I do

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- (1) Q Now based upon your knowledge of the Exxon Cultural
 (2) Resource Program and having worked in coordination with
 them
 (3) for two years in 1988 and - 1989 and 1990 do you know what -
 (4) what the rating system there in the middle means the
 (5) probability of undiscovered artifacts in beach zone and there's
 (6) a circle one through five?
 (7) A Yes One is the lower - lowest priority and five is the
 (8) highest
 (9) Q And so Dr Johnson did you rely upon the form or upon the
 (10) Exxon archaeologists' observation of the high probability of
 (11) undiscovered artifacts in the beach zone when you were
 (12) preparing your damage assessment?
 (13) A In terms of formulating my opinion about the importance of
 (14) this site I did consider this yes
 (15) Q Can you tell the jury what you considered?
 (16) A Well just the probability of additional cultural remains
 (17) in the area and basically it comes from these type of
 (18) references just general - well the fact that there are
 (19) cultural remains at the site this particular type of
 (20) reference
 (21) They also mention here that monitoring during cleanup is
 (22) needed And so again what this indicates to me is that the
 (23) archaeologists felt that there was significant materials
 (24) there They didn't often recommend monitoring It was - it
 (25) wasn't something that was frequently recommended Let's see

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- (1) Also I guess in terms of formulating my opinion about the
 (2) site it had to do with just general information about this
 (3) area of the Sound in terms of - well use of the area by
 (4) Chenega Natives over time basically
 (5) Q Did you rely upon the Chenega Natives understanding of the
 (6) area too Dr Johnson?
 (7) A Yes I did
 (8) Q What did you rely upon?
 (9) A Well in some case just conversations over time with
 (10) people about use of these areas? Not specifically Granite Bay
 (11) but as I recall - but just in general the different areas
 (12) it may have come up but I don't recall specific areas
 (13) But also information that Chenega had put together about
 (14) place names connected with sites in the area to - in terms of
 (15) place names these are important indicators not just in this
 (16) particular case but many of the sites because it records -
 (17) it's a form of oral tradition is what it is That if you have
 (18) Native place names for locations it indicates that it is a
 (19) place that was known at least in earlier historic times and
 (20) possibly as far back as prehistoric times and every location
 (21) out there doesn't have a place name
 (22) Some of these areas around Chenega Evans Island and so
 (23) forth do have place names associated with them so the fact
 (24) that there are a lot of place names in the area makes me you
 (25) know more - well actually I guess the way to put it is that

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- (1) there's - it shows to me that there is a rich tradition about
 (2) use of this area in general and that there is likelihood of
 (3) finding physical remains along the shoreline
 (4) Q When you say in general are you referring to Granite Bay?
 (5) A Granite Bay is an example but there's - there's other
 (6) locations as well
 (7) Q Do you know whether or not there is a Chenega place name
 (8) associated with Granite Bay?
 (9) A There is yes
 (10) Q Specifically with the Granite Bay area?
 (11) A Yes there is
 (12) Q Okay Another area you were asked about with regard to
 (13) Chenega Dr Johnson was the Evans Island area
 (14) Now during the time you were working for the Chugach oil
 (15) spill response team did you have any contact with an
 (16) archaeologist by the name of Mr Phippen?
 (17) A I have had contact with him yes
 (18) Q What did Mr Phippen do in 1989?
 (19) A He was one of the Exxon archaeologists
 (20) Q And did you find during your survey of the records of the
 (21) Cultural Resource Program information relating to the - to the
 (22) Evans Island property? That was the one I think where
 (23) counsel had referred you to some nails and asked whether or
 (24) not that was related to Native -
 (25) A Yes there were some structural - structural remains

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- (1) And again this is the type of form or the form that I had
 (2) looked at in terms of looking for evidence for the site and as
 (3) it says that there's a high probability of sites in the area
 (4) Q And Dr Johnson is this also a cultural resource form
 (5) from Exxon?
 (6) A Yes it is
 (7) Q So you also relied upon Exxon's finding that there was a
 (8) high likelihood very high potential for sites along the
 (9) segment then?
 (10) A Yes
 (11) Q And that was part of your damage assessment as well?
 (12) A It played a role in formulating my opinion about the site
 (13) yes
 (14) Q Now another matter I wanted to talk with you about with
 (15) regard to Chenega was this Guguak Bay pulley matter
 (16) Dr Johnson can you tell the jury whether or not your damage
 (17) assessment includes any money with regard to the Guguak Bay
 (18) pulley?
 (19) A With regard to the - specifically the pulley itself
 (20) that - we're not - as I - okay as I tried to explain
 (21) yesterday or whenever it was when we look at the area a
 (22) particular area where a site is located you try to look at all
 (23) of the evidence that's available and the pulley is an historic
 (24) remain that was available
 (25) The hearth or probable hearth is another type of cultural

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- (1) remain that is visible and available to evaluate And
 (2) culturally modified trees are also another physical remain that
 (3) one can evaluate
 (4) The focus of this is really on the hearth itself and the
 (5) Native use of the site The pulley itself has been
 (6) collected as was pointed out and in terms of focusing on the
 (7) site area the focus is really on the - the hearth area and
 (8) the culturally modified trees again the Native use of this
 (9) site The pulley itself basically is just a point of
 (10) information but it's not the focus of what the damage
 (11) assessment is
 (12) Q Okay Now this Guguak Bay area you've talked with the
 (13) Chenega people about the Guguak Bay area?
 (14) A Yes I have
 (15) Q Did you learn anything about it?
 (16) A Again this is a location where there's a place name
 (17) associated with it and I believe it refers to fishing
 (18) activities a Native name connected with it
 (19) Q And is that indicative of historic and prehistoric use?
 (20) A Again in the same vein as Granite Bay and other locations
 (21) in the area that - where you have Native place names
 (22) connected
 (23) with the location that there is a higher probability of finding
 (24) physical remains of some sort
 (25) Q Do you know who Kirk Wilson is?
 (26) A Yes I know him

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- (1) Q Do you know whether or not Kirk Wilson was an Exxon archaeologist?
- (2) A Yes Yes he was
- (3) Q Do you know whether or not Kirk Wilson was in the Guguak Bay area?
- (4) A I can't recall specifically that he was
- (5) Q Let me show you another page from - from the Chenega document from 1366A if I could Dr Johnson Do you see a reference to a possible hearth?
- (6) A Yes This is - this is the document that provides the -
- (7) the information
- (8) Q Do you - is this a - an Exxon document?
- (9) A Yes It is
- (10) Q Now there's also a reference on the document to - to monitoring during cleanup?
- (11) A Yes there is
- (12) Q Would Exxon - do you know whether or not based upon your
- (13) experience with ISCC whether or not Exxon would have recommended monitoring during cleanup unless it thought too
- (14) the area was an area of high cultural resource possibilities?
- (15) A Archaeologists in the program various archaeologists would recommend monitoring and in - I think it's fair to say that if
- (16) an archaeologist does recommend it that it is for those
- (17) reasons
- (18) Q Oh Dr Johnson I was going to ask you there's another

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- (1) reference on the site to no subsurface testing allowed Do you
- (2) know what that means?
- (3) A No subsurface testing basically what this refers to is -
- (4) MR DIAMOND I'm going to object Your Honor without
- (5) foundation at this point
- (6) THE COURT Let me hear the question again please
- (7) MR FORTIER I asked her if she knew what the
- (8) reference to no subsurface testing allowed meant Your Honor
- (9) THE COURT Objection sustained
- (10) BY MR FORTIER
- (11) Q When you were associated with ISCC did you work at all
- (12) with the Exxon Cultural Resource Program with regard to the
- (13) issue of testing of the subsurface areas in cultural sites?
- (14) A We had discussions on it yes
- (15) Q And do you have an understanding or does the term
- (16) subsurface testing have a special meaning in the field of
- (17) archaeology?
- (18) A Basically It has - well It has a couple different
- (19) meanings Generally what it refers to is putting a test pit in
- (20) to see if there's subsurface deposits
- (21) Q Why would an archaeologist put in a test pit?
- (22) A Basically to see if there are subsurface deposits in a
- (23) location where there's some evidence whether it's physical
- (24) evidence or some sort of oral account of there being a site
- (25) Q Now you indicated you had an understanding of what the

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- (1) Exxon Cultural Resource Program meaning of subsurface testing
- (2) was
- (3) A Yes I - I have a pretty good - well I know what they
- (4) are referring to in terms of subsurface testing
- (5) Q What are they referring to?
- (6) MR DIAMOND Your Honor I object as without
- (7) foundation if she can testify about what the allowed means
- (8) There's no foundation for that the last word in the note if
- (9) she just wants to talk about no subsurface testing she can do
- (10) that
- (11) THE COURT Objections overruled counsel
- (12) BY MR FORTIER
- (13) Q Go ahead please
- (14) A Could you repeat the question again? Is the question what
- (15) does this mean?
- (16) Q Yes
- (17) A What this means is that Chenega Village did not want
- (18) subsurface testing on their lands
- (19) Q Now besides the sites that Dr - or excuse me besides
- (20) the sites you discussed yesterday Dr Johnson on Chenega
- (21) lands that have nails and bed springs were there sites that
- (22) were almost - that were in - that were also composed besides
- (23) what we just talked about the Granite Bay Guguak Bay and the
- (24) Evans Island sites sites that were prehistoric?
- (25) A Yes

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- (1) Q And those sites also appear in your - in your - in your
- (2) summary right in your study?
- (3) A Yes There's both historic and prehistoric sites
- (4) Q In your working with - with the Chenega Corporation did
- (5) you come to an understanding of what the importance of the
- (6) Point Helen area was to the Chenega people?
- (7) A Yes It's pretty well known that Point Helen is an area
- (8) that Chenega recognizes as a former settlement or land area
- (9) that was a settlement area or area that was used by the
- (10) Chenega people at some point in the past
- (11) The tradition basically goes that there were villages along
- (12) the south coast or southwest coast of Knight Island It is
- (13) thought that the earliest one was located at the point and
- (14) that subsequently the village basically moved up the coast
- (15) until it finally moved over to Chenega Island So what the
- (16) point of it is is that this is part of the tradition in terms
- (17) of these sites being important Native sites to the people of
- (18) Chenega that these are their former village sites and it's
- (19) part of this type of oral tradition
- (20) Q Now there was another site that I think was identified
- (21) called Little Bay?
- (22) A Yes
- (23) Q Do you know whether or not - can you tell us what happened
- (24) if anything at Little Bay in 1989?
- (25) A Well first Little Bay is - is one of the sites further up

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- (1) the coast on the southwest side of Knight Island and at this
 (2) particular location a number of artifacts - I believe it was
 (3) something like 45 thereabout - were collected by Exxon
 (4) archaeologists at the site
 (5) Q These artifacts been there or had they been known to exist
 (6) there for some time Dr Johnson?
 (7) A They had - they had been placed there and some general
 (8) information I believe had been known about them
 (9) Q Dr Johnson, yesterday you were asked about Rua Cove If I
 (10) were to show you a map could you show the jury where Rua
 Cove
 (11) was?
 (12) A Yes
 (13) Q I'll show you on the - Dr Johnson if you want to come
 (14) around in front of the jury I'll - I'll show you this 1167
 (15) It know it's hard to see for you in the back You can walk
 (16) over this way a little bit more
 (17) Now Dr Johnson can you point out where Rua Cove is?
 (18) A Yes It's this little cove here (indicating)
 (19) Q This one right here?
 (20) A Yes
 (21) Q And you were asked yesterday some questions about
 whether
 (22) or not that area was oiled lightly oiled?
 (23) A Yes
 (24) Q Or whether it was oiled at all?
 (25) A Yes Basically what it is is I had participated in

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- (1) various oil evaluations shoreline oil evaluations or surveys
 (2) I should say for Chugach Alaska Corporation and basically
 (3) these followed the lands here in green that are Chugach lands
 (4) And one of the areas that we did go to was Rua Cove and I
 (5) remember that because it's a pretty - pretty distinctive
 (6) cove And I remember - I remember thinking yesterday that it
 (7) was heavily oiled but the documentation basically confused me
 (8) because it was saying the oil - this area the cove itself
 (9) is very heavily oiled
 (10) Q On the Chugach map it's indicating oiled there as well
 (11) Isn't it?
 (12) A Basically it's this cove itself I think it's much more
 (13) lightly oiled to the north and south but the cove itself was
 (14) pretty badly hit
 (15) Q The Rua Cove area was pretty heavily oiled?
 (16) A Yes yes
 (17) Q And is that where the archaeological site is Dr Johnson?
 (18) A Yes Access to the site is through the southern area and
 (19) the small little cabin is just sort of upland You walk along
 (20) a little path and then the mine remains are up in the uplands
 (21) of that
 (22) Q Okay thank you
 (23) Dr Johnson you were asked some questions yesterday
 (24) regarding an electric fence I think it was up at Granite
 (25) Bay In your opinion would an electric fence solve the issues

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- (1) that you were faced with in this case?
 (2) A No I don't believe that they would
 (3) Q Why not?
 (4) A Well basically - I mean I guess the way to look at it is
 (5) a fence could solve certain types of problems and for a certain
 (6) period of time I mean there's a lot more involved than just
 (7) putting a fence up
 (8) What - when we were looking at assessing the damage
 (9) trying to figure out what to do we were trying to find sort of
 (10) a final solution and the one that I myself and Jack Lobdell
 (11) are recommending to the corporations basically is this data
 (12) recovery program which in a sense is a final statement in
 (13) terms of scientific data that once one goes to a site and
 (14) recovers the archaeological context that can never be lost
 (15) again The archaeological context basically gets transferred
 (16) to paper and becomes part of our body of knowledge and you
 (17) can't lose it anymore
 (18) With a situation like fences whether it's electrical or
 (19) not that's an option that has been considered both
 (20) hypothetically here as well as in reality at other
 (21) locations There's problems with it in terms of putting fences
 (22) up apart from the aesthetics in terms of seeing fences all
 (23) over the place around sites You have problems in terms of
 (24) does this really prevent people from going into the site or
 (25) would it attract people to a site Most of the areas we're

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- (1) talking about here are in somewhat remote locations and so
 (2) basically people that have access to it would have access to
 (3) these sites at times when no one else would be around and so
 (4) the question would be how effective - effective would a fence
 (5) be in terms of preventing people from gaining access to the
 (6) site or protecting the site in the long run
 (7) Q Now let's just talk about this Granite Bay site for just a
 (8) moment Is there electricity at Granite Bay?
 (9) A Not that I - I don't think so
 (10) Q This would be kind of hard to hook up an electric fence
 (11) right?
 (12) A Yes
 (13) Q Dr Johnson you also I think indicated that you -
 (14) yesterday that you had looked at - at in addition to the
 (15) impact to the - to the sites for which damages were actually
 (16) being claimed by the Native corporations the overall impact of
 (17) the oil spill on - on cultural resources throughout the oil
 (18) spill area Is that correct?
 (19) A That's correct
 (20) Q And why did you do that?
 (21) A Well in 1989 part of the system was that this - the
 (22) documents came through on a regular basis and basically we
 (23) had the opportunity to review all of the segments for - well
 (24) I was in Valdez so we reviewed the documents for the Prince
 (25) William Sound area

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(1) The - there are a couple of reasons why we were interested
 (2) in reviewing all of them Our focus was on sites that belonged
 (3) to the corporations but beyond that the corporations also
 (4) have an interest in Chugach sites that the corporations not
 (5) claiming So there's more out there in terms of cultural
 (6) remains that we would have an interest in that we're not
 (7) necessarily bringing here in terms of damages this type of
 (8) thing that - I don't know
 (9) Q So you have to look at all of the - at the overall pattern
 (10) in order to see what was happening?
 (11) A Well the thing is is we - first of all we just had a
 (12) concern for sites in general and specifically with our own
 (13) sites but sites in general and so we would review basically
 (14) all of the documents that we had access to and try to help with
 (15) the process of formulating opinions on these
 (16) In terms of how this affected my own opinion some sites -
 (17) some significant sites that are not corporation sites were also
 (18) important and there was concern about impacts to these
 (19) because
 (20) of the heritage connection between the Chugach In general,
 (21) and
 (22) these site - different site locations
 (23) Q And did you prepare a log of examples of impacts to sites
 (24) other than those sites that the Native corporations are
 (25) claiming damages for?
 (26) A Well in the process of reviewing all of the - well
 (27) damages in general to the corporation site basically we

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(1) looked at the overall picture and in the process we reviewed
 (2) documents that pertained not only to our sites but to sites in
 (3) general The - one of the - or some of the charts that we
 (4) talked about yesterday had been limited to specifically to
 (5) sites that are being claimed That is basically a shorter
 (6) version of the charts that had been prepared earlier that just
 (7) referred to actual or potential incidents throughout the -
 (8) throughout the oil spill area
 (9) Q Dr Johnson I want to show you -
 (10) MR DIAMOND Before you do that Your Honor I object
 (11) as without foundation We have foundation as to who prepared
 (12) this and circumstances of its preparation I think that's what
 (13) Mr -
 (14) BY MR FORTIER
 (15) Q Dr Johnson do you want to tell who prepared these and the
 (16) circumstances of preparation?
 (17) A Yes Basically in terms of field notes that - Exxon
 (18) archaeologists field notes are the basis of these documents
 (19) Fortier and Mikko their staff did select a number of these
 (20) documents from the field notes I have looked at many of these
 (21) field notes just the actual field notes themselves and have
 (22) looked at the excerpts the pages that were pulled out and
 (23) basically it agrees with my own understanding - or my own sort
 (24) of basic research on both these documents as well as my
 (25) research in terms of other documents Whether they're the

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(1) cultural resource evaluation document sheets or whether they
 (2) are reports that were generated that provide much more
 (3) detailed
 (4) information than the references do in these - well that are
 (5) referenced here And so basically with these I consider it
 (6) my - my own chart because going through the documentation
 (7) I
 (8) feel very comfortable in agreeing with what these charts
 (9) represent
 (10) Q Now Dr Johnson I'd like to show you -
 (11) MR DIAMOND Before you do that Your Honor I'll
 (12) object to the use of the charts These charts weren't made by
 (13) the witness they were made by lawyers All she said she's
 (14) reviewed the excerpts that were attached She hasn't reviewed
 (15) the balance of the information This is attorney work product
 (16) THE COURT The objections overruled Go ahead
 (17) BY MR FORTIER
 (18) Q Before I do that Dr Johnson did you in fact review the
 (19) body of the work?
 (20) A I reviewed most of the body of the work In other words
 (21) what we're talking about is the actual field notes which is
 (22) volumes and volumes of field notes I reviewed large portions
 (23) of this Many of these that are referenced are actual field
 (24) notes that came through during the course of my review back in
 (25) 1989 and 90 - I have also gone through all of the back up
 (26) documentation connected with the references and feel
 (27) comfortable that - that we're not just selectively pulling

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(1) things out In fact what - what this is - it's only a
 (2) partial listing of examples and I think we're going to explain
 (3) what the charts are - I think that's what we'll - what should
 (4) be done at least
 (5) Q Okay why don't we do that I'm going to show you what's
 (6) been marked as 1289A Can you tell us what this chart is
 (7) please?
 (8) A Basically what this chart is it's called Selected
 (9) Examples of Vandalism Disturbance and Impacts What it is
 (10) it - it is not meant to indicate that every instance every
 (11) listing here is an actual case of vandalism disturbance or
 (12) impact but what it is is it is what - how to put it - in
 (13) the course of reviewing documents one comes across these
 (14) type
 (15) of references here and in other bodies different sets of
 (16) documents and so you may have like a reference to
 (17) disturbance
 (18) at a particular site or a particular location There are many
 (19) different types of references Whether it's this artifacts
 (20) collected from the burial cave in fact this refers to
 (21) archaeologists collecting artifacts
 (22) The next one down The KN 112 problems Bob collecting
 (23) artifacts In fact this refers to - Bob here is actually an
 (24) archaeologist as I recall an Exxon archaeologist but it
 (25) refers to the same type of collection of artifacts that
 (26) occurred at Little Bay or other sites where we're not talking
 (27) about vandalism We're not talking about anything illegal

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- (1) necessarily here we're just talking about changes impacts to
 (2) the site
 (3) 112 at the area of the oil spill in changes like
 (4) Elizabeth Island here we are talking about workers walking up
 (5) into the uplands Port Dick I don't recall specifically what
 (6) this is but all of the back up documentation is connected with
 (7) it And these - this is just sort of some general comments to
 (8) refer back to the documents that basically one does need to
 (9) look at the documents I always believe one needs to look at
 (10) the documents
 (11) Again here the general comments refers to bird pick up
 (12) crews digging in sites that there's further explanation in the
 (13) document but again it is necessary to look at the documents
 (14) I believe it is so you have a range of different types of
 (15) impacts Again some of them are directly connected with the
 (16) clean up activities They're a necessary part of the clean up
 (17) activities such as bear guards and so forth in the uplands
 (18) that were there to protect the workers But in fact it still
 (19) is a situation where you do have people in the uplands and
 (20) those are the kind of things that would trigger - trigger a
 (21) reaction in myself in terms of showing that yes there are
 (22) people in the uplands there are artifacts that are being
 (23) collected quite a few artifacts being collected by Exxon
 (24) archaeologists in the course of trying to protect the sites
 (25) There are also instances where impacts some of the actual

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- (1) vandalism and so it's just a wide range of these
 (2) in terms of being able to prove that each and every one of
 (3) these occurred even that is not what this is meant to do
 (4) It's meant to show what Exxon archaeologists were seeing in
 (5) the field as well and what I saw basically that a lot of this
 (6) agrees with the type of things I myself saw in the field in a
 (7) general - in a general sense
 (8) I saw people in the uplands different places I don't
 (9) recall if I specifically saw people in the uplands on lands
 (10) that we're claiming damages on but I did see people in the
 (11) uplands other archaeologists saw people in the uplands
 (12) That's really all this is - is meant to be
 (13) Q Okay Now Dr Johnson let me just take one of these
 (14) Knight Island burial
 (15) A Yes
 (16) Q Could you tell us about the Knight Island burial?
 (17) A Yes This is at the - from the one extreme of where
 (18) archaeologists are collecting artifacts to protect them This
 (19) is probably the other extreme where what you have is a case
 (20) that eventually was prosecuted in terms of vandalism that this
 (21) is one of several different references in these field notes
 (22) Q Did you want me to turn the page?
 (23) A Oh it doesn't matter I know the site pretty well There
 (24) are other references Here's another one KN 110 that a
 (25) number of people have visited the site between the time of the

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- (1) incident and the archaeologist's investigation
 (2) There are quite a few references in these field notes and
 (3) basically what it is is they're short references And again
 (4) they don't show the whole picture but what they do is they do
 (5) record little bits of the picture And some of these there
 (6) are actual incident reports that have been generated and there
 (7) have been you know some investigations of some of them but
 (8) it's just the sort of general type of information is what I was
 (9) reviewing especially in the course of 1989 and 1990 that
 (10) basically affected my - my own opinion of potential damages
 (11) Q Did you also assist in the preparation of an area chart
 (12) concerning the impact of oil on sites other than the Native
 (13) corporation sites?
 (14) A Yes It's a similar situation
 (15) Q Similar to the vandalism one?
 (16) A Yes And in other words -
 (17) Q Or the vandalism destruction - excuse me
 (18) A Yes In other words in terms of oiling that - basically
 (19) my experience in 1989 1990 was just in the oil spill area and
 (20) I had quite a bit of an opportunity to observe oil different
 (21) types of oil throughout - well throughout the Sound
 (22) especially Again that influences my own impression of oiling
 (23) at sites whether it's heavily oiled or lightly oiled or no
 (24) oil whatever and the type of impact to sites
 (25) This particular chart is basically the - the expanded

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- (1) version just showing some different cases of oil There's a
 (2) lot of other documents that detail it in greater detail but
 (3) this is just one set of documents we happened to do this with
 (4) Q And did you review all the back up material?
 (5) A Yes I did
 (6) Q Dr Johnson okay I'm going to show you what's been
 (7) marked
 (8) as 1290A this is selected examples of impact of oil?
 (9) A Uh huh
 (10) Q Those are from the SCAT archaeology field notes?
 (11) A What it is is there's other sources of information about
 (12) oiling This just happened to be one of the type of things
 (13) that we noted from these and the thing that I find important
 (14) is the impact of oil on the ability of - or archaeologists to
 (15) do surveys that many surveys back in 1989 were along oiled
 (16) shorelines and it's - it's difficult or impossible to find
 (17) artifacts if you have a heavily oiled beach because basically
 (18) you see the oil you don't see the artifacts And so what was
 (19) of interest to me was just different archaeologists noting that
 (20) there was heavy oil and that they weren't able to see what was
 (21) there This is just sort of another complication in terms of
 (22) the field - field activities conducted in 1989
 (23) Q Now Dr Johnson yesterday you were asked a series of
 (24) questions about whether or not certain sites - sites were
 (25) impacted by oil Was it important in your analysis to
 (26) determine whether or not there was impact to the site?

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- (1) A Oil is one of the types of impacts that we were concerned
 (2) for Oil clean up activities and associated activities that
 (3) occurred at the time of cleanup In other words you have your
 (4) oil your basic oil then you have a work plan with specific
 (5) work activities that were organized and they may cause some
 (6) impacts to cultural remains
 (7) In addition to that you have other types of activities
 (8) either connected with the operation such as bear guards or
 (9) monitors or whatever or agency personnel in the area doing
 (10) inspections That all of this involves people walking around
 (11) in the area and in the case of sites often they were at
 (12) sites so there s different types of impact It s not just
 (13) oiling
 (14) Q And yesterday Dr Johnson do you recall you were asked a
 (15) series of questions about confidentiality and 14 H 1
 (16) publication of notice that sort of thing?
 (17) A Yes
 (18) Q Let me ask you first of all the Village Corporations
 (19) publish 14 H 1 notices?
 (20) A No I don t believe they do I don t think
 (21) Q Has Chugach - well if you know 14 H 1 or a publication
 (22) for a 14 H 1 site what does it need to tell the public very
 (23) much about what s there how big it is anything like that?
 (24) MR DIAMOND Objection no foundation
 (25) THE COURT Do you know?

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- (1) MR FORTIER If you know
 (2) THE COURT Do you know the contents of the -
 (3) A Not with certainty but I would speculate
 (4) THE COURT Objection s sustained Thank you
 (5) BY MR FORTIER
 (6) Q In 1989 Dr Johnson when you were working as a part of
 (7) the - or when you were sitting on the ISCC I think you
 (8) indicated in your direct that - that you were reviewing field
 (9) notes or work orders?
 (10) A Well what it is is - what would come through the ISCC
 (11) would be the stat reports and a work program so you would
 (12) have
 (13) a report from biologists a report from the geomorphologist
 (14) and a report from the archaeologist These were very -
 (15) usually like one page is what it was that only briefly
 (16) described what they had observed and what their
 (17) recommendation
 (18) was in terms of possible constraints for the clean up program
 (19) In terms of the archaeology it was basically that sheet of
 (20) paper that we ve seen a couple of times that cultural resource
 (21) evaluation where you have some site information Basically
 (22) it s in a coded form like HTI historical industrial type
 (23) remains or CMT culturally modified tree or other types So
 (24) there was an effort to minimize the type of information that
 (25) was put on these forms because it was given to the ISCC
 (26) The field notes themselves especially later later on -
 (27) well actually probably throughout 1989 there was an attempt

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- (1) to keep this from going into the ISCC The archaeologists are
 (2) basically the ones that reviewed the field notes themselves
 (3) Q Now if somebody were to receive these work orders that
 (4) you ve described that were happening in 1989 the ones that
 (5) said go to the beach and do work at the beaches did those
 (6) have
 (7) a code on them? I m not -
 (8) A The cultural resource evaluation did have like the
 (9) information about the sites in a coded form
 (10) Q And that cultural resource evaluation is a part of the work
 (11) order?
 (12) A It is part of the work order that was presented to the ISCC
 (13) for evaluation
 (14) Q And did you later see the code explained in other books
 (15) publications?
 (16) A Yes In the 1989 Exxon Cultural Resource Program
 (17) publication
 (18) Q So were there people that were sitting on the ISCC in 1989
 (19) that weren t archaeologists?
 (20) A Yes
 (21) Q And they had access to these work orders?
 (22) A Yes -
 (23) Q And they knew what the - what the codes meant and that
 (24) sort of thing?
 (25) A Well I think in general the people on the ISCC that
 (26) they didn t know specifically the codes Some of them you

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- (1) know were rather cryptic Other ones like FFX for Fox farm
 (2) or like CMT for the culturally modified tree some of them one
 (3) might be able to figure out but there was an attempt to keep
 (4) the confidentiality there in terms of what - what the type of
 (5) remains were
 (6) In terms of information provided the fact that they re
 (7) listed there one would know that there are some sort of
 (8) cultural remains at that particular segment But unless you
 (9) knew what the code was you wouldn t know specifically what
 (10) they were
 (11) Q Do you know who else received the work orders? Simply if
 (12) you know
 (13) A Well again at the meeting this was attended by agency
 (14) personnel and as I mentioned the other day there were a few
 (15) other people involved I think one was representing the
 (16) Cordova District Fishermen s Union There was another
 (17) person
 (18) and I m not quite sure who she was representing but there were
 (19) a few other people
 (20) Q Okay Still on this - this question of confidentiality
 (21) there was a mention yesterday you were asked about a
 (22) Delaguna And you were shown a book Mr Diamond had
 (23) gotten out
 (24) of the library or something?
 (25) A I guess
 (26) Q Is that book still in print?
 (27) A As far as I know it s out of print

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- (1) Q Do you know when it was first published?
 (2) A 1956
 (3) Q And it's out of print now?
 (4) A As far as I know
 (5) Q Now I'd like to switch gears back a little bit
 (6) Dr Johnson just talk to you for a moment about some
 (7) additional charts that you prepared some additional charts
 (8) Did you also look at examples of clean up activities on
 (9) segments before SCAT surveys throughout the oil spill area?
 (10) A Yes that's another one of the charts
 (11) Q Why did you look at it?
 (12) A Well again as an archaeologist that was one of our
 (13) general concerns in 1989 that that was the procedure that
 (14) they'd set up was that there was to be archaeological surveys
 (15) at least of the reconnaissance sites - reconnaissance format
 (16) prior to any kind of clean-up activity And the idea was that
 (17) this was to help identify site locations So in cases where
 (18) there was no SCAT survey and there were clean up operations
 (19) you immediately had this concern that we don't even know if
 (20) there's something out there
 (21) Q And did you find examples?
 (22) A Yes There are - there are different ones This - I
 (23) would say the same thing for all of these charts that I said
 (24) for the first one that these are references in the field notes
 (25) that raised issues It's like I wouldn't - wouldn't say that

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- (1) every single one of them is an incident that type of thing
 (2) It's just that they raise issues Many of these have incident
 (3) reports or additional documentation written up about them
 (4) Q Okay And you also supplied backup to what's been marked
 (5) as 1291A?
 (6) A Yes And again I think it's important to look at the
 (7) backup that these - these are just sort of identification for
 (8) the different documents
 (9) Q And did you also review the archaeologist - Exxon cultural
 (10) resources archaeologists field notes to determine whether or
 (11) not artifacts were found during cleanup?
 (12) A Yes
 (13) Q And this would be throughout the oil spill area?
 (14) A Yes
 (15) Q And did you examine a chart with regard to selected
 (16) examples of artifacts found during cleanup?
 (17) A Yes
 (18) Q Why was that important to you?
 (19) A Again what it showed was this question of how - how good
 (20) were the initial surveys and did we actually know where all
 (21) the cultural resources were out there And the fact that in a
 (22) number of cases artifacts were found during the cleanup pretty
 (23) much agreed with what you expected It raised concerns about
 (24) sometimes you felt that they should have been - some of these
 (25) should have been found and they weren't It just - it's

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- (1) basically the effectiveness of this preliminary survey to help
 (2) protect the sites since that was one of the - the functions
 (3) of that particular survey at the beginning the SCAT survey
 (4) Q And how did that enter into your - if at all into your
 (5) approach to damages Dr Johnson?
 (6) A Well again just in terms of concerns for impacts to
 (7) sites general impacts It raised the concern that not only
 (8) were the initial surveys reconnaissance surveys - and that's
 (9) basically the best that could be done given the emergency
 (10) situation - that in the course of this that sites would be
 (11) missed And it's generally agreed that there were sites
 (12) missed but in addition to that there's a concern that some
 (13) areas there weren't - there weren't surveys conducted before
 (14) clean up activities began
 (15) Q Now let me just point out to you a couple on what's been
 (16) marked as 1350A KN 104?
 (17) A Yes This is a site that we talked about before in terms
 (18) of the identification of a prehistoric artifacts I think I -
 (19) I think I mentioned that this site the prehistoric artifacts
 (20) were found during the cleanup The crew member as the
 (21) documentation I believe explains did follow procedure in terms
 (22) of notifying Exxon archaeologists of this discovery and so
 (23) they were able to come out and address the situation What it
 (24) is is you have - what this is meant to indicate is that
 (25) workers were finding artifacts out there Here's a good

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- (1) example of a crew member that did the right thing and
 contacted
 (2) the archaeologists
 (3) The fear that it raises in my mind is crew members that
 (4) might not have done that and so it's just showing workers
 (5) contact with the cultural remains out there that there was -
 (6) there was contact with them
 (7) Q And again you attached the backup to this particular
 (8) chart?
 (9) A Yes
 (10) THE COURT Mr Fortier we're going to take a break
 (11) pretty soon Do you want to take it now?
 (12) MR FORTIER Sure we could take it now Your Honor
 (13) THE CLERK Please rise This court stands in
 (14) recess
 (15) (Jury out at 9 57 a m)
 (16) (Recess from 9 57 a m to 10 15 a m)
 (17) (Jury in at 10 15 a m)
 (18) THE CLERK This court now resumes its session
 (19) Please be seated
 (20) BY MR FORTIER
 (21) Q Dr Johnson I wanted to ask you too whether or not you
 (22) had reviewed a chart entitled Selected Examples of Visits and
 (23) Segments of Sites by Others Than Archaeologists?
 (24) A Yes
 (25) Q Why was that important?

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- (1) A Again it's what the chart is meant to represent is just
 (2) the fact that there were a lot of people out there at different
 (3) sites. It's like some of them were authorized to be there
 (4) Archaeologists obviously were authorized to be at many of -
 (5) most of the sites out there. State personnel, other Coast
 (6) Guard personnel that - they're all part of the clean up
 (7) operation and so they might have a particular role out there
 (8) In addition to that, there are other individuals that were
 (9) brought to the site for various reasons or had access to it
 (10) so what it represents is just the fact that there are people
 (11) out there at these sites, different references to people
 (12) visiting the sites. In general
 (13) Q And in preparing the chart, which I'm going to show the
 (14) jury as 1317A, this is one of three pages or four pages of
 (15) this particular chart. This is, again, one from all over the
 (16) oil spill area.
 (17) MR DIAMOND: Could we have some foundation as to the
 (18) preparation of this chart, too?
 (19) BY MR FORTIER:
 (20) Q Same preparation as the previous charts?
 (21) A That's correct.
 (22) Q This was from all over the oil spill area?
 (23) A Yes, that's correct.
 (24) Q And it also includes sites that were being claimed by
 (25) Chugach, Chenega, Port Graham and English Bay. Is that
 correct?

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- (1) A That's correct.
 (2) Q And with the preparation of this selected examples chart
 (3) you also have included backup, Dr. Johnson?
 (4) A Yes. Again, the backup, it's important to look at the
 (5) backup, I think.
 (6) Q Why is that?
 (7) A Again, it's like with these charts, the charts are more, in
 (8) a sense, like a catalogue or a listing of them. For example,
 (9) let's see, this one here, the fourth one down, archaeologists
 (10) and a couple of us take skiff after dinner, site hunting on the
 (11) beach. It's not an incident in any sense. What it is, just
 (12) the fact that after hours, people do have access
 (13) Archaeologists, they are doing survey work in a sense here, but
 (14) what it is, it's more in terms of people going out after dinner
 (15) or after hours, this type of thing, and just numbers of people
 (16) that generally have access, access to the sites.
 (17) Here we have some archaeologists. Other ones we have
 (18) clean up workers walking back into the uplands. It's just a
 (19) range of different type of people that have access to the site
 (20) either recorded here in some of the background documentation.
 (21) also like this one down here below, the boat operator is the
 (22) third set of eyes, what was happening in 1989, especially is
 (23) through the educational program in part that Exxon - that was
 (24) the choice that was made in terms of trying to have people work
 (25) with them in terms of watching out for cultural resources. And

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- (1) on one hand, that's a good thing, but on the other hand, what
 (2) it is, you are giving people more access to information about
 (3) sites and specific access to site locations - excuse me -
 (4) that they wouldn't have had before. And so knowledge of
 (5) locations in a firsthand - firsthand experience was happening
 (6) in the oil spill, and that was of concern, at least to me.
 (7) Q And did that influence your opinions as to whether or not
 (8) there was impact on account of the Exxon Valdez oil spill on
 (9) cultural resources?
 (10) A Yes. Basically, what this - this, in general, has impacted
 (11) my - my concern for the confidentiality that, basically, what
 (12) we see in a lot of the documents is that there were a lot of
 (13) people that had access to the sites and became educated about
 (14) them in some cases, and a lot more people had firsthand
 (15) experience with sites out there that had never had it before.
 (16) And what I am concerned about is this type of information
 (17) It's like a lot more people know where sites are, like along
 (18) the shore, and there's a difference between this type of
 (19) knowledge and like textbook type of knowledge, where you
 may
 (20) record that there's a site on the south end of a particular
 (21) island in a book, or in a legal document, but there's a
 (22) difference between that type of information and specifically
 (23) knowing, as you go along the shoreline, that this is the
 (24) location of a site. So these are the kind of concerns I have.
 (25) Q And Dr. Johnson, you had mentioned that you were on the -

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- (1) on this ISCC, there were individuals who weren't necessarily
 (2) archaeologists?
 (3) A Yes.
 (4) Q Just as a follow up question, you were shown yesterday a
 (5) book, too, by a woman by the name of Nancy Lethcoe. I think it
 (6) was the second edition of Sailing in Prince William Sound?
 (7) A Yes, that's the -
 (8) Q Did Nancy Lethcoe sit on the ISCC?
 (9) A Yes, she did.
 (10) Q And finally, Dr. Johnson, all of this material that you've
 (11) just looked at, the exhibits 1291, 1289, 1317 and 1316, those
 (12) are all documents that you have - you have actually reviewed
 (13) correct?
 (14) A The supporting documentation for these charts, I have
 (15) have gone through it.
 (16) Q In addition to those, you've also reviewed other field
 (17) notes of the Exxon archaeologists?
 (18) A Yes, many others.
 (19) Q And in doing so, did that in any way assist you in reaching
 (20) an opinion as to whether or not there were impacts to the
 (21) cultural resources on account of the oil spill?
 (22) A Yes. Just my general experience, both in 1989 and 1990,
 (23) personal experience and also review of documents over - over
 (24) time, has continued to basically make me concerned for the
 (25) sites out there, yes.

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- (1) Q And these charts we just looked at most of them are
 (2) supported by Exxon archaeologists field notes is that
 (3) correct?
 (4) A They re supported by Exxon yeah the -
 (5) MR FORTIER No further questions Thank you I'll
 (6) move the exhibits In Your Honor afterwards
 (7) THE COURT Fine
 (8) MR DIAMOND
 (9) RECROSS EXAMINATION OF LORAL JOHNSON Ph D
 (10) BY MR DIAMOND
 (11) Q Dr Johnson you ve discussed this morning a series of
 (12) exhibits with A designations - 1289 1290 1350A -
 (13) concerning alleged disturbances oiling Those are expanded
 (14) versions of what you talked about yesterday are they not?
 (15) A Yes that s correct
 (16) Q The new information on those charts don t pertain to sites
 (17) in this case isn t that right?
 (18) A I believe that - that it is new information
 (19) Q And it does not pertain to sites in this case?
 (20) A Oh that - there are sites - that s correct that it is
 (21) to sites that we re not claiming damages for
 (22) MR DIAMOND No further questions
 (23) THE COURT You can step down Thank you very much
 (24) MR DIAMOND Before the next witness is called may
 (25) we approach

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- (1) MR PETUMENOS Regarding this witness or the next
 (2) witness?
 (3) MR DIAMOND The last witness
 (4) (Sidebar conference held out of the hearing of the jury)
 (5) MR DIAMOND Your Honor we would request an
 (6) instruction under I believe Rule 705 In limine instruction
 (7) In as much as you allowed her to testify to facts otherwise
 (8) inadmissible because they were the basis of her opinion 705
 (9) says that by request of party shall instruct that they - that
 (10) those facts are not truth of the matters asserted Yesterday
 (11) Mr Fortier in his offer of proof said he was not putting on
 (12) facts concerning the sites unrelated to the case I have given
 (13) him a proposed jury instruction That s what we would like
 (14) read We think it would be appropriate to do it before the
 (15) next witness testifies The exact form of the instruction is
 (16) less important to us than the fact that the jury be instructed
 (17) that these are not - this testimony is not proof of the facts
 (18) MR FORTIER Your Honor I don t really have any
 (19) objection to it I think we proposed just a general expert
 (20) opinion sort of instruction
 (21) THE COURT Well it s fine with me If you have no
 (22) objection to it I'll give it to them now
 (23) MR DIAMOND Thank you
 (24) (Sidebar concluded)
 (25) THE COURT The parties have proposed that I give you

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- (1) an instruction and I think it s appropriate to give it to you
 (2) now This relates to parts of - one subdivision of the
 (3) broader category of expert testimony
 (4) This witness has taken certain things into consideration
 (5) Some of the things may have been what we - what lawyers call
 (6) hearsay which is an out of court statement by someone who s
 (7) not testifying and the technical distinction that makes it
 (8) inadmissible is if it s submitted to prove the truth of the
 (9) matter that the out of court declarant said
 (10) This instruction re - experts are sometimes not bound by
 (11) the hearsay rule In other words sometimes they can take
 (12) hearsay into consideration in coming to their agreements but
 (13) you have to understand that that s - that s an exception to
 (14) the general rule Lay witnesses are not normally allowed to do
 (15) that So this relates to material that this expert and other
 (16) experts in this case have taken into consideration some of
 (17) which may be hearsay
 (18) Testimony presented by plaintiffs archaeology experts
 (19) concerning what may have happened at a site is not one of their
 (20) - wait - oh I see Testimony presented by plaintiffs
 (21) archaeology experts concerning what may have happened at a
 (22) site
 (23) that is not one of their 44 claims is admissible solely for the
 (24) purpose of explaining the bases of the expert s opinion with
 (25) respect to the sites for which damages are claimed
 (26) Such testimony is not proof that these events actually

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- (1) happened and you are not to consider it except as it may bear
 (2) upon the validity or invalidity of the expert s opinions You
 (3) should not assume that because an expert may rely upon facts
 (4) not in evidence that these facts are true or have been proven
 (5) Counsel to the extent that you want this in the packet at the
 (6) end of the case I'll - I'll no doubt give it
 (7) MR DIAMOND Thank you
 (8) MR PETUMENOS Ready for the next witness Judge?
 (9) THE COURT Yes
 (10) MR PETUMENOS Dr Jack Lobdell
 (11) THE CLERK Sir please attach the microphone and
 (12) raise your right hand
 (13) (The Witness Is Sworn)
 (14) THE CLERK Please be seated
 (15) Sir for the record I need you to state your full name
 (16) THE WITNESS Excuse me I lost my microphone My
 (17) name is John E Lobdell The last name spelling is
 (18) L o b d e l l
 (19) THE CLERK And your occupation?
 (20) THE WITNESS I m an archaeologist in environmental
 (21) science
 (22) THE CLERK Thank you
 (23) DIRECT EXAMINATION OF JACK E LOBDELL Ph D
 (24) BY MR PETUMENOS
 (25) Q Dr Lobdell one of the things we ve been doing with

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- (1) witnesses that come in here over and over again is have them
 (2) meeting a bunch of new people and having them tell the jury
 (3) how
 (4) smart they are and you're no exception. We're going to start
 (5) with you but I'd like you to be fascinating while you do it
 (6) If you could
 (7) Could you tell the jury what your education is since high
 (8) school?
 (9) A Since high school I went to school at a number of places
 (10) before I finally figured out what I wanted to do when I grew
 (11) up and I ended up at the University of New Mexico and
 (12) majored
 (13) in history and anthropology. I was interested in first of
 (14) all the history of people and later on the prehistory of
 (15) people
 (16) Following that I went on to do graduate work at - at the
 (17) University of Wyoming and this was all again in prehistory
 (18) but I began to get an interest in environmental prehistory in
 (19) other words how people were able to live off the land not
 (20) just particularly the types of tools that they made
 (21) Q And after you went to the University of Wyoming you got a
 (22) degree in -
 (23) A In anthropology specialty in archaeology
 (24) Q And then to the University of Tennessee?
 (25) A I had a break to go to work I had an opportunity to come
 (26) to Alaska and I jumped on it I thought it would be a
 (27) wonderful thing to do for a year or so. In 1973 I came up and

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- (1) began teaching at Anchorage Community College
 (2) Q And when you came up to Alaska did you end up doing
 (3) some
 (4) work in the area of archaeology?
 (5) A Yes Right away I found the area fascinating and began to
 (6) work in archaeological sites around the Kachemak Bay area out
 (7) of Homer and found that this was an area that I really
 (8) enjoyed. Certainly it's one of the more beautiful areas of
 (9) Alaska. The weather's real good and there was some
 (10) fascinating
 (11) places down there to work. So I - while I was teaching at
 (12) Anchorage Community College I also had some field schools
 (13) for
 (14) my students down in Kachemak Bay as well
 (15) Q Kachemak Bay being in the Homer area?
 (16) A Yes
 (17) Q And what was the nature of the archaeological project that
 (18) you were working on down there?
 (19) A Actually I did five. One of them was an extended survey of
 (20) some of the outer islands in Kachemak Bay to try to identify
 (21) some of the more important sites and then I began to focus on
 (22) the individual sites themselves in - in the bay. We were
 (23) interested in areas where people must have lived in the
 (24) wintertime and also where they probably lived in good weather
 (25) as well. We looked at small sites and large sites and those
 (26) were the nature of the project several field schools as I
 (27) mentioned with students and other colleagues
 (28) Q And are you familiar with the fields of bioarchaeology and

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- (1) paleoecology?
 (2) A Yes When I went on to do more graduate work for a
 (3) doctorate in anthropology I specialized in those two areas
 (4) And bioarchaeology is essentially the understanding of
 (5) biological components of an archaeological site like human
 (6) bone. We can tell such things as ancient diseases whether or
 (7) not the people suffered periods of malnutrition what their
 (8) height was what their probable weight was. We can get an idea
 (9) of how old they were when they died and what the general
 (10) population was like. It was an idea to understand the quality
 (11) of life. Artifact counts are just enormous and you get an
 (12) idea that there's thousands and thousands of artifacts but to
 (13) get an understanding of what the quality of life was was
 (14) certainly my interest
 (15) Q Paleoecology?
 (16) A Paleoecology is trying to reconstruct the environment in
 (17) which the people lived. Was it the same as it is now or was
 (18) it different? What made it possible for them to exist back
 (19) then that perhaps wouldn't be the same right now? And also
 (20) how
 (21) this changed through time
 (22) Q In the Kachemak Bay area did you discover that there was a
 (23) culture down there in prehistoric times of some interest to
 (24) the - to your science?
 (25) A Yes Certainly I didn't discover it. There were several
 (26) people that had worked there before me but the focus of what I

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- (1) was trying to do was to try to determine again the quality of
 (2) life and how well these people adapted to the environment
 (3) And
 (4) to me. It shows that - at least what I found - was when Rome
 (5) wasn't even a wide spot on the map that culture was a very
 (6) unique and interesting culture was thriving and doing quite
 (7) well in Kachemak Bay
 (8) Q I believe you told me that in some respects the culture
 (9) that was going on in Kachemak Bay at the time of the
 (10) construction of Rome was in some respects more advanced
 (11) than
 (12) what was happening in Rome?
 (13) A I think so. Life was fairly fairly complex there and they
 (14) had become unique hunters and gatherers and certainly very
 (15) very able to take both large land mammals in hunting and go
 (16) after large sea mammals including whales and also hunt
 (17) smaller sea mammals such as seals and everyone in the
 (18) economy
 (19) was able to participate. Even the very very old people or
 (20) people that were sick could - could gather gather resources
 (21) on the strand flat to help - to help survive
 (22) Q Why the University of Tennessee?
 (23) A At the time that I was interested in doing this there were
 (24) very few programs that were focusing on that. There was one at
 (25) the University of Arizona but they were really kind of more
 (26) interested in working in Mexico but the University of
 (27) Tennessee had professors that were more interested in North
 (28) America and certainly interested in - in things in far North

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- (1) America
 (2) Q The best place you could find to continue your work?
 (3) A At that point for a graduate degree yes it was Now
 (4) certainly since then there have been other schools that
 (5) evolved in that direction
 (6) Q I'd like to talk about an aspect of your background that is
 (7) perhaps not strictly archaeology but may be very important to
 (8) this case Let's start with your thesis your doctoral
 (9) thesis What did you do your doctoral thesis on?
 (10) A My doctoral thesis was done on the human populations and
 (11) resource utilization of Kachemak Bay I was trying to look at
 (12) the - all of the biological components the shells the fish
 (13) bone the mammal bone the bird bone and determine how
 (14) these
 (15) contributed to the diet and whether or not this all remained
 (16) constant through time or if it - if it indeed changed
 (17) Q How did you go about doing that?
 (18) A It took careful excavation with some fairly large crews of
 (19) students and other people to excavate large portions of - of
 (20) big sites and to determine how these things changed through
 (21) time We looked from the bottom of a site when it was first
 (22) occupied on up to the top of the site when it's abandoned
 (23) Q How did you pay for all that?
 (24) A Several ways Usually we tried to get research grants
 (25) There were grants from the National Endowment for the
 (26) Humanities There were also grants from the National Science

- (1) money around or is money scarce?
 (2) A Sometimes there is and sometimes it's pretty scarce
 (3) Usually it's scarce
 (4) Q And are grants that you write subject to audit and
 (5) scrutiny?
 (6) A Yes
 (7) Q Make/sure you're not -
 (8) A Yes
 (9) Q - putting in things that you don't need?
 (10) A Yes
 (11) Q After you completed your thesis and got your doctorate did
 (12) you have the opportunity to apply what you learned running the
 (13) Kachemak Bay excavation experience elsewhere?
 (14) A Yes
 (15) Q Tell the jury
 (16) A I've been called upon for several years to do
 (17) impact related research all of it the State of Alaska heavily
 (18) on the North Slope in the oil areas And what I've had to do
 (19) is to come up with plans to find archaeological sites and
 (20) protect archaeological sites And in cases where the sites
 (21) were going to be impacted either directly or if there was the
 (22) threat that a site might be impacted through pilferage or
 (23) vandalism some of those sites would either need to be
 (24) protected or removed as well
 (25) Q Now the issue of things happening in the outside world

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- (1) Foundation and more local grants the Otto Geist funds from
 (2) the University of Alaska was used and every year in the
 (3) spring my Dean would kind of shudder every time I walked into
 (4) his office because he knew what was coming I wanted to fund
 (5) another one of my camping trips as he would call it
 (6) Q And what's involved in funding a camping trip? Do you just
 (7) put in a voucher or how does that work?
 (8) A I wish - I wish it was that simple Certainly you have to
 (9) have a plan and a research design to work in the archaeological
 (10) site but about 60 percent of an archaeologist's concerns - at
 (11) least one who has to supervise this activity - is logistics
 (12) and that's as you know getting there keeping people fed
 (13) keeping people warm and dry safety Logistics is what I call
 (14) the art of keeping people alive in the wilderness
 (15) Q So beginning with your doctoral thesis you had experience
 (16) doing that doing those logistics?
 (17) A I actually had a little earlier Certainly I was doing
 (18) archaeological sites even as early as when I was working on my
 (19) Bachelor's degree and as I gradually took more and more
 (20) supervisory responsibility I was doing some of this into -
 (21) well into my Master's degree But it really - in terms of
 (22) wilderness activities here in Alaska where you may be a great
 (23) distance from the end of the road this is where I think I
 (24) really got good experience at it
 (25) Q Well when you go to get these grants is there a lot of

- (1) construction oil wells roads being built and how they impact
 (2) a potential archaeological site is that an uncommon
 (3) phenomenon
 (4) within your profession?
 (5) A No it's actually quite common and it's even becoming more
 (6) common Construction projects may - may indeed impact a
 (7) known
 (8) archaeological resources and very small portions of the United
 (9) States have had professional surveys for archaeological sites
 (10) done
 (11) Q When an oil company hires you to figure out what they
 (12) should do about a potential impact of one of their activities
 (13) to an archaeological site what do you do?
 (14) A Certainly we examine all the information that we can find
 (15) about the archaeological site If it's a new archaeological
 (16) site one that is discovered in the course of looking at
 (17) whether or not the - building a project is feasible then
 (18) determinations need to be made as to what to do with that
 (19) archaeological site and certainly there are some options
 (20) Q And how do you go about determining what the options are
 (21) and do you end up making recommendations as to what should
 (22) be
 (23) done?
 (24) A I normally make recommendations Certainly I try to
 (25) recommend all of the options and in some cases do a cost
 (26) analysis as to which would be much more cost effective to do
 (27) Q About how many such investigations or assessments have
 (28) you
 (29) done in the private sector since getting your Ph.D. in

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- (1) situations like this? Talking assessments now
 (2) A In assessments including environmental assessments I
 (3) would say somewhere in the neighborhood of maybe 400
 (4) Q And you have done - In addition where it's been
 (5) warranted have you supervised excavations in the private
 (6) sector?
 (7) A Yes
 (8) Q Costed them and budgeted them and done all that?
 (9) A Yes
 (10) Q Now when this process is undergone in your experience in
 (11) the private sector do the people that you are working for
 (12) require that there be proven criminal activity on an
 (13) archaeological site before action is taken to protect a site?
 (14) A Well no The whole reason we do this is so that doesn't
 (15) happen We want to protect the site so that that doesn't
 (16) happen during the construction project
 (17) Q And what sorts of things then do you look for to
 (18) determine if the site is at risk?
 (19) A We may look for whether or not it will be impacted
 (20) directly If say someone's going to build a road right
 (21) through it We may look at the proximity of that site to where
 (22) people are going to be working is that site within, say a
 (23) mile over easily traveled ground to where people are going to
 (24) be working These are pretty much guidelines as to
 (25) determining
 (26) whether or not a site will be at risk

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- (1) Q Do you take a look at how many people are going to be in
 (2) the area and be out and about around archaeological sites?
 (3) A Usually I don't always have the information as to how
 (4) many people will be involved in a project at the time I just
 (5) have to make some assumptions that road building or the
 (6) setting
 (7) up of equipment for a well rig is going to take a lot of
 (8) people
 (9) Q Is that a factor you consider?
 (10) A I consider it yes I usually consider more the potential
 (11) of damage to the site whether it be primary or secondary
 (12) Q And what's the distinction you're making between primary
 (13) and secondary?
 (14) A Well primary damages are those that are caused directly by
 (15) the project A bulldozer going right through a site of
 (16) course is a primary damage
 (17) A secondary damage might be if there's some unauthorized
 (18) visitation to the site If someone for the sake of curiosity
 (19) were just to walk away from the project in perhaps off hours or
 (20) in the course of other survey work involved in the project to
 (21) come across the site and do some damage to it This might
 (22) include from simply walking across the site pedestrian
 (23) damage
 (24) to which there might be the smooching of some things that
 (25) might
 (26) be important or to the picking up of artifacts And certainly
 (27) on some crews there may even be a professional looter and we
 (28) certainly want to protect the places from people like that

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- (1) Q What did you do in addition to these assignments that
 (2) you've taken the consulting work that you've done? Have you
 (3) done any teaching?
 (4) A Yes I was a Professor at the University of Alaska -
 (5) well Anchorage Community College and it became the
 (6) university
 (7) several years later and I was there for 14 years 15 years
 (8) Q Have you published in your field?
 (9) A Yes
 (10) Q Tell the jury what kind of publishing you've done
 (11) A I've published in everything from popular journals or
 (12) popular magazines to what we call juried or refereed journals
 (13) where you have a jury of your peers read over very carefully
 (14) what you've done and evaluate if this is indeed significant
 (15) research
 (16) Also when you do a fairly large archaeological site
 (17) it's - it's required that you write some sort of monograph on
 (18) it In other words includes all the information about the
 (19) site After all archaeologists are going to dig into a site
 (20) and by that very nature it's an intrusive or destructive
 (21) activity so they have to be able to reconstruct what they
 (22) found the knowledge that they uncovered They have to be
 (23) able
 (24) to do that on paper
 (25) Q How about radio and film?
 (26) A Yes I was involved with a national public radio program
 (27) called Patterns of the Past and it was essentially a public

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- (1) education program to talk about interesting events in
 (2) archaeology to let the general public know about it
 (3) Oftentimes people don't get to see and maybe wouldn't want to
 (4) see these great big thick monographs on artifact after
 (5) artifact but they'd like to know what the importance of the
 (6) findings were
 (7) Q Have you worked - have you done any forensic work?
 (8) A Yes
 (9) Q What does forensic mean?
 (10) A Well for a fairly abridged definition forensic
 (11) anthropology or forensic archaeology is the interface of
 (12) science and the law And my role here in Alaska has been in
 (13) the past to be a part time member of the State of Alaska's
 (14) Crime Laboratory where I analyze things from archaeological
 (15) sites and also look at human bones especially in the case
 (16) where foul play has been expected
 (17) Q You work for the State Crime Lab and Alaska State Troopers?
 (18) A That's correct
 (19) Q Do you belong to any associations or professional
 (20) organizations in Alaska?
 (21) A Yes The most prominent that I belong to is the Alaska
 (22) Anthropological Association I'm one of the cofounders of the
 (23) association back in 1974 I'm a former President and was
 (24) their financial advisor for a period of about eight years and
 (25) served on the Board of Directors a couple of times and also

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- (1) various committees
 (2) Q And have you been involved in any organizations that are
 (3) dealing with the protection of archaeological sites?
 (4) A One of the committees that I did serve on for a number of
 (5) years and was also chair of for a while was a committee
 (6) called the Archaeology Advocacy Committee and that was a
 (7) committee that was set up to look at various agency practices
 (8) Also to examine areas where we knew there would be impact
 and
 (9) to make recommendations or advice as to whether or not the
 (10) protection of resources archaeological resources was going to
 (11) be a question
 (12) Q The Society for American Archaeology has a committee that
 (13) is similar?
 (14) A Yes
 (15) Q Are you on it?
 (16) A Yes I am The Society for American Archaeology is a
 (17) national organization I don't recall how many members we
 (18) have I think somewhere around 8 000 and we do have annual
 (19) meetings to discuss and present papers on research from all
 (20) over North America and other places as well But they do
 (21) have a number of standing committees and I'm on a couple
 and
 (22) one of them is called Save the Past for the Future and it's an
 (23) anti looting committee and we meet periodically to discuss the
 (24) problems of damage vandalism to archaeological sites We're
 (25) meeting this fall

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- (1) Q Is that a large issue in the field right now?
 (2) A Yes It is It's still a growing issue in the field
 (3) Q Is this a factor that you considered in - or have
 (4) considered in the number - all of the consulting jobs that you
 (5) have the issue of the danger to the site from these sorts of
 (6) incursion is that something you just - don't just apply in
 (7) the oil spill here we're about to discuss but throughout all
 (8) the work that you've done?
 (9) A Yes Certainly on my work in committees of this nature
 (10) and also in other places where I've seen archaeological sites
 (11) that have been badly damaged through mismanagement or
 (12) through - through vandalism
 (13) Q Do you have any experience observing the black market
 (14) traffic in archaeological artifacts in Alaska?
 (15) A Yes From time to time I've been approached by people
 (16) trying to sell me artifacts In two instances I recall a
 (17) couple of my clients were approached with artifact collections
 (18) for sale - in one case one rather large and very expensive
 (19) collection - and they sought my advice as to what to do with
 (20) these offers for sale
 (21) Q Can these artifacts that are trafficked be worth a lot of
 (22) money?
 (23) A Yes and no It certainly depends on the artifact There
 (24) seems to be a growing value in them and certainly the quality
 (25) of the artifact when it switches from being an artifact to an

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- (1) object of art some of these command thousands of dollars
 (2) Q In the course of the excavation work do you deal with
 (3) carbon dating on a regular basis?
 (4) A I think pretty much every archaeologist does The
 (5) archaeologist is the person who has to take the radio carbon
 (6) sample The archaeologist has to determine if it's a clean
 (7) sample for whether or not it's a contaminated sample
 (8) Additionally one big problem in getting a radio carbon
 (9) sample is whether or not you can get enough to - to radio
 (10) carbon date There's problems where you have to go through
 (11) special procedures if you get one so it's quite common for the
 (12) archaeologist to be responsible for - for taking the sample
 (13) itself and then submitting it to a lab It's really no
 (14) different than say a physician getting a urine sample and
 (15) having it sent off to a lab
 (16) Q And then interpreting the results?
 (17) A Yes When the results come back the interpretations are
 (18) done by the archaeologist and normally archaeologists have
 (19) some idea as to what they expect those results might be so that
 (20) they can determine whether or not something has been
 (21) contaminated or did they take the sample incorrectly
 (22) Q Can you give the jury an example of any experience you've
 (23) had with respect to material coming back from carbon dating
 (24) which you found that was contaminated and how it affects the
 (25) results?

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- (1) A Maybe a couple One I'm not sure if there's contamination
 (2) or not Last year there was an important site reported in
 (3) Alaska because the radio carbon dates that came back were
 (4) 11 000 years old and this is extremely old Certainly some of
 (5) the oldest sites in North America one of the oldest sites in
 (6) North America And the thing that had been a problem about
 (7) that is the first radio carbon samples that were submitted came
 (8) back with dates that were incorrect They came back with dates
 (9) in the 8 000 year range and resubmitting some of that same
 (10) carbon material again for confirmation proved that this site
 (11) was certainly more than 10 000 years old and probably 11 000
 (12) years old
 (13) So I don't think there's a contamination problem there I
 (14) think there was a problem with the laboratory itself in
 (15) producing results that weren't consistent with results that are
 (16) producible now
 (17) In my own case I've certainly seen problems of
 (18) contamination One in particular has to do with some dates
 (19) that I was involved in - in procuring from an archaeological
 (20) site in Kachemak Bay We took four radio carbon dates and
 (21) that's quite common to take them because really just taking
 (22) one is - unless that's all the material you could have you
 (23) need more for confirmation And of these four dates - we had
 (24) three dates that all dated pretty much in the 1200 years ago
 (25) range but the fourth date was something in excess of

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- (1) remember correctly of 15 000 years and so we were very
 (2) concerned that we d had a situation of contamination
 (3) Now the lab alerted us and said well is there any
 (4) lignite in the area Lignite s a type of coal and this was
 (5) down in Homer It was away from lignite deposits but
 (6) certainly coal can get on the beach and make its way into -
 (7) into fires and so if you take charcoal from a fire hearth
 (8) that can be a real problem of contamination But we were
 (9) concerned because we had taken this particular sample from a
 (10) structural part of a - of an ancient house and so we had not
 (11) expected it to be contaminated and because they destroyed
 (12) the sample in terms of getting this we were never able to confirm
 (13) whether or not it was lignite contamination or if something
 (14) else prior or after the time of - of deposition of this piece
 (15) of wood piece of charcoal had been contaminated by
 (16) something
 (17) else And we don t know what it might have been spilled boat
 (18) gas or any number of things could have contaminated it
 (19) MR PETUMENOS Your Honor at this point I would
 (20) tender Dr Lobdell as an expert in the field of archaeology
 (21) MR DIAMOND No objection
 (22) THE COURT He can give expert opinion and other
 (23) testimony in that area
 (24) BY MR PETUMENOS
 (25) Q Now you were retained in this case by the Native
 corporations that are before this jury?

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- (1) A Yes
 (2) Q And what were you asked to do?
 (3) A I was first asked by someone I ve worked with for a number
 (4) of years Mike Smith who s an environmental scientist in
 (5) wildlife management to observe and to take a look at whether
 (6) or not there were problems occurring in the spill area with
 (7) archaeological recovery whether or not there might be the
 (8) potential of contamination and also to get an idea of how the
 (9) general program was running the Cultural Resource Program
 (10) for the spill
 (11) Q Now at the time that you were starting to do this work
 (12) were there already - the jury s already heard about the
 (13) Chugach response team and the archaeologists that were in the
 (14) field They ve also heard about the fact that Exxon had
 (15) archaeologists in the field
 (16) Was it your job to be a field surveyor and to go out and
 (17) write field notes and look around at each site and determine
 (18) what s here and what s there and that sort of thing?
 (19) A Not really Again my role was to observe and to certainly
 (20) be sure that I understood the clean up procedures that were
 (21) going on and understand the monitoring procedures that were
 (22) going on and to go to selected archaeological sites and get an
 (23) idea of how they were fairing during the ordeal of the spill
 (24) and beach treatments
 (25) Q All right And based upon all of your review of the

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- (1) records you worked extensively with Dr Lora Johnson?
 (2) A I did Not really at first I did a lot of the review of
 (3) the records on my own and began working with her later
 (4) certainly as the records became available A lot of the
 (5) records such as field notes were not made available until
 (6) late in 1993 and I did not get an opportunity to get into the
 (7) field notes themselves until 1994 at least those that were
 (8) later produced Some of those early on in the field programs
 (9) I did examine
 (10) Q Well let s cut to the chase Based upon all of the
 (11) records that you ve reviewed the things that you ve seen have
 (12) you formed an opinion as to whether the archaeological sites of
 (13) these corporations has been damaged - have been damaged
 (14) and require repair?
 (15) MR DIAMOND Your Honor I ll object that the
 (16) question is going beyond the scope admitted by the Court s
 (17) pretrial order It s not confined to the issues - I m sorry
 (18) to the sites at issue in this case
 (19) MR PETUMENOS I ll rephrase
 (20) BY MR PETUMENOS
 (21) Q Have you formed an opinion that some of the Native
 (22) corporation sites that were in the oil spill impacted area have
 (23) been damaged?
 (24) A Yes
 (25) Q Okay And could you tell me what that opinion is?

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- (1) A My opinion is that some of the damage - the damages to the
 (2) sites that has occurred include situations of oiling to the
 (3) sites vandalism to the sites and some unknown damage For
 (4) example if a site was - was oiled and not monitored prior to
 (5) cleanup it s impossible to tell if damage did occur there
 (6) It s anticipated that it might have
 (7) There was other damage from oil spill workers themselves
 (8) such as bird crews picking up artifacts artifacts getting
 (9) picked up with clean up materials and going into disposal bags
 (10) and having to be retrieved later on and certainly there was a
 (11) high potential for damage that wasn t recorded The
 (12) archaeologists that were out there had a pretty awesome
 (13) responsibility in protecting the sites
 (14) Q Let s take the issue as it relates to oiling on a site
 (15) Tell the jury how direct oiling can impact a site in an adverse
 (16) way
 (17) A Well direct oiling to a site can cause damage because
 (18) it - if it s cleaned up then things are moved around and the
 (19) position in which artifacts are in may be very important being
 (20) able to reconstruct the history of - of what went on at that
 (21) site and certainly determine what the significance of that
 (22) site is
 (23) In addition to that there may be a problem of
 (24) contamination with petroleum on potentially - potentially
 (25) datable materials that can be used in radio carbon dating so

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- (1) certainly those are direct impacts of the oil
 (2) Q Now let's talk about this problem of the radio carbon
 (3) dating The jury saw in the course of Dr Johnson's
 (4) testimony some pictures of some wooden artifacts found in
 (5) peat
 (6) in Chenega Are you familiar with any of those pictures? Were
 (7) you in the courtroom when they were shown?
 (8) A Yes I've seen some of the - some of the artifacts
 (9) themselves in addition to the pictures
 (10) Q How can contamination by oil on an artifact like that
 (11) complicate the picture for an archaeologist trying to obtain
 (12) archaeological context from the information that would
 (13) otherwise be there?
 (14) A I think there's some debate as to whether or not these
 (15) artifacts can have the petroleum completely taken out of them
 (16) so that they can be properly dated There are some people
 (17) who
 (18) feel that they can It's a very expensive procedure It may
 (19) increase the cost of the radio carbon dating either twice as
 (20) much or four times as much and radio carbon dates are already
 (21) pretty expensive You get a little wad of charcoal or wood
 (22) that you feel needs to be dated and it's 200 to 225 dollars to
 (23) get a date on it so you want to be very careful and very cost
 (24) effective in what you do and to raise those costs certainly is
 (25) an impact
 (26) Also there's questions about whether certain materials
 (27) used in beach treatment itself can be cleaned out of these

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- (1) artifacts at all For example a lot of materials during the
 (2) spill were used in bioremediation putting different substances
 (3) on the oil to try to eat away the oil or break it up so it
 (4) could be flushed away and we don't know what these
 (5) contaminants would do to radio carbon dates There hasn't
 (6) been
 (7) extensive research in that area that I'm aware of
 (8) Q Treatment how can beach treatment affect the integrity of
 (9) a site as you understand it?
 (10) A Sites are detected especially here in South Central
 (11) Alaska by what's often found on the beach And if this
 (12) material is removed then the material that's farther up the
 (13) beach or into the trees can't even be recognized as an
 (14) archaeological site and certainly a lot of things that are in
 (15) the beach themselves may indicate the importance of what
 (16) can
 (17) be in another area
 (18) I - I understand there's controversy about whether or not
 (19) this zone of the intertidal area or that zone is important I
 (20) think we need to keep in focus here that when people lived
 (21) there a long time ago and were going from their homes on the
 (22) land to their kayaks in the water they probably were not
 (23) worrying about - Am I at mean high tide here? Where am I? So
 (24) the site needs to be looked at in terms of the - the total
 (25) site itself
 (26) Q Is that a - is that an example of what we talked about or
 (27) what Dr Johnson talked about when she discussed the

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- (1) archaeological context?
 (2) A Yes The archaeological context is - is the knowledge
 (3) that you can gain from a site
 (4) Q We had testimony in this court from Mr Gordaoff and others
 (5) describing the seafaring nature of the Chugach people now or
 (6) in
 (7) the recent past What has your investigations told you about
 (8) the history of the people in the region? Is that something
 (9) new?
 (10) A The history of the people in the region is really not that
 (11) well documented The prehistory of the region we know from
 (12) ethnohistory in other words the accounts of elders how they
 (13) used to live And we can push this backwards into the
 (14) prehistoric record through some of the archaeological
 (15) information that's been recovered to date But the history of
 (16) the people is - is - let me see if I can give an example from
 (17) another part of the world
 (18) Q One of the things I just wanted to focus you on so we don't
 (19) run too far afield is I just want to know whether or not there
 (20) are indications from the archaeological work that's been done
 (21) that this was basically a seafaring maritime oriented culture
 (22) going back?
 (23) A Yes this goes well well back into prehistory
 (24) Q And I was asking you that question more to your point about
 (25) archaeological context and where these sites are located in the
 (26) intertidal area and in the shoreline

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- (1) A Yes
 (2) Q And I also wanted to ask you some questions that have come
 (3) up Does it cause you any pause that the indication or clues
 (4) for a site and its potential location productivity are things
 (5) like ruined buildings rusted sites rusted iron in the area
 (6) the kinds of things that we've been hearing about as the clues
 (7) for a location of a site? Is that unusual or something that
 (8) you're unfamiliar with in your field as the indicator of where
 (9) things might be?
 (10) A No The locations of historic materials are often really
 (11) good indications of the fact that people lived there in the
 (12) past as well People have a tendency to place their homes -
 (13) I guess maybe a real estate agent would say location location
 (14) location and they're looking for places where there's good
 (15) fresh water where there's a salmon stream nearby that they can
 (16) subsist on where they have access to both open water and
 (17) protected water where they have access to resources
 (18) certainly
 (19) So it doesn't surprise me and in certainly a lot of my
 (20) investigations the top of the site may include historic
 (21) materials and on the surface may not seem very important but
 (22) as you get under them you may find older materials and
 (23) certainly also in the case of Prince William Sound these -
 (24) some of these historic items are really important to understand
 (25) the history of the people which was not recorded by historians

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- (1) in other areas
- (2) Q There was some discussion in some of the questioning here
- (3) earlier about a pulley that was found on a beach Now this
- (4) pulley Is it now in a museum do you know?
- (5) A I understand that it was collected and has been put in a
- (6) museum
- (7) Q Is the site that you - that where the pulley was found a
- (8) site for which you made a recommendation for this Court that
- (9) any sort of restoration damage or restoration activity take
- (10) place?
- (11) A Well no The - the pulley was from what I understand
- (12) by itself and in an Intertidal location I do feel that it is
- (13) appropriate while the people are out there that they scout the
- (14) area where that was found to see if there's other historic
- (15) artifacts that might help explain some of the historic period
- (16) that isn't well documented but it's not part of the damages
- (17) that were sought for that particular site
- (18) Q So all of this discussion then about the pulley that we
- (19) had was not on a site for which you are asking or
- (20) recommending
- (21) restoration take place?
- (22) A Well it's part of Guguak Bay and while I feel it may be
- (23) important as an indicator that there was past historic activity
- (24) there no What's intended is the hearth location and testing
- (25) around the hearth location and excavating what may be there
- (26) that's both historic and prehistoric

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- (1) Q This is part of what you did isn't it Dr Lobdell Is to
- (2) look at this site versus that site and look at the impacts and
- (3) try to decide which ones should require intervention and how
- (4) much intervention each one requires is that part of what your
- (5) work was?
- (6) A Yes
- (7) Q And this was an area that you decided not to do anything
- (8) on or not very much at least?
- (9) A Not the pulley area no The hearth area I think needs
- (10) some exploration and investigation
- (11) Q Now there was some questions about Dr Johnson did you
- (12) do
- (13) any test pits in these areas To your mind from an
- (14) archaeologist's standpoint what is a test pit and when did you
- (15) do them and how did you do them?
- (16) A Well a test pit is appropriate to determine if there are
- (17) subsurface materials located there In the case of survey and
- (18) protection of resources it may not be the highest priority at
- (19) that point Certainly there are surface indicators of sites
- (20) like - like a fire hearth like artifacts on the surface And
- (21) I think the important thing is to note that they are really
- (22) good indicators that there is material underneath them And so
- (23) a test pit especially in a time when there's a lot of cleanup
- (24) and beach treatment going on may not really be appropriate
- (25) The other thing is if you open a site with a test pit you
- (26) really kind of commit yourself to the preservation of that

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- (1) site not just the material of the test pit itself So to me
- (2) it seems - it's a responsibility when you determine that
- (3) you're going to do a test pit
- (4) Q When an archaeologist does a test pit does he take a
- (5) shovel dig in the ground and see what's there or is that not
- (6) how it works?
- (7) A No at least that's not the way I do test pits
- (8) Q Tell the jury
- (9) A A test pit especially where you have found something else
- (10) like a hearth needs to be a controlled and measured test In
- (11) other words you need to have a point of reference and from
- (12) that you need to determine how large your test is going to
- (13) be Normally it's a square or a rectangle of a certain size
- (14) and then you want to very carefully work your way down into the
- (15) deposits to determine how things are laid down You also want
- (16) to be able to read the side of that test pit as well so you
- (17) get a picture of - kind of like a layer cake how things got
- (18) laid down and that takes time Takes - it takes time to both
- (19) get out there and do the test pit
- (20) Q And so if we had 44 candidates as sites for which we
- (21) might - there might be remediation required some form of
- (22) remediation and we were to do a proper and appropriate test
- (23) pit have any clue what kind of cost would be incurred by the
- (24) party trying to do that 44 sites in Prince William Sound under
- (25) the conditions that are out there?

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- (1) A Well some of those have had tests in them There are -
- (2) for example one of the larger sites that was mentioned
- (3) yesterday Northwestern Lagoon there have been some tests
- (4) and
- (5) we know that it's a very large and very significant site and
- (6) that's why it may be very expensive to remediate the site But
- (7) the majority of the sites have not had test pits put in them
- (8) There was one other site that was mentioned I believe
- (9) Seldovia 188 McArthur Pass and while the focus of the oil
- (10) spill was - was on the beach itself there's certainly a lot
- (11) of material up in the uplands and there was one small test pit
- (12) that revealed just exactly how rich that site is and how
- (13) important it may be to giving us ideas about the prehistory of
- (14) people who lived in the Kenai Fjords area
- (15) Q Dr Lobdell for the sites that there haven't been test
- (16) pits - there's still quite a few of those Is that right?
- (17) A Yes
- (18) Q Given all the things that you think need to take place
- (19) first before you do a test pit - where to do it how deep to
- (20) do it the kind of test pit with the layering of the cake and
- (21) so forth that you're talking about - are we talking about a
- (22) fair amount of money to get that project undertaken on the
- (23) sites that haven't had these test pits done?
- (24) A I would say millions of dollars in excess certainly of
- (25) at least a million dollars to do that
- (26) Q You started to talk about McArthur Pass and that's a good

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- (1) transition for me because I do want to talk about the
 (2) activities of the Exxon archaeologists in the 1989 and
 (3) subsequent years that you studied
 (4) Could you give the jury an indication of the size of the
 (5) task that was facing those archaeologists and what you
 (6) understand from the records the goal was and what was
 possible
 (7) given the constraints they were working under?
 (8) A Well I'll try This - when the site was discovered
 (9) there were many artifacts noted in the intertidal zone and
 (10) they had been oiled A lot of them had been oiled I believe
 (11) an estimate I saw was there was something in excess of 5 000
 (12) artifacts And in the intertidal zone the context of those
 (13) was not known It wasn't known exactly how extensive the site
 (14) was So their task and it was really a tough one was to
 (15) collect all these and record where they were collecting them
 (16) At the same time that oil was being removed by hand It's a
 (17) very rocky beach and it was a tough thing to do
 (18) One - one thing I noted in the video was the fellow who
 (19) was taking the video had what we called during that summer
 (20) Val-disease He had kind of a walking pneumonia and certainly
 (21) it must have been pretty tough on him that day to be working
 (22) out in that environment
 (23) The other thing that was discovered there was that the size
 (24) of the site just immediately off the beach is pretty large
 (25) One very small test pit was excavated and later on expanded by

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- (1) only if I remember correctly 025 meters which is a very
 (2) small amount of ground and it yielded 65 more artifacts so
 (3) this is to be a fairly rich site
 (4) In addition to that a lot of radio carbon dates were taken
 (5) from the site and this site has been linked with other places
 (6) in Alaska but the dates don't quite fit They appear to be a
 (7) little later than some of the earlier dates And so this might
 (8) mean a situation where well we might have problems with the
 (9) radio carbon dates but it might also mean that we've got a
 (10) site that's important that shows the movement of these people
 (11) out of other areas - specifically Kachemak Bay and also Kodiak
 (12) Island - on their way to somewhere else
 (13) Q Let me get off of McArthur Pass and ask you about the
 (14) program generally in 1989 1990 operating under emergency
 (15) conditions
 (16) A Yes
 (17) Q What can go wrong in this large an area with the kind of
 (18) pressure that the archaeologists were under? Is there a
 (19) possibility that sites can be missed?
 (20) A Yes
 (21) MR DIAMOND Your Honor may we approach just for a
 (22) moment?
 (23) THE COURT Sure
 (24) (Sidebar conference out of the hearing of the jury)
 (25) MR DIAMOND I would register the same objection I

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- (1) registered with respect to Mr Fortier's examination yesterday
 (2) to the extent that we're going to get into fault here and
 (3) questions of whether this program was administered as
 (4) effectively as it should have been and -
 (5) THE COURT I don't think that's the question
 (6) MR PETUMENOS Contrary that's not my thrust at
 (7) all My thrust is that these gentlemen were doing the best
 (8) they could under adverse circumstances and that there's more
 to
 (9) do
 (10) THE COURT That's what I thought
 (11) (Sidebar concluded)
 (12) B MR PETUMENOS
 (13) Q I just want to be clear here you're not being critical now
 (14) of the archaeologists that were out there in the field doing
 (15) this work In general terms In terms of what they were faced
 (16) with?
 (17) A I think they had a pretty tough job I really do
 (18) Q Do you think they were in a position to prevent the loss of
 (19) confidentiality under the circumstances?
 (20) A Well when you look at the peak of the program it had I
 (21) think 20 or 22 archaeologists who were working I believe two
 (22) weeks on and two weeks off and that would mean that there
 were
 (23) 10 or 11 archaeologists for an area of a thousand miles of
 (24) oiled shoreline and over a 3 000 miles of coastline That's a
 (25) pretty big responsibility

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- (1) Q I have a few more questions about some particular issues
 (2) before I go to what you have decided or what you concluded
 (3) needs to be done and how much and then Judge we can take
 a
 (4) break after that if we can
 (5) There was some mention of an incident in the Crafton Island
 (6) cave and the fact that some bones had been removed by
 (7) scientists previously Do you remember some questions about
 (8) that of Dr Johnson?
 (9) A Yes
 (10) Q Now you were at the Crafton Island cave in 1989?
 (11) A Yes that's correct
 (12) Q Did you find human bone in 1989?
 (13) A Yes
 (14) Q And this is an area that you are a specialist in would you
 (15) say?
 (16) A Yes
 (17) Q There was also some discussion in 1989 about there being
 (18) some uncertainty about whether or not some of the digging that
 (19) was going on at Crafton Island was by animals or by human
 (20) beings Were you at Crafton Island in 1989 at that site?
 (21) A Yes
 (22) Q What do you think?
 (23) A What I observed was digging by humans
 (24) Q Why do you say that?
 (25) A Well I certainly didn't see any footprints of river

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- (1) otters as they re called and I didn t see any scats of river
 (2) otters Footprints that I saw were human footprints and the
 (3) type of digging at that I saw was not the circular hole digging
 (4) that otters do It was generally more - more disturbance by
 (5) humans
 (6) Also the places in which the digging occurred a lot of the
 (7) digging was done around the back of the cave and that s where
 (8) graves are known to be and that s where grave objects are
 (9) known to be So no I feel very strongly it s humans
 (10) MR PETUMENOS Judge I m going to need some exhibits
 (11) from the defendants before I can complete this portion of the
 (12) examination so perhaps now would be a good time for a break
 (13) THE COURT Okay I got to find out what that noise
 (14) was anyway
 (15) THE CLERK Please rise This court stands in
 (16) recess
 (17) (Jury out at 11 20 a m)
 (18) (Recess from 11 20 a m to 11 37 a m)
 (19) (Jury In at 11 37 a m)
 (20) THE CLERK This court now resumes its session
 (21) Please be seated
 (22) BY MR PETUMENOS
 (23) Q Dr Lobdell DeLaguna you ve heard that name?
 (24) A Yes
 (25) Q You ve read the book?

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- (1) checked out 39 times in 17 years
 (2) BY MR PETUMENOS
 (3) Q Is that sort of publication of an archaeological site that
 (4) causes you as an expert concern that perhaps these sites have
 (5) already been exposed to the public and no remediation is
 (6) required as a result of the oil spill
 (7) MR DIAMOND I ll object to the question as being
 (8) argumentative I think the question could have been asked
 (9) without the preamble
 (10) THE COURT We d lose site of the question counsel
 (11) If I sustained your objection so it s overruled
 (12) You can answer
 (13) THE WITNESS I m going to need the question again
 (14) MR PETUMENOS I m tempted to withdraw it but I do
 (15) want to have a record
 (16) BY MR PETUMENOS
 (17) Q Is the kind of circulation that I ve described of this
 (18) library book such that you believe that the confidentiality of
 (19) the sites that you have analyzed has already been lost as a
 (20) result of this book being available in the library?
 (21) A Well it may be the case It is a fairly obscure book
 (22) with - at least interest is fairly well focused for
 (23) archaeologists
 (24) Q And does a book sitting on a library shelf somewhere cause
 (25) you to conclude that the recommendations that you ve made

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- (1) A Yes I ve had the good fortune to work with Dr DeLaguna
 (2) Q I m going to show you what s been marked as
 (3) Exhibit 15513 1 It is DeLaguna s book written in the 1930s or
 (4) the work was done in the 1930s?
 (5) A The work was done in the 1930s
 (6) Q And published in the 1950s?
 (7) A 1956
 (8) Q Now I m going to represent to you that a friend of
 (9) Mr Diamond s I think it was checked this book out of the
 (10) Anchorage library and in the back of the library book is a
 (11) library card That contains the number of times that the book
 (12) has been checked out from the library?
 (13) MR DIAMOND Is counsel capable of representing
 (14) that?
 (15) MR PETUMENOS It s got little date stamps on it
 (16) Sort of my own experience Perhaps I don t have foundation
 (17) MR DIAMOND Maybe you do maybe you don t Can we
 (18) swear Mr Petumenos?
 (19) THE COURT Why don t we just describe what s on the
 (20) card all right?
 (21) MR DIAMOND And don t lose it
 (22) MR PETUMENOS I was going to have it copied and made
 (23) an exhibit actually counsel It s a little hard to interpret
 (24) some of the dates here so Mr - Mr Diamond has a point but
 (25) just from looking at it the jury can look at it themselves

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- (1) regarding what s necessary now to protect these sites should
 be
 (2) changed or altered in any way?
 (3) A No I don t believe so
 (4) Q Let s talk about the Cruising Guide to Prince William
 (5) Sound Exhibit 15514
 (6) MR PETUMENOS Oh, and Judge I really would like to
 (7) have the card marked as another exhibit
 (8) THE COURT You can make a copy of it sure
 (9) MR PETUMENOS And I also would like the exhibit
 (10) itself the book - I know Mr Diamond was concerned about the
 (11) renewals but perhaps we can get the book renewed or split the
 (12) fine if the trial lasts to December and move the book into
 (13) evidence
 (14) MR DIAMOND Or we ll substitute a very good photo
 (15) facsimile if there s no objection
 (16) MR PETUMENOS We ll work that out
 (17) MR DIAMOND Mr Petumenos is very loose with my
 (18) money Your Honor
 (19) THE COURT Your friend s money
 (20) MR PETUMENOS I m doing the best I can for the
 (21) friend s money Your Honor
 (22) BY MR PETUMENOS
 (23) Q Couple of references in this Cruising Guide to Prince
 (24) William Sound to Old Chenega Village Does that - do those
 (25) references cause you any concern with respect to your analysis

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- (1) - and I have your tabs here counsel I'm referring to page
 (2) 165- any concerns about what's written there about your
 (3) analysis that the sites need remediation because of the loss of
 (4) confidentiality?
 (5) A A little There's - you know certainly they point out to
 (6) things in this book that are visible anyway and maybe if
 (7) there was someone with a hard core pot hunter looter instinct
 (8) this might be important but again the focus of the book is
 (9) more enjoying sailing in Prince William Sound
 (10) Q It's about the Old Chenega Village that particular
 (11) passage isn't it?
 (12) A Yes
 (13) Q And the Old Chenega Village is a place with buildings on
 (14) it right?
 (15) A Yes
 (16) Q And the jury has seen photos of it I won't belabor the
 (17) point
 (18) Showing now the next one which is -
 (19) MR DIAMOND You want to identify it for the record
 (20) he has the earlier edition There are two of them
 (21) MR PETUMENOS Sure The - this is the later
 (22) edition
 (23) MR DIAMOND Yes That's 88 89 That's 84
 (24) MR PETUMENOS Exhibit 12038 contains In addition to
 (25) Old Chenega sections that I showed you at the break on
 Granite

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- (1) Bay Kake Cove and Thumb Cove and then Old Chenega
 Village
 (2) again Other than the hardened cold pot hunter seeking to
 (3) operate on a black market does what is written in that
 (4) publication cause you to have any concerns about the loss of
 (5) confidentiality and your conclusions regarding the need to
 (6) remediate sites as a consequence of the oil spill?
 (7) A Well again there's certainly concerns but as in the case
 (8) of this book and in the case of DeLaguna they were not as far
 (9) as I know taking people with them in great numbers to the
 (10) Sound So no I - I don't believe that it does
 (11) Q Your concern Dr Lobdell is - consists of 11 000 or so
 (12) oil spill workers going into the area?
 (13) A Yes
 (14) Q Training with respect to those workers as to what
 (15) archaeological sites are and to be careful about them?
 (16) A Yes
 (17) Q And one more exhibit this map here you looked at it at
 (18) the break
 (19) A Yes
 (20) Q Is there sufficient detail and information on that map that
 (21) causes you concern with respect to your analysis that the -
 (22) I'm sorry I'll give you the exhibit number 16197 that was
 (23) showed yesterday?
 (24) A Well for the hardened pot hunter the professional looter
 (25) this might be used as a source of information but I didn't

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- (1) even know that these existed and I don't even believe that a
 (2) lot of these records are in the State office I - I can't be
 (3) sure of that but I - I don't think it does
 (4) Q And you as an archaeologist who works in this area all the
 (5) time weren't aware of these maps sitting in the State - in
 (6) the State office?
 (7) A No I'm not They're certainly not in the documentation
 (8) with the Alaska Heritage Resource Survey files There may be
 (9) references to such things as allotment numbers but no And in
 (10) just looking at this all I could say is it points to blocks of
 (11) land
 (12) Q Now could we have defendants 10 600 5109? Verdant
 Cove
 (13) I'm told photograph Verdant Cove You're familiar with
 (14) Verdant Cove one of the sites?
 (15) A Yes
 (16) Q An Exxon attorney in opening statement said that what you
 (17) wanted to do Dr Lobdell was dig up all of this to dig up
 (18) all of Verdant Cove Is that true?
 (19) A No
 (20) Q Explain to the jury
 (21) A Well the picture is a picture of the beach with some dead
 (22) trees on it The actual site itself consists of three
 (23) different sites one that we have a fair amount of knowledge
 (24) about and a couple of others that we don't In this area -
 (25) and they may very well be in these in the trees but again

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- (1) I - I can't tell from this - this picture and this angle
 (2) there are at least eight depressions probably five of them
 (3) housepits and they seem to be a fair good size One of them
 (4) may be the size of the jury box and that would indicate to me
 (5) that we've got past habitations there that may go back a
 (6) considerable amount of time
 (7) There's also a second location where I believe if I
 (8) remember correctly there are five other depressions that are
 (9) similar So this area was the focus of a fairly substantial
 (10) habitation
 (11) In addition to that some landowners in the nearby parcel
 (12) in using some earth moving equipment uncovered some
 artifacts
 (13) which indicated it was a pretty critical period of time
 (14) The -
 (15) Q Well with all that with all that said it's a rich and
 (16) prolific area Is it your solution that you're going to go in
 (17) there and dig up the entire area is that what you're going to
 (18) do? Is that what you recommend doing?
 (19) A No What we want to do is launch an investigation the size
 (20) necessary to recover an understanding of this site That
 (21) doesn't mean dig every housepit That doesn't mean remove
 (22) every inch of it What it means is testing in some of the
 (23) housepits maybe excavation of one of them completely or half
 (24) of another and certainly testing between the house ruin areas
 (25) to determine what went on outside of the houses So no our

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- (1) Intention is not to remove every last rock off of the site
 (2) Q Exhibit 1505 is your worksheet for Verdant Cove am I
 (3) right?
 (4) A Yes
 (5) Q Now by way of background what did you do to go about
 (6) creating these work sheets? What analysis did you conduct in
 (7) arriving at both what you think should be done and how much it
 (8) should cost?
 (9) A The first thing that I did was to determine what level of
 (10) effort would be appropriate to try to recover archaeological
 (11) context And archaeology can be really slow and tedious work
 (12) if you're moving little bits of earth with a small trowel and
 (13) sometimes removing things with brushes so it is a
 (14) labor intensive activity
 (15) What I've done here is to break down for Verdant Cove
 (16) specifically that site what I feel is the appropriate level of
 (17) effort and so you see a principal investigator and eight field
 (18) archaeologists and an hour a total number of hours that's
 (19) anticipated to do that
 (20) I'm thinking that it could take between two and three
 (21) summers of work in the warm season to be able to recover
 (22) information from Verdant Cove to understand the story of the
 (23) people who lived there And then under analysis 4160 hours
 (24) there's simply 2080 working hours in a work year and that's
 (25) taking into account weekends and vacations and so this is

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- (1) simply a two year period of time when this material will be
 (2) analyzed There's lots of things to do There's certainly
 (3) radio carbon samples to prepare and send to labs There's
 (4) bones to count and identify and there's all kinds of drawings
 (5) and computer work that needs to be done
 (6) So again even the analysis is a -- is a fairly long term
 (7) activity Also in this we have a lot of background
 (8) information that we have to gather for the site before we even
 (9) go out there --
 (10) Q Let me stop you there because I think it's kind of going
 (11) all over the place
 (12) A All right
 (13) Q Let's take it in order To do this site properly what's
 (14) the first thing that a good archaeological team is going to
 (15) do?
 (16) A Okay They're going to do the -- they're going to do
 (17) background research for the area If there's been other
 (18) archaeological work in the area they'll assess that
 (19) Q They want to know what there is to know about the place
 (20) before they show up there with brushes and trowels and those
 (21) sorts of things?
 (22) A Oh sure Yeah they don't want to reinvent the wheel
 (23) here
 (24) Q Then what do they do?
 (25) A Then they want to survey the site Do an intensive survey

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- (1) of the site and locate all of the surface indications of what's
 (2) underneath
 (3) Q So that they know where to conduct more aggressive efforts
 (4) and where not to?
 (5) A Well actually no just to map the surface of the site
 (6) because they may be changing it pretty dramatically in some of
 (7) their excavations Now again the surface indications are --
 (8) are good indications of what's underneath
 (9) Q So mapping it all by itself --
 (10) A Yes
 (11) Q -- creates information that's important?
 (12) A Yes
 (13) Q Then what will they do?
 (14) A Then they'll engage in a testing program and this program
 (15) will be designed after the survey to try to figure out where
 (16) they can determine -- where the greatest areas of data recovery
 (17) can occur
 (18) Now where the most artifacts are going to be found -- where
 (19) the habitations are located and where maybe some -- even
 (20) some
 (21) garbage heaps to know what these people threw out is going to
 (22) be important Also certainly structural features They're
 (23) going to want to test those to determine whether or not they're
 (24) worth additional work
 (25) Q Then what are they going to do?
 (26) A After doing that they're going to prioritize the areas

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- (1) that they need to excavate in more detail such as opening up
 (2) an entire house That might be one thing Opening up several
 (3) large areas of a midden that might be another Doing smaller
 (4) but more numerous excavations between houses to determine
 (5) what
 (6) went on between houses
 (7) Q And as they do this this is the cake layering business
 (8) that we talked about?
 (9) A Yes
 (10) Q When they go down and then as they go down through the
 (11) layers what are they recording?
 (12) A They are recording backwards in time how the site first
 (13) was -- well it was abandoned but how it formed who first
 (14) moved in what they did there how they lived
 (15) Q Writing it down?
 (16) A Oh yeah Detailed writing writing of everything
 (17) Q Taking photographs?
 (18) A Hundreds of records of photographs -- hundreds of
 (19) photographs of records
 (20) Q Then what do they do?
 (21) A There are a lot of stratigraphic drawings that need to be
 (22) made of that layer cake so you can get an idea of just exactly
 (23) how the site was -- was in place how it was deposited That's
 (24) something else that's done and that's just retrieving the
 (25) information And a lot of that information in the field has to
 (26) be processed so normally at sites -- especially of this size

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- (1) - I'll set up a field laboratory for cleaning and processing
 (2) of the artifacts and the bones and a lot of them will be given
 (3) numbers because these are eventually going to go to
 someplace
 (4) where they're going to be stored. So we've got to keep track
 (5) of all this information
 (6) Another thing I do - and certainly more recently as the
 (7) technology has improved - is do a lot of data entry right into
 (8) computers right in the field so that we can get a good picture
 (9) of a map as we're working our way on down. We may not see a
 (10) relationship as we're digging. You might find one rock here
 (11) and pull it out and another rock here and pull it out but if
 (12) you've mapped those and you've got them all recorded and you
 (13) call them all back up at once on the computer they may form a
 (14) ring of stones. And that happened to me one time
 (15) We thought we were just working in a - in a site that was
 (16) a rock here and a rock there and when we got it all back in
 (17) the computer and called it up again we'd been looking at a
 (18) teepee ring. In other words the rings of stones that had held
 (19) down a tent. So we do that in the field as well
 (20) Q Now after the - all that's done and it's all documented
 (21) and so forth and perhaps now it's at the end of the summer and
 (22) the weather's getting bad and it's getting cold. What do you
 (23) have to do to the site until you get back the next year?
 (24) A Well we have to protect it from heavy rains. We can't
 (25) just leave test trenches open. We also have to be wary of any

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- (1) looters that might have heard we were out there and working
 out
 (2) there and could have easy access to the site by using our own
 (3) diggings to get into areas that might be very rich and they
 (4) could get artifacts for sale so we protect the site. I often
 (5) board them up and bury it with dirt in an area - in a way so
 (6) that we can quickly uncover it but in a way that would
 (7) certainly discourage someone from coming in and damaging it
 (8) Q After you're all done - say this was a one year project
 (9) and you're finished now you've got the information that you
 (10) feel is there. Isn't it the case that there's still a lot of
 (11) material that can be left behind?
 (12) A Yes
 (13) Q And so what do you do to protect that material to bury
 (14) it?
 (15) A Do the best we can. In some cases even piling heavy rock
 (16) over the area to really discourage a professional pot hunter
 (17) from coming in and looting the site. And also if we feel that
 (18) there's more that can be gained from the site we'll even put
 (19) other protective measures. If we feel that we've recovered
 (20) archaeological context and a lot of what the site - a lot of
 (21) what's left at the site is just more information of the same
 (22) kind then we're not really as worried about it as say we
 (23) might be if the site hasn't had any information from it at
 (24) all. But we still try to protect the site as best we can
 (25) Q You've left the site you have all this information and

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- (1) this stuff that you've brought back it's not like a used car
 (2) is it? What do you do with it then?
 (3) A Well then the real hard part starts the analysis and the
 (4) interpretation of what came out of the ground. We have an
 (5) enormous amount of artifacts normally in everything from very
 (6) very beautiful stone lamps that can be easily interpreted to
 (7) artifacts we've never seen before and we don't even know what
 (8) they were used for. So we have to measure them make
 (9) photographs under controlled circumstances the photographs
 of
 (10) the artifacts and then descriptions and writeups of these
 (11) artifacts. And certainly document where our excavations were
 (12) located in the site so that when someone who has interest in
 (13) this part of history or prehistory can tell exactly what we've
 (14) done because in a sense we've destroyed it and we have to -
 (15) it's not just something you'd like to do if you have the time
 (16) Once you dig an archaeological site you've got to be
 committed -
 (17) to the finishing of this final report
 (18) Q Now returning to your spread sheet here where did you get
 (19) the rate per hour that you're applying?
 (20) A Actually a couple of places. The rates that are here are
 (21) very typical charge out rates for people who do this kind of
 (22) work. They may even be a little low for Alaska. These are the
 (23) rates that were paid the Exxon survey archaeologists but I
 (24) want to emphasize these rates include not just what the
 (25) person's going to receive but certainly what's necessary to

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- (1) aid them in their employment such as health insurance and
 (2) Workman's Compensation insurance and unemployment
 insurance if
 (3) that were to be the case. And certainly there are some
 (4) administrative costs involved in keeping people - keeping
 (5) people paid
 (6) Now these were figured on an eight hour a day basis and
 (7) there might be some overtime involved in these although it's
 (8) not calculated in here. I do know that a lot of the Exxon
 (9) archaeologists simply because of the workload they had some
 (10) of them worked double days as much as 16 hours a day and
 that
 (11) wears you out. And especially doing work where you're doing a
 (12) lot of very tedious work with brushes and trowels it gets
 (13) pretty tiresome in the recording of this so an eight hour day
 (14) is what's been factored in here. But they can be looked at two
 (15) ways basically a charge out rate so that the people that are
 (16) employed have the benefits that are necessary is certainly
 (17) factored into these numbers
 (18) Q When the jury sees your various spread sheets they're
 (19) going to see that that different amounts of time were
 (20) recommended for different sites. Did that depend on how large
 (21) the site was how rich it was how difficult a site it was
 (22) things like that?
 (23) A Yes. Each site is individual. There's no two sites just
 (24) alike. Some are quite small and we figure we can get out
 (25) there for just a few days and that will be enough time to

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- (1) recover the information or at least get an idea of the
 (2) information We might get skunked I mean that's happened
 to
 (3) me
 (4) At one particular place I found 26 little minor artifacts
 (5) on the surface and I thought I would go back in there for a
 (6) period of three days and be done with it Well something on
 (7) the order of 30 days later we discovered that we had a very
 (8) significant site in North Alaska one of the - well certainly
 (9) the oldest that had ever been radio carbon dated in that area
 (10) was one of the only recordings of this particular group of
 (11) people that far north So in some cases where we're looking at
 (12) some small sites like a hearth it could grow into being a very
 (13) large site
 (14) Q And that's the nature of the beast with archaeology isn't
 (15) it Dr Lobdell? In other words it would be putting the cart
 (16) before the horse or it would be a Catch 22 if you were to
 (17) require somebody to tell you all of the things that are in the
 (18) site before you could establish there was a need to go out and
 (19) remediate it? You understand my question?
 (20) A Yes yeah It - we could make this more expensive by
 (21) doing a vast survey first And in programs that are planned
 (22) construction programs that's generally something that's done
 (23) so we can identify the resources But in a disaster event like
 (24) this no I think it's better to look at it this way The
 (25) other thing is archaeologists don't have X ray vision and

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- (1) until it's invented we rely on trowels shovels
 (2) Q Can't fly either I imagine The part below the line under
 (3) expenses relates to the stuff some of things you're going
 (4) to do when you get back from the field and the experience that
 (5) you've had putting people in the field as you say keeping
 (6) them warm getting them there keeping them healthy keeping
 (7) them safe?
 (8) A Okay Well there are a number of different line items
 (9) here
 (10) Q I'm trying to handle them generally so we don't take the
 (11) jury's time
 (12) A Some of them are field expenses some of them are
 (13) laboratory expenses but these are generally recognized costs
 (14) and they're based on real - real costs or estimated costs
 (15) of - of how much xeroxing might be necessary for example
 (16) There's field consumable supplies for Verdant Cove you note
 we
 (17) have 16 radio carbon dates at \$200 a date for a total of
 (18) \$3200 That may be a little low And we have some laboratory
 (19) and office space at a standard rate in Anchorage to make sure
 (20) that there's room to do this work
 (21) Q Finally at the very bottom you have included an
 (22) adjustment for the fact that we are doing this later in time
 (23) from the date of the event 1989 based on inflation
 (24) A Yes These rates are based on the Anchorage Metropolitan
 (25) Statistical area and I don't particularly want to bore you

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- (1) with that except it's - it costs different - it's a
 (2) different cost to live here in Anchorage than it is say in
 (3) the rest of the United States so we can't really use the
 (4) United States figures We use just this particular area and
 (5) these rates have been adjusted from 1990 up through '93
 (6) Now there is no rate for '94 as yet and it won't be
 (7) calculated until later in the year The national rate is
 (8) running at two and a half percent not including housing or
 (9) fuel costs or energy costs but from what I understand it's
 (10) running a little bit higher up here
 (11) Q When you do this for an oil company or for some other
 (12) entity in the private sector and they're thinking about maybe
 (13) they'll do the work this year but maybe they'll do the work
 (14) three years from now or four years from now and so forth and
 (15) that that time factor is in is inflation taken into account
 (16) in the industry for trying to determine for a client what it's
 (17) going to cost them?
 (18) A I try to help them in that direction yes
 (19) MR PETUMENOS I move into evidence Exhibit 1505
 (20) (Exhibit 1505 offered)
 (21) MR DIAMOND No objection Your Honor
 (22) THE COURT 1505 admitted
 (23) (Exhibit 1505 received)
 (24) BY MR PETUMENOS
 (25) Q Exhibit 1535 is the same sheet for Crafton Island south?

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- (1) A Yes
 (2) MR PETUMENOS I move into evidence exhibit 1535
 (3) (Exhibit 1535 offered)
 (4) MR DIAMOND No objection
 (5) THE COURT 1535 is admitted
 (6) (Exhibit 1535 received)
 (7) MR PETUMENOS I move into evidence Exhibit 1542
 (8) which is the Native corporation archaeological damage
 (9) supporting documentation containing all of the sheets like this
 (10) for each site for which there's a claim of damage
 (11) (Exhibit 1542 offered)
 (12) MR DIAMOND No objection
 (13) THE COURT 1542 is admitted
 (14) (Exhibit 1542 received)
 (15) BY MR PETUMENOS
 (16) Q Monitoring and stewardship what is that?
 (17) A To be able to keep track of sites and to be able to protect
 (18) sites until they can be given the proper treatment Until
 (19) archaeological context can be recovered from them there is
 (20) going to be a need to protect them from all kinds of things
 (21) but especially the potential vandalism It's kind of difficult
 (22) to determine how you might go about that especially if it's
 (23) exorbitantly expensive to move people out to the site and let
 (24) them stay there all year long
 (25) Now there have been several studies done on this and one

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- (1) that I weighed quite heavily was done by someone in the State
 (2) Office of History and Archaeology who felt that it was going
 (3) to cost a certain amount of money to monitor a certain number
 (4) of sites over a three year period and I felt that his
 (5) methodology was reasonable in doing that the number of visits
 (6) per year and the number of activities and the types of
 (7) activities that they were going to do at each site And so
 (8) from that I was able to take a per site basis and then using
 (9) the total number of sites the 44 sites that we're looking at
 (10) now use that figure and gradually reduce that figure over time
 (11) as we are able to excavate these archaeological sites or study
 (12) them in detail
 (13) Q Exhibit 1319A before you is a summary of the monitoring and
 (14) stewardship for the Chugach Alaska Corporation Could you
 (15) tell the jury how that methodology was applied to this particular
 (16) exhibit?
 (17) A If you can see here -
 (18) Q That won't work because I have it on the projector
 (19) A I'm sorry I'm sorry The top line program year number
 (20) one that's the total cost of the 19 sites at \$14,603.29 per
 (21) site We anticipate that we can remediate or excavate two of
 (22) those sites during that period of time and as you notice
 (23) through year ten of the program we would hope to get all 19
 (24) sites taken care of and the last year of the program the
 (25) price is down to the price of only that last remaining site

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- (1) Now the last column simply adjusts those for the current
 (2) rate of inflation three and a half percent
 (3) Q Now when you have a site that's taking a number of
 (4) years - we talked earlier about committing to taking a site on
 (5) and getting the work underway Tell the jury if it is or
 (6) isn't critical that there be a monitoring or a stewardship
 (7) program as an adjunct or as an addition to the other work
 (8) you're doing and tell them why?
 (9) A I think it is important to have the monitors there
 (10) Certainly there have been monitoring programs considered
 (11) after the spill There - there have been considerations by Exxon
 (12) for future monitoring programs and especially with so many
 (13) people that have been introduced to the area yeah I think the
 (14) monitoring of these sites while you're excavating and not able
 (15) to focus on sites that are not being excavated or even to
 (16) monitor sites where you are working and may have left them
 (17) open for a time period is an important thing to do
 (18) MR PETUMENOS I move into evidence exhibit 1319A
 (19) (Exhibit 1319A offered)
 (20) MR DIAMOND No objection
 (21) THE COURT It's admitted
 (22) (Exhibit 1319A received)
 (23) BY MR PETUMENOS
 (24) Q Is Exhibit 1318 the same monitoring stewardship cost for
 (25) the Village corporations of Port Graham English Bay and

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- (1) Chenega?
 (2) A Yes it's similar but the program because there's more
 (3) sites will take 13 years and also because there are three
 (4) different groups involved it's split into the number of sites
 (5) that they have to monitor
 (6) MR PETUMENOS I move into evidence Exhibit 1318
 (7) (Exhibit 1318 offered)
 (8) MR DIAMOND No objection
 (9) THE COURT It's admitted
 (10) (Exhibit 1318 received)
 (11) BY MR PETUMENOS
 (12) Q Now taking the cost of the remediation and the work that
 (13) you recommend that be done to protect these sites together
 (14) you have I think created or put together for us a remediation and
 (15) damage summary and you've got one for the villages again
 (16) Exhibit 1268 and that tells the jury 1268 the combination of
 (17) the remediation and the - the remediation damages that you
 (18) have put together for each site that the villages own?
 (19) A That part of it shows the remediation yes
 (20) MR PETUMENOS I move into evidence 1268 if I
 (21) haven't already
 (22) MR DIAMOND You have already
 (23) MR PETUMENOS Thank you I won't move it again
 (24) Let me see if I haven't confused myself just a bit
 (25) BY MR PETUMENOS

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- (1) Q Taking then those two things together I show you Exhibit
 (2) 1544 and -
 (3) A Yes
 (4) Q What is Exhibit 1544?
 (5) A It's the sites the damage amount per site or the
 (6) remediation amount per site and the monitoring costs that'll be
 (7) necessary and it comes up with a total
 (8) Q So that the monitoring costs is for the entire for all of
 (9) the sites and the work to be done on each one is broken out on
 (10) a site by site basis for the jury?
 (11) A Yes
 (12) MR PETUMENOS I move into evidence Exhibit 1544
 (13) (Exhibit 1544 offered)
 (14) MR DIAMOND No objection
 (15) THE COURT 1544 is admitted
 (16) (Exhibit 1544 received)
 (17) BY MR PETUMENOS
 (18) Q For the Chenega Corporation Exhibit 1592 is that the same
 (19) damage summary for that corporation?
 (20) A Yes
 (21) MR PETUMENOS I move it into evidence
 (22) (Exhibit 1592 offered)
 (23) MR DIAMOND No objection
 (24) THE COURT Admitted
 (25) (Exhibit 1592 received)

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- (1) BY MR PETUMENOS
 (2) Q Exhibit 1293 is the same for Port Graham?
 (3) A Yes
 (4) MR PETUMENOS And finally Exhibit 1294 is the same
 (5) for English Bay I move it into evidence 93 and 94
 (6) (Exhibits 1293 and 1294 offered)
 (7) MR DIAMOND No objection
 (8) THE COURT It s admitted
 (9) (Exhibits 1293 and 1294 received)
 (10) BY MR PETUMENOS
 (11) Q Finally we have created an exhibit entitled Exhibit 1543
 (12) What is exhibit 1543?
 (13) A It s the total of all of the remediation measures and the
 (14) monitoring costs combined for all of the four corporations
 (15) MR PETUMENOS I move it into evidence
 (16) (Exhibit 1543 offered)
 (17) MR DIAMOND No objection
 (18) THE COURT Admitted
 (19) (Exhibit 1543 received)
 (20) MR PETUMENOS Now Exhibit 1504 counsel
 (21) (Exhibit 1504 offered)
 (22) MR DIAMOND Your Honor we have no objection to this
 (23) coming in so long as we can reserve our right to discuss with
 (24) Mr Petumenos later today the editorial comments in the log
 (25) That s the only thing we would object to

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- (1) THE COURT I ll admit it on that basis
 (2) (Exhibit 1504 received)
 (3) MR PETUMENOS I don t concede obviously they re
 (4) editorial We ll work it out
 (5) MR DIAMOND The written editorial?
 (6) MR PETUMENOS I also move into admission Exhibit
 (7) 1268 My paralegal tells me I didn t move it in
 (8) (Exhibit 1268 offered)
 (9) MR DIAMOND I sort of feel I should hold everything
 (10) down on the table because it may get admitted
 (11) I have no objection to that either
 (12) MR PETUMENOS I think it will get admitted
 (13) (Exhibit 1268 received)
 (14) BY MR PETUMENOS
 (15) Q Exhibit 1504?
 (16) A Yes
 (17) Q Tell the jury what it is
 (18) A It s a photo log of pictures - let me check it here
 (19) again It s a photo log of pictures that I took during the -
 (20) during May of this year
 (21) Q Where did you go?
 (22) A To the Kenai Fjords area and southern Kenai Peninsula
 (23) Q Did you look at sites in the Kenai Fjords area?
 (24) A Yes
 (25) Q And finally Dr Lobdell the information about these

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- (1) sites the oiling and so forth has been coming in over time
 (2) since you first began your assignment in 1989 right?
 (3) A Yes
 (4) Q And you have been continually looking at material
 (5) reassessing and advising yourself of what the material is and
 (6) have been making your best recommendation up through and
 (7) until
 (8) today as to what you believe should occur out in the Sound in
 (9) the Kenai Fjords and the lower Kenai?
 (10) MR DIAMOND I m going to object to the leading
 (11) nature of that question
 (12) MR PETUMENOS It s the final question I m going to
 (13) ask Does that get me by?
 (14) MR DIAMOND I withdraw my objection
 (15) THE COURT Okay fair enough Now the witness
 (16) doesn t remember what was just said
 (17) A No I don t
 (18) MR PETUMENOS I won t ask you to read it back I m
 (19) just going to try to shorten it
 (20) BY MR PETUMENOS
 (21) Q You have been revising looking at material since 1989?
 (22) A Yes
 (23) Q And you have been doing that up until very recently to
 (24) make sure that as additional information comes in including
 (25) your trip in 1994 that you are giving this jury your best
 opinion as to what should happen and what it should cost is

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- (1) that right?
 (2) A Yes and revising estimates as well
 (3) MR PETUMENOS I broke my leading question into two
 (4) leading questions and I have no further questions
 (5) CROSS EXAMINATION OF JACK E LOBDELL Ph D
 (6) BY MR DIAMOND
 (7) Q Good afternoon now Dr Lobdell
 (8) DeLaguna Exhibit 15513 I I m going to show you the card
 (9) that Mr Petumenos all pointed us to Can you confirm for me
 (10) that since May 13 1993 the DeLaguna book has been checked
 (11) out what appears to be seven times?
 (12) A It s all over the card
 (13) Q One two three four five six seven
 (14) A If you say so One of the jobs I had as a college student
 (15) was to work in the university library and I often used to
 (16) stamp cards a couple more times than I was supposed to
 (17) Q You don t see any - any dates repeated here do you?
 (18) A No I don t
 (19) Q They all appear to be separated by at least two months?
 (20) A A day - oh yeah I see yeah
 (21) Q On the flipside of the card where they type in the name and
 (22) the number it says N 571 DeLaguna prehistory see that?
 (23) Would you read into the record what it says on the top
 (24) right hand corner of the card just above the little yellow
 (25) circle sticker?

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- (1) A Copy two
 (2) Q Thank you
 (3) Based on your vast experience working in a college library
 (4) does that suggest to you that this is one of two copies you can
 (5) check out from the Anchorage library?
 (6) A Certainly might yes except that it also might suggest to
 (7) me as in cases of rare books that one of them is sequestered
 (8) in a special room and not allowed to be checked out such as
 (9) if I remember correctly is the case at the consortium library
 (10) at the university We have an Alaska room and some books can
 (11) be checked out and some can't
 (12) Q Speculation on your part You don't know that with respect
 (13) to the DeLaguna book do you?
 (14) A Not that copy no
 (15) Q Let's go back to 1989 If we might for a moment You
 (16) were - you spent that winter in New Mexico?
 (17) A Part of it yes
 (18) Q All right You are a resident of New Mexico with the
 (19) exception of the summer months are you not?
 (20) A I'm a resident of Alaska I spend the summer - or excuse
 (21) me the winter months in New Mexico
 (22) Q And when you got the call from Chugach Alaska you were
 (23) in
 (24) New Mexico you weren't in Alaska were you?
 (25) A No it wasn't the first call I received concerning the
 (26) spill but I think I might have been in Alaska I believe I

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- (1) was in Alaska
 (2) Q The first call you received about the spill you received
 (3) that when you were in New Mexico not Alaska?
 (4) A Yes It was essentially the date of the spill that I
 (5) received my first call
 (6) Q Okay You've generated a number of -
 (7) A It was not - excuse me I don't mean to interrupt but it
 (8) wasn't from Chugach Alaska
 (9) Q No I understand that
 (10) You've generated a number of reports in this case for the
 (11) Native corporations have you not?
 (12) A I believe four
 (13) Q Your first was in 1990?
 (14) A Yes
 (15) Q And your second was in 1992?
 (16) A Yes although they were split between various
 (17) corporations One for one corporation one for another
 (18) Q And a third was in 1993 is that right?
 (19) A That's what I recall
 (20) Q The - the 1990 report covered something in the
 (21) neighborhood of 34 35 sites I could show it to you if you'd
 (22) like to see it Does that sound about right?
 (23) A I just don't recall It might have been that number
 (24) Q And to refresh your recollection you came up with a total
 (25) dollar work plan in 1990 for 34 sites totalling about 40

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- (1) million dollars?
 (2) A Yes I believe so
 (3) Q Okay And in 19 - your 1992 report covered 79 sites?
 (4) A Yes
 (5) Q And the total work plan that you calculated was in excess
 (6) of 15 million?
 (7) A Yes
 (8) Q And then your 1993 report covered 85 sites correct?
 (9) A I'm not sure of that number but that sounds - yeah in
 (10) the ballpark
 (11) Q And the work plan estimate in the 1993 report was for
 (12) expenditures of roughly 40 million dollars Is that correct?
 (13) A I think that's what I recall yes
 (14) Q Through the date of those three reports the time you
 (15) prepared those three reports It is true Is it not
 (16) Dr Lobdell that you had only personally toured a half dozen
 (17) of the sites for which you provided damage estimates?
 (18) A I don't think it's a half dozen but it certainly wasn't as
 (19) many sites as I would like to have
 (20) Q Do you recall there being more than a half dozen?
 (21) A I believe it was nine but I'm not sure about that
 (22) Q I won't quibble between nine and a half dozen
 (23) A Okay
 (24) Q And that was in August of 1989?
 (25) A Yes

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- (1) Q In August of 199 - 1989 you toured but you didn't
 (2) conduct any archaeological scientific investigation of those
 (3) nine sites Isn't that true?
 (4) A No There were certainly lots of people out running around
 (5) trying to protect sites and I didn't want to become a thorn in
 (6) somebody's side I was there to observe and look at these
 (7) sites
 (8) Q And so that the sum total of your personal hands on on the
 (9) ground knowledge concerning the sites that you've estimated
 (10) damages for in 1990 1992 and 1993 was the roughly nine or so
 (11) sites that you personally observed in 1989?
 (12) A Of the sites that I had been to?
 (13) Q Right
 (14) A Yes that's correct
 (15) Q In connection with the preparation of those reports I take
 (16) it your first order of business was to make some sort of
 (17) determination as to which one of the sites had been potentially
 (18) adversely affected by the oil spill?
 (19) A Yes that was part of it
 (20) Q Before you can come up with a work plan you have to know
 (21) which site you're dealing with?
 (22) A Exactly on a site by site basis
 (23) Q And you have to gather assemble some information about
 (24) the
 (25) site?
 (26) A That's correct

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- (1) Q In connection with the preparation of the - let's take the
 (2) 1990 report for example you relied on other people?
 (3) A Yes Yes there were some that - that I relied on in
 (4) addition to my own fieldwork
 (5) Q Well your fieldwork at this point consists of several days
 (6) out in the Sound looking at roughly nine sites?
 (7) A Yes
 (8) Q And the folks you relied on were employees of Chugach
 (9) Alaska Corporation isn't that true?
 (10) A They were members of the OSRT team, but at the same time
 (11) took the opportunity to talk to state archaeologists and
 (12) certainly Exxon archaeologists as well
 (13) Q That was during the couple of days in August of 1989 when
 (14) you were here?
 (15) A No It was certainly prior to going out to do my field
 (16) research and after I got back in as well
 (17) Q Well your field research at this point in time consists
 (18) of the several days that you spent in the field in August of
 (19) 1989 isn't that right?
 (20) A Yes
 (21) Q And so in going back to your office or your library or
 (22) wherever you do your analysis you relied on the observations
 (23) that you made in August of 1989 plus what you were told by the
 (24) OSRT people from Chugach Alaska correct?
 (25) A Partially

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- (1) Q The OSRT people included Dr Johnson who we met for the
 (2) first time the day before yesterday?
 (3) A Yes
 (4) Q Mark Lutrell?
 (5) A Yes
 (6) Q And Pete Zollers?
 (7) A Yes
 (8) Q Those were your three principal eyes and ears with respect
 (9) to site analysis when you prepared your analysis?
 (10) A There was one more Rita Miraglia and in addition to that
 (11) I had field notes of some of the Exxon - the Exxon activities
 (12) and also SCAT notes
 (13) Q The - the information that you collected from
 (14) Messrs Zollers Lutrell Johnson and Miraglia - if I say
 (15) Messrs that's wrong but those four people - was
 (16) information about why they considered sites important isn't
 (17) that right?
 (18) A I think that's one of the questions that I asked them
 (19) yes
 (20) Q And they provided summary information about site size?
 (21) A I asked them to provide me yes summary information on
 (22) site size
 (23) Q And site complexity?
 (24) A Sure If they could count the number of housepits or tell
 (25) me if there was a fire hearth there yes I thought that was

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- (1) important
 (2) Q Fairly simple data?
 (3) A Surface - surface indications yes
 (4) Q Had you had the resources Dr Lobdell you would have
 (5) preferred doing field investigations yourself would you have
 (6) not?
 (7) A Not necessarily all of them I would have liked to have
 (8) done more than nine sites
 (9) Q Well you didn't verify information that you got subsequent
 (10) to August of 1989 based upon what you had done earlier in
 (11) August of 1989 did you?
 (12) A I'm sorry I don't understand your question
 (13) Q All right The information that you received after the
 (14) summer of 1989 from the OSRT people -
 (15) A Yes
 (16) Q Prior to preparing your 1990 report your 1992 report your
 (17) 1993 report you never had occasion to personally come back
 (18) to Alaska and verify anything?
 (19) A No I was - I had field notes and SCAT reports that I was
 (20) trying to use to verify the material
 (21) Q And it is true is it not that you would have preferred to
 (22) have been able to come back to Alaska after 1989 and confirm
 (23) the data that you were getting from Johnson Miraglia Zollers
 (24) and Lutrell?
 (25) A Again I think that's only partially correct I don't

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- (1) think I needed to go to all of them
 (2) Q Didn't you testify at deposition in this case that you
 (3) would have preferred to do that yourself?
 (4) A I don't recall specifically those words but I think I
 (5) would have liked to have seen more than I saw
 (6) Q You also mentioned the SCAT reports from Exxon that was
 (7) something else you looked at?
 (8) A Yes
 (9) Q You didn't consider that to be particularly reliable
 (10) information in formulating your conclusions did you?
 (11) A Sure I did
 (12) Q Didn't you think that it was - it was probably slanted or
 (13) biased because Exxon was preparing it?
 (14) A Certainly that was a concern of mine at one point
 (15) Q And didn't you conclude that the Exxon data at least for
 (16) your purposes probably wasn't reliable as to what had been
 (17) oiled and how badly?
 (18) A I don't think those were my exact conclusions no
 (19) Q Well isn't that a rough approximation of what you thought
 (20) about the SCAT documentation?
 (21) A No I think - I think my difficulty had to do more with
 (22) the program itself that it was an in house program set up and
 (23) operated by Exxon and there were no safeguards as to the
 (24) reliability of that information as I could see them and there
 (25) were certain conflicts of interest or at least appearing

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- (1) conflicts of interest that I brought into question I'm not
 (2) saying that all of the SCAT data was - was unreliable
 (3) Q It is true though isn't it Dr Johnson - I'm sorry
 (4) Dr Lobdell Too many doctors in the courtroom - that you
 (5) would have preferred having more detailed information than
 that
 (6) which you were able to get from the Exxon materials and what
 (7) had been furnished you by the Chugach Alaska OSRT people?
 (8) A Oh I think I'd always like to get more information sure
 (9) Q And you did - in this case you would have preferred it?
 (10) A I'm not really sure what else there was for me to get
 (11) Q You would have preferred at least in one instance to go
 (12) out to the field and verify this the information you were
 (13) getting yourself?
 (14) A There were a couple of instances where I wanted to yes
 (15) Q Just a couple of instances? Didn't you testify at
 (16) deposition that you would have preferred to verify for yourself
 (17) the data field data that you were getting from the OSRT
 (18) people?
 (19) A Certainly if I had time resources and money to do it you
 (20) know it wouldn't hurt
 (21) Q You would have preferred it wouldn't you?
 (22) A I think I said it wouldn't hurt
 (23) Q And I asked you whether isn't it true you would have
 (24) preferred doing it yourself?
 (25) A Well I think we're into a battle of words here and you

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- (1) know I guess I'll agree with you
 (2) Q Thank you The first step was identifying which sites were
 (3) potentially harmed by the spill before doing a work plan for
 (4) them It is true is it not that you included sites that
 (5) based on the information that had been assembled for you had
 (6) not been adversely impacted by any oil?
 (7) A Yes
 (8) Q And the list of sites that we've heard about from
 (9) Mr Petumenos and we've seen on the overhead projector
 includes
 (10) examples of sites that were not adversely affected by oil?
 (11) A From what we understand yes
 (12) Q That's all I can ask you is what you understand in those
 (13) instances Dr Lobdell you also assumed that since the sites
 (14) were not oiled they were not subject to clean up activities?
 (15) A I'm not sure that I assumed that
 (16) Q Well you were told that as to several of these sites that
 (17) there were no adverse impacts from the oil spill were you
 (18) not?
 (19) MR PETUMENOS Excuse me Judge I'm not sure if he's
 (20) talking about sites that were eliminated from the damage
 (21) calculation or sites still in the damage calculations I have
 (22) an objection -
 (23) MR DIAMOND I'm talking about sites for which
 (24) they're still making claims
 (25) MR PETUMENOS Thank you

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- (1) MR DIAMOND Let me go back a second
 (2) BY MR DIAMOND
 (3) Q With respect to some of the sites that Mr Petumenos has
 (4) talked about that were not oiled your principal concern for
 (5) those sites is the threat of future vandalism isn't that
 (6) true?
 (7) A Or secondary effects to those sites that might have
 (8) occurred during the cleanup itself
 (9) Q Assuming there was a cleanup? You don't know in all
 (10) instances that these sites were subject to cleanup do you?
 (11) A I guess my concern would not necessarily be with a cleanup
 (12) on a given beach but whether or not the site itself was
 (13) impacted by say clean up workers You might have a beach a
 (14) quarter of a mile away from an archaeological site and that
 (15) beach be treated and the site be damaged inadvertently or by
 (16) vandals I think those were my major concerns
 (17) Q How could a cleanup a quarter of a mile away physically and
 (18) directly impact a site a quarter of a mile down the beach?
 (19) A Workers in the uplands workers seeking out interesting
 (20) places
 (21) Q Okay As to those sites then your concerns were not
 (22) directly linked to oiling that's why they got put on your
 (23) list
 (24) MR PETUMENOS Objection calls for a legal
 (25) conclusion

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- (1) MR DIAMOND I want to know why he -
 (2) THE COURT The objection's overruled
 (3) BY MR DIAMOND
 (4) Q As to those sites your concerns were not for the direct
 (5) effects of oil to the archaeological sites?
 (6) A That's correct
 (7) Q There were a number of such sites as to which you
 (8) concluded or at least based on the information that had been
 (9) provided to you that there were no oil spill related impacts
 (10) known they include do they not Northwestern Lagoon which
 (11) we've discussed at some length in this case?
 (12) A Yes
 (13) Q Flat Island is another one?
 (14) A Yes
 (15) Q Dogfish Bay?
 (16) A Yes
 (17) Q Disk Island burial cave?
 (18) A Yes
 (19) Q Any others that you can think of?
 (20) A There's a lot of sites
 (21) Q Can you think of any others in that category?
 (22) A No
 (23) Q That were not adversely impacted by the oil spill?
 (24) A Not off the top of my head no
 (25) MR PETUMENOS Excuse me I'll object to the question

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- (1) as misleading We went from direct impacts of oil to adversely
 (2) affected by the oil spill
 (3) THE COURT I don't believe the witness would be
 (4) swayed counsel Go ahead
 (5) BY MR DIAMOND
 (6) Q Dr Lobdell you don't purport to be an expert do you on
 (7) whether the oil spill caused any direct physical effects to
 (8) archaeological deposits in the intertidal zone?
 (9) A Could you be a little more specific please
 (10) Q Yeah I can
 (11) MR DIAMOND Give me just a moment Your Honor I've
 (12) got to dig a concept you're familiar with
 (13) BY MR DIAMOND
 (14) Q Dr Lobdell do you purport to be an expert on whether or
 (15) not the Exxon Valdez oil spill caused physical negative impacts
 (16) to deposits in the intertidal zone archaeological deposits in
 (17) the intertidal zone?
 (18) A I think it did
 (19) Q Do you purport to be an expert on that subject?
 (20) A I think that's partially correct
 (21) Q That you do not purport to be an expert on that subject is
 (22) that what's correct?
 (23) A I think I do and I - there's some things I know and some
 (24) things I don't know
 (25) Q Do you purport to be an expert on the direct effects of

אני חושב שיש לי מידע מסוים על ההשפעות
 הישירות של הנפט על הממצאים הארכאולוגיים
 באזור האינטידללי

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- (1) (Sidebar conference held out of the hearing of the jury)
 (2) THE COURT I believe that counsel's objection relates
 (3) to the passage just before the answer And I have a feeling
 (4) that here's what I am going to do with it The witness can
 (5) read the passage before and the passage after and to the
 (6) extent that he doesn't raise the issue of context here you can
 (7) bring it on redirect okay?
 (8) MR PETUMENOS He's going to be allowed to read both
 (9) the previous answer and the second one?
 (10) THE COURT Mr Diamond is going to be able to conduct
 (11) his own examination The witness is going to be allowed to
 (12) explain and if he doesn't explain to your satisfaction you'll
 (13) be allowed to explain with regard to redirect
 (14) MR PETUMENOS Got it Is that the way you want to
 (15) handle all these objections?
 (16) THE COURT I think I probably would, unless there's
 (17) something significantly different about a particular
 (18) objection
 (19) MR PETUMENOS All right
 (20) THE COURT Hold it I've got a personal note here and
 (21) I'm not reading it counsel Does that come from your
 (22) deposition?
 (23) MR PETUMENOS You want to read it?
 (24) THE COURT No
 (25) (Sidebar concluded)

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- (1) Exxon Valdez the Exxon Valdez oil spill on archaeological
 (2) deposits in the intertidal zone?
 (3) A I think I am
 (4) Q You were deposited in this case over a period of two or three
 (5) days?
 (6) A Two days
 (7) Q And counsel for the Native corporations was present?
 (8) A Yes
 (9) Q It was not the first occasion in which you gave deposition
 (10) testimony was it?
 (11) A It was the first
 (12) Q And you were instructed at the beginning of your deposition
 (13) that your testimony was subject to the penalty of perjury that
 (14) attach to trial testimony?
 (15) A Yes
 (16) MR PETUMENOS Could I have a transcript reference
 (17) before counsel -
 (18) MR DIAMOND I'm sorry it is 327 18 through 22
 (19) MR PETUMENOS Judge I can't make an objection with
 (20) regard to prior inconsistent statement if I am not given a
 (21) chance to look at it Could I have the lines again please
 (22) 18 through 22
 (23) MR PETUMENOS I have a contextual objection to the
 (24) proffer
 (25) THE COURT Come up here

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- (1) BY MR DIAMOND
 (2) Q Dr Lobdell not to keep everyone in suspense we were
 (3) talking about your deposition we were talking about your area
 (4) of expertise Let me show you an excerpt of that deposition
 (5) I will give you the original of your transcript so that you can
 (6) read it in context
 (7) Dr Lobdell were you not asked Well do you purport to
 (8) be an expert of whether or not Exxon Valdez oil spill has
 (9) caused physical negative impacts to in situ deposits in the
 (10) intertidal zones?
 (11) You answered Yes (sic)
 (12) Were you not asked that question and did you not give that
 (13) answer?
 (14) A I'm sorry I answered no
 (15) THE COURT It's been a long day counsel You want a
 (16) break?
 (17) MR DIAMOND It's been a long week After this I'd
 (18) like a break
 (19) A Yes
 (20) Previous to that I qualify by saying I think this is all a
 (21) little simplistic and went on to talk about the effects of oil
 (22) on artifacts and the effect of oil on radio carbon and I
 (23) discussed my concerns with it But again I think there's
 (24) still a lot of questions about - about oil in the intertidal
 (25) zone on archaeological sites

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- (1) BY MR DIAMOND
 (2) Q Well on the subject of radio carbon as long as you raise
 (3) it you don't consider yourself to be an expert on radio carbon
 (4) dating do you?
 (5) A An archaeologist uses radio carbon dating as a tool as I
 (6) mentioned just like a physician might take a blood sample and
 (7) submit it to a lab an archaeologist is responsible for the
 (8) taking of a sample and processing of the sample and getting
 (9) the sample to know the context of it and interpret the results that
 (10) come back But a radio carbon expert is generally a chemist or
 (11) a physicist who works in a lab so no I am not
 (12) Q So your answer to my question is no you do not consider
 (13) yourself to be an expert in the field of radio carbon dating?
 (14) A That's correct
 (15) MR DIAMOND Good time for a break
 (16) THE COURT Okay
 (17) THE CLERK Please rise This court stands in
 (18) recess
 (19) (Jury out at 12 42 p m)
 (20) (Recess from 12 42 p m to 12 55 p m)
 (21) (Jury in at 12 55 p m)
 (22) THE CLERK This court now resumes its session
 (23) Please be seated
 (24) MR DIAMOND May we approach just for a moment
 (25) (Bench conference off the record)

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- (1) BY MR DIAMOND
 (2) Q Dr Lobdell I'm talking quickly because we're going to try
 (3) to get done fast
 (4) You talked earlier about direct effects of the oil spill
 (5) and the ensuing cleanup on archaeological resources in the
 (6) area and one of the things that you said was the cleanup could
 (7) move things around remember that?
 (8) A Yes
 (9) Q Its true is it not that a lot of the intertidal zone
 (10) material does get moved around by natural processes -
 (11) A Yes
 (12) Q - in Prince William Sound And that in fact erosion
 (13) beach erosion in Prince William Sound is probably the largest
 (14) single threat to archaeological resources in the area?
 (15) A I wouldn't say it's the largest single threat but it's
 (16) certainly a threat It's kind of a two edged sword You know
 (17) the erosion helps us to find and identify archaeological sites
 (18) at the same time damage is being done to them yes
 (19) Q Erosion helps you because at times you get deposits of
 (20) what's called artifact scatter on the beach and that leads you
 (21) to know where some buried middens are that you otherwise
 (22) wouldn't discover?
 (23) A That's true
 (24) Q It's true is it not that most of the artifacts that one
 (25) would discover in the intertidal zone are stone as opposed to

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- (1) wood?
 (2) A I would say that's partially correct Most of them are
 (3) although in some - some special cases you might have
 (4) supersaturated wood or peat deposits in the intertidal zone
 (5) that have artifacts in them
 (6) Q We heard yesterday about one such deposit at Kake Cove
 (7) but
 (8) putting those aside ordinarily the artifacts that survive the
 (9) elements in the shore front environment are stone as opposed
 (10) to
 (11) wood?
 (12) A Yes
 (13) Q And you can't radio carbon date stone?
 (14) A That's correct
 (15) Q So if you get oil on a stone artifact it wouldn't inhibit
 (16) radio carbon dating because you can't do that in the first
 (17) place?
 (18) A On stone but from my own experience there's other
 (19) information to be gained from the intertidal zone
 (20) Q I'm talking about radio carbon dating
 (21) A Okay
 (22) Q With respect to radio carbon dating if you get some oil on
 (23) a stone it doesn't interfere with dating that material using
 (24) the radio carbon test because you can't radio carbon stone is
 (25) that correct?
 (26) A That's correct But if I can continue one excavation that
 (27) I did at the lowest tide of the year was in an intertidal zone

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- (1) to see if there were in place deposits farther on down into the
 (2) intertidal zone and we not only found them in place but
 (3) recovered some human remains and were able to take some
 (4) charcoal samples which we submitted for radio carbon So just
 (5) because there's an artifact in the - a stone artifact in the
 (6) intertidal zone doesn't necessarily mean that there might not
 (7) be in place materials below it
 (8) Q That could be carbon dated?
 (9) A Yes
 (10) Q With respect to beach treatment you also identified as a
 (11) potential direct effect of the oil spill and cleanup the
 (12) possibility of removal of artifacts on the surface that could
 (13) prevent the discovery of important resources that otherwise
 (14) might be discovered remember that testimony?
 (15) A I think that's an effect yes
 (16) Q One of the by products of the cleanup was the fact that
 (17) lots of sites were discovered that were never known to exist
 (18) before isn't that right?
 (19) A I wouldn't say they were never known to exist There's
 (20) good ethnographic and oral history reports of a lot of these
 (21) places and so certainly the people who found them during the
 (22) spill might want to think they're the discoverers of the sites
 (23) but somebody probably knew about them before them like the
 (24) people who made it
 (25) Q Within the archaeological community isn't it generally

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- (1) recognized that one of the silver linings - if one could have
 (2) a silver lining from an oil spill - but one of the silver
 (3) linings was that it added demonstrably to the knowledge the
 (4) archaeological knowledge of Prince William Sound?
 (5) A A lot of sites were found you bet
 (6) Q You were talking about how thinly spread the Exxon
 (7) archaeologists' connection with the work that they were doing
 (8) and you mentioned a thousand miles of oiled shoreline
 (9) A That was just an estimate on my part
 (10) Q You don't know that to be the case do you?
 (11) A I don't know the exact - the exact mileage of oiled
 (12) shoreline
 (13) Q We've heard testimony I believe from Mr. Bush that it's
 (14) under 500 miles. Does that sound more in line with reality?
 (15) A I don't know if he's referring to the total oil spill or
 (16) whether or not that's just the part that he was concerned
 (17) with
 (18) Q I want to turn for a moment to the program of
 (19) archaeological study that you have quantified in this case
 (20) And I don't think anybody disagrees with the notion that
 (21) archaeological study in the area is an important undertaking
 (22) but let me ask you some questions with respect to how all of
 (23) this relates to harms created by the oil spill
 (24) Let me first ask you one of the - one of the harms that
 (25) you've identified as being the result of the oil spill was the

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- (1) they'll be - as far as I can tell they'll be incorporated
 (2) into the material that the archaeological site will contain
 (3) Q But if you - if your ability to extract the science from
 (4) those materials has in any way been compromised because of
 some
 (5) chemical or physical effects of oil beach cleanup solvent
 (6) you're not going to be able to restore that by doing 23 years
 (7) of 30 million dollars worth of research are you?
 (8) A Not specific artifacts that are located on the beach no
 (9) Q And if materials were removed - either innocently by
 (10) clean up workers who picked it up mistakenly thinking it was
 (11) debris or purposefully because they wanted to own and
 possess
 (12) them - your 23 year program of 30 million dollars of
 (13) archaeological research is not going to restore those artifacts
 (14) to the place from whence they came?
 (15) A What it's going to do is try to replace the loss of the
 (16) cultural knowledge from those. But an individual artifact
 (17) lost is lost forever
 (18) Q You've done no research concerning pre spill vandalism in
 (19) the Prince William Sound area have you?
 (20) A No
 (21) Q And you've done no fieldwork to determine whether
 vandalism
 (22) or looting of artifacts is on the increase?
 (23) A I have noted at some of these sites the possibility of some
 (24) looting
 (25) Q But you have done no fieldwork to see if in fact that's

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- (1) fact that in your view it is likely that artifacts that might
 (2) have been out there are now irretrievably lost. That is a
 (3) concern that you have?
 (4) A Yes
 (5) Q Undertaking the - what is it a 16 year program 16 years
 (6) of archaeological research that you're advocating?
 (7) A I believe it's a 10 year program and a 13 year program
 (8) Q For a total of 23 years?
 (9) A Yes
 (10) Q Undertaking the 23 year program of archaeological study
 (11) that you're recommending is not going to bring back any of
 (12) those lost artifacts will it? That's not part of your budget
 (13) is it?
 (14) A The loss of cultural knowledge is irretrievable I mean
 (15) it's like an endangered species once it's gone it's gone
 (16) forever. So no it's - it's not going to bring that back
 (17) What it's going to attempt to do is to save the past for the
 (18) future
 (19) Q Not to disparage that but it is also true is it not that
 (20) to the extent that any artifacts out there in the intertidal
 (21) zone that are still there but may now have been contaminated
 (22) with beach clean up material or oil are not going to get
 (23) decontaminated by virtue of your study program your 23 year
 (24) study program isn't that right?
 (25) A No they won't. They won't be helped I think that

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- (1) happened? Let me rephrase that
 (2) You've done no fieldwork to determine if looting is on the
 (3) increase?
 (4) A I think as I stated my - my fieldwork has noted
 (5) incidences which may be looting
 (6) Q But your field -
 (7) A Whether or not - if you're talking about a grant program
 (8) of study to see whether or not it's on the increase no I have
 (9) not
 (10) Q Have you done any systematic research to see whether
 (11) looting has increased since the spill?
 (12) A No
 (13) Q Are you aware of any scientific research that's been done
 (14) that correlates looting with the spill?
 (15) A I may have read some articles which are back in the
 (16) recesses of my mind right now concerning this but no not
 (17) specifically
 (18) Q You haven't kept any list of incidents of vandalism to
 (19) archaeological resources in the Prince William Sound area
 have
 (20) you?
 (21) A No Again my role has not been as the monitor out there
 (22) Q You - you mentioned the Crafton Island burial cave -
 (23) A Yes
 (24) Q - In response to some of Mr. Petumenos questions You're
 (25) aware that that cave has a long long history of being the

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- (1) subject of looting and pot holing?
 (2) A I wouldn't say it has a long history of it I would say
 (3) that there are known incidences of vandalism that have occurred
 (4) there yes
 (5) Q Even before the oil spill?
 (6) A Yes
 (7) Q And with respect to the incident of which you referred
 (8) that occurred after the oil spill no connection has ever been
 (9) made between that incident and any oil spill clean up worker
 (10) other Exxon or Veco employee?
 (11) A When I was out there and looking at the damage there were
 (12) oil spill boats and oil spill crews all over Crafton Island
 (13) but no no specific individual was identified
 (14) Q Well there's also a nearby hatchery isn't there?
 (15) A I don't recall
 (16) Q You said that when you were at Crafton you noticed human
 (17) remains?
 (18) A Yes
 (19) Q Is that unusual?
 (20) A No
 (21) Q Not unusual to notice them?
 (22) A No
 (23) Q You see that frequently at caves in Prince William Sound?
 (24) A Sometimes
 (25) Q How many burial caves have you visited in Prince William

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- (1) Sound where you have seen human remains?
 (2) A I don't recall the exact number but I think it's four or
 (3) five in Prince William Sound total
 (4) Q Of the places you visited in 1989 how many places did you
 (5) see human remains?
 (6) A Two or three
 (7) Q You were asked about your visit to the Crafton Island
 (8) burial cave at your deposition weren't you?
 (9) A Yes
 (10) Q And you were asked what you saw there?
 (11) A Yes
 (12) Q You didn't mention human remains there during your
 (13) deposition did you?
 (14) A I don't recall It was a long deposition Maybe you can
 (15) refresh my memory
 (16) MR DIAMOND Counsel pages 148 to 149 I'll start
 (17) with the answer that begins on line 12 of 148
 (18) MR PETUMENOS Almost there counsel
 (19) MR DIAMOND And I'll end with the first line of
 (20) 149
 (21) MR PETUMENOS I have no problem No objection Your
 (22) Honor
 (23) BY MR DIAMOND
 (24) Q Dr Lobdell I'll show you the pages that I'm looking at
 (25) A Okay

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- (1) Q Beginning on page 12 - I'm sorry page 148 line 12 In
 (2) response to a question you said There are several Crafton
 (3) Island sites I believe Crafton Island north refers to a
 (4) series of caves rock shelter caves along the northeastern
 (5) coast of the Crafton Island
 (6) Question Burial caves?
 (7) Answer I recall that there were human remains in one or
 (8) two - possibly two of the caves yes
 (9) Question There are caves which you did visit during your
 (10) 1989 trip?
 (11) Answer I did not visit all the caves I was able to
 (12) visit one of them
 (13) Question What do you recall about the presence of
 (14) cultural resources at that site?
 (15) Answer It is a fairly large sea cave There is - or
 (16) there was protected midden in the back of the cave
 (17) You gave those answers to those questions?
 (18) A Yes I believe line 17 indicates that I recalled there
 (19) were human remains in one and possibly two of the caves I
 (20) recall specifically seeing human remains in one of the caves
 (21) Q That's a documented - that's a documented fact that there
 (22) are remains in burial caves?
 (23) A But I saw them Is what I'm saying
 (24) Q You made a very recent tour of some of the sites some of
 (25) the 44 sites that we discussed earlier today?

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- (1) A Yes
 (2) Q In May of this year?
 (3) A That's correct
 (4) Q And you did that with Dr Johnson?
 (5) A Yes
 (6) Q And Dr Mundy was also present?
 (7) A Not with me no We were - I understand he was in the
 (8) area at the time but it - he was not traveling with us
 (9) Q Were you with Dr Bush?
 (10) A No
 (11) Q Were you with any of plaintiffs counsel?
 (12) A No
 (13) Q How many sites did you visit?
 (14) A Off the top of my head something on the order of about a
 (15) dozen
 (16) Q It is true is it not Dr Lobdell that at none of those
 (17) dozen sites you saw anything that looked like recent
 vandalism?
 (18) A No it's not
 (19) Q You saw signs of vandalism at any of those 12?
 (20) A I had some concerns that there might be some potential
 (21) vandalism at one location in the Windy area There was a
 (22) natural erosion face but it looked like it was being helped
 (23) along by someone I couldn't confirm that We weren't there
 (24) long enough and again I don't think that can be confirmed
 (25) until we get into a program of intensive study

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- (1) At another site I noted that there had been some evidence
 (2) of digging with shovels where it had not been backfilled and I
 (3) knew that some National Park Service archaeologists had been
 in
 (4) the general area and I called one of them to ask them if they
 (5) did any uncontrolled testing or not and whether or not they
 (6) had not backfilled some of their trenches and they said no
 (7) that it wasn't them So that was the evidence I saw
 (8) Again the focus of this trip was more of a verification
 (9) trip
 (10) Q You re aware of the long preference of many of the Native
 (11) communities to leave undisturbed their archaeological places?
 (12) A When they can yes
 (13) Q You have no reason to believe do you Dr Lobdell that
 (14) if - If they were awarded the 30 million dollars that you have
 (15) outlined as a study plan that they would in fact use it to
 (16) conduct diggings in their secret places?
 (17) THE COURT Don t answer Don t answer
 (18) MR PETUMENOS I'll object There isn't -
 (19) THE COURT Objection s sustained
 (20) BY MR DIAMOND
 (21) Q You haven't discussed that subject with any of the Native
 (22) corporations?
 (23) MR PETUMENOS Same objection
 (24) THE COURT You can answer that question
 (25) A Yes I have I have talked to a number of individuals in

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- (1) sorted away correct?
 (2) Answer That might be their wishes
 (3) Question Have you in fact Inquired of CAC or the
 (4) associations as to their wishes in that regard?
 (5) Answer No
 (6) Those were the questions that were asked and the answered
 (7) that you gave?
 (8) A Yes I think if we go on and look at the context of that
 (9) a couple of things come to mind
 (10) First of all a lot of the sites which are ethnographic
 (11) locations may not be suitable for say large scale
 (12) excavation That comes out in the transcript and also there
 (13) are statements here that indicate that I've received
 (14) indications that they want to learn a great deal about their
 (15) culture and want to do these types of remedial actions and that
 (16) they are interested in this
 (17) And then I was asked specifically by whom and since then
 (18) as I mentioned there have been resolutions passed that
 (19) indicate that this is exactly what they want to do
 (20) Q Resolutions passed by the corporations?
 (21) A By Village Corporations
 (22) Q That you've seen?
 (23) A Yes
 (24) Q That could be rescinded by an equal number of votes?
 (25) A I don't know

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- (1) the villages and had meetings and some of them feel that -
 (2) that a program of this nature is appropriate Again this was
 (3) all done quite early early on And we weren't really sure
 (4) what was going to happen at all In the case of more recent
 (5) times I understand that the Village Corporations have passed
 (6) resolutions indicating that they want to do exactly this
 (7) The -
 (8) BY MR DIAMOND
 (9) Q Dr Lobdell at your deposition - I'm sorry this - the
 (10) pages 91, 92 lines 24 through 25 and 1 through 7
 (11) MR PETUMENOS If counsel will establish the date of
 (12) the deposition then I will be content
 (13) MR DIAMOND February 8 1994
 (14) BY MR DIAMOND
 (15) Q Dr Lobdell I'm going to direct your attention to pages 91
 (16) and 92 of the deposition that you gave in February of this
 (17) year
 (18) A I have a copy The lines again please?
 (19) Q Pages 91 and 92 of your February deposition beginning at
 (20) line 24
 (21) Did you not testify sir
 (22) Question You mentioned earlier in the deposition that the
 (23) possibility with respect to at least some of these sites it
 (24) might ultimately be the choice of the Native corporations not
 (25) to have those sites in fact excavated and curated artifacts

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- (1) MR DIAMOND No further questions
 (2) MR PETUMENOS I just have one question Judge
 (3) REDIRECT EXAMINATION OF JACK E LOBDELL Ph D
 (4) BY MR PETUMENOS
 (5) Q The question that you - that was read from your
 (6) deposition Well you purport to be an expert on whether or
 (7) not the Exxon Valdez oil spill has caused physical negative
 (8) impacts to in situ deposits in the intertidal zone?
 (9) Answer No
 (10) The question before it was it not Dr Lobdell -
 (11) Dr Lobdell was this one While possessing a generalized
 (12) knowledge about the types of impacts that can occur do you
 (13) present yourself in this case as an actual expert on what those
 (14) primary impacts have been in the case of the Exxon Valdez oil
 (15) spill? And again I mean impacts upon in situ deposits in the
 (16) intertidal zone
 (17) And your answer The previous one that was read I think
 (18) that is a little simplistic If you're asking about the
 (19) effects of oil on artifacts or the effects of oil on radio
 (20) carbon I would say that I have some concerns about that If
 (21) you're asking about whether or not I have knowledge clean up
 (22) crews have in any way damaged sites one way or the other I
 (23) would say that I have some knowledge about that I think
 (24) you're asking for a yes or no Are you an expert are you not
 (25) an expert and I don't think it is that simple a question

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- (1) Was that the previous answer you gave before the one
- (2) counsel read?
- (3) A Yes that's what I recall
- (4) MR PETUMENOS I have no further redirect
- (5) MR DIAMOND I have no further questions of the
- (6) witness
- (7) THE COURT Counsel do you have something else to
- (8) present today?
- (9) MR PETUMENOS Yes I do I have a witness from out
- (10) of town that I think I can get on in the time remaining
- (11) MR DIAMOND I think your videotape is longer than
- (12) nine minutes
- (13) MR CLOUGH Your Honor If I could speak to this
- (14) Last night the plaintiffs requested asked if they have
- (15) substantial --
- (16) THE COURT Come up here and speak
- (17) MR CLOUGH Thank you Your Honor
- (18) THE WITNESS I take it I'm excused Your Honor?
- (19) THE COURT Yes you're excused
- (20) (Bench conference off the record)
- (21) THE CLERK Sir would you please clip the microphone
- (22) onto your sweater and remain standing for the oath
- (23) Would you raise hand please?
- (24) (The Witness Is Sworn)
- (25) THE CLERK Thank you Be seated

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- (1) Sir for the record would you please state your full
- (2) name?
- (3) A Yes My name is Ted Eugene Raynor R a y n o r
- (4) THE CLERK And what is your occupation?
- (5) A I am a commercial fisherman and charter captain
- (6) THE CLERK Thank you
- (7) DIRECT EXAMINATION OF TED E RAYNOR
- (8) BY MR PETUMENOS
- (9) Q Mr Raynor thank you for your patience today in waiting
- (10) for us
- (11) Did you take a videotape of Applegate Island in the Herring
- (12) Bay area in 1993?
- (13) A Yes sir
- (14) Q And what part of the year in 1993 did you take this
- (15) videotape?
- (16) A Late April
- (17) MR PETUMENOS Could I have Exhibit 2990 -- I move
- (18) into evidence Exhibit 269 and ask it to be published to the
- (19) jury at this time
- (20) (Exhibit 269 offered)
- (21) THE COURT It's admitted It can be published
- (22) (Exhibit 269 received)
- (23) BY MR PETUMENOS
- (24) Q Tell the jury where this video begins what the first thing
- (25) is they're going to see and where you took the -- what part of

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- (1) the shore you took the video on as it comes on Would you do
- (2) that for us?
- (3) A The first part of the video will show the southeast corner
- (4) of Applegate Island in Prince William Sound
- (5) (Videotape Played)
- (6) A You'll see oil in the upper tidal zone
- (7) Q And you have the monitor right in front of you Mr Raynor
- (8) so what we're seeing now for the next period of time is the
- (9) upper intertidal zone of Applegate?
- (10) A Yes it's Applegate Island This is a rising tide You're
- (11) looking at the oil sheens coming out of the beach after a rock
- (12) has been turned over
- (13) Once again this is a rock being turned over to expose the
- (14) oil underneath Applegate Island
- (15) Q Still Applegate?
- (16) A Yes
- (17) This is a shot of the beach segment
- (18) Q What part of Applegate were you on?
- (19) A Southeast corner
- (20) This is still Applegate tide rising over the oil
- (21) Shot of the beach segment This is still the same beach
- (22) about a hundred yards to the south of that first part of the
- (23) video
- (24) MR CLOUGH Counsel to save replaying on cross
- (25) Could you ask the witness how large is the piece of wood

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- (1) depicted in the closeup?
- (2) MR PETUMENOS Rather than do that why don't you
- (3) just answer the question
- (4) A The piece of wood is about oh I'd say an inch in
- (5) diameter It's taken with a close up lens
- (6) MR CLOUGH Thank you Mr Raynor
- (7) A This is till Applegate oil amongst the upturned shale and
- (8) stones there
- (9) This is pooled surface oil still on Applegate
- (10) MR CLOUGH Same question about the tool Mr Raynor
- (11) to give the jury a sense of perspective please
- (12) A That bit of stone is about an inch inch and a half wide
- (13) MR CLOUGH Thank you
- (14) BY MR PETUMENOS
- (15) Q Your finger is a regular size Isn't it?
- (16) A Yes
- (17) MR CLOUGH You can hold it up
- (18) A It's this one right here (indicating)
- (19) This is still southeast corner of Applegate That's
- (20) probably the stick you've been looking at It's a little bit
- (21) bigger than I remember And this stick is about -- it might be
- (22) the same one I think it's a little bit thinner Yeah It's
- (23) the same one
- (24) This is Herring Bay on Knight Island same day
- (25) BY MR PETUMENOS

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- (1) Q Did you do anything to cause that sheen disturb anything?
 (2) A Yeah, I was going to clarify This was after digging into
 (3) the upper tidal zone of this beach to the left of the boat
 (4) there digging about two feet down into the beach and the only
 (5) way to really show what was in it was to just dip part of the
 (6) shovel load into the water and this is what came out of it
 (7) This is the hole this is dipping the shovel full of
 (8) material from the hole
 (9) This is back to Applegate Island on the next day This is
 (10) a beach just north of the segment that you viewed a few minutes
 (11) ago East Applegate Island That sliver of rock once again
 (12) as you can tell from his fingers is about an inch and a half
 (13) wide
 (14) The dark area is the oil on the rocks
 (15) This is sheen coming out of the beach We did not disturb
 (16) this This was naturally coming out
 (17) (Videotape concluded)
 (18) MR PETUMENOS Judge I'd like to thank the Court and
 (19) the jury for staying a little extra to get this witness on and
 (20) I have no further questions
 (21) MR CLOUGH I do have a couple questions and I beg
 (22) the jury's indulgence and not having to keep him over the
 (23) weekend
 (24) CROSS EXAMINATION OF TEE E RAYNOR
 (25) BY MR CLOUGH

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- (1) A I did not edit this video
 (2) Q Who did?
 (3) A I think my lawyers could probably answer that better than
 (4) me
 (5) MR CLOUGH Mr Petumenos who edited the video?
 (6) MR PETUMENOS A video editing company edited the
 (7) video
 (8) BY MR CLOUGH
 (9) Q You didn't edit it yourself?
 (10) A No I turned over all the raw footage to the oil spill
 (11) information center where access was gotten by any interested
 (12) party
 (13) Q So your lawyer - the lawyers gave this edited version to
 (14) you?
 (15) A They didn't give it to me
 (16) Q But you didn't prepare this edited version?
 (17) A No I didn't I shot it
 (18) Q And to the best of your knowledge the attorneys did?
 (19) A To the best of my knowledge
 (20) Q Now just to give a sense of perspective to the video the
 (21) edited portions or at least that the attorneys have chosen to
 (22) show to the jury those times where there's a closeup with the
 (23) stick or your finger remember those?
 (24) A Uh huh
 (25) Q Remember how large the finger was on the screen? Now in

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- (1) Q Mr Raynor my name's John Clough I represent Exxon in
 (2) the litigation here
 (3) First of all let me ask you Do you know sir if either
 (4) of those two places Applegate Island or Herring Bay are
 (5) parcels owned by the Native corporations suing here
 (6) represented by Mr Petumenos and Mr Fortier?
 (7) MR PETUMENOS We'll stipulate that they do not
 (8) MR CLOUGH So the stipulation is neither of those
 (9) parcels are owned by your clients?
 (10) MR PETUMENOS That's right
 (11) MR CLOUGH Nor by Mr Fortier's clients
 (12) MR FORTIER We join in the stipulation
 (13) BY MR CLOUGH
 (14) Q Is it correct you took all the video pictures yourself
 (15) sir?
 (16) A Yes
 (17) Q You actually handled the camera?
 (18) A Yes
 (19) Q You did the zooming in and zooming out?
 (20) A Yes
 (21) Q And you selected which you know what to take pictures of?
 (22) A Yes
 (23) Q And then - correct me if I'm wrong but you have more raw
 (24) footage which you then edited together to put together this
 (25) video is that correct?

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- (1) reality looking at the Barco use the one with your finger as
 (2) an example some of those pictures would have really only
 (3) covered an area that big maybe six or eight inches?
 (4) A In the video shot yes
 (5) Q I mean actually on the ground only about six by eight
 (6) inches?
 (7) A No that's a negative
 (8) Q Well when your finger was in it - and your finger was
 (9) filling up a big part of the screen - was it an awfully small
 (10) area you were tightening in on on the zoom?
 (11) A In the video shot yes
 (12) Q It was a small area of the much larger area of beach you
 (13) were walking around on right?
 (14) A In the video shot yes
 (15) Q Now would you agree with me sir as a videographer when
 (16) you pick where you're going to take your pictures and how
 (17) much
 (18) you're going to zoom in and exactly what angle you're going to
 (19) show and all that that you could bias the image you're trying
 (20) to present later on with the video?
 (21) A No I would not agree
 (22) Q Well it's late let's just cut to the chase Would you
 (23) agree with me that you are personally heavily biased against
 (24) Exxon and you have very strong feelings about this spill?
 (25) A (No audible response)
 (25) Q Yes or no?

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- (1) A I m biased against them but I also shoot beach garbage and
 (2) everything else that s out there too
 (3) Q When you say them you are biased against Exxon yes or
 (4) no?
 (5) A I m biased against the oil on the beach
 (6) Q My question to you is Are you personally biased against
 (7) my client Exxon Corporation?
 (8) A That s a hard question to answer
 (9) Q The answer is yes isn t it?
 (10) A Yes
 (11) Q And in fact you ve been very vociferous about your
 (12) opinions in that regard aren t you sir?
 (13) A Yes
 (14) Q You ve written a number of letters to the editor about it
 (15) haven t you?
 (16) A Yes sir
 (17) Q As recently as January of this year haven t you? One of
 (18) my three exhibits DX1514 - 15416
 (19) The Elmo please
 (20) If you could take a look at this This will be on your own
 (21) screen as well sir
 (22) A Yeah okay
 (23) Q Is this a letter to the editor that you wrote in January of
 (24) this year?
 (25) A Yes

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- (1) Q And are those your words?
 (2) A Yes
 (3) Q And in fact is it down there where - I guess you talk
 (4) about first of all earlier on a Mr Jim Dore who I
 (5) personally don t know - I m from down in Juneau - I ve heard
 (6) something about him up here I don t know much about him
 (7) Jim Dore has evidently watched too many of those
 sugar coated
 (8) oil company ads on television Those are your words?
 (9) A Yes
 (10) Q You go on about a number of other topics including the
 (11) Republican party ANWR comparing some other things Then
 you
 (12) go down and talk about my client again comparing - talking
 (13) about Mr Dore you say he is no different - perhaps we should
 (14) tighten it up so the jury can read
 (15) He is no different than some of the Exxon officials who
 (16) felt that Prince William Sound was just a bug infested wet
 (17) stormy hell hole that was better covered - better off covered
 (18) in oil Those were your words weren t they sir?
 (19) A Yes
 (20) Q And you are indeed very strongly biased against Exxon
 (21) aren t you sir?
 (22) A Yes
 (23) MR CLOUGH No further questions Your Honor
 (24) MR PETUMENOS Judge no questions
 (25) THE COURT Thank you you can step down sir

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- (1) I ll let you go Remember don t talk about the case with
 (2) anybody including your fellow jurors and in these three days
 (3) don t form or express any opinion on it until it s submitted to
 (4) you for your deliberation
 (5) See you Monday at 8 30
 (6) (Jury out at 1 40 p m)
 (7) THE COURT All right counsel the jury s gone Is
 (8) there anything to take up before we all get a three day break?
 (9) MR PETUMENOS How are you in the life cycle of a
 (10) salmon? I do want to know I do have exhibits to move in
 (11) They re the Mundy exhibits I ve been trying to get around to
 (12) forever but once again It s not an emergency
 (13) THE COURT I don t care I ve got 20 minutes
 (14) MR PETUMENOS I d like to move in the Mundy
 (15) exhibits We have a couple of arguments over a couple defense
 (16) exhibits we re fighting about
 (17) MR OPPENHEIMER Sure let s do it
 (18) MR FORTIER I was going to try to move in the
 (19) Johnson exhibits Go ahead
 (20) THE COURT I didn t even know you were here
 (21) counsel
 (22) MR OPPENHEIMER I know you didn t I wanted to make
 (23) sure you knew
 (24) MR PETUMENOS We have made an exhibit - this is not
 (25) a Mundy exhibit - out of a library card It is Exhibit 1549

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- (1) I move its admission
 (2) (Exhibit 1549 offered)
 (3) THE COURT It s admitted
 (4) (Exhibit 1549 received)
 (5) MR PETUMENOS On the Mundy exhibits I ll simply read
 (6) - and my understanding is that we have no objection to any of
 (7) the following exhibits - and the clerk can stop me if I go too
 (8) fast 1144A 1168 1169 1170 1171 1174 1176 1177 1178
 (9) 1179 1180 1181 1182 1183 1184 1185 86 87 88 89
 (10) 90 91 92 93 94 95 96 1202 through 1203 - that s
 (11) through 1207
 (12) MR OPPENHEIMER I m sorry it was 1202 1203 and
 (13) 1211 - give me the exhibits one more time
 (14) MR PETUMENOS 1202 3 4 5 6 and 7 is what I
 (15) have
 (16) MR OPPENHEIMER No objection
 (17) MR PETUMENOS 1211 1212 1213 1214 1215 1216
 (18) 1217 1370 and 1541
 (19) (Exhibits 1144A 1168 1169 1170 1171 1174 1176 1177
 (20) 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187
 (21) 1188 1189 1190 1191 1192 1193 1194 1195 1196 1202
 (22) through 1207 1211 1212 1213 1214 1215 1216 1217 1370
 (23) and 1541 offered)
 (24) MR OPPENHEIMER Counsel did you want to move in
 (25) 1174?

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- (1) MR PETUMENOS I did move in 1174
- (2) THE COURT All right They're all - all of those
- (3) are admitted
- (4) (Exhibits 1144A 1168 1169 1170 1171 1174 1176 1177
- (5) 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187
- (6) 1188 1189 1190 1191 1192 1193 1194 1195 1196 1202
- (7) through 1207, 1211 1212 1213 1214 1215, 1216 1217 1370
- (8) and 1541 received)
- (9) MR OPPENHEIMER No objection subject to our
- (10) stipulation that counsel will submit to the Court that we've
- (11) worked out a resolution to the captions of the photographs and
- (12) that's been done
- (13) Your Honor I would like to take the opportunity to move in
- (14) exhibits that came up in Dr Mundy's cross examination Those
- (15) are DX13023, 13029 15195 15556 16174 112836 112839
- (16) 13027
- (17) 15495 and page III 26 of exhibit 15503
- (18) (Exhibits DX13023 13029 15195 15556 16174 112836
- (19) 112839 13027 15495 and 15503 (page III-26) offered)
- (20) THE COURT They're all admitted
- (21) (Exhibit DX13023 15195 15556 16174, 112836 112839
- (22) 15495 received)
- (23) MR OPPENHEIMER I'm sorry there is one additional
- (24) page of 15503 counsel would like to have in under Rule 106,
- (25) disclaimer page
- (26) MR PETUMENOS I have some objections to some of the

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- (1) conditions in which the witness disclosed in the report that he
- (2) had not conducted that portion of the appraisal
- (3) MR OPPENHEIMER We're agreeable to that
- (4) MR PETUMENOS That's also true of the other Seldovia
- (5) exhibit If it's being offered I'm not sure it is
- (6) MR OPPENHEIMER It's not but we have no objection
- (7) THE COURT I'll admit them under that condition
- (8) (Exhibit 15495 received)
- (9) MR PETUMENOS Then I'm unclear as to what portion of
- (10) the Mundy Chugach appraisal is being admitted
- (11) MR OPPENHEIMER 15503 It's page Roman III 26
- (12) MR PETUMENOS Do you have a copy of that page?
- (13) Perhaps that one we can work on The other objections that I
- (14) have while he's getting that squared away is exhibit first
- (15) of all 13027 the 13027 exhibit is the letter to the Seldovia
- (16) Native Association which was used in cross-examination I
- (17) believe that the exhibit was properly used on
- (18) cross examination but I don't believe that as impeachment on a
- (19) collateral matter It's independently admissible as an exhibit
- (20) THE COURT I agree I'm not letting it in
- (21) MR OPPENHEIMER May I address that Your Honor?
- (22) THE COURT Only if you're persuasive enough to change
- (23) my mind at 15 minutes to 2:00 in the afternoon on the last day
- (24) of the week
- (25) MR OPPENHEIMER That's a tall hill clouds at the

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- (1) exhibits Not many but a couple we need to thrash out
- (2) MR OPPENHEIMER To two of them
- (3) MR PETUMENOS I'm unclear again counsel Exhibit
- (4) 15503 which is the Mundy report?
- (5) MR OPPENHEIMER We wish page Roman III-26 and you
- (6) would wish to add the page with the disclaimers which is
- (7) acceptable to us
- (8) MR PETUMENOS This is the Mundy Chugach report?
- (9) MR OPPENHEIMER That's correct page Roman III-26
- (10) MR PETUMENOS Could I see it?
- (11) MR OPPENHEIMER I don't think I have it in my file
- (12) MR PETUMENOS The reason we're having this colloquy
- (13) is with respect to Exhibit 15495 which is the limited
- (14) appraisal report on the Seldovia Native Association There was
- (15) cross-examination if you recall about the little zeros that
- (16) were on the table
- (17) MR OPPENHEIMER I'm sorry that's the exhibit you
- (18) wish -
- (19) MR PETUMENOS That's correct
- (20) MR OPPENHEIMER Pardon me on Exhibit 15495
- (21) counsel under Rule 106 would like to add a page to that
- (22) which is fine That being?
- (23) MR PETUMENOS That being the page with the -
- (24) MR OPPENHEIMER The disclaimer
- (25) MR PETUMENOS The assumptions and limiting

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- (1) top Let me give it a try
- (2) Your Honor there's no question about any authentication
- (3) issue He identified it It's also a collateral issue because
- (4) it goes to his bias and his methodology and the reason it goes
- (5) to his methodology is that this was the letter in which we
- (6) established that he was aware of possible contamination in
- (7) connection with the Seldovia properties which he evaluated but
- (8) did not include any reference to the spill about
- (9) THE COURT Where is that?
- (10) MR OPPENHEIMER Your Honor the first - the first
- (11) bullet point and then at the top of the last full paragraph on
- (12) the second page This was in connection with his testimony
- (13) that he was unaware of the stigma effect in connection with the
- (14) Seldovia appraisals It bears directly upon his methodology
- (15) because he was rendering an opinion with respect to real
- (16) estate not discussing stigma as late as the fall of 89 in
- (17) Seldovia and yet he's also soliciting in June believe it is
- (18) June for work in appraising damaged property when he's
- (19) already
- (20) rendering stigma opinions in other areas
- (21) THE COURT But you - you'll concede me this
- (22) counsel your cross examination was exceptionally thorough
- (23) MR OPPENHEIMER I'd like to believe it was Your
- (24) Honor
- (25) THE COURT Yes And I can - I'll tell you I could
- (26) take judicial notice of that it was and whatever you needed to

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- (1) get out of this letter it is in the record
 (2) MR OPPENHEIMER With that Your Honor
 (3) THE COURT To base your argument on
 (4) MR OPPENHEIMER I will finish the letter -
 (5) MR PETUMENOS My next objection is exactly the same
 (6) one on Exhibit 13029 It is exactly elevating the subject
 (7) matter to an exhibit as impeachment on a collateral matter
 (8) This is the letter to the State of Alaska and it's basically
 (9) the same objection - basically the same subject area that we
 (10) previously described
 (11) THE COURT It's the same letter isn't it?
 (12) MR OPPENHEIMER No it isn't Your Honor this
 (13) letter there's an additional argument This is the letter in
 (14) which he proposes his damage investigation to the State of
 (15) Alaska which I think that's independently appropriate
 (16) THE COURT But it's - essentially the substance of
 (17) the letter is the same isn't it?
 (18) MR OPPENHEIMER In one letter Your Honor he's
 (19) proposing there's damage In the other letter he's proposing
 (20) that the damage be studied
 (21) THE COURT So where's the difference? Where is the
 (22) difference between these two letters?
 (23) MR OPPENHEIMER The independent fact that's proven
 (24) by the second letter Your Honor to the State is in fact the
 (25) fact of his solicitation of work which ties into his testimony

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- (1) that he didn't get the job and the fact that he felt the study
 (2) needed to be conducted in order for that work to be - to be
 (3) satisfactory
 (4) And fourth and very importantly that letter refers to
 (5) the fact that he believed that a study of market impacts of
 (6) other oil spills would be a virtual prerequisite I think he
 (7) said in fact a prerequisite to a lawsuit and we think that's
 (8) highly probative of the basis for his later opinion of what
 (9) needed to be done
 (10) He did not undertake - well he did undertake the study
 (11) but he did not secure data from which he could draw an opinion
 (12) so that letter I believe is qualitatively different from the
 (13) letter to Mr. Elvass
 (14) THE COURT Just direct me to the passage in the
 (15) second letter that deals with this study
 (16) MR OPPENHEIMER Your Honor it's at the bottom of
 (17) this bullet point that I believe would be -
 (18) THE COURT I'm not wrong about this am I? The
 (19) paragraphs in both letters are exactly the same
 (20) MR OPPENHEIMER No I don't believe so Your Honor
 (21) Unless I'm misremembering - which is at this hour entirely
 (22) possible - but I believe that -
 (23) THE COURT They look the same to me
 (24) MR OPPENHEIMER Under the research paragraph -
 (25) THE COURT Wait a minute maybe you're right about

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- (1) the second page I think -
 (2) MR OPPENHEIMER Your Honor I stand corrected I
 (3) stand corrected The only difference is the request for
 (4) funding from the State
 (5) THE COURT Well I'm not going to let them in
 (6) MR OPPENHEIMER I understand
 (7) THE COURT To the extent that you've gone over
 (8) specific passages in letters and that appears in the transcript
 (9) you're having prepared daily you can certainly take them to
 (10) final argument
 (11) MR OPPENHEIMER Understood Your Honor
 (12) THE COURT And read them twice if you want to
 (13) MR OPPENHEIMER Understood We may do that And
 (14) counsel this is page Roman III 26 from exhibit -
 (15) THE COURT So the exhibits I have not admitted here
 (16) are DX13027 and DX13029
 (17) MR OPPENHEIMER Correct Your Honor And I believe
 (18) we can resolve 15503 in just a second -
 (19) MR PETUMENOS The only page being offered is -
 (20) which portion of it?
 (21) MR OPPENHEIMER It is - it is this page or if you
 (22) want just the section with the entitlement lender interviews
 (23) whichever you feel more comfortable with
 (24) MR PETUMENOS May I have a moment?
 (25) I'm going to have to reserve on this one Judge on the 106

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- (1) basis until I'm able to determine if there are other portions
 (2) of the report to check with
 (3) THE COURT That's fine
 (4) MR PETUMENOS That's the only one remaining then
 (5) THE COURT Is that it?
 (6) MR OPPENHEIMER That's it
 (7) THE COURT Is that it for the day?
 (8) MR FORTIER That's it for the day Your Honor we'll
 (9) bring our list in Monday
 (10) THE COURT See you Monday at 8:30 then -
 (11) THE CLERK Please rise This court stands in
 (12) recess
 (13) (Recess at 1:54 p.m.)

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(1) STATE OF ALASKA)
 (2) Reporter s Certificate
 (3) DISTRICT OF ALASKA)
 (4) I Joy S Brauer RPR a Registered Professional
 (5) Reporter and Notary Public
 (6) DO HERBY CERTIFY
 (7) That the foregoing transcript contains a true and
 (8) accurate transcription of my shorthand notes of all requested
 (9) matters held in the foregoing captioned case
 (10) Further that the transcript was prepared by me
 (11) or under my direction
 (12) DATED this day
 (13) of 1994
 (14) JOY S BRAUER RPR
 (15) Notary Public for Alaska
 (16) My Commission Expires 5 10 97

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- (1) IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (2) THIRD JUDICIAL DISTRICT
 (4) In re) Case No 3AN 89 2533 Civil
) Anchorage Alaska
 (5) The EXXON VALDEZ) Monday August 1 1994
) 8 50 a m
 (6))
 (8) VOLUME 25 Pages 4029 through 4169
 (10) TRANSCRIPT OF PROCEEDINGS (Continued)
 (11) TRIAL BY JURY
 (12) BEFORE THE HONORABLE BRIAN C. SHORTELL
 Superior Court Judge
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- (1) PROCEEDINGS
 (2) THE CLERK. Please rise
 (3) (Call to Order of the Court)
 (4) THE COURT Counsel did counsel want to see me out of
 (5) the presence of the jury?
 (6) MR. SHAPIRA Yes Your Honor There is an issue about
 (7) the scope of relevance of the testimony of the first witness
 (8) The plaintiff's first witness this morning is Carroll Kompkoff
 (9) and we've just had discussions with plaintiff about the scope
 (10) of the intended testimony
 (11) Your Honor may recall that in opening statement one of the
 (12) plaintiff's attorneys made reference to an incident in the
 (13) early childhood of one of the elders of the community. This
 (14) individual is Carroll Kompkoff who is a witness and the
 (15) incident - I'm paraphrasing Your Honor I'm sure I won't have
 (16) this exactly right - is something to the effect of he was
 (17) marooned on an island in a storm took refuge in a cave where
 (18) he saw the remains of his ancestors and that this was a very
 (19) meaningful event for him
 (20) Your Honor Mr. Kompkoff is a board member of the Tatitlek
 (21) Corporation I believe Vice Chairman or Chairman of the
 (22) Board I could be wrong about that He - that corporation
 (23) does not have an archaeology claim It is unknown at least to
 (24) the defendants what cave or site this is but we believe
 (25) based on other discovery and revelations in this case that

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- (1) there are no damages in the case sought concerning this
 (2) particular cave So what we have is a witness who's not making
 (3) any damage claim talking about a site for which no one is
 (4) making a damage claim and it seems to us patently not
 (5) relevant
 (6) There are two other issues that I wanted to address
 (7) regarding the scope of the cross examination but Your Honor
 (8) may prefer to take the other first
 (9) THE COURT Yes I would
 (10) MR. PETUMENOS Judge Shortell counsel's right about
 (11) the allusion to the opening statement It was my opening
 (12) statement Mr. Kompkoff is the Chairman of the Board of the
 (13) Tatitlek Corporation but also a shareholder of the Chugach
 (14) Alaska Corporation which is of course making a number of
 (15) archaeological claims
 (16) We heard a lot of testimony in the trial about oral
 (17) tradition about the investigations that are conducted by the
 (18) Native corporations regarding oral tradition and at issue in
 (19) this case has been the value of some of these sites from the
 (20) standpoint of both history and really some of the more sacred
 (21) nature or the cemetery aspect of some of the sites that we're
 (22) talking about
 (23) Mr. Kompkoff will essentially provide for the jury in about
 (24) a 20-minute direct examination an example of the kind of oral
 (25) tradition that we've alluded to only in terms of an academic

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- (1) sort of way But he will describe first of all the event
 (2) that was described in opening statement and he will describe
 (3) the process by which the corporation attempted to learn from
 (4) him what there was in it and the location and when that took
 (5) place and how the fact that there was really no attempt to
 (6) obtain this history until the corporation came into play and
 (7) that the corporation's cultural resource manager was the
 person
 (8) that came to him and attempts were made to try to reconstruct
 (9) He also will testify to his background and history living
 (10) in some of the fox farms that we've heard about and I'm a
 (11) little concerned that the fox farm historical sites that have
 (12) been described by the archaeologists that the jury does not
 (13) have the sense of the history of it and how it functioned
 (14) within the Native community and culture And this particular
 (15) witness himself was raised on one many years ago He's
 about
 (16) 60 years old It will be relatively short direct and I think
 (17) to the point and I think very relevant to our claim
 (18) THE COURT All right Thank you counsel
 (19) MR SHAPIRA Your Honor Just in brief response
 (20) There is nothing more potentially prejudicial than allegations
 (21) of disturbing remains of ancestors and it would certainly be
 (22) something plaintiffs were entitled to go into were there any
 (23) issue in this case about these remains being disturbed by
 (24) anyone but to raise this highly emotional kind of issue when
 (25) it doesn't go to any damage claim - I mean about this

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- (1) particular site - the details of this site and this witness -
 (2) THE COURT Why doesn't it go to a damage claim?
 (3) MR SHAPIRA No one's making a claim about this site
 (4) Your Honor
 (5) THE COURT Well all right So your objection is
 (6) this is irrelevant because this cave hasn't been identified
 (7) and because this cave itself is not a cave for which damages
 (8) are being sought?
 (9) MR SHAPIRA Yes Your Honor
 (10) THE COURT Okay
 (11) MR SHAPIRA Should I pass on to the issue -
 (12) THE COURT Suppose it were a cave which could be
 (13) identified and for which damages were sought would the
 (14) testimony be relevant there?
 (15) MR SHAPIRA I wouldn't be making this objection
 (16) THE COURT If it were a cave that the corporation was
 (17) seeking to protect in the future would it be relevant?
 (18) MR SHAPIRA If it could be identified what it was
 (19) where it was what corporation owns it whether any corporation
 (20) owns it This cave could be on National Park Service land
 (21) THE COURT Okay I understand your objection The
 (22) objection's overruled
 (23) MR SHAPIRA A couple of matters with regard to the
 (24) scope of the cross examination Your Honor
 (25) This - the witness is the Chairman of the Board of the

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- (1) Tatitlek Corporation and I would propose to make
 (2) cross examination of probably not longer than two minutes or
 so
 (3) concerning the Tatitlek Corporation's claim in this litigation
 (4) about land value and subsistence and culture
 (5) There is also the issue of bias I would like to bring out
 (6) just briefly that this witness is a shareholder of two of the
 (7) plaintiff corporations and that many members of his family are
 (8) shareholders of two of the plaintiff corporations
 (9) THE COURT Go to the second first counsel It's a
 (10) relatively easy one There's no objection to that right?
 (11) MR PETUMENOS No I think though that we need to
 (12) be a little careful how it's done I agree that it can be
 (13) done The last time we did it we sort of ended up with sort
 (14) of a problem
 (15) THE COURT We won't do them in numerical analysis
 (16) this time Now what about the first one?
 (17) MR PETUMENOS The first part I have an objection to
 (18) for a couple of grounds
 (19) First of all my direct was fairly narrow fairly focused
 (20) on the issues I've described I have not prepared the witness
 (21) with respect to any other aspect of the claims that are - that
 (22) have come forward and the witness is actually become
 Chairman
 (23) of the Board of Tatitlek in the last year some four years
 (24) after the spill and has not been the principal witness to be
 (25) addressing those issues on behalf of the corporation

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- (1) I have a scope of direct objection to what he's doing And
 (2) I'll also note that if he's going to get into those matters I
 (3) was served with a file full of exhibits at 5:30 last night
 (4) well after my witness had gone home and when I didn't have
 any
 (5) further contact with him and when I had to be in appointment
 (6) for the rest of the evening personal appointment for the rest
 (7) of the evening for 15 minutes So I thumbed through them this
 (8) morning That's all I've seen
 (9) This witness was on the list last week and we had a
 (10) three day weekend I don't know why I'm getting subsistence
 (11) related cross examination exhibits at 5:30 at night on Sunday
 (12) and I object to the cross-examination exceeding the scope of
 (13) direct
 (14) MR SHAPIRA Your Honor Mr Petumenos raised with me
 (15) the subject of the late designation of the exhibits and I
 (16) voluntarily withdrew them before court began We're not using
 (17) those exhibits
 (18) THE COURT You're not going to use them so that's
 (19) not an issue
 (20) MR PETUMENOS But the exhibits themselves shed
 (21) light on some of the cross examination he wants to do as I
 (22) understand it
 (23) THE COURT Even more light will be shed when I hear
 (24) the witness testify counsel So the objection's pending and
 (25) I'll see whether or not it's a good objection when I hear the

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- (1) witness testify
- (2) MR SHAPIRA Thank you Your Honor
- (3) THE COURT I don't know if you've been informed but
- (4) one of our jurors was in a minor car accident but apparently
- (5) significant enough to get the police involved He's going to
- (6) be late I don't think he's here yet We're just going to
- (7) have to wait for him
- (8) MR PETUMENOS Could we see the Court in chambers
- (9) then with the time that we have?
- (10) THE COURT Yeah sure
- (11) THE CLERK Please rise This court stands in
- (12) recess
- (13) (Recess from 8 50 a.m. to 9 24 a.m.)
- (14) (Jury in at 9 24 a.m.)
- (15) THE CLERK Please rise This court now resumes its
- (16) session
- (17) Please be seated
- (18) THE COURT Counsel?
- (19) MR PETUMENOS Judge can we approach - just
- (20) kidding My first witness this morning is Mr. Carroll
- (21) Kompkoff
- (22) THE CLERK Sir please attach the microphone to your
- (23) lapel there and remain standing for the oath
- (24) A Right here?
- (25) THE CLERK Right that would be fine Could you

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- (1) stand up and raise your right hand please?
- (2) (The Witness Is Sworn)
- (3) THE CLERK Please be seated
- (4) Sir for the record can you state your full name?
- (5) A Carol M. Kompkoff
- (6) THE CLERK Can you spell your last name?
- (7) A K o m p k o f f
- (8) THE CLERK And your occupation?
- (9) A I'm a self-employed commercial fisherman
- (10) THE CLERK Thank you
- (11) DIRECT EXAMINATION OF CARROLL M. KOMPKOFF
- (12) BY MR. PETUMENOS
- (13) Q Good morning Mr. Kompkoff In addition to being the - a
- (14) self-employed commercial fisherman you are the President of
- (15) the Tatitlek Corporation are you not?
- (16) A Right uh huh
- (17) Q And how long have you been the President of the Tatitlek
- (18) Corporation?
- (19) A Since September of last year
- (20) Q Mr. Kompkoff I really want to ask you about - not about
- (21) your being a President of Tatitlek this morning but about some
- (22) information that you have from long ago
- (23) Tell the jury where you were born
- (24) A I was born in the village of Chenega Alaska That village
- (25) has been destroyed by earthquake since I moved away from it

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- (1) Q So you lived in the old village of Chenega?
- (2) A Right uh huh
- (3) Q What year were you born Mr. Kompkoff?
- (4) A March 20th 1926
- (5) Q And how many children were in your family?
- (6) A There was - I had three brothers and one sister
- (7) Q And when you were growing up as a boy in Old Chenega
- how
- (8) often would there be contact from the outside world at
- (9) Chenega?
- (10) A Not very often There was a monthly mail service that was
- (11) provided by you know I think one time the guy's name was Jim
- (12) Dolan and about once a year we'd get a supply ship from the
- (13) BIA Bureau of Indian Affairs for the school
- (14) Q You received supplies at Chenega once a year?
- (15) A For the school yes
- (16) Q And how did the people in Old Chenega Village survive?
- How
- (17) did they live in those days?
- (18) A Well we lived off the land and the sea I remember that
- (19) very very very well
- (20) Q When you say that you lived off the land and the sea
- (21) could you give the jury some idea of how those activities were
- (22) conducted when you were a boy?
- (23) A We hunted - you mean what did we hunt stuff like that?
- (24) Q Well did you have big power boats and seiners and things
- (25) like that?

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- (1) A No uh uh Most of the families in Chenega had bidarkis
- (2) three man bidarkis
- (3) Q What is a bidarki?
- (4) A There was a few two or three four power boats that they
- (5) had They weren't very big but just simple gasoline power
- (6) anywhere from I would say 22 to 30 feet long somewhere
- (7) around there 34 feet at the most
- (8) Q What is a bidarki?
- (9) A It's a Native skinboat capable of carrying three people
- (10) Q And some - how were they made?
- (11) A They were made by the village people, themselves you
- know
- (12) out of seal hides and they had wood frames that were tied
- (13) together with - with sinew from some animals
- (14) Q And when did you start engaging in this kind of activity
- (15) when you were young? How old did it start for you?
- (16) A Since I can remember you know way way back Starting
- (17) three four years old I guess
- (18) Q And you started off living in the village of Old Chenega?
- (19) A What was that?
- (20) Q You started off living in the actual village?
- (21) A Right
- (22) Q Of Old Chenega?
- (23) A Right
- (24) Q Did your parents move you at any time to a different spot
- (25) to live?

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- (1) A Yes We - my dad had a couple fox farms at different
 (2) times I remember we had one out at Seal Island in the middle
 (3) of nowhere there in Prince William Sound
 (4) Q And what kind of activities what were you doing on a fox
 (5) farm? Why was that important to your family?
 (6) A Well it was a means of getting some income from raising
 (7) and selling fox pelts
 (8) Q At the time and we re talking I guess the 1930s at this
 (9) point?
 (10) A Uh huh
 (11) Q Can you think of any other way Natives could bring cash
 (12) into the village other than fox farms?
 (13) A Just by fishing for seemed like - seemed like everyone
 (14) from the village of Chenega fished for a cannery at Port Nellie
 (15) Juan called Nellie Juan Packing Company I think it was called
 (16) Q So they would fish for the cannery and then the fox farms
 (17) would bring in cash?
 (18) A Yes
 (19) Q Was that basically it for cash?
 (20) A I would - yes I m pretty sure
 (21) Q Now there were a number of fox farms throughout the area?
 (22) A Yes there was
 (23) Q And those fox farms had they to your understanding
 (24) existed for a long time before you went there and used them?
 (25) A I think so yes That was - we moved from - I remember

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- (1) to an island called Squirrel Island which is oh just I
 (2) don t know four five six miles away from Old Chenega across
 (3) on the Knight Island side of the passage there
 (4) Q Now there came a time Mr Kompkoff when you lost your
 (5) dad?
 (6) A Right uh huh I was - well my dad hurt himself when he
 (7) was - when he was selning He fell on a corner of a hatch
 (8) combing on a fishing boat and smashed his kidney I guess
 (9) Q Was there medical attention or medical help in Chenega in
 (10) those days?
 (11) A No huh uh And he didn t go to a doctor until it was too
 (12) late so he died in March of 1936 when I was 10 years old
 (13) Q And what did the kids do now for their food and their
 (14) survival in the village? How were you taken care of?
 (15) A Well we - seemed like people always shared with us you
 (16) know I often went with - went hunting with someone
 (17) Someone seemed like they always took me along just so you
 (18) know just for experience and to share in whatever we -
 (19) whatever we got the subsistence food
 (20) Q Did there come a time shortly after your father s death
 (21) when you were out on such a trip with some people from the
 (22) village?
 (23) A Yes My brother Fred - I had an older brother and he
 (24) had gotten married I think the year my dad died or I forgot
 (25) what year it was but he moved away to Tatitlek He married a

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- (1) lady from Tatitlek And he had moved away but he came down
 to
 (2) Chenega to go trapping and he took me and my cousin Paul
 (3) Kompkoff along in a bidarkl
 (4) And one of the trips that we left was sort of late in the
 (5) day and we had to travel almost a full day from Chenega to the
 (6) area into the place where my dad had a trapping camp in Lewis
 (7) Bay upper end of Knight Island and while we were on our way
 (8) a storm came up and we weren t making much headway as I
 (9) remember so we took shelter when it got dark on us just go in
 (10) to shore anywhere on Knight Island shore
 (11) I remember this very well because I was about ten years
 (12) old And we pulled the bidarkl up the shore and took all the
 (13) supplies out and we found a big rock overhang sort of a cave
 (14) and my brother built a fire got a fire going and by the light
 (15) of the fire we could see skeletal remains all over the place
 (16) where - nowhere else for us to go so we just spent the night
 (17) there
 (18) Q Mr Kompkoff when you grew up what language did you
 (19) speak?
 (20) A What is that?
 (21) Q What language did you speak when you grew up? Did you
 (22) speak -
 (23) A When I was growing up? Oh Aleut and some English in the
 (24) school
 (25) Q But you spoke Aleut fluently when you -

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- (1) A Yes uh huh
 (2) Q Do you now?
 (3) A Oh yes
 (4) Q And all of the bays and the places that you went do they
 (5) have Aleut names?
 (6) A Yes but it s been so long since I moved away from there
 (7) that I ve forgotten the names of the place We had - they had
 (8) names for seemed like every bay and island around there
 (9) Q You have children?
 (10) A Oh yes I have four sons and three daughters
 (11) Q How many of them speak Aleut?
 (12) A Not - maybe one might speak a little bit just two or
 (13) three understand it
 (14) Q This story that you ve told the jury today did there come
 (15) a time when anyone came to you and asked you about what you
 (16) knew about the old places?
 (17) A No
 (18) Q For years and years no one came and asked?
 (19) A No huh uh
 (20) Q Do you know someone named John Johnson?
 (21) A What?
 (22) Q Do you know John Johnson?
 (23) A Oh yes
 (24) Q And who is John Johnson?
 (25) A He is something with archaeology working for Chugach
 Alaska

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- (1) Corporation
- (2) Q Did there come a time when he came to you and talked
- (3) about -
- (4) A Yes He asked me if I knew of any archaeological sites
- (5) and I pointed out to him on a chart as well as I could the
- (6) area where we spent that one night
- (7) Q So he asked you about the story that you told the jury
- (8) today?
- (9) A Yes uh huh
- (10) Q And do you remember about when he did that what year?
- (11) A I think it was - I m not quite sure now I think it was
- (12) winter before last
- (13) Q Winter before last?
- (14) A Uh huh
- (15) Q And did you understand that he was working for the
- (16) Chugach
- (17) Alaska Corporation when he did that?
- (18) A Yes I did
- (19) Q Mr Kompkoff you and I talked and we talked about attempts
- (20) to remember the history of the people in Prince William Sound
- (21) We ve talked at length about that And do you remember telling
- (22) me that you remembered one time in which some 40 years ago
- (23) in
- (24) about 1950 there was some attempt made to talk about that?
- (25) A Right uh huh
- (26) Q Tell the jury about that
- (27) A I think it was the year 1950 or - we had a village meeting

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- (1) concerning possessive rights that are for - we were starting
- (2) land claims I think that was the issue at the time And John
- (3) Borodkin was the Council President at the time and there was
- (4) several old people there that he wanted some information for
- (5) regarding the areas that our ancestors lived at and these
- (6) people named off several village sites of the past in Prince
- (7) William Sound
- (8) Q When they had this meeting were they speaking - were the
- (9) older people of the village -
- (10) A Yes
- (11) Q - speaking in English or Aleut?
- (12) A Some of those people could speak very very little English
- (13) the old people and so John asked them questions in Aleut and
- (14) he would translate it to Maxine Brittell who was taking
- (15) minutes in English
- (16) Q Counsel exhibit 1367
- (17) The first page is real hard to read but why don t you turn
- (18) to the second and tell me if you recognize Exhibit 1367
- (19) A Yes I remember attending this meeting I remember it very
- (20) well
- (21) Q 1950?
- (22) A Uh huh
- (23) Q Mr Kompkoff do you think that the efforts of people like
- (24) John Johnson and the Chugach Alaska Corporation and others
- (25) who
- (26) are trying to preserve the history of your people is an

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- (1) important thing?
- (2) A Yes it is I think it really is important
- (3) MR PETUMENOS Judge I have no further questions
- (4) CROSS-EXAMINATION OF CARROLL M KOMPCKOFF
- (5) BY MR SHAPIRA
- (6) Q Good morning Mr Kompkoff My name is Ralph Shapira
- (7) and
- (8) I m an attorney for Exxon
- (9) A Good morning
- (10) Q Good morning Although we just met this morning I ve had
- (11) the pleasure of taking your son Gary s deposition for the day
- (12) Gary is the Chief of the Native village of Tatitlek is that
- (13) correct?
- (14) A Yes he is
- (15) Q And although he s just in his thirties he s been Chief of
- (16) the village for I think over 14 years is that right?
- (17) A Uh-huh
- (18) Q And you now sir are the Chairman of the Board of the
- (19) Tatitlek?
- (20) A I m the President not the Chairman
- (21) Q Sorry the President of the Tatitlek Corporation?
- (22) A Uh huh
- (23) Q You still do some subsistence activities now the way you
- (24) did when you were a boy don t you?
- (25) A Not as - not as much I do hunt deer and seal
- (26) Q And over the past five years you ve bagged an average of

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- (1) about three deer a year haven t you?
- (2) A Right uh huh
- (3) Q And you still shoot seals?
- (4) A Right
- (5) Q To eat?
- (6) A Uh huh
- (7) Q And over the past several years you ve shot about four or
- (8) five seals a year haven t you?
- (9) A Not - not this year I haven t I haven t shot any seals
- (10) Q I guess your deposition that I read to prepare for this
- (11) cross examination was taken over a year ago but within the
- (12) past four or five years before last year you had shot -
- (13) A Right
- (14) Q - four or five seals a year hadn t you?
- (15) A Right uh huh
- (16) Q You also take fish for subsistence use correct?
- (17) A Uh huh
- (18) Q And the fish that you take is really taken out of your
- (19) commercial catches because you re a commercial fisherman
- (20) correct?
- (21) A Right uh huh
- (22) Q And you have two commercial fishing boats that you
- (23) operate?
- (24) A Right
- (25) MR PETUMENOS Your Honor I ll object beyond the
- (26) scope of direct

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- (1) THE COURT The objection s overruled as to that
 (2) question
 (3) BY MR SHAPIRA
 (4) Q Your commercial fishing is for salmon correct?
 (5) A Correct uh huh
 (6) Q And you ve not ever commercially fished for halibut
 (7) correct?
 (8) A No
 (9) Q But you do take - you do eat subsistence halibut correct?
 (10) A Yes I do
 (11) Q And that s caught for you and your family by your
 (12) son in law?
 (13) A Right
 (14) Q Now sir you mentioned your childhood in Chenega?
 (15) A Uh huh
 (16) Q After you lived in Chenega for a period of time you moved
 (17) to Tatitlek correct?
 (18) A Right
 (19) Q And you moved from Tatitlek to your present residence
 (20) which is in Cordova in about 1966?
 (21) A Right
 (22) Q Correct And since then since 1966 you ve never lived in
 (23) Tatitlek?
 (24) A No huh uh I have spent you know a day or two at a time
 (25) there

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- (1) Q And unless your pattern of visiting has changed since your
 (2) deposition was taken you go there maybe three or four times a
 (3) year and spend a day or at most spend overnight in Tatitlek
 (4) correct?
 (5) A Right uh huh
 (6) Q And because you re not in Tatitlek much you can t say
 (7) whether there s been any change in the lifestyle of the people
 (8) of the village of Tatitlek since the oil spill because you
 (9) don t live there and don t know correct?
 (10) A No I can t I can t I can t honestly say
 (11) Q Now you mentioned that when you were a boy and growing
 (12) up
 (13) in Chenega and in Tatitlek that there was a tradition among
 (14) your people that you called sharing?
 (15) A Uh huh
 (16) Q Correct?
 (17) A Uh huh
 (18) Q Would you describe what the sharing tradition is?
 (19) A Yes The people you know they - whoever hunts for food
 (20) for subsistence food or fish they share with a lot of the
 (21) village people if they get deer or seal or fish or whatever
 (22) they get and they also share with us in Cordova at times
 (23) Q Now up until this year when you didn t get any seals the
 (24) four or five seals that you caught a year was that more than
 (25) your own family your own immediately family could eat?
 (26) A Right uh huh

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- (1) Q And did you share that food?
 (2) A Yes yes
 (3) Q With other relatives and friends in your community?
 (4) A Right uh huh
 (5) Q And you mentioned that your brother-in law shares his
 (6) halibut catches with you Does that go on to this day?
 (7) A Yes
 (8) Q And are there other things that you share now other
 (9) subsistence foods that you share with other people in your
 (10) community and family?
 (11) A I share whatever deer we get - I get I didn t get
 (12) anything last year Deer are getting harder to get seems
 (13) like I m hoping to get some this year That remains to be
 (14) seen
 (15) Q The sharing tradition that you described is alive and well
 (16) in your community and in your family today is that correct?
 (17) A Uh huh
 (18) Q Now it s true Isn t it that you don t know of anyone who
 (19) gathered any subsistence foods since the oil spill that had oil
 (20) on it correct?
 (21) MR PETUMENOS I ll object as beyond the scope of
 (22) direct
 (23) THE COURT Sustained The objection s sustained
 (24) BY MR SHAPIRA
 (25) Q Now sir I want to talk to you a bit about plaintiffs

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- (1) exhibit 1367 which your counsel talked to you about and that
 (2) was that meeting in 1950 when the people of your community
 (3) got
 (4) together and talked about their traditional hunting and fishing
 (5) grounds and places they lived and so forth And I will -
 (6) May I have the Elmo?
 (7) Now sir for the benefit of the jury I m going to ask you
 (8) to point out some places on a map
 (9) A What?
 (10) Q I m going to ask you to point out some places on a map
 (11) because this exhibit of the history of your people discusses
 (12) many places where your people used to and still do hunt and
 (13) fish and I think it would be helpful to the jury to see the
 (14) range that your people traveled to hunt and fish
 (15) Now I can - are you comfortable getting up and pointing
 (16) out some things on the map?
 (17) A Sure
 (18) Q Let me set this up for you And if you ll give me a minute
 (19) I d like to get an atlas because I ve been looking for some of
 (20) these places and haven t been able to find all of them
 (21) A Okay
 (22) MR DIAMOND Here s your atlas
 (23) MR SHAPIRA Thanks
 (24) BY MR SHAPIRA
 (25) Q Now sir this historical document says that the Tatitlek
 (26) people originally settled at Nuchek?

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- (1) A Right
- (2) Q Could you indicate on the map where Nuchek is?
- (3) A Right here
- (4) Q That's the southern part of Hinchinbrook Island?
- (5) A Uh huh yes
- (6) Q Just for reference where is the village of Tatitlek now located?
- (7) A It's right there
- (8) Q And the exhibit says that from there your people traveled by bidark as far as Middleton Island where is that?
- (9) A Can't even see - it's out here somewhere
- (10) Q Middleton Island is way out in the Gulf of Alaska?
- (11) A Right uh huh
- (12) Q And Hinchinbrook Island where is that?
- (13) A (Indicating)
- (14) Q And that was to gather food and wood and to hunt seal and ducks and land otter and sea otter and mink does that sound right?
- (15) A Right
- (16) Q Do you remember those things from your childhood?
- (17) A Yes I do
- (18) Q And then the exhibit says that gradually a large village was established at Landlock Bay Where is Landlock Bay?
- (19) A Landlock Bay is here - wait a minute yeah
- (20) Q That's pretty close to where Tatitlek is now correct?

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- (1) A Yes uh huh right
- (2) Q And from there it says the people moved to Ellamar Where is Ellamar?
- (3) A Ellamar is right over here
- (4) Q On the other side of Tatitlek?
- (5) A About three miles from Tatitlek
- (6) Q And then it says that the villagers joined people who came from Gravina Where is Gravina?
- (7) A Gravina is right here
- (8) Q Okay that's down here Port Gravina?
- (9) A Right here This one right here
- (10) Q And others came from Makarka Point?
- (11) A Makarka Point is right here
- (12) Q Okay And Kniklik?
- (13) A Kniklik is right in here
- (14) Q That's way over on the west side of Prince William Sound correct?
- (15) A Correct
- (16) Q Northwest side It then says from Tatitlek people used to go to Mineral Creek in Valdez Bay for wild rice Whereabouts is that?
- (17) A Mineral Creek is right in here
- (18) Q Way up near the City of Valdez?
- (19) A Right uh huh
- (20) Q And it says from Kniklik they always went to Pigot Bay

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- (1) (sic) for summer fishing and camping?
- (2) A You mean Pigot Bay
- (3) Q I'm sorry Pigot Bay?
- (4) A Yeah it's here
- (5) Q That's all the way over near Whittier?
- (6) A Right
- (7) Q And it says the people camped there all summer and there's still evidence of their habitation there correct?
- (8) A Yes uh-huh
- (9) Q And then it says that at the present time the Tatitlek - and I guess the present time for this document is around 1950?
- (10) A Right
- (11) Q Right It says the Tatitlek Natives still maintain camps in Galena Show us with that is?
- (12) A Galena Bay
- (13) Q That's north of Tatitlek off Valdez Arm and in Fidalgo Where's Fidalgo?
- (14) A Port Fidalgo right here
- (15) Q Okay And Jack's Bay?
- (16) A Jack's Bay is up here
- (17) Q Up closer to Valdez?
- (18) A Right uh huh
- (19) Q And that's all for hunting and fishing and for personal use correct?
- (20) A Right

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- (1) Q And it says that they fish a large portion of the offshore waters of Prince William Sound particularly Fidalgo Boulder Bay - where is Boulder Bay?
- (2) A Boulder Bay's right here
- (3) Q That's right next to Tatitlek Galena Bay Jack's Bay Valdez Arm?
- (4) A Right up here
- (5) Q And Long Bay where is Long Bay?
- (6) A Long Bay is right here
- (7) Q Long Bay is on the other side of the Columbia Glacier from Tatitlek?
- (8) A Right
- (9) Q Glacier Island where is that?
- (10) A Right here
- (11) Q That's also near the Columbia Glacier?
- (12) A Right uh huh
- (13) Q Now is all that - I think - thank you very much Please you can be seated
- (14) Now sir I know that you haven't lived in Tatitlek since 1966 but to your knowledge do the people of Tatitlek still travel that far and wide in an effort to get their subsistence fish and game and other subsistence products?
- (15) A Yes they do
- (16) Q So there hasn't been any change over time then?
- (17) A Well there has been some changes I guess There's bound

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- (1) to be
- (2) Q And is that change with more powerful motor boats and so forth?
- (3) A Right
- (4) Q It s easier to range farther?
- (5) A Right Uh huh
- (6) Q Now it is true isn t it sir that you as the President of Tatitlek Corporation do not know of anything that Tatitlek Corporation can t do with its land now that it could do with its land before the oil spill?
- (7) MR PETUMENOS I ll object as beyond the scope of direct
- (8) THE COURT Sustained
- (9) BY MR SHAPIRA
- (10) Q It s true is it not sir that Tatitlek Corporation has a policy against selling its land which you strongly support as its President?
- (11) MR PETUMENOS I ll object as beyond the scope of direct
- (12) THE COURT Sustained The objection s sustained
- (13) Counsel you re beyond the scope of direct
- (14) BY MR SHAPIRA
- (15) Q You fished commercially almost every year since you were ten years old haven t you?
- (16) A I have

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- (1) A Right uh huh
- (2) Q And you have been a shareholder of Tatitlek Corporation since 1971?
- (3) A Right
- (4) Q You are also a shareholder of the Chugach Alaska Corporation?
- (5) A Uh huh right
- (6) Q And you have seven children?
- (7) A Uh huh
- (8) Q Are they all shareholders of the Tatitlek Corporation?
- (9) A Yes they are
- (10) Q And how many grandchildren have you?
- (11) A 22 somewhere along there
- (12) Q Congratulations
- (13) MR SHAPIRA I have no further questions Your Honor
- (14) MR PETUMENOS I have no redirect Judge
- (15) THE COURT Mr Kompkoff thank you very much You can step down Watch that microphone if you would
- (16) MR PETUMENOS Judge I would move into evidence exhibit 1367
- (17) (Exhibit 1367 offered)
- (18) THE COURT It s admitted
- (19) (Exhibit 1367 received)
- (20) MR FORTIER Judge plaintiffs will be calling

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- (1) Q Did you fish commercially in 1989?
- (2) A I didn t seine I gill netted
- (3) Q Did you do anything else with your vessels that year?
- (4) A What was that?
- (5) Q Did you do anything else with your fishing boat that year other than fish?
- (6) A I did hunt deer
- (7) Q I m sorry with your fishing boat sir in 1989 other than fish did you do -
- (8) A You mean my seine boat or gillnet boat?
- (9) Q Let s start with your seine boat
- (10) A My son my youngest son ran my seine boat that year I didn t feel like seining
- (11) Q And how about with your gillnet boat?
- (12) MR PETUMENOS Excuse me Judge I m sorry but I don t understand why this is in the scope of direct
- (13) THE COURT Where are you going?
- (14) MR SHAPIRA It s not within the scope of direct
- (15) Your Honor but the witness is within subpoena power and it seems a shame to drag him back from Cordova
- (16) THE COURT Well said counsel Since you admit it s not in the scope of direct the objection s sustained
- (17) BY MR SHAPIRA
- (18) Q Just one more question sir You are a shareholder of Tatitlek Corporation?

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- (1) Dr Jim Fall
- (2) THE CLERK Sir can you attach the microphone to your tie and remain standing for the oath Please raise your right hand
- (3) (The Witness Is Sworn)
- (4) THE CLERK Please be seated
- (5) Sir for the record I need you to state your full name
- (6) A James Fall
- (7) THE CLERK And please spell your last name
- (8) A F a l l
- (9) THE CLERK And your occupation?
- (10) A I am the regional program manager for the Division of Subsistence of the Department of Fish and Game and I m a cultural anthropologist
- (11) THE CLERK Thank you
- (12) DIRECT EXAMINATION OF JAMES FALL
- (13) BY MR FORTIER
- (14) Q Dr Fall the Division of Fish and Game - excuse me the Department of Fish and Game you re referring to the Alaska Department of Fish & Game?
- (15) A That s correct
- (16) Q And the Division of Subsistence is a division within the Alaska Department of Fish and Game?
- (17) A It is
- (18) Q You re a State employee?

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- (1) A I am that's correct
 (2) Q Can you tell the jury what the division - first of all
 (3) why don't you tell us how long you've been the Director of the
 (4) Division of Fish & Game?
 (5) A I'm the Regional Program Manager for the Division's South
 (6) Central and Southwest Regions and I've done this since 1981
 (7) Q How long have you been employed by the Division itself?
 (8) A Since 1981 it's been essentially the same job since I've
 (9) worked for the Division
 (10) Q And how long have you been a cultural anthropologist?
 (11) A Like I said depends upon how you define it I earned a
 (12) degree in - a Ph.D. in anthropology from the University of
 (13) Wisconsin Madison in 1981 I began graduate studies at the
 (14) University of Wisconsin Madison in 1975 and did my first
 (15) anthropological fieldwork in Canada in the Yukon Territory in
 (16) 1978 - or was it '77 '77 '78 somewhere in there So I've
 (17) been doing this kind of work since the late 1970s
 (18) Q So kind of the sequence of things is that you began at the
 (19) University of Wisconsin at Madison studying cultural
 (20) anthropology in 1975?
 (21) A That's correct Before that I was a undergraduate at the
 (22) University of Pennsylvania in Philadelphia where my major also
 (23) was anthropology
 (24) Q And you earned a Doctorate in cultural anthropology?
 (25) A That's correct

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- (1) Q You wrote a thesis in cultural anthropology?
 (2) A I did
 (3) Q I can call you Dr. Fall?
 (4) A Yes
 (5) Q And I suppose I should then I shall
 (6) Dr. Fall what is it that the Division of Subsistence does?
 (7) A Okay the Division of Subsistence was created by the Alaska
 (8) legislature in 1978 and we are charged under that State
 (9) statute with a whole variety of things The most important
 (10) charge that we have is to conduct studies on all aspects of
 (11) subsistence hunting and fishing in the lives of Alaska
 (12) residents
 (13) The statute also directs us to collect information about
 (14) subsistence hunting and fishing directly from subsistence
 (15) users themselves We're also directed to assess the
 (16) dependence of people on those resources We are also
 (17) directed
 (18) to make our findings available to the public to other
 (19) agencies We are directed to assist the Board of Fisheries and
 (20) the Board of Game in assessing hunting and fishing
 (21) regulations
 (22) which affect subsistence The Board of Fisheries and the Board
 (23) of Game are the Alaska State regulatory bodies which adopt
 (24) hunting and fishing regulations
 (25) In addition we are charged under State law with
 (26) participating with other divisions within the Department in
 (27) developing management plans to make sure that the
 (28) information

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- (1) about subsistence hunting and fishing is incorporated into
 (2) those plans And we are also responsible for making sure that
 (3) our information is also used in land use plans resource
 (4) management plans the reviews of environmental impact
 (5) statements and things like that
 (6) Q And you yourself have been working in that regard since
 (7) 1981 is that correct?
 (8) A I have that's correct
 (9) Q And that's with - that's in the South Central area of
 (10) Alaska?
 (11) A Yes I'm responsible for two of our regions the South
 (12) Central Region which starts at the Copper River Delta and
 (13) extends all the way out the Aleutian chain It includes the
 (14) Cook Inlet and Copper Basin areas Kodiak Island I'm also
 (15) responsible for the Bristol Bay area which is the Southwest
 (16) Region for the Division
 (17) Q And Dr. Fall are you also involved with Prince William
 (18) Sound area?
 (19) A Yes I am Yes that's part of the South Central Region
 (20) Q And you've been involved with the Prince William Sound
 (21) area as part of the South Central Region for the purposes of
 (22) subsistence the Subsistence Program since 1981 as well is
 (23) that correct?
 (24) A Yes I have yes
 (25) Q Now Dr. Fall you mentioned that as a part of the

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- (1) information gathering that what the Division does is talk with
 (2) subsistence - subsistence harvesters?
 (3) A Yes We use a variety of - of research methods
 (4) established methods of social science to do our work And as
 (5) I mentioned before we are directed by State law to collect
 (6) information directly from subsistence hunters and fishermen as
 (7) part of our work
 (8) Q In gathering that information do you learn such things as
 (9) whether or not the hunters and fishermen are having
 (10) difficulties or if it's times of plenty with regard to fish and
 (11) game?
 (12) A Yes that is one of the many things that we collect
 (13) information about
 (14) Q And if fishermen are - the subsistence hunters and
 (15) fishermen are having difficulty then do you report those
 (16) difficulties to anybody?
 (17) A Yes There are a couple things that we can do when we
 (18) learn about issues like that We discuss them with area
 (19) biologists within our Department to assess the information We
 (20) also direct the people themselves to prepare regulatory
 (21) proposals to the Board of Fisheries or the Board of Game to
 (22) address a resource issue
 (23) Q Dr. Fall what I'd like to do is show you a - an exhibit
 (24) that's already been marked We actually have it on hand board
 (25) as 1364 It is called the Exxon Valdez Oil Spill Area General

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- (1) Land Status Have you seen this map before?
 (2) A Yes I have
 (3) Q Is this a map that is used by your Division?
 (4) A Yes it is
 (5) Q And does the map in general portray the South Central
 (6) Region of Alaska that you are Program Division Manager - or
 (7) Program Manager for?
 (8) A Part of it yes Yes
 (9) Q Would that include - let me see if I can - that includes
 (10) the Prince William Sound area again?
 (11) A It does The Lower Cook Inlet area as well
 (12) Q And the Lower Cook Inlet area is this area down in here?
 (13) A That's correct
 (14) Q And Kodiak Island?
 (15) A Yes
 (16) Q Now there's a legend on this map which says the Exxon
 (17) Valdez oil spill area includes the area enclosed by this
 (18) outline here?
 (19) A Yes
 (20) Q And that includes affected communities?
 (21) A Yes it does
 (22) Q And it also includes their immediate human use areas?
 (23) A Yes it does
 (24) Q Okay And you're also involved with the study of those
 (25) human use areas is that correct?

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- (1) A Yes As one of the techniques we use for doing our
 (2) research is resource use area mapping where we sit down with
 (3) hunters and fishermen in the communities with a set of maps
 and
 (4) we ask them to indicate on those maps where they have
 (5) subsistence fished where they have subsistence hunted for
 (6) various kinds of resources and then we prepare those maps for
 (7) use in land use plans regulatory issues producing oil spill
 (8) restoration project proposals and things like that
 (9) Q And the legend goes on Dr Fall that it also includes the
 (10) adjacent uplands up to the watershed divide?
 (11) A Yes
 (12) Q That would be the uplands up to the mountains?
 (13) A I believe so
 (14) Q Now Dr Fall in the roughly eight years before the oil
 (15) spill you were involved in the study of the communities now
 (16) affected by the oil spill as well right?
 (17) A The Division of Subsistence has conducted research in all
 (18) of the predominantly Alaska Native communities in the oil spill
 (19) area and we have conducted studies in all these communities
 (20) before the spill
 (21) We had also conducted studies in Cordova which is a larger
 (22) community also in the spill area as well as the - the City
 (23) of Kodiak itself So yes there is information substantial
 (24) amount of information about subsistence use patterns in these
 (25) communities before the Exxon Valdez oil spill

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- (1) Q Okay Center your attention now on Chenega Bay and
 (2) Tatitlek You've studied those communities before the oil
 (3) spill too haven't you?
 (4) A Yes The Division of Subsistence conducted research in
 (5) Chenega Bay the first two years that that community was
 (6) resettled That community was resettled in 1983 and 1984
 (7) after a 20-year absence The old community was destroyed by
 a
 (8) tidal wave after the '64 earthquake and the people returned to
 (9) Western Prince William Sound 20 years later and we did a
 study
 (10) of their first two years of reestablishment of subsistence uses
 (11) in Western Prince William Sound
 (12) We have also done research in Tatitlek in the Eastern Sound
 (13) beginning in the early 1980s on and off and then a directed
 (14) study beginning in 1987
 (15) Q And in the course of doing these studies did you arrive at
 (16) any general findings prior to the oil spill with regard to
 (17) subsistence and the role it plays in those communities?
 (18) A Yes we did
 (19) Q Dr Fall I'm going to show you what's been marked as
 (20) exhibit 6104 Zoom back I figured out how to use this now
 (21) Can you tell us what this is Dr Fall?
 (22) A Sure This is an overview of some of our findings about
 (23) the role of subsistence hunting and fishing in these
 (24) communities economies and way of life
 (25) As a little bit of background to describing this the

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- (1) Division of Subsistence itself has done studies in
 (2) approximately 190 Alaska communities since the early 1980s
 and
 (3) what we have learned is that in the smaller communities of
 (4) rural Alaska there is a distinctive way of life and economic
 (5) system that we have coined a mixed subsistence/cash
 economy
 (6) and these are features of a mixed subsistence economy and
 way
 (7) of life And the communities of the oil spill area are really
 (8) good examples of this type of way of life and economic system
 (9) in Alaska
 (10) And one of the features is a very high level of
 (11) participation in subsistence hunting and fishing Virtually
 (12) every household uses wild foods The vast majority of them
 (13) also harvest wild foods Another feature is high levels of
 (14) subsistence food production Our studies show that on
 (15) average each year before the spill people in these communities
 (16) harvested about 300 to 500 pounds edible weight per person
 per
 (17) year of wild foods
 (18) To put that in perspective in the western United States
 (19) families purchase and bring into the kitchen about 220 pounds
 (20) of meat fish and poultry per year So you can see that the
 (21) range in these communities is usually 300 to 500 pounds that a
 (22) large portion of their diets year in year out are composed
 (23) of subsistence game subsistence fish marine invertebrates
 and
 (24) wild plants
 (25) A very wide range of natural resources is used for

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(1) subsistence purposes in these communities In fact in the oil
 (2) spill region before the spill it was about the widest range
 (3) that you'll find in all of Alaska Besides five species of
 (4) salmon a wide variety of other fish halibut cod herring
 (5) spawn on kelp is very important to some of these communities
 (6) marine invertebrates from octopus to clams to chitons which is
 (7) a type of marine invertebrate that lives on rocks Snails and
 (8) so forth land mammals depending upon the region such as
 deer
 (9) and goats and black bear Marine mammals remain quite
 (10) important in these communities mostly harbor seals and sea
 (11) lions Birds and eggs waterfowl upland game birds their
 (12) eggs and wild plants
 (13) Very thorough utilization of subsistence resources is
 (14) another characteristic where it is common for people to use
 (15) fish heads to use some of the internal organs of marine
 (16) mammals and land mammals and a wide variety of products
 (17) besides freezing today and the - in many of these communities
 (18) smoking of fish drying of fish fermenting in some cases of
 (19) fish is very important The production of seal oil harbor
 (20) seal oil still occurs
 (21) Family groups produce subsistence products and this kind
 (22) of way of life which the technical term is a domestic mode of
 (23) production the economic production of food for the table is
 (24) done by family groups That your role in this kind of economy
 (25) is not really based upon where you went to school or what kind

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(1) of degrees you have or your training in a technical capacity
 (2) It's really based upon your relationship to other people in
 (3) that community whether you're a man or a woman whether
 you're
 (4) a young person or an elder or - or a middle aged person The
 (5) domestic mode of production is one that produces for use and
 (6) for sharing and not for profit or to maximize harvest and
 (7) that's very typical in these communities
 (8) A very extensive sharing network that people that harvest
 (9) resources share those with not only one or two other
 (10) households but with a whole extended network of family as
 (11) well as with elders and others in need
 (12) Specialization in subsistence production I mentioned
 (13) before that most households do hunt and fish but you will find
 (14) in these communities that there are particular people
 (15) particular households who are especially skilled at certain
 (16) kinds of hunting activities let's say marine mammal
 (17) activities and they are responsible for a very large part of
 (18) the overall subsistence harvest in that community which they
 (19) share with others They don't keep these things for
 (20) themselves but they are obligated by the traditions of those
 (21) communities to share them
 (22) Traditional land use systems are quite important in and a
 (23) major feature of these kinds of communities People recognize
 (24) that the areas around each community have been used for
 (25) generations by that particular community Other traditional

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(1) communities recognize these boundaries as well and respect
 (2) them These traditional land use areas are really quite
 (3) extensive but they also aren't bounded and it's quite rare to
 (4) find subsistence hunters and fishermen in these communities
 (5) traveling outside of these areas for - for hunting and
 (6) fishing
 (7) Small scale technologist These are mixed cash/subsistence
 (8) economies today People do purchase equipment to
 subsistence
 (9) hunt and fish but they're usually small scale People don't
 (10) go into debt purchasing nets nylon nets seines rifles and
 (11) ammunition
 (12) Traditional systems of knowledge quite important that the
 (13) knowledge about how to hunt and fish where to find things
 how
 (14) to put up resources is passed on from generation to generation
 (15) through subsistence activities themselves We call this the
 (16) intergenerational transmission of knowledge that you don't
 (17) learn about subsistence from a book in these communities You
 (18) learn about it by doing it with your grandparents with your
 (19) parents with your uncles and so forth
 (20) Finally another important feature is a relatively
 (21) underdeveloped and insecure cash sector of the local
 economy
 (22) People do work but jobs are scarce They're often seasonal
 (23) and year in year out the subsistence sector of the economy is
 (24) the most secure with the cash sector very insecure The cash
 (25) that is earned is invested back in the secure sector of the

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(1) economy which is subsistence So that's an overview of the -
 (2) our findings about the - the subsistence way of life in these
 (3) communities of the oil spill area
 (4) Q Now Dr Fall I'd like to talk about just a few of those
 (5) point by point First of all with regard to participation in
 (6) subsistence use is the importance of diversity in the resource
 (7) categories Did you study the use of resources of Tatitlek and
 (8) Chenega before the oil spill?
 (9) A Yes we did
 (10) Q Okay And in doing so you went out and you talked with
 (11) the residents of the villages Can you describe for the jury
 (12) how you did that?
 (13) A Yes One of the methods that we use is called a systematic
 (14) household survey and what it is is a survey instrument that is
 (15) administered face to face in each household in this community
 (16) We've administered such surveys in about 180 communities
 (17) throughout the state and it is our view that it provides us
 (18) with an extremely reliable estimate of the level of subsistence
 (19) production in these communities
 (20) The survey is quite detailed and it lists each kind of
 (21) resource that's known to be used in that community and then
 (22) the household is asked to estimate its harvest of each
 (23) particular resource for a 12 - for the preceding 12 months so
 (24) we get the estimates of the levels of harvest of every resource
 (25) used in that community for a year

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- (1) Q And Dr Fall did you prepare an analysis of the
 (2) participation and the different subsistence uses by resource
 (3) category for Tatitlek?
 (4) A Yes
 (5) Q With regard to your studies?
 (6) A Yes That's a standard practice in our - in our studies
 (7) Q What I'd like to do Dr Fall is have you explain to the
 (8) jury hopefully they can - can you read the bottom line? No
 (9) blurry? Let me try it Is that better?
 (10) Dr Fall can you explain to the jury what they're looking
 (11) at here?
 (12) A Sure This is a bar diagram that's based upon the
 (13) interviews that we did in 1988 pertaining to the study year of
 (14) 1987 in Tatitlek And we asked each household Did you use
 (15) salmon during the study year? And what you see if you look
 (16) far on the left is that 95 percent of the households used
 (17) salmon in the study year and about 70 percent that second
 (18) bar actually harvested salmon
 (19) And if you did then look across at the other categories
 (20) that I mentioned before you'll see very large levels of
 (21) participation and use right across the board 95 percent other
 (22) fish 100 percent used marine invertebrates 100 percent land
 (23) mammals mostly deer about 90 percent marine mammals
 (24) about 75 percent birds and eggs and about 100 percent wild plants
 (25) You'll notice too that the bar the darker bar for

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- (1) harvesting is also very high for most resources but it's
 (2) always lower than the percentage using This indicates sharing
 (3) again Not every household that uses a particular resource in
 (4) these communities harvest themselves but many receive those
 (5) resources from others
 (6) Q If we could Dr Fall perhaps we could talk about just a
 (7) couple of these resources with regard to 1987 in Tatitlek I
 (8) notice for instance marine invertebrates everybody uses
 (9) those You had 100 percent use of those invertebrates?
 (10) A That's right Every household used marine invertebrates
 (11) Q And roughly 80 percent effort in harvesting?
 (12) A That's correct 80 percent of the households were
 (13) successful harvesters of at least some kind of marine
 (14) invertebrate whether it was a clam or a chiton or a crab or an
 (15) octopus
 (16) Q Has the division studied what role if any the harvesting
 (17) of marine invertebrates plays in the overall
 (18) subsistence activity?
 (19) A The role of marine invertebrates in the subsistence of
 (20) these communities is very important and in our technical
 (21) papers we do devote a section of reports to describe marine
 (22) invertebrate use What makes marine invertebrates particularly
 (23) important - well there's actually a couple of things One is
 (24) their variety Another is the timing of the year when marine
 (25) invertebrates are generally taken which is a lot in the

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- (1) springtime before salmon arrive when other resources are not
 (2) particularly abundant
 (3) Another real important aspect of marine invertebrate
 (4) subsistence is that it's relatively easy therefore older
 (5) people get out on the beaches on the reefs with their
 (6) grandchildren and can do this activity And it's an important
 (7) time when kids are what anthropologists call enculturated into
 (8) the way of life of that community In other words they learn
 (9) the values they learn the skills they learn the stories when
 (10) they're out there doing this with - with older people and
 (11) marine invertebrates is a key kind of activity where this can
 (12) occur
 (13) Q Dr Fall another area are birds and eggs where there is
 (14) a - looks like about a 75 percent participation rate in the
 (15) using but a somewhat smaller just over half rate in
 (16) gathering Can you explain that to the jury?
 (17) A That's a good example of specialization in subsistence
 (18) production Birds and eggs are highly valued resources
 (19) Again in part because of the time of the year when they can
 (20) be taken However people do have to invest time and effort
 (21) and a certain amount of money to get out to find where the eggs
 (22) are and to hunt birds and for this reason it's usually men
 (23) who have skiffs who have motors who get out there and
 (24) harvest these resources rather than older people younger women for
 (25) example generally don't hunt birds don't climb the rocks to

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- (1) get the gull eggs and so forth so it's a more specialized
 (2) kind of activity
 (3) Q And the eggs that are being referred to here Doctor are
 (4) those marine bird eggs?
 (5) A Mostly gull eggs
 (6) Q Now Dr Fall in addition to studying the participation
 (7) and subsistence uses you also looked at harvest compositions
 (8) what's geared as a percentage of the total is that correct?
 (9) A That's correct
 (10) Q And you looked at that with regard to Chenega Bay?
 (11) A Yes
 (12) Q And you prepared a chart with regard to 1985-86?
 (13) A That's correct we have
 (14) Q I'm going to show you what has been marked as 6095 It
 (15) says at the top Harvest Composition Chenega Bay 1985/86
 (16) It's a pie chart
 (17) A That's what we call it It's a pie chart yes
 (18) Q Can you explain to the jury what this is Doctor?
 (19) A Sure After we collect estimates of harvest quantities
 (20) let's say numbers of deer numbers of king salmon number of
 (21) octopus we convert those numbers into pounds usable weight
 (22) for food so we can come up with an estimate of how many
 (23) pounds of food value the subsistence resources contribute And then
 (24) you can divide that up by category to see the relative
 (25) composition of the harvest and in this diagram the slice of

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- (1) the pie is directly related to the size the relative size
- (2) of - or contribution of that category to the total
- (3) So in 1985/86 that's a 12-month period from spring to
- (4) spring about 37 percent of the pounds of subsistence foods
- (5) harvested by Chenega Bay was marine mammals that's harbor
- (6) seals and sea lions About 21 percent was salmon about 21
- (7) percent was land mammals That's mostly deer but also black
- (8) bear and goats and some small game Other fish 17 percent
- (9) that's halibut herring rock fish cod two percent
- (10) shellfish I mentioned those before Birds and eggs one
- (11) percent and wild plants berries mostly one percent
- (12) Q Now Dr Fall you mentioned this harvest deposition is in
- (13) terms of weight?
- (14) A It is that's correct
- (15) Q Would that explain in part the difference between
- (16) shellfish at two percent and marine mammals at 37 percent?
- (17) A Oh sure because you take a sea lion it's an animal that
- (18) comes in a large package It's 200 pounds per edible weight on
- (19) average for a sea lion and you get a number of sea lions you
- (20) share them and it contributes a large portion to the total
- (21) harvest When you go out and you pick a bucket of chitons that
- (22) are maybe a couple of inches long they're real important
- (23) They get shared around but they don't weigh a whole lot when
- (24) you actually convert them into food value That's why you mix
- (25) them with rice and eat them that way

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- (1) Q And Dr Fall this harvest composition was created or put
- (2) together after Chenega Bay had been reestablished for about a
- (3) year or two?
- (4) A That's right This represents the harvest deposition for
- (5) the second year after the resettlement of the community
- (6) Q Were there any findings at the Department or at your
- (7) Division arrived at based upon this harvest composition a year
- (8) or two after the community had reestablished?
- (9) A Well we thought that - that the harvest composition
- (10) itself was not surprising given what we knew about other
- (11) communities in the - in Prince William Sound the important
- (12) role of harbor seals and sea lions to the diet
- (13) What we did think though what we concluded at the end of
- (14) our technical paper was that in terms of harvest quantities we
- (15) thought that the harvest in Chenega Bay would probably
- (16) continue
- (17) to increase over the course of the 1980s that we saw an
- (18) increase from the first year to the second year and people
- (19) reported to us that they were still gearing up for subsistence
- (20) activities Many of the adult men had left the old village of
- (21) Chenega as - as children and they needed to reacquaint
- (22) themselves with much of Western Prince William Sound They
- (23) were trying but it was going to take some time to learn from
- (24) the elders there So it was our conclusion our prediction
- (25) that the harvest levels would - would continue to increase and

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- (1) this diagram depicts
- (2) Q Now Dr Fall did you also -
- (3) THE COURT Counsel it's about time to take a break
- (4) Would you -
- (5) MR FORTIER Why don't we take a break now
- (6) THE CLERK Please rise This court stands in
- (7) recess
- (8) (Jury out at 10 29 a m)
- (9) (Recess from 10 29 a m to 10 44 a m)
- (10) (Jury in at 10 44 a m)
- (11) THE CLERK Please rise This court now resumes its
- (12) session Please be seated
- (13) BY MR FORTIER
- (14) Q You all hooked up there Dr Fall?
- (15) A Yes
- (16) Q Dr Fall you indicated to the jury that Division had also
- (17) looked at the traditional use areas the land use areas of -
- (18) of the communities
- (19) A Yes we have
- (20) Q Could you tell the jury what you did?
- (21) A It's basically sitting down with harvesters in each
- (22) community with a set of maps and handing them a pen and
- (23) asking
- (24) them to indicate where - which areas they have used for
- (25) fishing for hunting either over the course of their lifetimes

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- (1) then we're able to lump the categories up to get a picture of
- (2) the total area that they use for subsistence
- (3) Q Okay And with regard to Tatitlek Corporation we - we
- (4) just heard from Carroll Kompkoff who is the President of
- (5) Tatitlek Corporation regarding his - his recollection of
- (6) where people used to go in the old days
- (7) What I'd like to do Doctor is show you a chart that is
- (8) marked as plaintiffs exhibit 1562 It is a subsistence use
- (9) area that's noted as a subsistence use area for the Tatitlek
- (10) Corporation - or for the Tatitlek Village The source
- (11) indicates that it's during the lifetime of the harvesters is
- (12) this what you were referring to?
- (13) A That's right That's the question that we asked in that
- (14) case
- (15) Q And Dr Fall does this map represent what you were told
- (16) in 1988 concerning the areas of harvest by the Tatitlek people?
- (17) A Yes it does This map is out of our technical paper which
- (18) we published on subsistence uses in Tatitlek and this is a
- (19) depiction of what we learned about traditional harvest areas
- (20) Q So according to this map then the traditional harvest
- (21) areas - let me get a pen - whoops - for Tatitlek
- (22) Corporation or for the Tatitlek area if this is Tatitlek up
- (23) here
- (24) A That's right
- (25) Q It would include the area up into this fiord here?

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- (1) A Right
- (2) Q And then it also includes areas over around the Valdez
- (3) area?
- (4) A It does
- (5) Q And then over in - in this area?
- (6) A Correct
- (7) Q And do you know what area this is Dr Fall?
- (8) A No place name s on the map so -
- (9) Q We ll take a look at that in a minute And it also
- (10) includes areas around Montague Island?
- (11) A That s correct
- (12) Q And Knight Island?
- (13) A Right
- (14) Q And Naked Island?
- (15) A That s - that s correct
- (16) Q And Bligh Island?
- (17) A Right
- (18) Q Okay And then of course around the Hinchinbrook Island
- (19) area?
- (20) A A portion of it that s right
- (21) Q Now did you also prepare a similar chart with regard to
- (22) Chenega Chenega Bay use?
- (23) A Yes we did
- (24) Q Dr Fall - and did you also prepare similar maps with
- (25) regard to the uses of the Port Graham and English Bay people?

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- (1) A Yes There is one set of maps that depicts English Bay and
- (2) Nanwalek and Port Graham together They share basically their
- (3) status particular harvest areas so we have one set of maps
- (4) which combines the two communities
- (5) Q If I could with your assistance Dr Fall could you come
- (6) around here and maybe we can explain a map to the jury?
- (7) It is exhibit 1309
- (8) Can you tell us what this is Dr Fall?
- (9) A Sure This is a reproduction of our subsistence use area
- (10) maps for Chenega Bay and what this shows is the areas that
- (11) people who are living in Chenega Bay when we did our work in
- (12) 1984 85 and 86 had gone for various kinds of subsistence
- (13) activities the first two years that they were back in that
- (14) community So unlike the map for Tatitlek that we just showed
- (15) which was a lifetime map in this one we were particularly
- (16) interested in what people were doing in those first two years
- (17) what areas they were concentrating on when they were
- (18) reestablishing themselves in the community And it s
- (19) color coded so this brown right here is deer and bear areas
- (20) Q You just pointed to Green Island and Elrington?
- (21) A LaTouche Evans Island portion of Knight Island portion
- (22) of Eleanor Island up here smaller areas over here This was
- (23) in part because Chenega Bay people will team up with their
- (24) relatives in Tatitlek and do certain kinds of activities too
- (25) They were especially doing that in the early years

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- (1) And then this pink or red whatever color that is is
- (2) marine invertebrates You see that along the shoreline
- (3) You ll also see certain areas in open water where they might be
- (4) putting out crab pots for example looking for octopus and
- (5) those kinds of things Marine resources is salmon and fish
- (6) halibut trolling for halibut and jigging for halibut areas
- (7) around there
- (8) Intertidal and marine resources I m not exactly sure how
- (9) that s different from the pink one Waterfowl is slashed right
- (10) around here It s hard to see probably from where you re
- (11) sitting the waterfowl areas indicated and so forth
- (12) Q You ve indicated down around where again Doctor?
- (13) A Here is the waterfowl area that I could - some up in
- (14) here So Evans Island around the community itself around
- (15) Elrington Island where people were hunting for geese and
- (16) ducks
- (17) Q And where your finger was is where Chenega Bay -
- (18) A That s Chenega Bay right here
- (19) Q Okay And where was the old village of Chenega?
- (20) A Right up here
- (21) Q On Chenega Island okay
- (22) Now Dr Fall you also indicated you made a map for the
- (23) Port Graham area Port Graham and English Bay?
- (24) A That s right
- (25) Q And again this is based upon traditional uses?

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- (1) A Yes In - In the case of Nanwalek and Port Graham we
- (2) asked hunters and fishermen about their uses for the prior 20
- (3) years so and we did those interviews in the early 1980s So
- (4) the use areas that you see for the places that Nanwalek and
- (5) Port Graham were using in the 1960s the 1970s and the early
- (6) 1980s and it s a pretty good depiction of what they did
- (7) throughout the 1980s as well
- (8) Q I ll just show you what has been marked Doctor as
- (9) exhibit - plaintiffs exhibit 1310
- (10) A Okay And it s the same organization of different
- (11) categories of resource color-coded so you can see that the
- (12) total area stretches from the head of Kachemak Bay all the way
- (13) around There s Port Graham right there and English Bay or
- (14) Nanwalek it s called now Actually it was called Nanwalek
- (15) before it was English Bay and now it s Nanwalek again and
- (16) Port
- (17) Graham and the areas stretching over to Port Dick to the lower
- (18) point right here
- (19) There were uses previously to the - to the east of this
- (20) area and people in Nanwalek and Port Graham do recognize
- (21) this
- (22) part of the southern coast as part of their traditional
- (23) territory However they hadn t used those areas in the 60s
- (24) and 70s so they didn t show them to us in this map
- (25) We have another map in our technical paper which shows a
- (26) much larger area that is used from the 1880s to the 1980s as
- (27) remembered by elders

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- (1) Q And the traditional use area that you referred to that s
 (2) further to the -
 (3) A To the east
 (4) Q To the east?
 (5) A Yeah
 (6) Q Is that the Kenai Fjords area Doctor?
 (7) A It is
 (8) Q Which includes Yalik Bay?
 (9) A Does include Yalik Bay which is a site of a some of the
 (10) elders and ancestors from Port Graham and Nanwalek
 (11) Q All the way up to Yalik Bay?
 (12) A Yes
 (13) Q One question Doctor this area around here actually the
 (14) Village Corporation lands the Port Graham English Bay?
 (15) A That s what s indicated on the map yes
 (16) Q Now Dr Fall you also looked at a total Prince William
 (17) Sound subsistence activity area?
 (18) A It s possible to - to include Chenega Bay s areas and
 (19) Tatitlek s areas together to depict them both
 (20) Q Okay
 (21) A And that s what this map is
 (22) Q By this map you re referring to exhibit 1362?
 (23) A Yes
 (24) Q And this map shows both Chenega and Tatitlek usages?
 (25) A It does yes

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- (1) Q And this is a full extent of the subsistence traditional
 (2) use areas?
 (3) A That s right
 (4) Q Thank you Doctor
 (5) A I knew I was going to do that
 (6) Q Careful when you come down here Doctor
 (7) Now did you also look at how the - how these residents
 (8) these residents of Chenega and Tatitlek harvested - what
 (9) seasons things were harvested at Dr Fall?
 (10) A Yes Part of our standard set of research methods is to do
 (11) what s called a - a seasonal round of resource harvests where
 (12) we interview key respondents about when they engage in
 (13) particular harvest activities This is particularly important
 (14) to do because I think as most of you know in Alaska
 (15) resources are not available - not all resources are available
 (16) year round and the time when a resource is available is very
 (17) critical to a subsistence way of life
 (18) Q And so Dr Fall when you were looking at this did you
 (19) look at what was harvested in the spring and the summer and
 (20) fall and the winter?
 (21) A That s right
 (22) Q I m going to show you what s been marked as exhibit 1561
 (23) MR SHAPIRA If you could -
 (24) MR FORTIER Oh sure I m sorry I ll wait a
 (25) minute

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- (1) BY MR FORTIER
 (2) Q Okay now I m going to show it to you again
 (3) This is called Annual Round of Harvest Activities by
 (4) Residents of Chenega Bay and Tatitlek in the 1980s Doctor?
 (5) A Right And it combines our information for Chenega Bay and
 (6) Tatitlek
 (7) Q Okay And it shows that certain activities take place in
 (8) the spring of the year April - March April May?
 (9) A That s right The way we ve organized this - this chart
 (10) is by month but you can also look at it by season And we
 (11) chose to start out the seasonal round in April and that s
 (12) because the springtime is a period of renewal of renewed
 (13) subsistence activities and renewed concentrated effort on
 (14) subsistence activities And you can see that there s a whole
 (15) lot of resources that become available in Prince William Sound
 (16) in April and that s indicated by the darker bars in the
 (17) chart
 (18) There are some resources that people can find year-round
 (19) There are some herring swimming around in Prince William
 (20) Sound
 (21) throughout much of the year and sometimes people will get
 (22) them
 (23) in their nets That s why we have it lighter for much of the
 (24) year but the real concentrated times are shown in dark
 (25) That s when most of the harvest takes place or most of the
 (26) effort takes place and in the springtime herring herring
 (27) spawned on kelp concentrated effort on seals in the spring

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- (1) because they re around the herring feeding
 (2) Clams as I mentioned before marine invertebrates very
 (3) important in the springtime with the low tides the better
 (4) weather Halibut people like getting out on the water
 (5) jigging for halibut in the springtime especially before the
 (6) salmon arrive and especially when the weather s good to try
 (7) the halibut Chiton s a kind of marine invertebrate
 (8) Then as you move down the chart you ll see that there are
 (9) darker lines for salmon that kick in in May and June Chinook
 (10) and sockeye first and then further down the chart you ll see
 (11) chum and pink salmon about the sixth and fifth resources from
 (12) the bottom And you also see another set of resources kick in
 (13) in the late summer and early fall time such as coho salmon
 (14) deer and goat where people to some extent shift from marine
 (15) resources to land based resources such as deer and goats and
 (16) some black bear hunting Again in the fall time
 (17) And there are subsistence activities that occur in the
 (18) winter as well Harbor seal hunting you can see is dark
 (19) again Duck hunting is real important for many communities
 (20) over the wintertime especially to provide fresh food for a
 (21) change in diet from dried and smoked salmon and halibut and
 (22) so
 (23) forth
 (24) But we call it a seasonal round or an annual round because
 (25) it repeats year after year after year and it s an important
 (26) feature of these kinds of - of ways of life that the pattern

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- (1) of life is tied in directly to the patterns of the resources
 (2) We in Anchorage most of us anyway if we're not retired
 (3) are tied into our work schedules. We hunt and fish as
 (4) recreational activities for fun and when we can get some time
 (5) off in these communities that really isn't the choice. The
 (6) choice is to get out there and do it when the stuff is there
 (7) because you need it to survive.
 (8) Q Now Doctor, did the Division form any conclusions about
 (9) the use of subsistence resources in the 1980s?
 (10) A Yes. And for Tatitlek for Chenega Bay for Nanwalek and
 (11) Port Graham our conclusions were that subsistence was
 (12) absolutely fundamental to the economy and the way of life and
 (13) the cultural survival of these communities that their way of
 (14) life their economic pattern are very good examples of mixed
 (15) subsistence/cash economies that you find throughout the State
 (16) of Alaska.
 (17) Q And Dr. Fall, did the - has the Division - did the
 (18) Division study the impact of the oil spill on these
 (19) activities?
 (20) A Yes we did. In several different ways. And one of the
 (21) major activities that we undertook in the years after the spill
 (22) was to go back to the communities and conduct the research
 (23) over again that we had done before. We did systematic household
 (24) surveys in all 15 of the predominantly Alaska Native villages
 (25) including Tatitlek, Chenega Bay, Nanwalek and Port Graham.

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- (1) using virtually the same research methods and research
 (2) instrument as we had before so that we could compare what
 (3) the pattern was after the spill with what the pattern was before
 (4) the spill.
 (5) Q Okay. And Doctor, in doing that, did you look at whether
 (6) or not there were changes in the subsistence harvests in 1989
 (7) compared to pre-spill averages?
 (8) A Yes we did.
 (9) Q I'm going to show you what's been marked as 6107. With
 (10) regard to Tatitlek, Chenega Bay, Nanwalek and Port Graham
 (11) what did you find there?
 (12) A One of our major findings was that there was substantial
 (13) reductions in subsistence harvesting in the year after the
 (14) spill. And what this chart shows is the extent of the - of
 (15) the reduction as a percentage. And so if each bar - the
 (16) length of the bar is the degree of change that occurred. If
 (17) the bar goes above the 0-0 line that means there was an
 (18) increase. If the bar goes below the 0-0 percent line that
 (19) means there was a decrease. You can see for Tatitlek and
 (20) Chenega Bay when we compared the harvest estimates for the
 (21) year after the spill with the averages before the spill we found
 (22) almost a 60 percent reduction in the available subsistence
 (23) foods from subsistence harvesting by the people in those
 (24) communities. We found an almost similar reduction in
 (25) Nanwalek and Port Graham of about 50 percent decline compared to

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- (1) pre-spill norms.
 (2) Q Now with regard - let's just talk about Chenega Bay for a
 (3) moment if we could Doctor. Are there any qualifications that
 (4) you would make with regard to this chart?
 (5) A Yes. I would make some qualifications regarding Chenega
 (6) Bay. You remember before that we were talking about our - our
 (7) study in Chenega Bay before the spill and how we focused on
 (8) the first two years of the resettlement of that community and how
 (9) we concluded that it - that the harvest levels would probably
 (10) increase over the next years as people reestablished
 (11) themselves there.
 (12) It is our view that our pre-spill estimates for Chenega Bay
 (13) probably underestimate the level of subsistence harvesting
 (14) that was occurring in 1987-1988. Another reason for
 (15) concluding that is that the harvest levels in Tatitlek just
 (16) before the spill were in the - were averaging about 440 to 480
 (17) pounds per person compared to the early estimates of Chenega
 (18) Bay of 350 or so. So for those reasons it is our view that
 (19) we've likely underestimated the extent of the decline in
 (20) Chenega Bay. But nevertheless even with the numbers that we
 (21) do have it's a substantial reduction in subsistence.
 (22) Q And did you look at the changes in subsistence harvests
 (23) say per region, Prince William Sound, Lower Cook Inlet?
 (24) A Yes. What you can do is take the information and lump it
 (25) to look at regional patterns as well as village patterns.

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- (1) and -
 (2) Q What I'd like to do Doctor is show you what's been marked
 (3) as 6108. It is called Changes in Subsistence Harvest Spill
 (4) Year 1989. Is this a chart you're talking about?
 (5) A That's right. It's looking at the same information. If
 (6) you combine Chenega Bay and Tatitlek together, subsistence
 (7) harvests went down about 60 percent. Nanwalek and Port
 (8) Graham
 (9) down about 50 percent. The six villages in the Kodiak Island
 (10) Borough down about 50 percent compared to pre-spill average.
 (11) Q Now when you interviewed the harvesters with regard to
 (12) this information or the folks in the villages with regard to
 (13) the information, I take it you talked with the folks in Port
 (14) Graham and English Bay as well?
 (15) A Yes.
 (16) MR SHAPIRA: Objection. Your Honor, there's a
 (17) vagueness issue. The questioning goes in terms of when you
 (18) interviewed, I think it is clear as a foundational matter
 (19) THE COURT: The objection - that's fair, you can
 (20) rephrase your question.
 (21) BY MR. FORTIER:
 (22) Q Did the Division interview folks in Port Graham and English
 (23) Bay?
 (24) A Yes we did.
 (25) Q And did you make any - did you find anything about what
 the - what the pre-spill - say 1989 harvests were before and

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- (1) after the spill?
- (2) A Yes
- (3) Q Could you tell the jury?
- (4) A The declines were about 50 percent in both communities 45
- (5) to 50 percent
- (6) Q Now during 1989 - or excuse me did you also examine
- (7) whether or not there was a reduction in the number of
- (8) subsistence resources used Doctor?
- (9) A Yes What we were able to do is - is figure out a - an
- (10) average or just a range for each community of the variety of
- (11) resources that a household uses or harvests counting the coho
- (12) salmon as one king salmon as one harbor seal as one
- (13) octopus
- (14) as one and each household use from zero to as many
- (15) resources
- (16) as there might be available so you can come up with an
- (17) average
- (18) that gives you an idea of the - the range of resource uses in
- (19) that community
- (20) And as I mentioned before it's quite broad in these
- (21) communities of the oil spill area And we had that information
- (22) from before the spill and we were able to compare it with the
- (23) information after the spill
- (24) Q Doctor I'm showing what's been marked as 6110 It's
- (25) called Changes in the Number of Subsistence Resources Used
- (26) Pre spill Against Post spill
- (27) A Yes This is organized the same way as the other two that
- (28) we looked at with the dark bar being no change and - and the

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- (1) bars going down indicating a reduction in diversity of
- (2) resources And the pattern here is quite similar to what we
- (3) saw with - with resource harvests overall
- (4) In Prince William Sound the diversity of resources the
- (5) number of different kinds of resources available for
- (6) subsistence use dropped by more than 50 percent after the spill
- (7) in Lower Cook Inlet Nanwalek and Port Graham about 45
- (8) percent and in the Kodiak Island Borough about 27 28
- (9) percent
- (10) reduction in - in that measure of subsistence use
- (11) Q And Doctor did you make any investigation did your
- (12) Division make any investigation into why all these changes?
- (13) A Yes we did One question that we added in - when we did
- (14) these interviews in 1990 was an assessment question and - or
- (15) actually a set of questions For example when - after we
- (16) finished asking the household about their uses and harvests of
- (17) salmon as a category we then asked how did that compare to
- (18) last year And they would say oh it was about the same or
- (19) oh it was really different If they said it was about the
- (20) same we marked that down If they said it was really
- (21) different we asked well how how was it different And some
- (22) would say oh it went up a little bit Most said oh it was
- (23) really lower I really used or harvested a whole lot less And
- (24) the next obvious question was why was that why did this
- (25) change
- (26) occur And they would give us an answer and one of the
- (27) answers that they often gave is well it was because of the

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- (1) spill And then if they didn't offer what specifically about
- (2) the spill it was we asked well what about the spill was it
- (3) that in your assessment caused these - your household to use
- (4) less salmon or harvest less salmon
- (5) So what we did was have an open-ended question We didn't
- (6) ask directly how did the Exxon Valdez oil spill lower your
- (7) subsistence uses we didn't ask that We asked an open-ended
- (8) question and by follow-ups tried to bring out that
- (9) household's assessment So what we have really then are
- (10) minimum but I think good assessments from people about
- (11) what
- (12) they thought was happening and why
- (13) Q And did you prepare a chart with regard to what the
- (14) responses were Doctor?
- (15) A Several in fact yes
- (16) Q What I'd like to show you the first document has been
- (17) marked as 6115 Could you tell the jury what is please?
- (18) A Sure What this summarizes or what this shows is what
- (19) percentage of the households we interviewed in different
- (20) regions said that their subsistence uses of at least one
- (21) subsistence resource had declined in the year after the spill
- (22) for a spill related reason whatever that reason might be
- (23) So in Prince William Sound that's Tatitlek and Chenega
- (24) Bay almost all the households said that because of the Exxon
- (25) Valdez oil spill some of their subsistence uses went down
- (26) Almost an exact same percentage in Nanwalek and Port
- (27) Graham

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- (1) about 95 percent of the households It drops off in Kodiak
- (2) about 50 percent of the households We do see over time an
- (3) interesting geographic relationship between spill effects
- (4) That I think we'll probably talk about in a later question
- (5) but here is one example of that
- (6) Q And Doctor did the Division look into what predominant
- (7) concern was with regard to the oil spill?
- (8) A Yes we did Remember that after people said well it was
- (9) the oil spill that - that led us to use less we asked what
- (10) about the oil spill and the - the predominant reason that
- (11) people gave was concern about oil contamination concern that
- (12) the resources had been rendered unsafe to eat because of
- (13) contamination by the oil
- (14) And again you can see the geographic pattern that we
- (15) found regarding this but you'll also see that the vast
- (16) majority of the households in Prince William Sound 90
- (17) percent - remember almost all of them said it was an oil
- (18) spill reason and almost all of those said it was oil
- (19) contamination that led them to reduce their uses of
- (20) subsistence
- (21) In Lower Cook Inlet it's almost 80 percent In Kodiak
- (22) Island Borough about 30 percent of the households specifically
- (23) cited oil spill contamination as the reason for reduced
- (24) harvests
- (25) Q And Doctor referring to exhibit 6116 with regard to

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- (1) Prince William Sound again this is Tatitlek and Chenega is
 (2) that correct?
 (3) A That's correct It's Tatitlek and Chenega Bay combined
 (4) but there were no - no differences between those two
 (5) communities
 (6) Q Both communities had the same concern?
 (7) A The same level of concern
 (8) Q And Lower Cook Inlet is Port Graham and English Bay?
 (9) A That's right
 (10) Q And again was the concerns similar - were the concerns
 (11) similar?
 (12) A There was tremendous concern about oil contamination in
 (13) both of those communities
 (14) Q Okay Doctor based upon your review of the statistics
 (15) prepared by the - by your Division do you have any idea why
 (16) contamination was such a big concern in 1989?
 (17) A Yes And I - I think it goes beyond our statistic It
 (18) goes to key respondent interviews that we've done and other
 (19) interview work we've done on the spill It's grounded in the
 (20) way of life of these communities and their traditions
 (21) Survival in these communities is very clearly directly related
 (22) to a detailed knowledge about the natural environment People
 (23) are trained to be careful observers of the lands the waters
 (24) the animals around them and they're - they're taught as
 (25) children and again as adults it's a continuous learning

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- (1) process to read signs from the land the water and the animals
 (2) to inform them about the safety of travel about the edibility
 (3) of resources and so forth
 (4) When the oil spill occurred there were very obvious signs
 (5) of injury and damage that subsistence users saw There were
 (6) oiled sea otters oiled seals oiled birds There was oil in
 (7) the water and the beaches These signs were obvious but
 (8) what's important to remember is that the oiling was
 (9) discontinuous Not all water was oiled not all lands were
 (10) oiled and there were resources that didn't show any obvious
 (11) effects such as fish such as maybe some un-oiled seals and so
 (12) forth
 (13) Nevertheless what we learned is that people again careful
 (14) observers of the environment noted dying dead and injured
 (15) wildlife that they couldn't explain Some examples was a dead
 (16) starfish that washed up on the beach in Tatitlek A dead whale
 (17) that washed up in - in Kodiak Seals that hunters approached
 (18) that were acting lethargic that didn't flee when the hunters
 (19) came near Very very odd They couldn't explain it
 (20) Other kinds of observations were also rooted in the history
 (21) of the communities An interesting one was in Chenega Bay
 (22) where elders observed cod pooling in shallow water and the
 (23) only other time these elders could remember such a thing was
 (24) at
 (25) the time of the earthquake in '64 when the village had been
 (26) destroyed

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- (1) For a people who - whose survival depends upon reading the
 (2) environment and their own traditions to help them interpret it
 (3) these kinds of things really warned them of danger and they
 (4) couldn't understand what was going on The oil spill was
 (5) something that was unique in their experience It had created
 (6) conditions that were completely unfamiliar to these people and
 (7) it undermined their own abilities to make informed decisions
 (8) They didn't know what was going on Consequently they acted
 (9) in a very culturally appropriate manner They acted with great
 (10) caution They refrained from using many resources that they
 (11) suspected were oiled Some that they could tell but others
 (12) they didn't know The signs were out there some animals were
 (13) oiled others were not What is going on? They didn't know
 (14) They didn't have the answers from their own knowledge and
 (15) they
 (16) acted cautiously and their subsistence harvests went down
 (17) Q Now in the Tatitlek area did you find that that same
 (18) concern contamination appeared throughout the surveys that
 (19) you conducted Doctor?
 (20) A Yes It was prevalent in most of the households that we
 (21) interviewed
 (22) Q And the Tatitlek area their traditional use area we saw
 (23) on the map includes areas of Bligh Island the Galena Narrows
 (24) area Fidalgo Island and up into the Tatitlek Narrows?
 (25) A Uh huh
 (26) Q And do you know whether or not that area was oiled Doctor?

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- (1) A It was not oiled
 (2) Q But yet the people were still concerned about
 (3) contamination?
 (4) A They were concerned because in part they know like we
 (5) know that animals move around that seals and sea lions and
 (6) salmon could move through the oiled areas to the un-oiled
 (7) areas So the - the concern went beyond the - the beaches
 (8) where there was physical oiling or beaches that were near
 (9) physical oiling to encompass really the ecosystem itself
 (10) Q And Doctor we've heard that there were some emergency
 (11) orders that the Department passed with regard to subsistence
 (12) fishing Could you tell us first why the Department did that?
 (13) And I'm referring to the Department of Fish and Game
 (14) A Sure The Division of Subsistence began a - a Subsistence
 (15) Response Program soon after the spill And one of our tasks as
 (16) part of that program was to figure out whether there were any
 (17) regulatory actions that the Department could take on an
 (18) emergency basis to assist people in substituting for lost
 (19) harvests And we identified a couple of - of possibilities
 (20) which the Division of Commercial Fisheries which is the
 (21) management division within our department that has the
 (22) authority to issue emergency regulations took They - they
 (23) did follow through on these recommendations
 (24) Q And Doctor you've prepared a synopsis of several
 (25) emergency orders?

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- (1) A Yes or a part of them The first one has to do with the
 (2) Chenega Bay area and what we found in our emergency order was
 (3) that conduct of normal subsistence salmon harvests in waters
 (4) adjacent to oiled beaches or with oil on the surface is likely
 (5) to result in adulterated product The oiling of beaches in the
 (6) Southwest District and Green Island which are the traditional
 (7) areas for Chenega Bay and are the areas in the regulations that
 (8) are specifically directed for subsistence fishing by Chenega
 (9) Bay people have resulted in a loss of subsistence fishing
 (10) opportunities Those were closed by the Department in the
 (11) traditional subsistence fishing areas the opening of
 (12) alternative harvest areas is justified
 (13) What the Department did was open four bays Eshamy Lagoon
 (14) Jackpot Bay Crab Bay and Sawmill Bay which were oil free
 (15) Some of them had been boomed off to protect them from oiling
 (16) and the people in Chenega Bay - and normally these areas are
 (17) closed They're closed to commercial fishing and to
 (18) subsistence fishing but because they were indisputably clean
 (19) we opened them up and people from Chenega Bay were able
 (20) to go
 (21) there and harvest salmon which indeed they did
 (22) The second one has to do with Tatitlek and it's a similar
 (23) kind of justification that we found that subsistence
 (24) activities by residents of Tatitlek have been seriously
 (25) disrupted since the Exxon Valdez oil spill For the last two
 (26) months residents have foregone harvest of most of their usual

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- (1) subsistence foods including herring herring spawned on kelp
 (2) clams halibut and seals due to their concerns about possible
 (3) oil contamination of these resources
 (4) And what the Department did in this case was allow people
 (5) from Tatitlek to travel to the Copper River Flats area far to
 (6) the east of the oiling and by emergency regulation the bag
 (7) limits or the seasonal limits - I've forgotten what the number
 (8) was but let's say 25 or 50 salmon were relaxed so that - so
 (9) that Tatitlek harvesters could travel there and take more than
 (10) the bag limit to share with the people back in the community
 (11) So we did take these - these regulatory actions in recognition
 (12) of the emergency situation
 (13) Q Now Doctor did you form any conclusions based upon
 (14) these
 (15) statistics about the impact of the oil spill?
 (16) A Yes
 (17) Q On subsistence activities?
 (18) A Yes We have - or I have written several papers on the
 (19) topic and have presented some of our findings in the oil spill
 (20) symposium that was held in Anchorage a couple years ago and
 (21) also in the Oil Spill Forum sponsored by the Trustees later
 (22) this year and what we've included about 1989 is several
 (23) things
 (24) One is that again there was substantial reductions in -
 (25) in subsistence harvests There was a tremendous decline in
 (26) resource diversity There was a decline in - in effort in

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- (1) subsistence effort and in resource sharing in these
 (2) communities that there was nonuse of traditional harvest areas
 (3) as a result of the spill There was a disruption in the
 (4) transmission of traditional knowledge because people could
 (5) not
 (6) hunt and fish together and there was an undermining of that
 (7) traditional knowledge in that people were not sure what was
 (8) going on and their traditional knowledge did not inform them
 (9) about this and there was uncertainty about the future about
 (10) what would happen in the coming years what would happen to
 (11) the
 (12) resources what would happen to them
 (13) Q And Dr Fall besides these emergency orders concerning
 (14) Chenega and Port Graham Chenega and Tatitlek do you know
 (15) whether or not there was an increase in the use of salmon by
 (16) the folks from Chenega Chenega Bay in 1989? Maybe my
 (17) question
 (18) isn't altogether clear Doctor
 (19) We've heard some suggestions over the past several weeks
 (20) about an increase in subsistence fishing activities in Chenega
 (21) Bay in 1989 Do you know anything about that?
 (22) A Yes Well getting back to your question the answer is no
 (23) I do not think that there was an increase in subsistence salmon
 (24) harvesting in Chenega Bay in 1989 If you take our statistics
 (25) which pertain to 1984 1985 you will see that per capita the
 (26) harvest of salmon in 1989 was higher than in '84 and '85
 (27) In part this is because of restrictive regulation that
 (28) occurred in the Chenega Bay area when the village was

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- (1) resettled Remember that community was gone for 20 years in
 (2) the interim and there was nobody really subsistence fishing in
 (3) Western Prince William Sound When Chenega Bay people got
 (4) back
 (5) out there they found that they were only allowed to
 (6) subsistence fish with gear allowed in the commercial fishery
 (7) which is purse seines remember subsistence activities usually
 (8) small scale technologies They were restricted to open
 (9) commercial fishing periods and there was a very restrictive bag
 (10) limit
 (11) The same thing applied to Tatitlek In 1987 the villages
 (12) of Tatitlek and Chenega Bay came before the Board of Fisheries
 (13) and asked them to change those regulations to make them
 (14) more
 (15) consistent with how they lived and the Board responded
 (16) favorably allowed gillnets to be used removed the seasonal
 (17) limits on subsistence fishing and allowed much more time
 (18) We did see an increase in subsistence salmon harvests in
 (19) Tatitlek from 1987 to 1988 that we think in part is a result
 (20) of this regulation change It's reasonable to think that the
 (21) same kind of increase over the early years of the village of
 (22) Chenega Bay also occurred in 1988
 (23) Q Doctor let me just ask you a few follow up questions
 (24) because I'm not sure I understand
 (25) You referred to purse seines and then you said small scale
 (26) technology then you said gillnets What do you mean by all
 (27) that?

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- (1) A Okay Well purse seine is a large commercial fishing boat
 (2) that requires hundreds of thousands of dollars of investment
 (3) and is the only commercial gear that's allowed in the Southwest
 (4) District where Chenega Bay is
 (5) Q So purse seine is not a small technology?
 (6) A No it's not I wouldn't call it a small scale
 (7) technology What people in Chenega Bay wanted to use is
 (8) gillnets like you see people using in the Cook Inlet
 (9) subsistence salmon fishery this summer or just a little beach
 (10) seine that you can pull around with your skiff and your
 (11) outboard motor That's the kind of subsistence activities that
 (12) they had done before and that they wanted to do again
 (13) Q So they needed to get the regulations changed and that's
 (14) what happened in 1987?
 (15) A That's right
 (16) Q And that allowed them to use the small scale technology
 (17) the gillnets then?
 (18) A Yes as well as fish more often and harvest up to their
 (19) needs
 (20) Q And was - were there any changes with regard to whether or
 (21) not commercial fishermen could also go subsistence fishing?
 (22) A Yes there was a change Before 1987 commercial
 (23) fishermen
 (24) in Prince William Sound were prohibited from getting a
 (25) subsistence permit and this was really inhibiting on many of
 (26) the people in the community who derived great income from -
 (27) or

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- (1) not great income but derived what little income they had from
 (2) commercial fishing and they couldn't go subsistence fishing
 (3) and this was also changed
 (4) Q Now your studies from Chenega Bay that we looked at in the
 (5) first part of your discussion were between 1984 and 1986 is
 (6) that correct Doctor?
 (7) A It's a two-year period in there It's 84 85 spring to
 (8) spring and 85 to 86 spring to spring
 (9) Q So then you didn't look at what the impact was in the
 (10) change of regulations from large seines down to small scale
 (11) technology that allowed people in Chenega Bay to go fishing
 (12) more often in 1987 is that correct?
 (13) A Not in Chenega Bay we did not We do have the information
 (14) for Tatitlek
 (15) Q You didn't look at what the changes were until 1989 then
 (16) correct?
 (17) A That's right
 (18) Q Now Doctor have you - has the Division continued to look
 (19) or continued to conduct research on the impact of the oil spill
 (20) to these communities Tatitlek and Chenega in Prince William
 (21) Sound Port Graham and English Bay on the lower Kenai
 (22) Peninsula?
 (23) A Yes We've continued to administer our - our systematic
 (24) household surveys each year
 (25) Q Okay And with regard to what we'll call the post spill

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- (1) years 1990 to say 1992 have you - have you reached any
 (2) conclusions?
 (3) A Yes We've - we've reached a number of conclusions One
 (4) thing that we have found is that over time there has been a
 (5) rebounding in subsistence harvests in diversity of uses in -
 (6) in subsistence effort For the most part however these
 (7) measures still remain below pre spill estimates and it is our
 (8) view that full recovery from the spill has not occurred
 (9) That's an overview then of the findings
 (10) Q Okay Did you look at the changes in the subsistence
 (11) harvest deposition for Chenega Bay say 1985 and 1992?
 (12) A Yes
 (13) Q I'd like to show you Doctor what's been marked as 6122
 (14) Can you tell us what this is?
 (15) A Sure It's the - a bit of background We have continued
 (16) the surveys every year and we found that by 1992 the
 (17) subsistence harvests in Chenega Bay were matching our earlier
 (18) estimates from '84 and '85 in terms of total subsistence
 (19) harvests
 (20) There are some qualifications that I'd like to make about
 (21) that but nevertheless the absolute estimates are about the
 (22) same However we did document an important shift in the
 (23) composition of that subsistence harvest and this compares it
 (24) The light bar to the left in the pair is the percentage of the
 (25) harvest for the 1985 study year and for fish which is salmon

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- (1) halibut cod and so forth it was almost - about 40 percent in
 (2) 19 - in 1985 '86 By 1992 that slice of the pie topped 70
 (3) percent
 (4) Now in contrast marine mammals in 1985 made up 37 percent
 (5) by weight of the subsistence harvests And in 1992 that had
 (6) declined to about five or six percent of the total harvest So
 (7) it's an important change in the composition and in our view
 (8) this isn't a simple voluntary substitution of one resource for
 (9) another Marine mammals are a very different kind of resource
 (10) from salmon and you wouldn't normally find people just
 (11) substituting salmon for marine mammals What this indicates is
 (12) that while effort subsistence effort has increased over the
 (13) years their success in taking marine mammals has declined
 (14) quite a bit
 (15) The fish harvest has increased in a way to compensate for
 (16) that and also because - because people have been advised
 (17) that
 (18) fish are - are safe to eat and so people have - have
 (19) emphasized the fish in their subsistence harvests
 (20) Q Now earlier in your testimony Doctor you indicated that
 (21) you'd talked with - you talked with the harvesters to find out
 (22) what areas of scarcity were Did you examine areas of scarcity
 (23) when you prepared these charts?
 (24) A We - we did ask about whether people's - one of the
 (25) reasons that - that people's subsistence harvests had declined
 (26) might have to do with scarce resources And indeed that was

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- (1) a response that people gave us about difficulty in - in
 (2) achieving an adequate subsistence harvest And the first year
 (3) of the spill 1989 we learned that in these communities there
 (4) were hunters especially who voluntarily refrained for
 (5) conservation reasons that they knew that birds were - were -
 (6) had been injured severely by the spill They knew that marine
 (7) mammals had been oiled and they weren't sure what this
 would
 (8) do to the long range population and so they voluntarily
 (9) stopped hunting
 (10) Now over time this hunting started up again but people
 (11) reported to us that they had to put in a lot more time and
 (12) effort and money to find the animals especially seals and some
 (13) birds and some marine invertebrates to achieve any kind of a
 (14) subsistence harvest And in their view their subsistence uses
 (15) of those particular categories were still lower than before the
 (16) spill because of the scarcity
 (17) Q And Doctor did you also examine compare the pre spill
 (18) and post spill subsistence harvests of these communities?
 (19) A Yes
 (20) Q What I'd like to do Doctor is show you what's been marked
 (21) as 6117 and have you tell us what this is please
 (22) A Okay This is another bar diagram that compares
 (23) subsistence harvest levels over time and each bar is a
 (24) separate year And for each community from left to right it's
 (25) the earliest year to the latest year The bar on the far

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- (1) left - we take Chenega Bay for example the bar on the far
 (2) left is the pre-spill average subsistence harvest at about 350
 (3) pounds As we've already talked about that harvest dropped
 by
 (4) 60 percent to just about 150 pounds in 1989 the dark bar
 (5) The following year there was no change There was no
 (6) recovery in subsistence in 1990 in Chenega Bay The harvest
 (7) remained well below pre spill levels By 1991 however
 (8) subsistence effort had increased and subsistence harvests
 were
 (9) up substantially back up to match the pre spill estimate And
 (10) in 1992 we estimated a harvest of about 400 pounds per person
 (11) in Chenega Bay
 (12) Looking at Tatitlek it's pretty much the same pattern a
 (13) decline from a pre-spill estimate of about 470 pounds per
 (14) person 60 percent decline to about 200 no recovery Or in
 (15) the case of Tatitlek an even further reduction in 1990 and
 (16) then a substantial increase in 1991
 (17) What's important in looking at Chenega Bay and Tatitlek is
 (18) first of all the similarity of the pattern Two communities
 (19) in the same geographic area the same cultural tradition
 (20) experiencing the same kinds of impacts reporting information
 (21) in a very similar way
 (22) The other point is the pre spill average for Tatitlek
 (23) which as I mentioned before is probably the - a good
 (24) indicator of what was happening in Chenega Bay right before
 the
 (25) spill Notice that Tatitlek's estimate for '91 - by the way

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- (1) we didn't do a survey in '92 but in '91 did not get back up to
 (2) that 450 range and that's why we conclude that - that's one
 (3) of the reasons why we conclude that recovery is not complete
 (4) for those communities
 (5) The pattern in Nanwalek and Port Graham is a bit
 (6) different Not for 1989 however As we mentioned before a
 (7) 50 percent decline from before the spill to after the spill in
 (8) both Nanwalek and Port Graham We do however see a more
 (9) rapid rebounding in the Lower Cook Inlet communities
 (10) especially in Port Graham and by 1991 was matching or
 (11) exceeding the pre spill estimate Nanwalek almost matched the
 (12) pre-spill estimate by 1992 So we do see that rebounding
 (13) there
 (14) People in these communities report that in some cases they
 (15) are again investing more time and money to achieve these
 (16) harvests These rebounding harvests have come at a cost but
 (17) nevertheless people have gone back to - to hunting and
 (18) fishing and trying to some extent in the years after the
 (19) spill
 (20) Q And Doctor with regard again to Chenega Bay the
 (21) pre spill is 1985 figures is that correct?
 (22) A It's an average of 1984 and 1985
 (23) Q And it was your opinion - it was the Division's opinion
 (24) that Chenega just prior to the spill would have been more
 (25) similar to Tatitlek is that correct?

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- (1) A I think that that's a reasonable suggestion to make
 (2) Q Now Doctor has your Division participated in publications
 (3) by the Alaska Department of Fish and Game?
 (4) A Yes
 (5) Q Was one of those publications Alaska Wildlife The Exxon
 (6) Valdez Oil Spill what have we learned?
 (7) A Yes I did contribute an article to that - to that
 (8) publication
 (9) Q Okay I'm showing you just the cover page of what has been
 (10) marked as exhibit 1558 Do you recognize that?
 (11) A Yes I do
 (12) Q Is this a publication that you contributed to?
 (13) A Yes I did
 (14) MR SHAPIRA Your Honor the article is hearsay The
 (15) witness is not designated an expert witness
 (16) THE COURT I better take this out of the presence of
 (17) the jury Time for a break anyway
 (18) (Jury out at 11:38 a.m.)
 (19) THE COURT Well counsel I know what the objection
 (20) is How do you respond to it?
 (21) MR FORTIER How do I respond?
 (22) THE COURT Yes This is not an expert witness?
 (23) MR FORTIER Well he's not an expert witness but
 (24) this is an official publication of the State of Alaska
 (25) Department of Fish and Game and as an official publication of

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- (1) the State of Alaska Department of Fish and Game it falls within
 (2) the hearsay exception to the rule I think it's 803 - just a
 (3) minute I'll find it here I know it's Evidence Rule 803 Your
 (4) Honor
 (5) THE COURT Well there's a lot of subdivisions to
 (6) that rule counsel
 (7) MR FORTIER Yes Your Honor and I will find that
 (8) one for you I believe it's 803(B) Your Honor public records
 (9) and report it's - I could lay some more foundation I guess
 (10) but it's not an investigative report It's not offered by the
 (11) State in a criminal case so it doesn't fall within the
 (12) exception part of 803(B)(a) - 803(B) I'm sorry
 (13) THE COURT Okay
 (14) MR SHAPIRA Your Honor could I just have a minute?
 (15) We don't have a copy of it I think that this is a magazine
 (16) article written by a witness
 (17) THE COURT Looks like a magazine
 (18) MR SHAPIRA It certainly looks like a magazine but
 (19) if I could get a copy of it I might be able to respond more
 (20) MR FORTIER Sure Whether or not it's a magazine or
 (21) not Your Honor it still is an official publication of the
 (22) State of Alaska It doesn't say magazines don't count
 (23) THE COURT I don't see that language here anywhere
 (24) MR FORTIER Yeah thanks Your Honor It's right
 (25) here and it's the whole publication

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- (1) MR SHAPIRA This is a special issue of the magazine
 (2) of the Alaska Department of Fish and Game entitled Alaska
 (3) Wildlife Volume 25 Number 1 with a five dollar cover price
 (4) This is a - this is a newspaper - this is a magazine Your
 (5) Honor It's also not on our list of produced documents But
 (6) Your Honor let me have a quick look at the evidence code
 (7) MR FORTIER Your Honor we did produce it I know
 (8) we did My producer is standing right next to me
 (9) MR SHAPIRA We were notified of the intent to use a
 (10) different magazine article to which we would likewise have
 (11) objected Your Honor but not this one
 (12) MR FORTIER I was going to bring that one up next
 (13) Your Honor
 (14) THE COURT Let me see the publication please
 (15) THE COURT Well I have a question for you counsel
 (16) Does this similarly repeat the things he's already said in his
 (17) testimony this article?
 (18) MR FORTIER It focuses on the things he said yes
 (19) Your Honor
 (20) THE COURT Does it differentiate? Does it go
 (21) beyond? Is there something different?
 (22) MR FORTIER No it doesn't No it doesn't Your
 (23) Honor
 (24) THE COURT Well then why should I allow him simply
 (25) to describe an article he's written that repeats his

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- (1) testimony?
 (2) MR FORTIER Your Honor what I wanted to do was to
 (3) introduce both publications
 (4) THE COURT I know you wanted to counsel You need
 (5) to tell me why
 (6) MR FORTIER Why did I want to Your Honor?
 (7) THE COURT Yeah
 (8) MR FORTIER Because it is a visual description of
 (9) all the things he relied upon that the Department relies upon
 (10) in what they do
 (11) THE COURT Yes and he's given a verbal description
 (12) of that right?
 (13) MR FORTIER That's right Your Honor so it's a
 (14) demonstrative aid
 (15) THE COURT Okay You can't use them only because
 (16) they're cumulative counsel I think it would probably be
 (17) admissible but it's all in his testimony
 (18) Anything else? Let's take a break
 (19) THE CLERK Please rise This court stands in
 (20) recess
 (21) (Recess from 11 45 a.m. to 12 03 p.m.)
 (22) THE CLERK Please rise This court now resumes its
 (23) session Please be seated
 (24) THE COURT Counsel we're here without the jury
 (25) because you asked for it right?

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- (1) MR FORTIER Thank you Your Honor
 (2) I answered a question wrong Your Honor You'd asked
 (3) whether or not the article would be cumulative and it was the
 (4) same and I said yes it was Actually what the article
 (5) concerns is - is contamination and subsistence health food
 (6) safety It focuses on a series of studies was conducted by
 (7) the Division and other agencies in 1989 through 1991
 (8) I wasn't going to get into that area because another
 (9) witness who we plan on calling hopefully this afternoon will
 (10) also testify to the - to the risk part of it What the
 (11) article does would be to discuss the fears of contamination
 (12) that the village people have would substantially shorten my -
 (13) my direct examination of Dr. Fall
 (14) THE COURT Well that's really an attractive
 (15) argument counsel but I don't think it's my duty to shorten
 (16) your presentation If in fact the method of presentation of
 (17) evidence you've chosen is appropriate and the testimony is
 (18) appropriate because you did cross examination on testimony
 (19) and
 (20) besides it is cumulative The uncertainty in the future is
 (21) something he talked about in his testimony
 (22) MR FORTIER Okay Well Your Honor I just wanted
 (23) to bring that to your attention that thing about PAH levels
 (24) and testing of subsistence foods is something that's dealt with
 (25) in the article
 (26) THE COURT Let me see it again counsel I'll take a

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- (1) look at the specific passages
- (2) MR FORTIER It's this area here
- (3) THE COURT Okay I've read the passages you referred
- (4) to there on page 5 of the January/February 1993 issue of Alaska
- (5) wildlife Counsel do you have anything specific to say about
- (6) these particular passages or have you even read them?
- (7) MR SHAPIRA I haven't read them I don't know what
- (8) particular passages he's referring to
- (9) THE COURT Do you want to read them or not?
- (10) MR SHAPIRA I would like to do it if this magazine
- (11) article is going to come into evidence Your Honor or any part
- (12) of it
- (13) THE COURT It's always the risk
- (14) MR SHAPIRA Which part did he refer to?
- (15) THE COURT The whole page
- (16) MR SHAPIRA Your Honor I don't know how we would
- (17) accomplish this but I have no objection to that entire page
- (18) being admitted
- (19) THE COURT Especially the second column right? If
- (20) you have no objection to that page though counsel why
- (21) would
- (22) you have an objection to the rest of the article?
- (23) MR SHAPIRA Well I have to read the rest of the
- (24) article Your Honor And let me add that the reason for my -
- (25) the time it's going to take me is this was not designated and
- (26) we have not read -

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- (1) THE COURT I understand completely counsel You
- (2) haven't heard me complaining I think you should read it
- (3) MR SHAPIRA Okay
- (4) Your Honor turning to page one it contains a discussion
- (5) of 7 000 years of history which- this witness is not
- (6) designated as an expert witness It contains hearsay from a
- (7) number of residents of Tatitlek and Chenega Bay This witness
- (8) ought not to be talking about hearsay That's just page one
- (9) THE COURT And I suspect you're going to have the
- (10) same problems If you go through it all you're going to find
- (11) some objectionable things that you think are objectionable that
- (12) may in fact be admissible The best way to deal with this is
- (13) with the witness The witness can be questioned about things
- (14) in the article about the facts that that article relates then
- (15) counsel will have an opportunity to object specifically and
- (16) I'll deal with any specific objects that there are But the
- (17) article itself there's no reason to admit it if the witness
- (18) can testify and be fully cross examined on whatever he
- (19) testified So it's the same ruling I issued before we took the
- (20) break
- (21) Let's bring the jury in
- (22) (Jury in at 12 10 p m)
- (23) THE COURT All right the jury is present Go ahead
- (24) counsel
- (25) MR FORTIER Thank you Your Honor

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- (1) BY MR FORTIER
- (2) Q Dr Fall between 1989 and 1992 did the Division
- (3) participate in - in studies regarding the safety of
- (4) subsistence foods?
- (5) A Yes we did The Division participated in the Oil Spill
- (6) Health Task Force and this was an ad hoc group of a number of
- (7) agencies and organizations which organized shortly after the
- (8) spill to address the question of subsistence food safety and
- (9) we were an active participant in the task force
- (10) Q Why did you do that Doctor?
- (11) A Because it's our obligation to - to respond to - to
- (12) questions about - about subsistence and one of the aspects of
- (13) our Subsistence Response Program in '89 was to assist in
- (14) answering questions about food safety
- (15) Q And did you provide reports concerning those findings?
- (16) A Well yes The - we helped develop reports for the Oil
- (17) Spill Health Task Force and those are in several different
- (18) types We produced a newsletter for the Oil Spill Health Task
- (19) Force that - that one of our staff wrote that was reviewed by
- (20) task force members and then sent out to the communities We
- (21) helped put together the - what we call the script which was
- (22) the presentation that we made in the communities about the
- (23) studies findings that occurred over several years So we did
- (24) participate in - in producing some reports for the task force
- (25) Q And as I - earlier you testified Doctor that

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- (1) contamination was a significant source of concern in 1989?
- (2) A Yes
- (3) Q Did that continue as a source of concern through the -
- (4) through the following years 1990 1991 1992?
- (5) A Contamination concerns themselves continued in these
- (6) communities They focused now on particular resources such
- (7) as
- (8) marine invertebrates and marine mammals but the answer is
- (9) yes
- (10) Q Would that be in Tatitlek there continued to be oil spill
- (11) contamination concerns?
- (12) A Yes
- (13) Q And would that be within the Tatitlek traditional use area?
- (14) A Yes it is
- (15) Q Which is this area here Doctor?
- (16) A Yes
- (17) Q And also with regard to the Chenega area and its -
- (18) A There are still contamination concerns regarding some
- (19) resources in those areas
- (20) Q And as well with Port Graham and English Bay?
- (21) A Yes
- (22) Q There's an area of Port Graham known as Windy Bay isn't
- (23) there that's a traditional use area?
- (24) A That's correct yes
- (25) Q Now did - in the studies performed by the Division or

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- (1) the -- the Subsistence Task Force were there any findings with
 (2) regard to the oiled -- or with regard to the -- to this
 (3) shellfish in the Windy Bay area?
 (4) A Yes the Oil Spill Health Task Force And yes the Windy
 (5) Bay was one of the sampling sites during the project and it
 (6) was selected because it is a traditional use area for Nanwalek
 (7) and Port Graham people from those communities who wanted
 to
 (8) know about what was happening in Windy Bay and it was one
 of
 (9) the few sites in our program that was heavily oiled So we
 (10) did -- we did learn about levels of hydrocarbon contamination
 (11) in marine invertebrates from Windy Bay
 (12) Q And do you know whether or not as of 1991 those levels of
 (13) hydrocarbon contaminations continued to be high in the Windy
 (14) Bay area?
 (15) A They were above background levels yes At least some of
 (16) them were Not all of the samples taken from Windy Bay but
 (17) there were some samples from Windy Bay that continued to
 have
 (18) elevated levels of hydrocarbons
 (19) Q And does the Division continue to study the impact of the
 (20) oil spill on these resources for contamination purposes?
 (21) A Yes There is an oil spill restoration program that s
 (22) going on right now and it is directed by the Oil Spill
 (23) Trustees Oil Spill Trustee Council and the Trustee Council
 (24) for last year and this year funded the Division of Subsistence
 (25) to continue the collection and testing of subsistence

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- (1) resources mostly marine invertebrates from selected sites in
 (2) Prince William Sound Lower Cook Inlet and Kodiak Island We
 (3) did it last year and the program is continuing this year
 (4) Q Why are you doing that Doctor?
 (5) A To continue to respond to people s questions There s a
 (6) couple of reasons One is that it s to -- it s to respond to
 (7) the questions that we had initially in the Oil Spill Health
 (8) Task Force about numbers of samples numbers of sites
 (9) applicability of our findings for one particular area to
 (10) another
 (11) What we ve tried to do the last couple of years is focus on
 (12) places that we had looked at for the first year I should back
 (13) up
 (14) The first year which was last year we selected sites that
 (15) we had looked at before to see whether there was any change
 (16) with oil still in the environment would there be accumulation
 (17) of hydrocarbons in marine invertebrates from sites that we had
 (18) already found were -- were okay That was the question
 (19) Another question that we wanted to look at was well why
 (20) haven t we looked at more sites There are sites you haven t
 (21) examined and we wanted to know about those too So this
 year
 (22) we have tried to expand the number of sites that the studies
 (23) since 1989 have looked at to make sure that we re getting a
 (24) good breadth of coverage and that people s questions about
 (25) food safety are addressed fully

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- (1) Q So people in the communities -- Tatitlek and Chenega Port
 (2) Graham and English Bay -- are still posing questions about the
 (3) safety of these foods?
 (4) A They continue to ask questions about food safety
 (5) Q They continue to be concerned about whether or not the
 (6) foods are contaminated is that correct?
 (7) A At least some foods that concern is there That s
 (8) correct
 (9) Q So you re continuing -- your Division is continuing to
 (10) test?
 (11) A We re directing the program We of course don t directly
 (12) conduct the tests That s done by the National Oceanic and
 (13) Atmospheric Administration Laboratory in Seattle but it is our
 (14) project to direct and result
 (15) Q And are you telling the residents of Chenega Tatitlek
 (16) Port Graham and English Bay the results of these tests?
 (17) A Yes We communicate the results of the test in letter
 (18) form We get a report back from the lab which we share with
 (19) the communities And we are also producing a -- what we call a
 (20) Subsistence Restoration Newsletter which also reports the
 (21) results of the findings And last year we also had a meeting
 (22) of the Oil Spill Health Task Force where we discussed the --
 (23) the latest results
 (24) Q Well what are you telling them?
 (25) A The -- well what we have been telling them right now is

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- (1) largely consistent from the earliest advice from the Oil Spill
 (2) Health Task Force The study findings show that all of the
 (3) fish that we have collected and tested as part of this program
 (4) are safe to eat The reason for this is that fish are able
 (5) even if they are exposed to oil -- we certainly have found
 (6) evidence of exposure to oil -- but even if they are exposed to
 (7) oil they concentrate that oil in the gallbladder It is
 (8) broken down and excreted quickly relatively quickly so that
 (9) it doesn t build up in what we consider to be the edible flesh
 (10) of the fish So fish and mammals for that matter have a
 (11) pretty good mechanism for ridding themselves of oil quickly
 (12) Now this may do damage to the individual resources or the
 (13) individual animals that are exposed to the oil but it doesn t
 (14) render them unsafe to eat and that message has been
 conveyed
 (15) in preliminary form in late 89 and again in 1990
 (16) Coupled with that message about fish of course has been
 (17) that people need to use common sense and traditional
 knowledge
 (18) about -- about the safety of foods That fish if it smells
 (19) oily or looks oily it shouldn t be used If there s something
 (20) about that -- that fish that your knowledge of that fish tells
 (21) you stay away from it stay away from it Don t eat it But
 (22) in terms of the buildup of hydrocarbons in halibut in salmon
 (23) we could find no evidence of danger and it was good news It
 (24) was really good news for subsistence harvesters and indeed
 as
 (25) you saw people are taking a lot of fish and in fact more

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- (1) fish now proportionately than before the spill in some cases
- (2) Now the message has been for marine invertebrates a
- (3) little bit different Most of the sites that were part of the
- (4) Oil Spill Health Task Force study were not heavily oiled
- (5) We - remember that what people really wanted to know about
- (6) was things that their senses and their traditional knowledge
- (7) couldn't inform them about So the thinking was why go to an
- (8) oiled site when we're telling people to stay away from oiled
- (9) animals The goal was to look at sites that appeared to be
- (10) okay and find out whether the oil might be impacting these
- (11) animals in ways that couldn't be detected So that's mostly
- (12) what we looked at And again good news that most of the
- (13) marine invertebrates that we tested as part of this program
- (14) were safe to use
- (15) However we did include some oiled areas in our studies
- (16) including Windy Bay and we did find that marine invertebrates
- (17) exposed to oil on the beaches in the water subsurface or the
- (18) surface would accumulate hydrocarbons And this is because
- (19) marine invertebrates are different from fish and they tend to
- (20) accumulate hydrocarbons as long as they're exposed to them
- (21) They don't have an efficient mechanism for ridding themselves
- (22) Because of the elevated levels of hydrocarbons in the
- (23) shellfish the advice of the Oil Spill Health Task Force was
- (24) that people should not use marine invertebrates from beaches
- (25) that have oil on them on the surface or the subsurface That

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- (1) That the limited samples that we - that we looked at showed
- (2) very low to nondetectable levels of PAHs which is consistent
- (3) with what would be predicted given that they're mammals that
- (4) can - that can deal with the oil that they ingest and even
- (5) some that were - that the levels of exposure to oil the
- (6) levels were pretty low
- (7) Q Now Doctor in spite of all this testing do you find that
- (8) there's still concern about contamination?
- (9) A Yes we do
- (10) Q And do you know whether or not that concern impacts the
- (11) diversity that you observed prior to the oil spill in the use
- (12) of these resources?
- (13) A Well sure it does Because for one thing we're still
- (14) advising people to stay away from beaches that they suspect of
- (15) being oily of being oiled because of the concern about marine
- (16) invertebrates which contribute quite a bit to the diversity of
- (17) resources There remains concerns about some fish and - and
- (18) marine mammals as well
- (19) Q And Doctor this is - did you find that this - these
- (20) concerns remained in the Tatitlek area as well?
- (21) A Yes
- (22) Q Chenega?
- (23) A Yes
- (24) Q Port Graham?
- (25) A They do

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- (1) advice persists to this day We are still advising people to
- (2) not use marine invertebrates from such beaches
- (3) Q That would be from oiled beaches?
- (4) A That's right beaches that presently have oil on the
- (5) surface or subsurface
- (6) Q Okay And in addition you advise people to use their own
- (7) common sense or traditional knowledge?
- (8) A Absolutely
- (9) Q And Doctor if you know during this period of time from
- (10) 1989 to 1992 were other resources tested for instance seals
- (11) deer ducks?
- (12) A Yes We did a range for tests of marine mammals that were
- (13) taken in 1989 and in 1990 They were done at the - the NOAA
- (14) Lab That's the National Oceanographic and Atmospheric
- (15) Administration It's called NOAA Their lab also We had
- (16) oiled seals in that set of seals and sea lions as well as
- (17) unoiled seals and we did find that oiled seals showed elevated
- (18) levels of hydrocarbons in their blubber
- (19) Blubber is used for making oil for use with dried fish and
- (20) dried halibut But again good news that over time those
- (21) elevated levels declined to where seals that we took last year
- (22) the levels even in the blubber were in the background So
- (23) again good news regarding seals at least for the ones that we
- (24) have looked at as a part of this program
- (25) And it's basically the same for - for deer and for ducks

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- (1) Q And English Bay?
- (2) A Yes
- (3) Q Now Doctor finally you indicated in your testimony that
- (4) you rely upon the observations of subsistence harvesters as to
- (5) the plenty or plenitude of resources how many there are out
- (6) there whether or not there's seals out there deer that sort
- (7) of thing
- (8) A (Nods head up and down)
- (9) Q Have you received reports regarding reduction of resources
- (10) since the oil spill?
- (11) A Yes The hunters and fishermen of course have spent a
- (12) lot of time out in the traditional use areas and we find that
- (13) their observations about relative abundance are - are worthy
- (14) of - of a great deal of - of consideration And for
- (15) example at Chenega Bay and Tatitlek Nanwalek and Port
- (16) Graham
- (17) hunters have been reporting scarcity of harbor seals and sea
- (18) lions despite increasing efforts to take these important
- (19) subsistence resources It's that people have a hard time
- (20) finding them We've also received reports of scarcity of deer
- (21) in a number of locations
- (22) MR FORTIER I have no further questions Thank you
- (23) Doctor
- (24) MR SHAPIRA I'll be just a minute getting some
- (25) papers together Your Honor

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- (1) THE COURT Sure go ahead
 (2) CROSS-EXAMINATION OF JAMES FALL
 (3) BY MR SHAPIRA
 (4) Q Good afternoon Dr Fall
 (5) You testified on direct examination that the average
 (6) American buys about 220 pounds of meat fish and poultry a
 year
 (7) per person correct?
 (8) A Brings into the kitchen for use in the home that s
 (9) correct
 (10) Q And you compared that with what you said the average
 Native
 (11) subsistence harvest was before the oil spill which you said
 (12) was 300 to 500 pounds on average correct?
 (13) A On average yes That s the range on average
 (14) Q Now you were exaggerating just a little bit for that
 (15) It s really 200 to 400 pounds for the Natives isn t it?
 (16) A No
 (17) Q Dr Fall let me show you an article that you wrote on just
 (18) this year
 (19) I ll ask ask for plaintiffs exhibit 3620 to be shown
 (20) page one on the Barco
 (21) Now sir this plaintiffs exhibit 3620 is an article that
 (22) you wrote correct?
 (23) A That s right
 (24) Q And let me now -- and you wrote it in March 1994 about --
 (25) less than six months ago?

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- (1) A Uh huh
 (2) Q Let me now ask Page 2 to be shown no the jury
 (3) On page 2 of your article you said that subsistence
 (4) harvests in these villages in the 1980s were large averaging
 (5) 200 to 400 pounds or more usable weight per person annually?
 (6) A Right
 (7) Q You thought that was the truth when you wrote this article?
 (8) A The two statements are not contradictory
 (9) Q Which is it is it 300 to 500 pounds per average or is it
 (10) 200 to 400?
 (11) A Most of the estimates that we have are in the 300 to
 (12) 500-pound range For the 15 villages Chignik Bay averages
 (13) around 200 pounds per person as does Chignik Lagoon
 English
 (14) Bay and Port Graham are in the high 200s for most of the time
 (15) There are a couple of anomalous estimates for Kodiak Island
 (16) communities that are in the 100 to 200-pound ranges
 (17) Without the information in front of me I m not positive
 (18) but I think you ll find that the estimates for the other
 (19) communities all average above 300 pounds And indeed there
 (20) are a number of averages for Perryville for Old Harbor for
 (21) Evanoff Bay for Tatitlek that top 400 pounds
 (22) Q Now sir when you wrote your article and you said
 (23) subsistence harvests in these villages in the 1980s were large
 (24) averaging 200 to 400 pounds or more usable weight per person
 (25) annually you were talking there about predominantly Native

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- (1) communities in the oil spill affected areas were you not?
 (2) A Yes
 (3) Q That s it for that
 (4) Now sir you also in your direct referred to plaintiffs
 (5) exhibit 6122 do you remember that?
 (6) A Yes
 (7) Q And you said in plaintiffs exhibit 6122 that there had
 (8) been a big change in the composition of the harvest before the
 (9) oil spill as compared to after the oil spill because the
 (10) percentage of fish in the diet had jumped way up from below 40
 (11) percent to around 70 percent correct?
 (12) A That s correct
 (13) Q Now isn t it true sir that a typical Native diet in
 (14) these 15 villages before the oil spill was that fish comprised
 (15) about two-thirds of the subsistence harvest?
 (16) A Without looking at the information I can t say whether
 (17) it s two-thirds or not It is true that in most communities
 (18) fish will be the predominant composition of the -- of the
 (19) subsistence harvest If you look at most communities in
 (20) Kodiak that ll be the case except for Old Harbor in some
 (21) years except for Akhiok in some years Lower Cook Inlet
 (22) yeah fish salmon 60 70 percent sure Not in Chenega Bay
 (23) In Chenega Bay before the spill a larger slice of the pie was
 (24) marine mammals and a large slice of the pie in Tatitlek was
 (25) marine mammals Those were the communities that -- that had

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- (1) before the spill a comparably large marine mammal harvest
 (2) Q We re talking here about Chenega Bay right?
 (3) A Correct
 (4) Q You testified that Chenega Bay in the two pre spill years
 (5) you were using were untypical correct because the village had
 (6) just gotten started and you expected there to be significant
 (7) changes in harvest later correct?
 (8) A We predicted that the subsistence harvest levels would
 (9) increase and I think that it is fair to say as I said before
 (10) that in addition salmon harvest levels probably increased in
 (11) Chenega Bay in the years directly before the spill However I
 (12) did not think that a reduction of 6 percent down to 6 percent
 (13) from 30 percent or more of marine mammals is something that s
 (14) simply a voluntary substitution of fish for -- for marine
 (15) mammals or some kind of very predictable and natural direction
 (16) in Chenega Bay s harvest because a regulatory change of
 salmon
 (17) Q Now the change in percentage of fish in the diet for
 (18) Chenega Bay from between the first two years of the founding
 of
 (19) that village until the post spill year that you measured here
 (20) 1992 isn t it fair to say that that change is a turn toward
 (21) what is typical for the 15 Native communities that you ve
 (22) studied in terms of the percentage of fish in the diet?
 (23) A It is true that 60 or more percent in most communities in
 (24) most years is composed of fish However as I said before
 (25) Chenega Bay had this unique -- somewhat unique pattern of

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- (1) really focusing on marine mammals. They're highly desirable
 (2) highly valued resources in that community and one would not
 (3) predict simply that they would over time match the pattern of
 (4) a community elsewhere.
 (5) Q Now sir, Mr. Fortier was asking you questions, he asked in
 (6) terms of you've studied the villages and you've had interviews
 (7) with people in the villages and you've done significant survey
 (8) work in the village. He really meant your Division didn't
 (9) he?
 (10) A That's how I understood the question to be.
 (11) Q Right, because you personally haven't been out to most of
 (12) these villages doing any of these interviews since long before
 (13) the oil spill, isn't that correct?
 (14) A No, No, that's not correct. I've been the - the
 (15) principal investigator of our - of all of our research since
 (16) the spill. We've done thousands of interviews since the
 (17) spill. There's no way one person can do thousands of
 (18) interviews. We work as a team in our division. I'm
 (19) responsible for the work of the Division. I review our work.
 (20) I consult with our other interviewers and ultimately I'm the
 (21) one that edits the reports. I'm responsible for the
 (22) conclusions.
 (23) The first year after the spill, I did more interviews
 (24) systematic harvest surveys than any other person on my staff
 (25) because I was interested in how the survey form was

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- (1) performing. Since then, I haven't. I've relied on our
 (2) experienced staff to do those interviews. I've reviewed them
 (3) all and - and we stand by them. However, not having done all
 (4) the systematic household interviews, I've done a substantial
 (5) number of village meetings where we've learned about the
 (6) issues. I've attended most meetings of the Oil Spill Health
 (7) Task Force. I was a member of the team that went out to learn
 (8) about oil spill contamination, which is funneled into our
 (9) interpretation of the spill's effects. So that's been my
 (10) role.
 (11) Q You're familiar with the term "fieldwork", aren't you, sir?
 (12) A Yes, I am.
 (13) Q And fieldwork is the process by which the trained
 (14) professional in your department go to the villages and conduct
 (15) detailed surveys, take notes, conduct what you call key
 (16) respondent interviews, correct?
 (17) A That's correct.
 (18) Q Let's start with the village of Chenega Bay, one of the
 (19) villages involved in this case. And I will ask you to turn to
 (20) page 50 to 51 of your deposition.
 (21) MR FORTIER: Volume one, counsel? Could you wait
 (22) till I get it before - okay.
 (23) BY MR SHAPIRA:
 (24) Q Now, sir, at line 21 of page 50 of your deposition, you
 (25) were asked, "Now you mentioned earlier that you personally

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- (1) conduct fieldwork from time to time. And you said, "Yes. Then
 (2) you were asked, "When was the last time that you conducted
 (3) fieldwork in Chenega Bay, if you ever conducted field - and
 (4) you interrupted and said, "I've never conducted fieldwork in
 (5) Chenega Bay. That was a truthful response during your
 (6) deposition, wasn't it?
 (7) A Yes, in terms of systematic household interviews. I think
 (8) later in the deposition we got into other ways of collecting
 (9) information about Chenega Bay, including village meetings and
 (10) Oil Spill Health Task Force events where I did learn about
 (11) contamination issues. That helped me interpret our
 (12) information, but I haven't conducted any systematic household
 (13) surveys in Chenega Bay.
 (14) Q And you haven't conducted any fieldwork in the village of
 (15) Tatitlek since 1983, correct?
 (16) A I've done no systematic household interviews there.
 (17) correct.
 (18) Q And you haven't personally done any fieldwork in Cordova
 (19) which would include the Native village of Eyak?
 (20) A I've done no systematic household interviews there, no.
 (21) Q Since 1986, correct?
 (22) A Right.
 (23) Q And you've never done any fieldwork in Port Graham
 (24) correct?
 (25) A I've done no systematic household interviews there, no.

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- (1) Q And you've not done any fieldwork in Nanwalek, which is
 (2) also called English Bay since 1986, correct?
 (3) A That's correct.
 (4) Q And the last time you did any fieldwork in the entire
 (5) Kodiak Island was in 1989, correct?
 (6) A Depending upon how we're defining fieldwork, I've done no
 (7) systematic household interviews there. The Division's done a
 (8) lot. I've supervised them. I've not personally done those
 (9) interviews.
 (10) Q Now, sir, the most recent available harvest information
 (11) subsistence harvest information available from your
 department
 (12) for the 15 Native villages which you've studied, which you
 (13) consider to be in the area of the oil spill affected areas, is
 (14) a November 1993 report of which you were the editor, correct?
 (15) entitled "An Investigation of the Sociocultural Consequences of
 (16) Outer Continental Shelf Development in Alaska: A Preliminary
 (17) Overview of Selected Findings from the Household Harvest
 Survey
 (18) for the First and Second Years of Research, 1992 and 1993
 (19) James A. Fall and Charles Utermohle, editors, correct?
 (20) A That interim report does contain the results of interviews
 (21) that the Division conducted pertaining to 19 - 1992 and 1993
 (22) so that - yes, the -
 (23) Q It doesn't just pertain to 1992 and 1993, does it? It
 (24) pertains - it shows the entire range of subsistence harvest
 (25) information that you have collected since 1981 for these

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- (1) villages correct?
 (2) A That's correct I understood your question to be does it
 (3) contain the latest information and the answer is yes it does
 (4) Q It does?
 (5) A Yes
 (6) Q This is the latest work correct?
 (7) A It is It's the latest work in draft form of an interim
 (8) report that's not a public document
 (9) MR FORTIER Your Honor may we approach the bench
 (10) for a moment?
 (11) THE COURT Sure
 (12) (At side bar on the record)
 (13) MR FORTIER Your Honor I'm going to object to the
 (14) use of the report First of all because it's hearsay It
 (15) hasn't been produced as a public report
 (16) Second because it's an interim draft report under the
 (17) rules of this case DM 171 which we've looked at before No
 (18) draft interim reports are to be introduced not to be inquired
 (19) into
 (20) MR SHAPIRA Your Honor I'm not intending to
 (21) introduce the reports I'm using the report to authenticate
 (22) four single bar charts that -
 (23) THE COURT Are they findings?
 (24) MR SHAPIRA Yes they are the findings
 (25) THE COURT You can ask him directly about the

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- (1) A Yes Of course it's not the only report that contains the
 (2) most recent information but it does contain that information
 (3) as it existed in November and would be published in the
 (4) report
 (5) Q You've confused me just a little
 (6) A I'm sorry
 (7) Q Because if there's another report we haven't seen it
 (8) This is the most recent report isn't it?
 (9) A That's correct What I meant was this is an interim
 (10) document with draft data in it and we continue to review our
 (11) information as well as our text and there might have been
 (12) minor changes in it since then
 (13) Q But you reviewed it before you sent it to your client
 (14) which was the United States Government's Mineral
 Management
 (15) Service correct?
 (16) A I reviewed it for its appropriateness for what it is and
 (17) what they asked for which was an interim report with
 (18) speculation about the direction of change and explanations for
 (19) the patterns that we were seeing so that we and the people in
 (20) MMS could discuss those results And what this is leading up
 (21) to of course is considerable staff discussion about this
 (22) draft report and then the completion of a final report that
 (23) will be public
 (24) Q Before you sent this preliminary report to the Minerals
 (25) Management Service you reached the conclusion that the

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- (1) findings If you have to use the report after - I'm sure that
 (2) his testimony - I'm not sure but I'm relatively sure his
 (3) testimony is not going to raise an objection and he'll
 (4) probably give you direct answers
 (5) MR SHAPIRA I'm sure he will Your Honor These are
 (6) the latest information and the plaintiffs exhibit which they
 (7) have showed which includes the 1992 information has to have
 (8) been taken from this because there isn't any other source for
 (9) that information
 (10) THE COURT Okay
 (11) MR SHAPIRA I would just - to establish my record
 (12) I would like to show the witness the documents have him
 (13) identify the charts and then use the charts not the document
 (14) THE COURT That's fine
 (15) (At side bar concluded)
 (16) BY MR SHAPIRA
 (17) Q Mr Fall I've put before you a hefty document - and I
 (18) promise not to make you read very much of it - Exhibit 25 -
 (19) defendants exhibit 2513 That is the report of which you are
 (20) the editor?
 (21) A Yes
 (22) Q And that's the report that contains both the most recent
 (23) harvest information for the Native villages and the full scope
 (24) of the harvest information that you've collected since 1981
 (25) correct?

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- (1) material contained in the report was accurate to the best
 (2) ability of your Division correct?
 (3) A If you are referring to the harvest data the quantified
 (4) data in the report
 (5) Q Yes
 (6) A The answer is yes
 (7) Q Yes And indeed that's all I'm going to use this
 (8) document for I have tabbed for your convenience a number of
 (9) pages and I ask you - it's the red tabs on the right of the
 (10) exhibit - and I would ask you to turn now to figure Roman I 3
 (11) in the report It's the first tab
 (12) Do you have that before you sir?
 (13) A Yes I do
 (14) Q Does Figure I 3 set forth the Subsistence Division's best
 (15) estimates of overall wild resource harvests over time for four
 (16) communities in the Prince William Sound including Chenega
 Bay
 (17) Cordova and Tatitlek?
 (18) A Given that I've qualified my statements about pre spill for
 (19) Chenega Bay the answer is yes These - this - this graphic
 (20) does display the results of our harvest surveys yes
 (21) Q Well sir I'm interested in your qualification on that
 (22) because what I asked you was whether this exhibit Figure I 3
 (23) is the best harvest information that you have for these
 (24) communities
 (25) A It's the best quantified information that we have that is

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- (1) correct
 (2) Q No qualification You don't know any better numbers than
 (3) these do you?
 (4) A Except for if the question is what were people doing in
 (5) Chenega Bay right before the spill then I'm obligated to
 (6) qualify our results as we did in our technical paper
 (7) Q You didn't survey Chenega Bay right before the spill did
 (8) you?
 (9) A We did not
 (10) Q The only years you surveyed for was 1984 85 and 1985/86
 (11) correct?
 (12) A That's correct
 (13) Q You don't know what Chenegans were harvesting before the
 (14) spill do you?
 (15) A We do not have detailed information
 (16) Q This is every bit of data you have on what they were
 (17) harvesting?
 (18) A Terms of quantified information that's correct
 (19) Q Yes Now I'd like you next to turn to Figure I-4
 (20) MR FORTIER Counsel can you give me the page
 (21) number?
 (22) MR SHAPIRA Page Roman I 81 Chapter I 81
 (23) BY MR SHAPIRA
 (24) Q Now sir does Figure I-4 of Exhibit DX2513 set forth the
 (25) Subsistence Division's best estimates of overall wild resource

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- (1) harvests over time for four communities in Cook Inlet
 (2) including Nanwalek English Bay and Port Graham?
 (3) A Yes it does
 (4) Q Next sir Figure I 5
 (5) MR FORTIER Page please counsel
 (6) MR SHAPIRA It's the next page
 (7) While you're looking at that one I'll just take the
 (8) liberty of putting I-4 before the jury
 (9) BY MR SHAPIRA
 (10) Q How about Figure I 5 sir is that the Subsistence
 (11) Division's best estimates of overall wild resource harvests
 (12) over time for five communities in the Kodiak Island Borough
 (13) including Karluk Kodiak Larsen Bay Old Harbor and
 (14) Ouzinkie?
 (15) A Yes it is
 (16) Q And lastly sir Figure I 6 Is that the Subsistence
 (17) Division's best harvest information for the communities of the
 (18) Alaska Peninsula and Arctic regions including Chignik Bay and
 (19) Chignik Lake?
 (20) A For comprehensive overall surveys the answer is yes
 (21) There is other subsistence information about some of these
 (22) communities for particular resources but for overall harvest
 (23) estimates these are our best estimates
 (24) Q Okay Now I want to talk with you about some of the
 (25) numbers for some of the communities and I apologize I should
 have briefly shown to the jury the last of the three - the

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- (1) last of the four charts And let me explain that we have
 (2) colored in the communities which you characterized in your
 (3) report as affected by the oil spill The ones that we've left
 (4) in white were not in your opinion affected by the oil spill
 (5) correct?
 (6) A I need to look at each one to tell you whether that's
 (7) correct or not
 (8) Q That would be?
 (9) A Kaktovik Kivalina and Kotzebue were not affected by the
 (10) oil spill
 (11) Q Now Dr Fall I hope I can arrange this so that both you
 (12) and the jury can see the figures Can you see them sir?
 (13) A Yes And I have it in front of me here too
 (14) Q Okay great With your permission sir I've just gotten
 (15) the suggestion sir you can look at the one you have and the
 (16) jury can look at the blowup
 (17) Now sir taking exhibit Figure I 3 the first set of one
 (18) two three four five six bars show the six years that you
 (19) have surveyed the Chenega Bay community to determine its
 (20) overall level of subsistence harvests correct?
 (21) A That's correct
 (22) Q And it shows that in 1984 the people of the village of
 (23) Chenega Bay harvested about 309 pounds per person?
 (24) A Correct
 (25) Q Correct?

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- (1) A Correct
 (2) Q Now remembering the dialogue that we had at the
 beginning
 (3) of this cross examination when I pointed out that on average
 (4) overall for the Aleutic - for the Native communities that you
 (5) surveyed was in the 200 to 400-pounds per-year range that
 (6) Chenega Bay first harvest figure is well within the range
 (7) correct?
 (8) A It's in the low end of the range
 (9) Q And for Chenega Bay 1985/86 the harvests were 374
 pounds
 (10) per person correct?
 (11) A That's right
 (12) Q And then the oil spill came and Chenega Bay's harvests
 (13) were way down for two years correct?
 (14) A They were
 (15) Q And you pointed out in your direct testimony that they were
 (16) in the neighborhood of 60 or more percent down right?
 (17) A That's correct
 (18) Q But then in 1991/92 Chenega Bay's harvest bounced -
 (19) sorry And I'm wider than I - I was - bounced back up to the
 (20) 343 pounds per-person range correct?
 (21) A That's correct
 (22) Q Also within that 200- to 400-pound average that you think
 (23) is typical of the Aleutic villages?
 (24) A As a certain set of villages yes
 (25) Q Yes sir And in the 1992/93 year Chenega Bay reported

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- (1) the largest harvest that you have ever recorded for it in all
 (2) six years that you've conducted harvests correct?
 (3) A That's correct
 (4) Q Let's next talk about Tatitlek. Now the village of
 (5) Tatitlek you've only surveyed five years correct?
 (6) A That's right
 (7) Q Because you didn't survey Tatitlek for 1992/93 as you did
 (8) Chenega Bay correct?
 (9) A We did not
 (10) Q Now the pattern appears -- for the first five years on
 (11) Tatitlek the pattern appears similar to what happened in
 (12) Chenega Bay does it not? That is to say that the two years
 (13) after the oil spill harvests were way way down correct?
 (14) A They were
 (15) Q And you characterize it again as something in the
 (16) neighborhood of 60 percent down?
 (17) A Compared to pre spill averages yes
 (18) Q But then in the third year after the oil spill was a
 (19) significant jump up to 344 pounds per person?
 (20) A That's a significant increase it is
 (21) Q Significant increase and it's pretty darn comparable
 (22) isn't it to the 1987/88 survey year before the oil spill?
 (23) A It's comparable to that as we refer in our paper to
 (24) probably too low
 (25) Q You think it's probably too low for 87/88 or do --

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- (1) A We do
 (2) Q You don't know a better number or you'd have published it?
 (3) A We published the 1988/89 year and most of my comparisons
 (4) for Tatitlek I average the two
 (5) Q You do. And referring again to the overall average among
 (6) the Native villages of 200 to 400 pounds per person per year
 (7) or even in your more exaggerated terms 300 to 500 pounds per
 (8) year that Tatitlek number is way off the chart isn't it?
 (9) MR FORTIER Objection to counsel's
 (10) characterization
 (11) THE COURT Yeah strike the word exaggerated from
 (12) the question counsel
 (13) BY MR SHAPIRA
 (14) Q That Tatitlek number for 1988/89 is way off the chart
 (15) isn't it?
 (16) A No it's not
 (17) Q I see
 (18) A There are two other estimates that top 500 pounds in our --
 (19) in our work and several others that approach 500 pounds
 (20) That's a high harvest 600 pounds per person is a high harvest
 (21) for an Aleutic community given our work. We put Tatitlek in
 (22) the Nushagak River and it would be low. That is not an
 (23) atypical subsistence harvest for a community like Tatitlek
 (24) that's heavily dependent upon resources and we must -- I'm
 (25) obligated to qualify statements about ranges of resources

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- (1) simply because -- or resource harvests simply because the
 range
 (2) for 15 communities is 200 to 400 or 300 to 500 does not mean
 (3) that if one community drops from 400 to 200 one year it's
 (4) meaningless because it still stays within the range. The lower
 (5) end of that range is Chignik Bay. Chignik Bay is a mixed --
 (6) Native and non Native community with a substantial seasonal
 (7) development of -- of fish processing. It's on the low end as
 (8) is Chignik Lagoon for some of the same reasons
 (9) Q Now --
 (10) A So you know the 200-pound range that -- that you're using
 (11) is -- is not a good estimate of what one would expect in a good
 (12) year or a typical year for Chenega Bay or Tatitlek to harvest
 (13) It's low very low
 (14) Q Now the reason you didn't go back for the sixth year to
 (15) harvest -- to survey the village of Tatitlek is because the
 (16) chief of the village of Tatitlek -- is because the Chief of the
 (17) village told your Division that his people were all surveyed
 (18) is that right?
 (19) A He told us that and this year he told us to come back
 (20) again and we've done it again
 (21) Q But we don't have a -- have the results from that?
 (22) A We do not. I don't either
 (23) Q We don't know whether it's 643 or 400 we have no idea?
 (24) A Or zero or -- actually we know it's not zero. I'm sorry
 (25) Q We know it's not zero?

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- (1) A That's right
 (2) Q Now sir you expressed the view in your direct testimony
 (3) that Tatitlek was a very similar community to Chenega Bay
 (4) correct?
 (5) A I believe that to be the case yes
 (6) Q And in your opinion if you had gone back to Tatitlek in
 (7) 1992/93 the survey would have shown would likely have
 shown
 (8) that on additional years considerable increase in harvest just
 (9) like Chenega Bay had in 1992/93 isn't that right?
 (10) A Given that they trap the same way I would have been
 (11) surprised had that not increased in a manner similar to
 Chenega
 (12) Bay
 (13) Q While we are on this exhibit let's talk about Cordova and
 (14) the village of Cordova -- I withdraw that. City of Cordova
 (15) includes what's roughly described as the Native village of
 (16) Eyak correct?
 (17) A That's correct
 (18) Q It's within the city limits?
 (19) A It is yes
 (20) Q Now you've never done a survey just of Eyak correct?
 (21) A We have not
 (22) Q You did a survey of the wider community of Cordova
 (23) correct?
 (24) A And it's a random survey with a relatively small percentage
 (25) compared to a village where we try to talk to everybody

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- (1) Q Now is it fair to say that the figures you've gotten for
 (2) Cordova in the four years that you've surveyed that community
 (3) don't show much of an oil spill impact
 (4) A Well the problem is we didn't collect any information for
 (5) 1989. We don't know. Given - I mean if we didn't do '89 and
 (6) '90 in Chenega Bay if we just had two years before the spill
 (7) and two after like we have for Cordova we wouldn't see any
 (8) impact there either. So the problem there is we didn't go to
 (9) Cordova in 1989 and try to answer that question
 (10) Q You don't know correct?
 (11) A We don't have the information to demonstrate that no
 (12) Q And in Valdez which is another area with some degree of
 (13) Native population you don't have any pre spill estimates at
 (14) all correct?
 (15) A We do not
 (16) Q Let's now talk for just a bit - I've lost my charts -
 (17) about the Lower Cook Inlet communities of Nanwalek/English
 (18) Bay and Port Graham. And here as you mentioned in your direct
 (19) testimony starting with Nanwalek there was a significant
 (20) one year reduction in 1989 that occurred after the oil spill
 (21) correct?
 (22) A Yes 50 percent
 (23) Q Then a significant increase the following year albeit
 (24) still not back to pre spill normal levels correct?
 (25) A Whether that increase in 1990 is really that notable or

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- (1) not I guess we could debate admit it went up. It went up
 (2) Q You mean the difference between 140 and 180 given the
 (3) roughness of your survey measure isn't all that significant a
 (4) difference?
 (5) A I wouldn't use the term roughness to describe our - our
 (6) results. However given that the range is 140 to about 290 an
 (7) increase of 40 pounds from one year to the next is - it's an
 (8) increase but -
 (9) Q You wouldn't read anything much into it?
 (10) A Other than it didn't go down. It's good that it went up a
 (11) little bit and it looks like there might be some trend towards
 (12) increasing harvest
 (13) Q All right. But are you saying sir that there is some
 (14) margin of estimate or - I don't want to use the word error
 (15) I know these are the best numbers you have but they're rough
 (16) numbers aren't they? You don't have a precise estimate of
 (17) anybody's harvest in any year correct?
 (18) A We have reasonable estimates. We don't sit there in
 (19) somebody's kitchen and watch as everything comes through
 (20) the
 (21) door
 (22) Q And the way you collect your information is you go to the
 (23) village the next year and you say to each one of the people
 (24) that you interview. What did you harvest the year before? How
 (25) many salmon? How many deer? How many clams? How many
 (26) bidarkis? How many of everything correct?

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- (1) A Well close. It's the preceding - it's usually the
 (2) preceding 12 months and we choose the appropriate measure
 (3) We
 (4) don't ask number of bidarkis number of clams. People tend to
 (5) calculate those kind of things in five-gallon buckets or
 (6) baskets and those kind of things
 (7) Q How many buckets of clams?
 (8) A That's how they do it yeah
 (9) Q And people don't remember what they harvested with all that
 (10) much precision for the whole preceding year correct?
 (11) A A lot of people do and most people do for most resources
 (12) in my experience
 (13) Q Okay
 (14) A And in the Division's experience
 (15) Q Now in Nanwalek English Bay for 1991/92 there was a
 (16) significant increase wouldn't you call it that?
 (17) A I think that's a significant increase
 (18) Q It's just about to pre spill margins isn't it?
 (19) A It is
 (20) Q For 1992/93 it really has returned to normal hasn't it?
 (21) A It compares. It compares very favorably to our single
 (22) pre spill estimate of 1987 and yeah it looks like they're
 (23) back up to what they were doing right before the spill
 (24) Q And for Port Graham looks like the hard hit on the harvest
 (25) for Port Graham was just a year correct?
 (26) A That - it's - I think that is an interesting point to

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- (1) discuss because our two most recent estimates for Port
 (2) Graham
 (3) are interestingly almost exactly the same as Nanwalek but are
 (4) a bit higher than that single pre spill estimate for Port
 (5) Graham. It raises the question in my mind whether we hit Port
 (6) Graham in a relatively low year in 1987 and that a more
 (7) typical year for them is what we're seeing the last couple of
 (8) years
 (9) Q So you're saying - I shouldn't read this - that Port
 (10) Graham's harvests now are greater than the pre spill year
 (11) Maybe your pre-spill year is a little low?
 (12) A That's what I'm saying
 (13) Q Is that right?
 (14) A Yeah. Look at Nanwalek and Port Graham as two peas in a
 (15) pod and that's basically how they're responding
 (16) Q If we look at it that way it is perfectly clear isn't it
 (17) in 1991/92 and in 1992/93 those harvests are completely back
 (18) to normal aren't they?
 (19) A We cannot say they're completely back to normal. We can
 (20) say that the harvest quantities as measured in total pounds
 (21) are matching what we think was happening right before the
 (22) spill. That's - that is true. When we describe a harvest a
 (23) subsistence harvest we also need to think about the - the
 (24) effort and the composition that people - the effort that
 (25) people are putting in to achieve that harvest and the
 (26) composition of the harvest. And -

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- (1) Q You think Port Graham s people may be working harder now
 (2) than they used to?
 (3) A There is some indication by their own reports that there is
 (4) more effort being expended to take seals to take some marine
 (5) invertebrates and some birds than there was five to ten years
 (6) ago
 (7) Q How about Tatitlek? Do you think Tatitlek s community s
 (8) working harder now to get their 344 pounds per person?
 (9) A Yes I do
 (10) Q And what does working harder mean? They have to fish
 (11) more days? Do they have to go farther? What exactly does it
 (12) mean?
 (13) A I don t think necessarily the issue is fish I think it s
 (14) more marine mammals and deer and maybe some fish but it
 means
 (15) making more trips to achieve your goal If your - If your
 (16) goal is a bag limit of four deer and if you re - if you know
 (17) a traditional harvest area and the deer are relatively
 (18) abundant you could get those four deer in a couple of days
 (19) maybe one or two trips Now maybe you have to take five to
 (20) ten trips some of which you don t even see a deer These are
 (21) numbers I m just using for illustrative purposes
 (22) Q In fact you re just making them up aren t you?
 (23) A I am
 (24) Q You don t have any statistics that show how many trips
 (25) these people are taking to get their deer?

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- (1) A We have case examples that we are collecting now to try to
 (2) get a handle on effort but we haven t reported that kind of
 (3) information in any of our technical papers nor are we ready to
 (4) yet
 (5) Q That means you don t know the figures yet correct? You
 (6) haven t compiled them?
 (7) A We don t have any quantified data about effort
 (8) Q All right You don t know in any statistically significant
 (9) way whether people are taking three deer trips a year as
 (10) opposed to two last year or traveling 500 miles for their deer
 (11) harvest as opposed to 200 last year do you?
 (12) A We know that there s more effort but we don t have numbers
 (13) to demonstrate that What we have are the reports of the
 (14) hunters themselves in their responses to our - to our
 (15) interviews about the increased effort that they ve had to
 (16) make And in our view that is reliable information from
 (17) experienced hunters about their relative effort
 (18) Q I want to put on the Elmo for you sir an exhibit that you
 (19) used in your direct examination And that s plaintiffs
 (20) exhibit 6095 And you talked about this as being the harvest
 (21) composition of the people of Chenega Bay correct?
 (22) A For 1985/86 that s correct
 (23) Q And did you show that to us for some reason? Is it a
 (24) typical mix is it - what was the significance of the exhibit
 (25) in your direct examination?

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- (1) A The significance is to show what people in Chenega Bay
 were
 (2) doing in 1985/86 I do not claim that this is - as we went
 (3) over a while ago I do not claim that this is typical for other
 (4) communities in the oil spill area And indeed as you
 (5) yourself pointed out the slice of the pie composed of fish in
 (6) most villages in most years is quite large and reasonably
 (7) exceeds marine mammals
 (8) Q All right You talked in your direct examination about the
 (9) significance of what you called marine invertebrates to the
 (10) diet of people at Chenega Bay correct?
 (11) A The diet the culture the way of life yes
 (12) Q And when we are talking about those marine invertebrates
 (13) we were talking about two percent of the diet of the people of
 (14) Chenega Bay correct?
 (15) A According to this chart that s correct At the time
 (16) about two percent or about - I think that equates to seven or
 (17) eight pounds per person per year
 (18) Q Seven or eight pounds per person per year?
 (19) A Uh huh
 (20) Q And you talked about the significance in the diet also of
 (21) birds and gull eggs do you remember that?
 (22) A Yes
 (23) Q And birds and eggs was one percent?
 (24) A It was in that year yes
 (25) Q One percent Now you also talked about the work that you

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- (1) have done on the food safety health task force did I get that
 (2) right?
 (3) A The Oil Spill Health Task Force
 (4) Q Thank you
 (5) A Call it the Task Force
 (6) Q The Task Force the Oil Spill Health Task Force and you
 (7) said that the Task Force undertook to study the safety of
 (8) subsistence resources because the people were worried about
 (9) that subject correct?
 (10) A As a shorthand that is correct The Oil Spill Health Task
 (11) Force coordinated the studies The actual studies were funded
 (12) by Exxon and by the State but the Oil Spill Health Task Force
 (13) coordinated them and we always try to focus that the health
 (14) advice and the studies were being done for the Task Force
 (15) Q For the Task Force?
 (16) A That s correct
 (17) Q And your Division was on the Task Force?
 (18) A We participated yes We were a member
 (19) Q And everything that the Task Force did or all significant
 (20) decisions made by the Task Force were made by consensus
 (21) correct?
 (22) A That s correct
 (23) Q And so you agreed with the Task Force s reports?
 (24) A That s correct we did
 (25) Q All right Now you discussed the reports that you have

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- (1) generated about food safety over time beginning in 1989 when
 (2) you made your first report to the people of the villages
 (3) correct?
 (4) A You mean the Task Force now?
 (5) Q Yes sir
 (6) A Okay yes
 (7) Q Now you meaning Dr James Fall because you went out to
 (8) the villages
 (9) A I did
 (10) Q In October 1989 every single one of the villages at issue
 (11) in this case and you participated in a presentation to the
 (12) villagers about what was shown in the preliminary food safety
 (13) health tests correct?
 (14) A Well we missed a couple of villages but in essence I
 (15) participated We never did get to Akhlok and we didn't
 (16) include the Alaska Peninsula that first year but we got
 (17) everywhere else and I participated
 (18) Q You got to Chenega Bay?
 (19) A We did
 (20) Q Tatitlek?
 (21) A We were there
 (22) Q Port Graham?
 (23) A Yes
 (24) Q Nanwalek?
 (25) A We were there

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- (1) Q Cordova?
 (2) A No
 (3) Q Missed Cordova?
 (4) A We didn't go to Cordova an oversight on our part
 (5) Q All right And you determined right off the bat in the
 (6) first testing that came back that fish were safe to eat
 (7) correct?
 (8) A We said that based upon the samples that we collected it
 (9) was good news regarding fish We were basing that on the -
 (10) the Oil Spill Health Task Force actually relied upon another
 (11) group that we call the Expert Toxicological Committee We
 (12) meaning the Task Force in the State assembled a group of
 (13) toxicologists from industry from state and federal governments
 (14) and from universities to review the data because the Task
 (15) Force didn't feel that it itself had enough expertise to
 (16) review the - the issue of oil contamination
 (17) And what the expert committee said is that given the
 (18) limited results that they had so far for 1989 that it looked
 (19) pretty good for fish but we needed to look some more We
 (20) needed to collect more samples and continue another year or
 (21) so
 (22) which we did
 (23) Q And as we've discussed earlier although fish looks like
 (24) only 40 some percent of the diet based on this Chenega Bay
 (25) 1985/86 sample in fact it was significantly more than half
 (26) the diet of most of the villages correct?

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- (1) A That's a - that's a correct statement
 (2) Q Right So the first report that people got in October of
 (3) 1985 (sic) from the Committee of Toxicological Experts as told
 (4) to the people by you and other members of the Task Force was
 (5) that fish are safe to eat?
 (6) A Correct It was 1989
 (7) Q Thank you
 (8) A I believe you said 1985 but it was 89
 (9) Yes that was the advice along with the advice to use
 (10) common sense use your senses use whatever else you know
 (11) about
 (12) food safety to form your decisions but we found no evidence
 (13) that there was buildup of hydrocarbons in fish that would make
 (14) them unsafe to eat
 (15) Q The one concern that was expressed in your October 1989
 (16) presentation to the villagers was about shellfish correct
 (17) oiled shellfish?
 (18) A No I'd say there were a lot of concerns that we expressed
 (19) in those meetings One of them was oiled shellfish We also
 (20) expressed concerns about the lack of information the lack
 (21) of information about marine mammals birds deer We had no
 (22) information We also expressed concerns about the limited
 (23) number of samples that we had We were worried about with
 (24) the
 (25) oil still in the environment whether our conclusions would
 (26) change even regarding fish So we had lots of concerns but
 (27) one of them was oiled marine invertebrates yes

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- (1) Q Now you said you were concerned about the quality of the
 (2) information you had at that point
 (3) A Well it was quality not so much in terms of the accuracy
 (4) of the tests Those I think are beyond dispute those tests
 (5) are good That's the - we used the best outfit we could to do
 (6) those tests so it wasn't a matter of quality of the scientific
 (7) information It was the - the limited number of sites and
 (8) kinds of - of fish and numbers of samples that we had - that
 (9) we had done and the limited time that we had that we had
 (10) covered That was the - the concern
 (11) Q You used the best laboratory you could find correct?
 (12) A We did Yes we did
 (13) Q And you had - you collected subsistence foods from the
 (14) areas that you thought the Natives were gathering correct?
 (15) A Well we went to the communities themselves and asked
 (16) Which areas would you like us to look at? So that's how that
 (17) worked We didn't make that decision entirely on our own In
 (18) some cases we probably did select certain sites to look at but
 (19) we tried to include the communities in the selection process
 (20) or at least community leaders in that process
 (21) Q You didn't just go and tell people we're going to test
 (22) over here we're going to test over here You asked for
 (23) community input?
 (24) A We did
 (25) Q From the Native community saying which areas are you
 (26) using

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- (1) that you would like us to test for the safety of your foods
 (2) correct?
 (3) A Yeah And what are your priorities since we couldn't go
 (4) to all of them So we -- we picked ones that were nearby that
 (5) probably had the most questions regarding safety because they
 (6) weren't necessarily oiled
 (7) Q Now sir when you went out on these presentations to the
 (8) villages you had a script I think you said
 (9) A We called it the script that's right
 (10) Q And the script was prepared by the Task Force?
 (11) A By a committee of the Task Force that's right
 (12) Q A committee of the committee?
 (13) A Yeah that's right
 (14) Q And your people were on the committee?
 (15) A Yes
 (16) Q And your people approved what was said at the meetings
 (17) correct the script?
 (18) A That's right we did
 (19) Q There may have been some people who during their
 (20) presentations they varied to some degree from the script but
 (21) the -- the basic script was approved right?
 (22) A That's right We didn't read it but we built a consensus
 (23) about what information should be presented and what message
 (24) should be presented
 (25) Q And you gave handouts to the people at the presentations in

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- (1) A That's right I might have misspoken there a bit The
 (2) sentence says "The subsistence fish samples were clean and
 (3) good food and again pertaining specifically to what we did
 (4) looked at so far Still left the question open as to change
 (5) and to looking at it in more detail But we -- we thought we
 (6) were delivering a positive message to people that it looked
 (7) pretty good
 (8) Q Certainly pretty positive about fish wasn't it?
 (9) A It was
 (10) Q Because on page 17 you told the people to summarize the
 (11) data collected to date indicate that fin fish which make up
 (12) approximately two-thirds of the typical subsistence diet are
 (13) safe correct? That's what you told the people?
 (14) A Based upon our samples and based upon our work up to that
 (15) point that's what we told them We thought -- we thought that
 (16) our best advice was that subsistence fishing was -- was safe
 (17) Q And on Page 2 of the handout you gave the important
 (18) introduction didn't you? You said before we begin we will
 (19) tell you what the general results were The fish that were
 (20) collected in May and July had no detectable levels of oil in
 (21) them or levels that were very very low This means all the
 (22) fish that were collected were okay to eat correct? That's
 (23) what you told people?
 (24) A We told people that Yes we did
 (25) Q Now we're going to go through in the course of the

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- (1) the villages correct?
 (2) A Yes we did
 (3) Q Now I'm going to show you defendants Exhibit 2154 Oil
 (4) Spill Health Task Force Community Presentation of Results of
 (5) Subsistence Foods Testing to Date Kodiak Island Borough
 (6) Community September 27 to 30 1989 Handouts to
 Accompany Oral
 (7) Presentation There's an additional note For additional
 (8) information please contact Division of Subsistence Alaska
 (9) Department of Fish and Game and that's your Division
 (10) correct?
 (11) A Right
 (12) Q Sir is Exhibit 2154 a copy of the handouts you made at
 (13) these village presentations?
 (14) A I'll have to take your word for it that it is because I
 (15) don't remember all the handouts that we had That was four
 (16) years ago five years ago but it looks like these were the
 (17) kinds of things we were -- we were handing out at that
 (18) meeting
 (19) Q And turning to page 14 is this what you were telling
 (20) people at these meetings the subsistence fish samples were
 (21) clean and good food and probably better than could be
 purchased
 (22) from commercial outside sources?
 (23) A Yes Based upon the samples that we did that's what we
 (24) told people
 (25) Q And that was in October 1989?

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- (1) remaining parts of your cross examination -- which I regret to
 (2) say will last until tomorrow -- a number of other
 (3) pronouncements of the Task Force that you participated in your
 (4) department Division approved But to summarize it is fair to
 (5) say isn't it that in repeated presentations to the people in
 (6) newsletters in publications in speeches in videotapes
 (7) beginning in October 1989 the Task Force told people that fish
 (8) were safe to eat period?
 (9) A Again we -- we qualified that by saying use common sense
 (10) to evaluate any food What we told them also is that based
 (11) upon the samples and strictly the question of hydrocarbon
 (12) contamination of the flesh that in early 1990 we could say
 (13) that -- that fish looked good and there was no reason based
 (14) upon the Expert Toxicological Committee or the Oil Spill Health
 (15) Task Force results to not use a fish that appeared to be clean
 (16) to a subsistence user
 (17) Q The fish looked good in 1989 when you tested them
 (18) correct?
 (19) A That's right But remember that people didn't have any
 (20) results about -- about our tests until September and October of
 (21) 1989 Preliminary results for one round after most subsistence
 (22) fishing was over
 (23) Q And fish continued to look good in 1990 when you did
 (24) additional testing?
 (25) A They did

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- (1) Q And you told people that?
- (2) A We did
- (3) Q Continued to look good in 1991 correct?
- (4) A That's right
- (5) Q 92 correct?
- (6) A We've done very limited -- well we've dropped fish from
- (7) most of our studies because we basically have a handle on
- (8) what's going on
- (9) Q Because they're safe to eat right?
- (10) A And after three years we're confident to say that We were
- (11) not entirely confident to say that after the first year More
- (12) studies were needed is what the Expert Toxicological
- (13) Committee
- (14) said
- (14) Q I'm not sure I understand that sir I've just shown you
- (15) three places where in your handout you were communicating
- (16) with
- (16) the Native villagers you told them fish were safe to eat
- (17) better than what you could buy in supermarkets?
- (18) A We did the samples
- (19) Q Were you intending to warn them then not to eat fish?
- (20) A We were telling them that we needed -- that it was good
- (21) news that in our view you could use fish and not worry about
- (22) contamination However to be absolutely sure we needed to
- (23) look at it some more We needed to go another round Indeed
- (24) we spent a lot of money and time collecting resources in 1990
- (25) to assure ourselves that the -- that the advice was correct

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- (1) We had a lot of confidence but we didn't stop studying it
- (2) because of that We needed to find out more information to
- (3) really assure ourselves and to do the best job we could to
- (4) answer people's questions
- (5) MR SHAPIRA Your Honor I'm about to pass on to the
- (6) broader area of testing other subsistence resources and if it
- (7) would be all right with you for the break I'm finding myself
- (8) extremely hot
- (9) THE COURT Sure yeah it is warm in here today
- (10) MR SHAPIRA Thank you Your Honor
- (11) THE COURT I'll let you go and don't talk to anybody
- (12) about this case and don't form or express any opinion on it
- (13) until it's submitted to you for your deliberation We'll see
- (14) you tomorrow at 8:30
- (15) (Jury out at 1:25 p.m.)
- (16) THE COURT Counsel is there anything else to take up
- (17) on the record?
- (18) MR DIAMOND No Your Honor
- (19) MR FORTIER I don't believe so Your Honor
- (20) THE COURT I'll see you in chambers
- (21) MR FORTIER Oh no
- (22) THE CLERK Please rise This court stands in
- (23) recess
- (24) (Recess at 1:26 p.m.)

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- (1) STATE OF ALASKA)
 - (2) Reporter s Certificate
 - (3) DISTRICT OF ALASKA)
 - (6) I Joy S Brauer RPR a Registered Professional
 - (7) Reporter and Notary Public
 - (8) DO HERBY CERTIFY
 - (9) That the foregoing transcript contains a true and
 - (10) accurate transcription of my shorthand notes of all requested
 - (11) matters held in the foregoing captioned case
 - (12) Further that the transcript was prepared by me
 - (13) or under my direction
 - (14) DATED this day
 - (15) of 1994
 - (21) JOY S BRAUER RPR
 - Notary Public for Alaska
 - (22) My Commission Expires 5-10 97
-

Look-See Concordance
Report

UNIQUE WORDS 2,308
TOTAL OCCURRENCES
10,398
NOISE WORDS 385
TOTAL WORDS IN FILE
29,300

SINGLE FILE CONCORDANCE

CASE SENSITIVE

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NOISE NOI

INCLUDES ALL TEXT
OCCURRENCES

IGNORES PURE NUMBERS

WORD RANGES @ BOTTOM
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(1) IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (2) THIRD JUDICIAL DISTRICT
 (4) In re) Case No 3AN 89 2533 Civil
) Anchorage Alaska
 (5) The EXXON VALDEZ) Tuesday August 2 1994
) 8 38 a m
 (6))
 (8) VOLUME 27 Pages 4170 through 4324
 (10) TRANSCRIPT OF PROCEEDINGS (Continued)
 (11) TRIAL BY JURY
 (13) BEFORE THE HONORABLE BRIAN C. SHORTELL
 Superior Court Judge
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(1) PROCEEDINGS
 (2) (Call to Order of the Court)
 (3) THE COURT Good morning everybody The jury is
 (4) not - they re not all here so we have some time Counsel
 (5) did you want to see me?
 (6) MR DIAMOND We did want to raise one issue Your
 (7) Honor and it deals with the scope of Mr Fall's
 (8) cross-examination Mindful that we have swung the door open
 (9) and it's been used to the plaintiffs favor we would like to
 (10) be able to get into the subject of the settlement and the
 (11) subsistence claims with Dr Fall And I think I'll let
 (12) Mr Shapira address that
 (13) MR SHAPIRA Your Honor the -
 (14) THE COURT The argument's gone past the blush test
 (15) counsel Those are the ones we have a hard time with And on
 (16) that note you can begin
 (17) MR SHAPIRA Your Honor as you know we've taken the
 (18) position from the outset that the subsistence case presented by
 (19) Mr Fall eloquently yesterday is not relevant at all to a case
 (20) of lands damages Mr Fall put on quite compelling direct
 (21) testimony to the effect that the Natives lost a portion of
 (22) their subsistence harvest of their traditional normal
 (23) subsistence harvest for roughly a two-year period from 1989
 (24) through 1990 And that recovery is not full to this day
 (25) either because the levels of subsistence harvest are not back

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(1) to normal or because a mix of subsistence harvest is not the
 (2) same as it was before the oil spill
 (3) Your Honor that is exactly the issue that we litigated in
 (4) the federal case It was a claim by Natives for their lost
 (5) subsistence harvests and we discussed - the exhibits that we
 (6) used yesterday in cross-examining Mr Fall were prepared for
 (7) the federal case This was the federal case It has nothing
 (8) to do with land damages at all
 (9) And what I'm - Your Honor I guess we can argue that and
 (10) that certainly plaintiffs have an argument that somehow this
 (11) relates to land damages but in fact what Mr Fall was
 (12) testifying about was harm to the community of Natives not to
 (13) the - not landowners, the community of Natives whose
 (14) traditions were to harvest subsistence resources And what he
 (15) talked about was the food that they didn't catch because of the
 (16) oil spill and that's the federal case That's the federal
 (17) case that's been settled
 (18) Now I refer - I characterized Mr Fall's testimony as
 (19) compelling and I did that for a reason Your Honor I think
 (20) the jury may be very impressed with the notion that all these
 (21) people who depended on these resources for hundreds or
 (22) thousands of years were deprived of these resources for a
 (23) period of time and I think that's the kind of thing the jurors
 (24) might want to make an award for And Your Honor it is - it
 (25) prejudices Exxon badly not to be able to advise the jury that

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- (1) that claim has been brought by exactly the plaintiffs that
 (2) Mr Fall is testifying here on behalf of That is to say - I
 (3) misstated myself That claim has been brought by the people
 (4) about whom Mr Fall is testifying in federal court and it was
 (5) settled and Exxon has fully extinguished that claim or however
 (6) Your Honor might want to characterize it but we need to tell
 (7) the jury that that's been taken care of and that that's not the
 (8) issue in this case The jury needs to understand that this is
 (9) a land damages case and not a loss of subsistence harvest
 (10) case
 (11) MR DIAMOND Your Honor I did not set Mr Shapira up
 (12) for a fall pardon the expression
 (13) THE COURT That's good That's good counsel I like
 (14) that It is his cross-examination He knows the subsistence
 (15) settlement as well as anybody
 (16) THE COURT I understand that
 (17) MR DIAMOND I did want to add to put this in
 (18) perspective Mr Shapira has not sat through all the testimony
 (19) in this case but the fact is we're headed for a double
 (20) recovery here The claims that seemingly are evoked by
 (21) Dr Fall's testimony are for the lost harvests Plaintiffs
 (22) can't have it both ways Either the landowner gets the - the
 (23) damages because the harvest on his land has been reduced or
 (24) if
 (25) he has turned the land over to a sharecropper or tenant farmer
 (26) the tenant farmer gets the reduced damages for the reduced

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- (1) I don't expect we'll hear from any surprise appraisers And
 (2) we've heard day long testimony of reduced subsistence
 (3) harvests Clearly the only implication that's left for the
 (4) jury is to conclude that somehow that is an incident of land
 (5) ownership and the right to recover for reduced subsistence
 (6) harvests is such an incident
 (7) Without putting all the facts on the table without putting
 (8) particularly the fact that we have brought that claim for the
 (9) past present and future lost of harvests it is inescapable
 (10) that this jury ultimately will - will unwittingly but
 (11) nonetheless very generally allow a double recovery We think
 (12) the only way to deal with this is to allow us to elicit these
 (13) facts from a witness who does have knowledge of what was
 (14) settled
 (15) MR PETUMENOS They used two Maybe we can use two
 (16) if we need to This is an inappropriate way to move for
 (17) summary judgment it seems to me in the middle of a witness
 (18) testimony in the form of attempting to get in evidence that
 (19) will most assuredly have that result Exxon cannot produce a
 (20) release that the Native corporations have signed Exxon cannot
 (21) show how we participated or acquiesced in any way on the
 (22) payments that were made to the Native class because we were
 (23) not
 (24) consulted We were not beneficiaries of the settlement We
 (25) had nothing to do with it
 (26) We can perhaps be - we can admire Exxon for its

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- (1) harvests but you can't do it twice and that's the situation
 (2) we found ourselves in
 (3) This is slightly different than the argument we had two
 (4) weeks ago or three weeks ago about the jury instructions
 (5) concerning merely the pendency of the federal claim We now
 (6) have settled this claim and we've settled not only for lost
 (7) harvests in 1989 and lost harvests in 1990 but we've settled
 (8) for lost harvests in perpetuity It's particularly important
 (9) to bring these - bring these facts into sharp focus for the
 (10) jury because the Native corporations have advanced this
 (11) notion
 (12) of a special relationship to their shareholders that they hold
 (13) this land and they acquired this land in trust for their
 (14) shareholders so that they could use it for subsistence
 (15) purposes
 (16) It's admitted they get no pecuniary gain out of this
 (17) subsistence resources They are held in trust Well we
 (18) settled all claims that had arisen in favor of the
 (19) beneficiaries of that trust and there is nothing left
 (20) Indeed I suggest that you go back to Dr Mundy's testimony
 (21) in which Dr Mundy admitted that he does not attempt to
 (22) quantify any special damages or any damages for lost
 (23) subsistence So the jury is going to be presented with no
 (24) separate enumeration no way to calculate any kind of land
 (25) damage attributable to lost subsistence It's not - not been
 (26) put on the table and I think they're almost out of witnesses

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- (1) persistence because this is the fourth or fifth time they've
 (2) attempted to raise this argument in a way that I think this
 (3) evidence came in would be devastating to - to the Native
 (4) corporation case The flipside of course of how badly they
 (5) want to get this into evidence is they want the jury to be told
 (6) not to give us anything because they already paid us and
 (7) that's not true
 (8) The - your instructions said the Native corporations are a
 (9) separate person for purposes of this litigation have a
 (10) separate right to recover and can advance all the legal
 (11) theories that the law will allow and it is not correct It
 (12) tells half the story to describe Dr Mundy's testimony in that
 (13) way, because Dr Mundy - and this will be a hotly contested
 (14) issue in this case - determined that a vast amount of land had
 (15) the highest and best use of natural lands and one of the ways
 (16) that Dr Mundy determined that natural land was in fact
 (17) natural land is the existence of subsistence activities on the
 (18) land And he has come up with a loss of use of that land for a
 (19) period of time and this is a land case that the corporations
 (20) who own the land are entitled to make
 (21) If Exxon thought they were exposing themselves to a double
 (22) recovery the time to have addressed that would have been in
 (23) the settle negotiations with the last action with respect to
 (24) the subsistence users and they didn't do that They didn't
 (25) consult with us and therefore they have left a claim out It

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(1) is not a double recovery It is a claim that has survived
 (2) summary judgment here and it is going to the jury
 (3) THE COURT So what is the claim?
 (4) MR PETUMENOS The claim is for the land damage loss
 (5) and lost use of land and lost productivity of the land, and we
 (6) are entitled to put on evidence that the land lost its
 (7) productivity which is what we did yesterday And the loss of
 (8) use is inextricably interwoven with the determination by
 (9) Dr Mundy that the highest and best use of the land is natural
 (10) land and that one of the chief components of natural land is
 (11) its use for these purposes and its ability to produce the goods
 (12) that it does
 (13) Exxon will take the position that unless it has good
 (14) anchorage unless it's got development potential and you can
 (15) put a lodge on it it's got something called a limited use
 (16) highest and best use category of a fraction of the value that
 (17) the Native corporations look for
 (18) So there are two things that we're proving through
 (19) Dr Mundy and Dr Fall First that the land has value because
 (20) it produces these subsistence harvests And secondly, that
 (21) that land's use was lost and Exxon makes a big point of the
 (22) fact that oh you'll hear lots of depositions of Native
 (23) witnesses saying well did you lose any use of this land? I
 (24) mean you personally did you lose any use of this land? And
 (25) we meet that proof with people like Dr Fall And to put in front

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(1) of the jury the notion that our claim - which has not been
 (2) released and that we have all the legal theories of a separate
 (3) entity to put forward - should somehow be compromised
 (4) because
 (5) they made a settlement with somebody else is outside the
 (6) evidence rules You can't use settlements for that purpose
 (7) and it would be error And if anyone would be prejudiced it
 (8) would be the Native corporations because what they would be
 (9) inviting the jury to say is don't pay them because I made a
 (10) settlement with someone else
 (11) And if they had summary judgment that we didn't have a
 (12) claim because it belonged to somebody else, they should have
 (13) brought it But they didn't bring it because they know they
 (14) don't have it and it's totally inappropriate to be trying to
 (15) backdoor that issue by putting in evidence and asking the jury
 (16) to do something improper which is discount one person's
 (17) settlement or verdict because they settled with somebody else
 (18) on a different theory
 (19) THE COURT Thank you counsel
 (20) Counsel do you want to be heard?
 (21) MR FORTIER Your Honor If I could just a couple of
 (22) other points
 (23) I think that if you analyze this perhaps in terms of what
 (24) the rules of evidence would reveal you'll also see that it's
 (25) not relevant The claim that was settled involved at least 15
 (26) different communities spread throughout the oil spill area

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(1) They were communities that were spread throughout the oil spill
 (2) area They had nothing to do with the private harm to the
 (3) natural resources which was retained claim that Exxon knew
 (4) that the Native corporations had retained So there's a matter
 (5) of relevance even if it's marginally relevant. Prejudice of
 (6) it would outweigh whatever marginal relevance there might be
 (7) On the one hand taking the lost - the lost harvest for a
 (8) couple of years from an area that extends from the - from the
 (9) eastern side of Prince William Sound all the way down to the
 (10) end of the Alaska Peninsula in saying that that should be
 (11) offset in some way or suggesting that that settles the claim of
 (12) the folks from Prince William Sound and the Gulf of Alaska
 (13) The other question is whether or not this is a - is
 (14) evidence of a compromise Rule 408 clearly excludes this sort
 (15) of evidence So for the purposes of rule 403 and 408 even if
 (16) it's all marginally relevant it ought to be excluded
 (17) THE COURT Thank you
 (18) MR DIAMOND 403 and 408 deal with offers of
 (19) compromise, offers of proof liability That's not an issue I
 (20) hear
 (21) We're not claiming the Native corporations released
 (22) anything What we're claiming I guess is that - I guess you
 (23) asked it best, what's their claim and how does it relate to
 (24) that which we've heard evidence on from this witness and other
 (25) witnesses

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(1) Mr Petumenos says it's loss of use and Dr Mundy includes
 (2) it as a variety of loss of use and we have discussed this in
 (3) the abstract, I think. We have questioned from the beginning
 (4) of this suit in pretrial proceedings how can they recover for
 (5) this when this is a personal right owned by the individual
 (6) subsistence users
 (7) We're beyond dealing with the abstract. This is now
 (8) concrete We know what the evidence is we know what the
 (9) proof
 (10) is and Mr Petumenos says it is damage because we've
 (11) interfered with a loss of use
 (12) It seems to me that there's only one claim here It is
 (13) not - it can't be unbundled in the way that Mr Petumenos
 (14) suggests There are two elements to a - at least two elements
 (15) to a claim beyond that which he speaks Maybe there's a loss
 (16) of use but there had to be resulting harm and then there has
 (17) to be consequential damages which flow from that
 (18) We have a limited resource here Either the landowner has
 (19) the right to recover damages because we have reduced the
 (20) bountifulness of the property, or the individual does but it's
 (21) one or the other We're talking about the same right We're
 (22) talking about the same harm Either the subsistence users have
 (23) been harmed because their harvest has been reduced or the
 (24) landowner has because the subsistence user's harm - harvest
 (25) has been reduced but you can't collect it twice and that's
 (26) what's happening here That's what this jury is being set up

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(1) to do
 (2) We re not looking for summary judgment We re simply
 (3) looking for an opportunity to advance all the facts not just
 (4) part of the facts and summary judgment might well be
 (5) appropriate directed verdict on this might well be
 (6) appropriate We re not trying to do that We just want the
 (7) jury informed that with respect to the loss of the harvest
 (8) that loss has already been asserted by the shareholders The
 (9) Native corporations acknowledge that it s the right of the
 (10) shareholders Mr Gordaoff told us that Mr Shapira was acting
 (11) like a jerk when he was suggesting that somehow this was a
 (12) right that belonged to the corporation that Native
 (13) corporations wouldn t be offended if somebody subsisted or
 (14) didn't subsist Those are individual rights We just want to
 (15) deduce the fact that those are individual rights by their
 (16) admissions and they ve been paid for It s not a case of
 (17) having paid for past lost harvest We ve paid for past
 (18) present and future So to the extent there s going to be any
 (19) diminution in the use of these lands we purchased that right
 (20) We paid for it We ve compensated the people who are going to
 (21) be affected for it
 (22) This is not a situation where the landowner gets some
 (23) additional pecuniary benefit from subsistence such that
 (24) interference with subsistence hurts both the subsistence user
 (25) and the landowner They admitted they don t charge and they

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(1) wouldn t charge and it would be unthinkable for them to charge
 (2) their shareholders for this right It s a zero sum game
 (3) There s only so much here and they have acknowledged it s
 the
 (4) right of the shareholder subsistence user we have interfered
 (5) with We simply want the jury to know that we have paid
 (6) millions of dollars for that
 (7) Again summary judgment might well be appropriate directed
 (8) verdict might well be appropriate That s not what we re
 (9) arguing about this morning We simply want a fully informed
 (10) jury not a jury that goes off into deliberations thinking that
 (11) somehow these bar graphs which show dramatic declines in
 89
 (12) and 90 are something that they have to worry about.
 (13) That s all I have to say
 (14) THE COURT Thank you counsel This is - the
 (15) subject matter you re discussing at such length this morning is
 (16) truly an issue for instructions In fact, it s not an issue
 (17) for instructions I ve already given an instruction on it and
 (18) what I - and it was defendant s proposed instruction and what
 (19) I said then was evidence of damage to subsistence resources
 and
 (20) damage to commercial fisheries has been allowed here
 because it
 (21) may be relevant to whether the oil spill reduced the value of
 (22) the Native corporation s property or caused them damage by
 (23) interfering with the corporation s use of their land
 (24) You are instructed not to consider any aspect of the
 (25) federal court proceeding whether by comment of counsel
 media

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(1) information or other source You are to consider the claims
 (2) before you on their own merit only on the basis of information
 (3) and instructions presented this in courtroom You are not to
 (4) consider whether any other party may recover for any claims in
 (5) the federal action I gave that days ago at Exxon s request
 (6) I also gave another instruction that dealt with the Native
 (7) corporations claim for recovery of damage to their lands
 (8) Alaska law recognizes any corporation as a person distinct from
 (9) its shareholders I intend to give it appropriate
 (10) instructions at the end of this case to minimize the
 (11) possibility of double recovery
 (12) Now then the question occurs to me Why is it that a State
 (13) employee should be questioned about the ins and outs of a
 (14) settlement in the federal court action which he didn't take
 (15) part in? Why should I allow that kind of cross-examination?
 (16) Doesn t make any sense to me when in fact I can instruct
 (17) to - to avoid the possibility of double recovery?
 (18) So the answer is no you can t cross-examine him on the
 (19) subject matter of the settlement in federal court and that is
 (20) categorically N O got it?
 (21) MR DIAMOND Got it
 (22) MR SHAPIRA Your Honor one of the things I would
 (23) like to cross-examine the witness on - and this is related -
 (24) is his assistance to the plaintiffs and their counsel in both
 (25) actions testimony - Dr Fall has been virtually a part of the

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(1) plaintiffs team since the outset of this litigation He has
 (2) conferred and assisted plaintiffs counsel in their expert
 (3) witness on countless occasions and his participation voluntary
 (4) participation on that side of the litigation seems to me to be
 (5) pertinent to the issue of bias I would like to bring out on
 (6) cross-examination how many times he has met with talked with
 (7) consulted with and assisted plaintiffs' counsel in both cases
 (8) THE COURT Counsel that s just cross-examination for
 (9) bias I can't imagine that that isn t appropriate
 (10) MR SHAPIRA Thank you Your Honor
 (11) THE COURT Unless you have some objections that I
 (12) haven't thought of
 (13) MR FORTIER Well Your Honor the objections I have
 (14) would be first of all that I understand Mr Shapira wishes to
 (15) use a memorandum that was sent to certain of the communities
 (16) regarding Mr Fall s work and informing the communities that
 (17) they should meet with Mr Fall That s an attorney-client
 (18) communication I believe
 (19) THE COURT Tell me what the communication is again
 (20) MR FORTIER It s a memorandum
 (21) THE COURT From whom?
 (22) MR FORTIER From Mr Hausfeld who is one of the
 (23) class lawyers for the - for the Native class, and in the
 (24) memorandum you know he - he discusses the need to answer
 the
 (25) harvest questions That is what Mr Shapira is referring to as

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- (1) one of the impeachment documents or one of the sources of bias
- (2) I guess You know I think it's - it's attorney-client
- (3) communication it shouldn't come in
- (4) As to - I don't know where else Mr. Shapira would plan on
- (5) going with his - with this interrogation The number of
- (6) meetings and that sort of thing I mean I don't have objection
- (7) to that
- (8) THE COURT Okay thank you Nobody else is standing
- (9) up
- (10) MR. PETUMENOS The only other question we had is how
- (11) to refer to the federal proceedings And earlier I think
- (12) Mr. Shapira is going to use the transcript from the federal
- (13) trial which he has a right to do and at one point at least
- (14) you indicated that you wanted counsel to refer to that trial
- (15) as we both may in the course of the trial as related
- (16) proceedings or something like that as opposed to identifying it
- (17) by name Is that what we're supposed to be doing?
- (18) THE COURT This is testimony?
- (19) MR. PETUMENOS Yes
- (20) THE COURT Testimony under oath It's all - it will
- (21) be obvious from the context that it's a court proceeding and
- (22) he's testifying under oath I don't think it necessarily has
- (23) to be specified as a federal court proceeding
- (24) MR. PETUMENOS That's what I thought we had said and
- (25) I just wanted to make sure

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- (1) MR. SHAPIRA Another lawsuit?
- (2) THE COURT That's fine with me I mean I really
- (3) don't see the prejudice - I wouldn't even see the prejudice
- (4) frankly if you referred to it as did you testify in the
- (5) federal proceedings
- (6) MR. DIAMOND I think we've identified for the jury
- (7) there is a federal case pending
- (8) THE COURT The thought that they might not know
- (9) there's a federal proceeding when you've repeatedly asked me
- (10) to
- (11) instruct on it is sort of ignoring reality, isn't it?
- (12) MR. SHAPIRA Your Honor as far as the - excuse
- (13) me -
- (14) THE COURT Yes go ahead
- (15) MR. SHAPIRA As far as the supposed attorney-client
- (16) privilege matter what that refers to is Your Honor may recall
- (17) yesterday on the bar charts of harvest there was one extremely
- (18) high harvest number for Tatitlek which I questioned the witness
- (19) about for the '88 year
- (20) THE COURT Right
- (21) MR. SHAPIRA It turns out that the facts are these
- (22) That is the only harvest information for a pre-oil spill
- (23) period which was taken in a survey conducted after the oil
- (24) spill and we have evidence that plaintiffs' counsel in the
- (25) class action was involved in assisting Dr. Fall's people in
- (26) collecting information in Tatitlek in that year and in

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- (1) encouraging the - the survey respondents to cooperate fully in
- (2) letting their past harvest go
- (3) It is our position that the results of that admittedly
- (4) quite higher in Tatitlek may have been skewed by litigation
- (5) concerns and the fact that Dr. Fall's people first of all
- (6) had to obtain the permission of plaintiffs' counsel to enter
- (7) those villages And secondly that plaintiffs' counsel wrote
- (8) letters to the villages encouraging the cooperation with Dr.
- (9) Fall's people are relevant facts to evaluating whether that
- (10) harvest year really was a typical harvest year as Dr. Fall
- (11) suggested or really was an extraordinarily high one for this
- (12) particular reason relating to litigation bias as we would like
- (13) to suggest
- (14) THE COURT The - the document is only an impeachment
- (15) document right? If he answers the questions correctly you
- (16) won't have to use them
- (17) MR. SHAPIRA That's correct if he answers the
- (18) question I acknowledge -
- (19) THE COURT Don't use it until you approach the bench
- (20) and tell me you actually want to use the document because I'm
- (21) sure there's a way you won't have to
- (22) MR. SHAPIRA I think it can be quite simply done
- (23) I'll only ask whether he is aware from any source that
- (24) plaintiffs' counsel encouraged the villagers to cooperate with
- (25) his researchers in that - regarding that one pre-spill year

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- (1) MR. PETUMENOS Judge, I don't think I have any
- (2) problem with that approach The only thing I wanted to point
- (3) out before we have the jury here and Mr. Shapira just made an
- (4) argument on relevance and our point is privilege Frequently
- (5) documents and communications which are privileged are
- (6) relevant
- (7) but they're inadmissible if they're privileged
- (8) THE COURT That may be so counsel but I really
- (9) don't think the document will have to be used To the extent
- (10) it has to be used I'll deal with the privilege question later
- (11) because that may be a quite murky privilege question We'll
- (12) see I mean it depends on the dissemination of the document
- (13) how many people got it whether it was publicly sent around,
- (14) and I don't want to explore those issues
- (15) MR. PETUMENOS Right
- (16) THE COURT I shouldn't have to
- (17) MR. PETUMENOS What I heard Mr. Shapira say he's
- (18) going to ask Dr. Fall about what he knew and if Dr. Fall knows
- (19) it it's not privileged so there shouldn't be a problem But
- (20) if he gets into the communication between the attorney and the
- (21) class then we have a problem
- (22) THE COURT I - you know it strikes me as a fairly
- (23) simple point The question is whether the witness cooperated
- (24) with and had some - and somehow had some closer
- (25) relationship
- (26) with the lawyers than he might have with somebody else and
- (27) that - that relationship can certainly be explored

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- (1) Okay I m going to take a break counsel I need it after
 (2) this Thank you
 (3) THE CLERK. Please rise This court stands in
 (4) recess
 (5) (Recess from 9 05 a m to 9 10 a m)
 (6) (Jury in at 9 10 a m)
 (7) THE COURT You can be seated
 (8) Well Mr Shapira you ve got the playing field all to
 (9) yourself
 (10) MR SHAPIRA I think we collectively guessed wrong
 (11) about the length of the break Your Honor
 (12) THE COURT That s all right I like to keep you in
 (13) suspense Somebody better go get those people or else I m
 (14) going to let Mr Shapira start cross-examining
 (15) (Pause)
 (16) MR FORTIER Your Honor I apologize
 (17) THE COURT No problem counsel
 (18) MR FORTIER I slipped out to feed my addiction
 (19) THE COURT Could we have the witness back up?
 (20) CROSS-EXAMINATION OF JAMES FALL (Resumed)
 (21) BY MR SHAPIRA
 (22) Q Good morning Mr Fall - Dr Fall?
 (23) A Good morning
 (24) Q Dr Fall I want to begin by showing you a memorandum sent
 (25) to you in February 1986 by Mr Ron Stanek Who is Mr Stanek?

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- (1) A Ron Stanek is a subsistence resource specialist for the
 (2) Division of Subsistence in Anchorage
 (3) Q He is like yourself a Ph D in anthropology correct?
 (4) A He is not He has a Master s degree in recreation and his
 (5) background is primarily in biology and in recreational studies
 (6) Q I missed on that one Let me try this one He is the
 (7) Project Manager for that large report that I showed you
 (8) yesterday the most current harvest information the MMS-2
 (9) report correct?
 (10) A Yes I m the principal investigator along with Charles
 (11) Utermohle and Ron Stanek is the project manager
 (12) Q Now, Ron Stanek is also the individual who does the
 (13) fieldwork for your Department in the areas of Nanwalek English
 (14) Bay and Port Graham correct?
 (15) A Up until he took his present job as Project Manager for
 (16) the - what we call the Minerals Management Service Project
 (17) Ron Stanek was responsible for research in Nanwalek and the
 (18) primary person for responsible for research in Nanwalek and
 (19) Port Graham up until about 1991
 (20) Q And that was through the 1980s correct?
 (21) A That is correct yes
 (22) Q All right Now I want to show you and I think you have
 (23) before you on your monitor a memorandum that he sent you in
 (24) February 4 1986 Do you recognize that document?
 (25) A Yes I do

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- (1) Q Now he was reporting there on what he had learned about
 (2) recent harvests in Port Graham and English Bay correct?
 (3) A That s right
 (4) Q And I want to address your attention to the portion that
 (5) I ve highlighted He told you there that red salmon returns to
 (6) the English Bay River were at an all time low and all three
 (7) fisheries commercial sport and subsistence were closed for
 (8) part of the summer Good returns of silver salmon were heavily
 (9) fished for home use and this winter there appears to be a
 (10) considerable amount of effort of taking seals to make up for
 (11) the low salmon take Do you see that?
 (12) A Yes
 (13) Q Now you understood that in some circumstances when
 (14) some
 (15) resource like salmon wasn't available the Natives would switch
 (16) to another resource in this instance seals correct?
 (17) A Yes
 (18) Q And you understand that that's a frequent dynamic in these
 (19) Native harvest patterns correct?
 (20) A That does happen yes
 (21) Q The Natives are what you might call opportunistic hunters
 (22) what s there, what s running strong one year is what they focus
 (23) on correct?
 (24) A Right And of course that doesn t necessarily mean that
 (25) the resources are equivalent that they serve exactly the same
 purposes except for their food and in this case is a good

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- (1) example of how when one resource is short another is taken
 (2) to - to supplement the - or to make up for it. Yes
 (3) Q And one of the reasons that you knew that was a typical or
 (4) not unusual pattern was that Mr Stanek had published just that
 (5) year a major technical report on behalf of your Division called
 (6) Patterns of Wild Resource Use in English Bay and Port Graham
 (7) Alaska Technical Paper Number 104 correct?
 (8) A Yes I d need to see the rest of the title page to see it
 (9) here 1985 it was published
 (10) Q In that technical paper it s a - once again a very
 (11) lengthy document and I promise not to make you read very
 (12) much
 (13) of it but the first two pages are what s called the Abstract
 (14) You see that?
 (15) A Yes
 (16) Q And what does that mean?
 (17) A That is a short summary of the major points in the report
 (18) MR FORTIER Your Honor if I could ask counsel to
 (19) let me know what the page numbers -
 (20) MR SHAPIRA My apologies That s Exhibit 4330
 (21) BY MR SHAPIRA
 (22) Q Now in the Abstract that brief summary Mr Stanek
 (23) reported - by the way did you review this technical paper
 (24) before it was published?
 (25) A Yes I did
 Q He reported that harvest data demonstrate both communities

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- (1) used a wide variety of local Fish and Game resources and
 (2) combined this use in a mixed cash/subsistence economy
 During
 (3) a 12 month period from May 1981 to April 1982 harvest data
 (4) indicate that salmon were 68.5 percent and other fish and so
 (5) forth. He goes through the percentages of harvest correct?
 (6) A Right
 (7) Q And then turning to the second page of the abstract he
 (8) advised there that other resources such as marine mammals
 (9) were 15.2 percent in Port Graham and 5.9 percent for English
 (10) Bay's annual harvest. Do you see that?
 (11) A Yes
 (12) Q Now yesterday in your testimony here you referred to
 (13) English Bay and Port Graham as basically two peas in a pod
 (14) because that's how they respond from a harvest perspective
 (15) right two peas in a pod?
 (16) A That's right. That's right.
 (17) Q And English Bay and Port Graham are quite close together
 (18) geographically aren't they?
 (19) A They are.
 (20) Q And yet in 1981 one of these peas in the pod had a - 15.2
 (21) percent of its harvest was marine mammals that's basically
 (22) seals correct?
 (23) A And sea lions
 (24) Q Seals and sea lions. And the other had only roughly a six
 (25) percent annual harvest correct?

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- (1) A Right
 (2) Q All right. Now you told us - well let me - before I
 (3) leave this let's talk about the last paragraph of the summary
 (4) the Abstract. Mr Stanek in the paper that you reviewed
 (5) reported there that annual harvests of some resources such as
 (6) salmon and marine mammals varied by more than 100 percent
 (7) This was due to factors such as abundance of resources timing
 (8) of harvests weather conditions and availability of cash
 (9) employment in each community correct?
 (10) A That's right. Ron has identified here a variety of factors
 (11) that in normal years may affect subsistence harvests. What
 (12) we haven't pointed out in the Abstract is that the data that
 (13) he's talking about here pertain to 1981 was not collected
 (14) through a systematic household survey like the information we
 (15) collected in 1987 or after the spill. It was used with harvest
 (16) calendars that were primarily focused on salmon and only
 (17) secondarily on other resources. The people were required to
 (18) keep the salmon calendars by regulation. They were not
 (19) required to record their harvests of seals and sea lions and
 (20) marine invertebrates on the calendar. Some of them did that
 (21) basically as a favor to us and we asked them to do that but
 (22) the - the methods used to collect data other than salmon
 (23) were not as rigorous as we used in 1987. And it's interesting
 (24) to compare these - these data with later data but the
 (25) comparisons need to be very controlled and we need to be very

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- (1) careful in comparing
 (2) Q When did you change your practices and require people to
 (3) report marine mammal harvests on your harvest tickets?
 (4) A We don't require people to report marine mammal harvests to
 (5) us
 (6) Q I misunderstood your testimony then. I thought you said in
 (7) 1981 when this data was taken the data collection technique
 (8) wasn't very rigorous because people didn't have to record
 (9) marine mammal harvests on their harvest tickets isn't that
 (10) what you just said?
 (11) A No what I said is that it was rigorous for salmon and
 (12) because of the regulatory requirement to report salmon on the
 (13) harvest calendars it was not rigorous for marine mammals and
 (14) other resources, because at that point we were basically using
 (15) the calendars to get salmon. We were interested in what other
 (16) resources people might report to us and so we - we asked
 (17) them about it
 (18) Q When did you get rigorous about reporting marine mammal
 (19) harvests?
 (20) A Whenever we do a systematic household survey we ask
 (21) people to report on all resources over the previous 12 months and
 (22) we've been doing those surveys since about 1982 or 1983. The
 (23) first one we did in Nanwalek and Port Graham began in 1987
 (24) Q Are you telling us here sir, that you don't think the data
 (25) that Mr Stanek based his summary on in this technical paper

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- (1) was very good?
 (2) A No I'm not saying that at all
 (3) Q Hadn't been very recently collected?
 (4) A No I'm not saying that at all
 (5) Q You think his data is wrong?
 (6) A No I'm not saying that at all
 (7) Q So when one community had 15 percent of its harvest in sea
 (8) mammals and another had 8 percent of its harvest in sea
 (9) mammals these two communities that were like two peas in a
 (10) pod you don't know that there's anything wrong with those
 (11) numbers do you?
 (12) A What I'm saying is that because the harvests - because the
 (13) data collection methods were not as rigorous as we used later
 (14) we really need to look at all the information that we have in
 (15) order to make some conclusions about the similarities between
 (16) Nanwalek and Port Graham. I wouldn't focus just on this
 (17) particular document to demonstrate profound differences
 (18) between
 (19) the two communities
 (20) Q Oh but he did focus on that in the Abstract. The summary
 (21) of his lengthy paper the final paragraph does focus on exactly
 (22) that difference doesn't it?
 (23) A He's observing that there's a difference. I don't see him
 (24) saying that this suggests that there are tremendous differences
 (25) between the two communities
 (26) Q I see. Now when you reviewed his paper and this summary

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- (1) did you tell him the data wasn't very good and maybe he ought
 (2) not to emphasize that point?
 (3) A Not at all. Because as I said before I think the data
 (4) are good. Data have limitations. Data needs to be used
 (5) acknowledging those limitations and used with other
 (6) information that's collected later.
 (7) Q Now I want to show you again the same context the
 (8) exhibit you showed to the jury yesterday in your direct
 (9) testimony having to do with the harvest composition of Chenega
 (10) Bay in 1985/86. Do you see that?
 (11) A Yes.
 (12) Q You remember you pointed out that this showed how much
 (13) of one thing and another that they harvest?
 (14) A Right.
 (15) Q Correct? And then you compared that with an exhibit 6122
 (16) and you said look this shows effect of the oil spill because
 (17) marine mammal harvests had dropped to 6 percent and you
 (18) considered that quite extraordinary correct?
 (19) A What I said is that this shows a tremendous difference in
 (20) the composition of the harvests in 1985 compared to 1992.
 (21) Q And you thought it was because of the oil spill?
 (22) A I would say that this at least in part has to do with
 (23) oil spill effects on harbor seals in Western Prince William
 (24) Sound.
 (25) Q But the six percent that marine mammals had fallen to in

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- (1) 1992 you thought was at least in part a result of the oil
 (2) spill that matches exactly what Port - what English Bay's
 (3) percentage of marine mammals were before the oil spill
 (4) correct?
 (5) A Sure does.
 (6) Q So it wasn't so extraordinary was it that another Native
 (7) community harvested six percent of marine mammals in a year?
 (8) A I guess I never said that Chenega Bay is Nanwalek or that
 (9) Chenega Bay is another pea in that pod with Port Graham.
 (10) Q Now sir you also said in your testimony yesterday - and
 (11) I apologize for not having highlighted this - marine mammals
 (12) are a very different kind of resource from salmon and you
 (13) wouldn't normally find people just substituting salmon for
 (14) marine mammals, do you see that?
 (15) A Right.
 (16) Q But that's exactly what Mr. Stanek had told you in his two
 (17) memoranda had been happening in Port Graham and English
 (18) Bay.
 (19) Isn't it?
 (20) A Yeah. You do find people substituting one resource for
 (21) another. What I meant and I think the context of my remarks
 (22) yesterday will show is that they aren't equivalent resources
 (23) that if people have a choice between a normal harvest of
 (24) salmon and normal harvest of marine mammals they won't say well
 (25) gee we're kind of tired of marine mammals this year let's
 just get more salmon. They'll harvest both because they're

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- (1) both part of the mix and they both are different resources
 (2) If people in Nanwalek and Port Graham couldn't put up enough
 (3) dried fish and smoked fish over the - over the summer and the
 (4) seals are out they take seals. It's food.
 (5) Q Dr. Fall I wasn't meaning to suggest that for one minute
 (6) that a seal is the same as a salmon. But you do know perfectly
 (7) well that Natives do substitute one for another depending on
 (8) harvest opportunities in any given year and that the variance
 (9) between their percentage harvests of those things can as
 (10) Mr. Stanek reported to you vary by more than 100 percent from
 (11) year to year, correct?
 (12) A It does happen.
 (13) Q And it's perfectly plausible that two communities that are
 (14) close together and are like two peas in a pod in the same year
 (15) one of them will harvest three times as much seal as the other
 (16) correct?
 (17) A It can happen.
 (18) Q And it did happen, didn't it?
 (19) A It evidently did.
 (20) Q Now you talked about in your direct testimony about
 (21) whether or not the - the range and variety of resources
 (22) harvested by Natives was affected by the oil spill and you
 (23) ventured your opinion that the range was affected.
 (24) A Yes.
 (25) Q Correct? Now it is true is it not that the variety of

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- (1) wild resources harvested in Port Graham in 1991 - that's after
 (2) the oil spill - was greater than the variety of resources
 (3) harvested in that same village in 1987 before the oil spill
 (4) isn't it?
 (5) A Yes.
 (6) Q I want to draw your - I want to shift gears and go back to
 (7) where we left off in the - in this extraordinarily hot warm
 (8) courtroom yesterday afternoon and that is with the food safety
 (9) testing procedures that you were involved in and the reports
 (10) that you and other members of the Task Force delivered to the
 (11) Natives. Okay?
 (12) Now sir I'm going to refer you back to a document I used
 (13) yesterday defendants Exhibit 2154 and that you will recall
 (14) is the handout that accompanied the presentations that you
 (15) made
 (16) to Natives in September and October 1989 correct?
 (17) A Yes as part of a group. It was myself and others who made
 (18) these presentations.
 (19) Q Yeah I understand. There was a large group you were
 (20) along and you approved the handouts before they were sent?
 (21) A Right.
 (22) Q Now directing your attention to page 14 of the handout
 (23) it's correct isn't it, that you reported to Natives that
 (24) they - that you were reporting on the results from two
 (25) different studies one by the ADF&G - that's your Department
 correct?

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- (1) A Right
 (2) Q And the USFDA that's the Food and Drug Administration of
 (3) the U S government?
 (4) A It is
 (5) Q And the other by Exxon and NOAA What's NOAA?
 (6) A NOAA that's the National Oceanic and Atmospheric
 (7) Administration It's a federal agency
 (8) Q It is true there were two different studies correct?
 (9) A Yes
 (10) Q And you also reported that in each case the group of
 (11) expert toxicologists looked at the results and talked about the
 (12) possible health hazards correct?
 (13) A That's right
 (14) Q It's also true that FDA the federal - it's Food and Drug
 (15) Administration gave their opinion in a report called Summary
 (16) of Analysis of Subsistence Seafood From a Pilot Study Dated
 (17) August 17 1989 correct?
 (18) A That's right
 (19) Q And it is - and that NOAA hosted a panel of nine experts
 (20) from government universities and industry to review the
 (21) results from Exxon NOAA studies correct?
 (22) A Yeah That's what we call the expert committee of
 (23) toxicologists
 (24) Q And that was a blue ribbon committee of some of the finest
 (25) toxicologists in the United States wasn't it?

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- (1) A That's a fair statement yes
 (2) Q And it's true isn't it that the experts reported their
 (3) assessment and the recommendation in a brief report entitled
 (4) Interim Findings of the Toxicological Expert Committee for
 (5) Evaluating Data Relating to the Substance of Marine
 Subsistence
 (6) Foods Exxon Valdez Oil Spill dated September 14 1989 true?
 (7) A Right
 (8) Q And that's what you reported to the Natives?
 (9) A It is yes
 (10) Q And you reported to the Natives that both of these groups
 (11) had concluded that the subsistence fish samples that were
 (12) tested to date were safe from a health standpoint correct?
 (13) A Yes
 (14) Q And what you explained that you meant by that was that is
 (15) the subsistence fish samples were clean and good food and
 (16) probably better than could be purchased from commercial
 outside
 (17) sources correct?
 (18) A The samples that we looked at were such yes
 (19) Q And that was the conclusion of both groups of experts?
 (20) A Yes
 (21) Q Correct?
 (22) A The first - the first study had 13 samples The second -
 (23) that was the first - first round of tests I've forgotten how
 (24) many samples a hundred or so
 (25) Q Are you suggesting there was something wrong with the first

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- (1) study?
 (2) A No I'm just - well it was extremely limited
 (3) Q So when you reported to the Natives did you say well
 (4) despite this information in the handout about these two groups
 (5) you really shouldn't listen to the first one because there were
 (6) so few samples?
 (7) A No What we told them were these were interim findings
 (8) We had a lot of confidence in these findings that if a fish did
 (9) not appear abnormal and if it didn't smell or taste of oil
 (10) that it was safe to eat We also told them that the experts
 (11) recommended that we continue to - to collect additional
 (12) samples for another year to make sure that our advice was
 (13) right
 (14) Q Dr Fall what you told them is what's written in this
 (15) handout isn't it?
 (16) A In part
 (17) Q This was distributed?
 (18) A It was distributed yes
 (19) Q It was intended to be read by the people who attended these
 (20) meetings wasn't it?
 (21) A Yes, it was
 (22) Q Now, you also told people using the same document at
 Page
 (23) 15 that shellfish were by and large okay is that right?
 (24) That quote in the opinion of the toxicologists most of the
 (25) other mussels clams and chiton samples pose no health
 problem

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- (1) because they had low levels of - I'm sorry this is unfair I
 (2) should give you the preceding paragraph
 (3) And let me start over For shellfish the results were a
 (4) little different and the conclusion of the toxicologists was
 (5) more cautious correct?
 (6) A Right
 (7) Q And what you explained to the people was that the experts
 (8) didn't know for certain if eating shellfish with light
 (9) aromatics at these levels would cause a health problem but in
 (10) their opinion there's an unacceptable risk of possibly of
 (11) getting cancer from the consuming of heavy aromatics at these
 (12) levels over time In their opinion a totally prudent person
 (13) should avoid eating shellfish with these heavy levels
 (14) aromatics correct?
 (15) A Correct.
 (16) Q That was with regard to collecting of samples from some
 (17) heavily oiled areas specifically Windy Bay correct?
 (18) A Correct
 (19) Q But a lot of shellfish were collected from other places as
 (20) well true?
 (21) A That weren't oiled right.
 (22) Q Right that weren't oiled that you were directed to as
 (23) being subsistence sites from which people Natives were taking
 (24) their shellfish correct?
 (25) A Right And they wanted to know about the safety of those

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- (1) places
 (2) Q They sure did And you told them what you knew about the
 (3) safety in this very report correct?
 (4) A Based upon those interim findings for that first year
 (5) Q Based on those interim findings and what you reported was
 (6) that in the opinion of the toxicologists most of the other
 (7) mussels clams and chiton samples pose no health problem
 (8) because they had low levels of aromatics like the fin fish?
 (9) A That's right Those clean - those samples that appeared
 (10) clean from beaches that appeared clean turned out to be not
 (11) be
 (12) accumulating hydrocarbons
 (13) Q And you explained further that this meant that in the
 (14) opinion of the toxicologists for a few of the shellfish
 (15) samples that's from heavily oiled beaches the level of
 (16) aromatics from the oil contamination was high and should be
 (17) avoided while for other shellfish samples the level was zero
 (18) or very low and posed no health problem from oil correct?
 (19) A Well what you had added there was the phrase heavily oiled
 (20) beaches and the advice from the Task Force has been to avoid
 (21) using shellfish from beaches with oil on the surface or
 (22) subsurface without really a qualification about the degree of
 (23) oiling
 (24) Q Well the samples that led to that conclusion about a few
 (25) of the shellfish being heavily contaminated were from the
 (26) samples tested from Windy Bay correct?

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- (1) A Which was a heavily oiled beach We didn't have - the
 (2) sampling procedures that we used didn't select sampling sites
 (3) for degree of oiling We chose Windy Bay because it was a real
 (4) test case for us about PAH accumulation but the - as I just
 (5) mentioned the health advice was more cautious than saying
 (6) avoiding beaches where the oil is just dripping from the
 (7) rocks It was avoid using - and it had and it still is avoid
 (8) using marine invertebrates from beaches with oil on the surface
 (9) or subsurface It's more cautious
 (10) Q It was more cautious, right?
 (11) A Yes it is more cautious
 (12) Q It is more cautious and in this same handout you attempted
 (13) to explain to the Natives what this level of contamination
 (14) meant in terms of possible health risks correct?
 (15) A Based upon what we knew at the time but yes we did
 (16) Q And you don't particularly with these heavily contaminated
 (17) mussels and clams from Windy Bay correct?
 (18) A That's what we had that's the information that we had at
 (19) the time right
 (20) Q And when you told them what all this scientific stuff
 (21) really meant you explained it on Page 16 correct?
 (22) A I don't see the page number but -
 (23) Q Oh
 (24) A Okay
 (25) Q You said another approach taken to the question is it

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- (1) safe was to compare the BaP levels that's the chemical you
 (2) were looking for correct?
 (3) A It's benzo(a)pyrene That's one of many heavy aromatic
 (4) hydrocarbons
 (5) Q It's the one that the toxicologists told you should be the
 (6) test chemical correct?
 (7) A It's the one that toxicologists had a fair amount of
 (8) information about its carcinogenic qualities There are others
 (9) that are suspected to be - also cause cancer One of the
 (10) problems that we ran into right off the bat is how poorly
 (11) toxicologists really understood the - the cancer-causing
 (12) qualities of these various high aromatic hydrocarbons This
 (13) information was - was - was presented in that - in that
 (14) context that here we know about this one benzo(a)pyrene We
 (15) don't know about other ones but let's look at this one and see
 (16) what it tells us
 (17) Q Sir you're not a toxicologist correct?
 (18) A I am not
 (19) Q You had a blue ribbon panel of some of the finest
 (20) toxicologists in the United States to advise you correct?
 (21) A We did
 (22) Q They told you the thing to check for was BaP didn't they?
 (23) A That I don't know What they told us is that the concern
 (24) over the long term is heavy aromatic hydrocarbons which
 (25) persist in the environment which are known to be carcinogenic

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- (1) at least some of them such as - such as benzo(a)pyrene and
 (2) that one of them we know about is benzo(a)pyrene so let's take
 (3) a look at that They didn't tell us to ignore the other ones
 (4) Q What did they tell you to test for sir?
 (5) A The whole range of polycyclic aromatic hydrocarbons
 (6) Q And how did they tell you to test for them? By measuring
 (7) BAPs correct?
 (8) A Well no No the tests that were done in the NOAA lab
 (9) looked at the whole range of polycyclic aromatic hydrocarbons
 (10) When you're trying to come up with some estimate or some
 (11) evaluation let's say of - of health risks what the
 (12) toxicologists had to do was move from the known to the
 (13) unknown
 (14) and they knew about the - the carcinogenic qualities of
 (15) benzo(a)pyrene so what they said is - well let's first find
 (16) out what's in there and let's figure out if we can what the
 (17) possible equivalence of the other high aromatic hydrocarbons
 (18) are to benzo(a)pyrene But no they didn't tell us to focus on
 (19) benzo(a)pyrene no
 (20) Q You didn't cut corners on this testing did you?
 (21) A No
 (22) Q You did the best scientific testing you could that's what
 (23) you testified to yesterday?
 (24) A That's what we tried to do that's right
 (25) Q BAPs is what you tested for BAPs is what you evaluated
 (26) health risks based on correct? And that's what you were doing

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- (1) in this very paragraph when you told people -
- (2) A In this -
- (3) Q - the way to evaluate it is to compare BaP levels?
- (4) A Yeah Now at this point I really need to point out that
- (5) again we're using the vague English pronoun you "I did not
- (6) present this information This information which of course we
- (7) reviewed and we thought was a good example to present to
- (8) people was presented by - by Steve Lewis a toxicologist for
- (9) Exxon and he was the - the lead on this portion of the - of
- (10) the presentation
- (11) Q Oh so this was just Exxon's idea it wasn't your idea?
- (12) A He's the one that suggested that we put this in here for
- (13) comparative purposes
- (14) Q Was it approved by the blue ribbon panel of toxicologists
- (15) from all around the country?
- (16) A I cannot tell you that I cannot tell you whether the blue
- (17) ribbon panel of toxicologists approved putting this paragraph
- (18) in our presentation
- (19) Q Do you think it was wrong? Do you think this was
- (20) misleading to the Natives who you were trying to give
- (21) information to?
- (22) A I think that this was one piece of a lot of pieces of
- (23) information that we needed to provide to people to see the
- (24) context of these studies, to place this in a context
- (25) Q And when you made your presentations did you say now

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- (1) folks this paragraph where we tell you an approach to the
- (2) question, is it safe, that's really just Exxon's idea. They're
- (3) trying to - they're trying to pretend like the stuff is safe
- (4) Did you tell them anything like that that's not the rest of
- (5) us that's Steve Lewis of Exxon talking?
- (6) A No I didn't
- (7) Q That's because you knew it was the Task Force collectively
- (8) that had approved this paper correct?
- (9) A We agreed that this should be part of the presentation
- (10) that's correct
- (11) Q And you were part of the consensus that agreed on it
- (12) right?
- (13) A Yes
- (14) Q All right. Now in this part of your presentation of
- (15) handouts that you approved you advised the people that
- (16) approach taken to the question is it safe was to compare BaP
- (17) levels in Alaskan fish and shellfish with BaP found in other
- (18) common foods correct?
- (19) A Right
- (20) Q And what you told people is that BaP isn't an unusual
- (21) chemical in fact it's found in a lot of foods correct?
- (22) A Right
- (23) Q And one place it's found is in charbroiled steaks smoked
- (24) meats smoked fish and various leafy vegetables correct?
- (25) A That's correct

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- (1) Q And these are common foods that I would venture to suggest
- (2) everyone in this courtroom has eaten from time to time
- (3) correct?
- (4) A I'm not going to make that guess Lots of people don't
- (5) like leafy vegetables but -
- (6) Q Other than the - other than the George Bushes in the crowd
- (7) who won't eat their broccoli these are common foods eaten by
- (8) people generally aren't they charbroiled steaks smoked
- (9) meats smoked fish and various leafy vegetables?
- (10) A Maybe your average American I'm not sure about people
- (11) generally
- (12) Q Okay Your average American eats those foods and what
- (13) you
- (14) were telling the people here is that the levels of BaPs in the
- (15) most heavily contaminated shellfish that you had found the
- (16) ones from Windy Bay a heavily oiled beach as you testified
- (17) yesterday even those levels were comparable still in the
- (18) range of what is commonly found in charcoal broiled steaks
- (19) smoked meats smoked fish and various leafy vegetables
- (20) correct?
- (21) A Again focusing just on the benzo(a)pyrene levels that's
- (22) what we told them
- (23) Q Now we've been focusing mostly on your food safety
- (24) presentations just up through 1989 and you've explained that
- (25) these were the preliminary results which were given to the
- (26) people based on testing known to that date correct?

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- (1) A Right
- (2) Q The toxicological expert committee published a final set of
- (3) findings in February 1990 correct?
- (4) A That's right They met again in I believe January -
- (5) maybe that was February of 1990 - and developed a set of
- (6) findings
- (7) Q And those findings were written up in written form and were
- (8) disseminated by you were they?
- (9) A Yes they were in our newsletter
- (10) Q I'm going to put before you sir, defendants Exhibit
- (11) DX2188 and ask you if these are the written findings - final
- (12) findings not preliminary findings - of the Expert
- (13) Toxicological Committee
- (14) A Yes these appear to be the findings
- (15) Q All right Now I want to focus on the first page The -
- (16) sorry I should show the title first These are the Summary of
- (17) Findings of the Toxicological Expert Committee delivered in
- (18) February 1990 The question they were addressing is based on
- (19) all available knowledge of crude oil sampling results
- (20) toxicology biochemistry and epidemiology are subsistence
- (21) foods safe for human consumption That's what the experts
- (22) were
- (23) looking at, correct?
- (24) A That was the question posed to them, that's right
- (25) Q All right And then they told on the first page what they
- (26) had done and what they had concluded The first thing they

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- (1) said was 385 analyses from 548 samples of Alaskan fish and
 (2) shellfish have been completed by the National Marine Fisheries
 (3) Service Environmental Conservation Division Is that that NOAA
 (4) that you referred to?
 (5) A That s correct
 (6) Q Based upon available data and cumulative scientific
 (7) knowledge and consistent with the conclusions reached earlier
 (8) fin fish are safe for human consumption levels of aromatic
 (9) hydrocarbons found in fin fish are very low and are similar to
 (10) levels in fish from areas unaffected by the oil spill That
 (11) was their final conclusion?
 (12) A That was their conclusion, that s right
 (13) Q They went on then to talk about shellfish They said
 (14) specimens of mollusks taken from heavily oil-contaminated
 (15) beaches for example Windy Bay showed high levels of
 aromatic
 (16) hydrocarbons shellfish tested from less impacted beaches
 such
 (17) as Chenega Bay and Old Harbor, showed the presence of
 aromatic
 (18) hydrocarbons in higher concentrations than found in
 (19) uncontaminated areas but at levels that are not considered to
 (20) represent a serious health hazard If mollusks are consumed
 (21) they should not be collected from areas that are obviously
 (22) contaminated with oil
 (23) That was their final recommendation wasn t it?
 (24) A That was
 (25) Q And now I want to address your attention to the final note

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- (1) on the page The experts said note the Alaska Division of
 (2) Public Health and Alaska Department of Environmental
 (3) Conservation for many years have advised that bivalve mollusks
 (4) should not be collected from Alaskan beaches because of the
 (5) dangers from paralytic shellfish poisoning PSP PSP
 (6) represents the greatest danger from eating bivalve mollusks
 (7) Then they go on to say commercially collected clams and
 mussels
 (8) are routinely tested for PSP and are safe for consumption
 (9) Now that was the expert toxicological - expert toxicologists'
 (10) recommendation, correct?
 (11) A Right
 (12) Q And they said the greatest danger from eating any shellfish
 (13) wasn't the oil it was paralytic shellfish poisoning correct?
 (14) A They re noting that that s the advice - well, the advice
 (15) from the State of Alaska is that PSP is a danger and they re
 (16) noting that and they re agreeing with that.
 (17) Q Not just is a danger it s the greatest danger from eating
 (18) shellfish the greatest?
 (19) A That was their conclusion
 (20) Q Greater than any risk of eating oiled shellfish which had
 (21) PAH concentrations of barbecued meat and leafy vegetables
 (22) correct?
 (23) A Over the course of the oil spill area or over the - the
 (24) entire oil spill area that is a - that is a - an accurate
 (25) statement It raises the question as to whether PSP or - or

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- (1) some kind of - of other danger would be the greatest danger in
 (2) a heavily oiled beach but over the - over the oil spill area
 (3) where we have various degrees of oiling or a lot of clean
 (4) beaches PSP is a greater danger than oil contamination based
 (5) upon these findings
 (6) Q Now let s turn to Page 2 of the expert toxicologists
 (7) findings They asked the question Are there any restrictions
 (8) on the amounts that can be eaten? And they answer the
 (9) question None no restrictions for fish and none no
 (10) restrictions for mollusks taken from beaches that have not been
 (11) obviously contaminated with oil That was their final
 (12) recommendation was it not?
 (13) A That s correct
 (14) Q And then they ask the question Can we expect to see any
 (15) acute or chronic illness in those eating subsistence foods?
 (16) And they answer their question No acute effects have been
 (17) seen in the 11 months since the spill Correct?
 (18) A Which isn t surprising given that people stopped using
 (19) subsistence foods and avoided using oiled resources and
 (20) resources from oiled areas which smelled and tasted of oil so
 (21) it s not surprising that we - we didn t encounter illnesses
 (22) from the acute effects of the spill - by acute meaning
 (23) sudden - sudden effects of the oil on the resources
 (24) Q Let s take that up in two ways sir First of all you
 (25) said people stopped eating subsistence resources That s not

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- (1) true based on the graphs that we saw yesterday is it?
 (2) A What I said, they stopped using subsistence resources from
 (3) oiled areas
 (4) MR FORTIER Objection mischaracterizes
 (5) A And resources suspected being oiled or some way affected
 by
 (6) the oil
 (7) BY MR SHAPIRA
 (8) Q Is it true that no one got sick from eating subsistence
 (9) foods?
 (10) A I don t know that to be true We do know from our
 (11) interviews that people reported to us eating resources and
 (12) later on feeling nauseous feeling sick worried about the
 (13) resources throwing away what was left of those resources
 (14) These cases were not reported immediately to health officials
 (15) and were not documented That s what this statement means
 is
 (16) that although there were - there were reports of such and such
 (17) events We don t have any official record of them
 (18) Q I see So at the time the Expert Toxicological Committee
 (19) the experts committee delivered their report they weren t
 (20) aware of any illnesses from eating oiled-
 (21) A Yes
 (22) Q But you did know of some cases?
 (23) A Well we did the interviews in January February March of
 (24) 1990 The Expert Toxicological Committee was meeting in
 (25) September and then again in February of 90 so we didn t have

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- (1) our results to pass on to them about particular cases
 (2) Q So you weren't holding out on the experts committee?
 (3) A No
 (4) Q You weren't - it wasn't a case where you knew of some
 (5) people who were sick and you decided not to tell the experts
 (6) committee because you wanted the information not to be
 public
 (7) anything like that?
 (8) A I don't know why I'd want to do that no
 (9) Q No reason you'd want to do that?
 (10) A No
 (11) Q If people had gotten sick and you knew about it you'd have
 (12) darn well told the experts committee?
 (13) A We would have informed them about what we were hearing
 (14) about yes
 (15) Q And so as of the time this report was delivered in February
 (16) 1990 you didn't know about anybody getting sick from oiled
 (17) food?
 (18) A Now again I cannot say that for certain Whether there
 (19) are reports in my notes whether there are reports in other
 (20) researchers notes or other people's notes about instances of
 (21) eating resources and feeling sick afterwards, I can't say at
 (22) this point
 (23) Q Now the experts final expert's report also gave a little
 (24) more information about the level of PAHs found in subsistence
 (25) foods as compared to what Natives were eating anyway when
 they

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- (1) smoked their subsistence food correct?
 (2) A We had two samples of smoked salmon that they looked at
 (3) Q The experts decided they ought to take a look at what was
 (4) in the food that the Natives were eating which hadn't been
 (5) contaminated with oil and so they asked for some samples of
 (6) Native smoked fish correct?
 (7) A I'm not sure who asked for those samples Those - we -
 (8) we wound up with those samples during a couple of community
 (9) meetings in I think it was Tatitlek and maybe Ouzinkie in
 (10) January - no in September or October It might have been the
 (11) experts who asked for those It might have been the lab the
 (12) NOAA lab I don't remember who asked for those two samples
 (13) Q Who knows Somebody tested Native smoked fish correct?
 (14) A That's right
 (15) Q And the purpose was to see how much PAHs they were
 getting
 (16) anyway from the foods they regularly eat irrespective of any
 (17) oil contamination correct?
 (18) A The purpose was to see what those two samples of smoked
 (19) fish had in terms of levels of PAHs If the purpose was to
 (20) find out what levels of PAHs people were ingesting from
 smoked
 (21) fish or other resources we wouldn't have just picked two
 (22) samples This was just something to take a look at and it
 (23) wasn't followed up on
 (24) Q There's only - it wasn't followed up on?
 (25) A No it wasn't

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- (1) Q It was reported in the final report of the experts the
 (2) blue ribbon experts toxicological committee?
 (3) A They reported those two samples but what I mean is that
 (4) further sampling of - of smoked salmon was not done as part of
 (5) our study So we don't know what the range is We don't know
 (6) whether these are typical whether these are outliers We
 (7) don't know
 (8) Q I only want to - I don't want to quarrel with you too much
 (9) on some of the things you've said but I only want to make one
 (10) thing clear if we can The smoked salmon that they were
 (11) testing was not oiled smoked salmon correct?
 (12) A No it wasn't
 (13) Q So this is just regular clean salmon which gets PAHs by the
 (14) process of Natives smoking correct?
 (15) A It does
 (16) Q Something the Natives have been doing for thousands of
 (17) years and continue doing to this day correct?
 (18) A They do that
 (19) Q And what the report found was the two samples of
 (20) subsistence smoked salmon prepared in a traditional manner
 (21) contained 8 170 and 22 400 parts per billion of total aromatic
 (22) hydrocarbons, respectfully By comparison levels of total
 (23) aromatic hydrocarbons found in fin fish thus far are generally
 (24) very low less than 15 parts per billion and are not
 (25) significantly greater than in the nonpolluted testing -

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- (1) nonpolluted areas tested correct?
 (2) A Those are the findings yes
 (3) Q So there is no comparison between the amount of PAHs this
 (4) potentially carcinogenic material that the Natives were putting
 (5) into their own food by smoking it and what was being
 (6) registered in tests of subsistence foods taken from oiled
 (7) areas correct?
 (8) A Right that's correct
 (9) Q Let's turn to one more finding of the Expert Toxicological
 (10) Committee on Page 3 where they advise people that any risk of
 (11) adverse health effects as a result of the oil spill from
 (12) consumption of Alaskan fish and shellfish is very small
 (13) correct?
 (14) A We told them that it's very important to read that entire
 (15) paragraph Villagers should rely on common sense and their
 own
 (16) judgment to avoid collecting foods from areas obviously
 (17) impacted by oil In addition individuals should decide based
 (18) on the appearance smell texture and taste of subsistence
 (19) foods If food is of doubtful quality it should not be
 (20) consumed
 (21) That has been our advice what we have told people What
 (22) we have tried to do as part of the Oil Spill Health Task Force
 (23) is to increase their level of knowledge As I mentioned
 (24) yesterday because of the spill people did not know what was
 (25) going on they couldn't use their own traditional methods of

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- (1) understanding their own environment We needed to let s say
 (2) empower them with information that they could incorporate into
 (3) their judgment and make decisions for themselves We weren t
 (4) trying to convince them of anything We said here s more
 (5) information use this along with common sense your own
 (6) judgment your own knowledge and make the decision with all
 of
 (7) that information in mind That was our advice
 (8) Q And evaluating food by looking at it the appearance
 (9) smelling it feeling it and tasting it was something the
 (10) Natives have been doing for thousands of years Isn t that
 (11) right?
 (12) A That is correct
 (13) MR SHAPIRA Exhibit 2223
 (14) BY MR SHAPIRA
 (15) Q Now sir just a few months later than the experts
 (16) toxicological report final report was delivered there was a
 (17) significant outbreak of paralytic shellfish poisoning wasn t
 (18) there?
 (19) A You re going to have to refresh my memory
 (20) Q I ll do it Let me see if I can put it on this
 (21) All right Now do you recognize the bulletin issued by
 (22) the State of Alaska Department of Epidemiology - bad copy of
 (23) it - July 3rd 1990 concerning the outbreak of paralytic
 (24) shellfish poisoning on the Alaska Peninsula?
 (25) A When I was reviewing predesignated documents the other
 day

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- (1) I noticed - I believe this was in the packet As far as I can
 (2) recall it s the first time I had seen it
 (3) Q Well were you unaware sir that in 1990 let me - I
 (4) rephrase it Let me rephrase that Is your memory now
 (5) refreshed that there was a major outbreak of paralytic
 (6) shellfish poisoning in 1990 from which at least one individual
 (7) died?
 (8) A You ll have to refresh my memory some more Where is this
 (9) individual and -
 (10) Q Well I ll see how well this blows up and maybe I ll have
 (11) to read it to you off a bad copy You can read that can t
 (12) you Dr Fall?
 (13) A No I cannot
 (14) Q Let s bring it down Let me give you a hard copy sir
 (15) that I think you will be able to read and so much for
 (16) technology as they say
 (17) Now sir this - the Alaska Division of Public Health
 (18) published this special bulletin in July - on July 3rd 1990
 (19) correct?
 (20) A That s what it says, yes
 (21) Q And it reported that on June 25 1990 at 9 30 p m members
 (22) of the fishing boat at sea contacted King Cove health
 (23) authorities to report that one of three crew members was very
 (24) ill from paralytic shellfish poisoning During dinner that
 (25) evening crew member consumed 25 to 30 steamed butter clams
 and

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- (1) two teaspoons of butter clam broth at 7 00 p m - and let s
 (2) skip down to the next paragraph - he died at 1 55 a m after
 (3) cardiopulmonary resuscitation was discontinued in Cold Bay
 do
 (4) you see that?
 (5) A Yes
 (6) Q And in the second column the special bulletin said
 (7) discussions with community health aids public health nurses
 (8) and hospital personnel in the Alaska Peninsula and Kodiak
 (9) Island elicited information on three additional outbreaks
 (10) involving seven individuals with illness consistent with
 (11) paralytic shellfish poisoning And then it lists seven other
 (12) cases that were suspected of being paralytic shellfish
 (13) poisoning cases on Kodiak in that time period correct?
 (14) A Right that s what it says
 (15) Q And then two paragraphs down it says this is the first
 (16) reported death due to PSP in Alaska since prior to 1976
 (17) During the 14 year period from 1976 to 1989 42 outbreaks of
 (18) PSP involving 105 individuals were documented in Alaska Of
 (19) the 42 outbreaks 23 involved butter clams Other shellfish
 (20) implicated in the Alaska outbreaks included mussels cockles
 (21) steamer clams razor clams and so forth Do you see that?
 (22) A Yes
 (23) Q And next to the last paragraph column three describes
 (24) what paralytic shellfish poisoning does to a person It says
 (25) human illness is usually characterized by onset of symptoms

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- (1) within ten minutes to several hours after ingestion of
 (2) shellfish Common symptoms include nausea vomiting -
 how d
 (3) you do that? Common symptoms includes nausea vomiting
 and
 (4) numbness and tingling around the lips and tongue which may
 (5) progress to involve the head and feet Individuals may also
 (6) experience dry mouth tightness of the throat generalized
 (7) muscle weakness slurred speech - can t read that next word
 (8) that s a medical term - and lack of muscular coordination
 (9) Floating sensation may occur coma total muscular paralysis
 (10) and respiratory arrest with death may occur Do you see that?
 (11) A Yes
 (12) Q Okay Then in a block at the bottom can you bring the
 (13) whole thing up - in that block at the bottom - I won t
 (14) attempt to highlight it but I ll read it for the record - are
 (15) the Division of Public Health s recommendations correct?
 (16) A Right
 (17) Q And recommendation number one says quote, all Alaska
 (18) beaches are at risk at all times There are no simple and
 (19) reliable tests to determine if a particular beach is safe
 (20) Individuals should not eat shellfish collected from Alaskan
 (21) beaches Do you see that?
 (22) A Yes
 (23) Q Now you know don t you sir that that is the
 (24) recommendation of the Alaska State Department of Health?
 (25) A Yes I know that s the recommendation I also know that

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- (1) the Department of Fish and Game has not - does not close
 (2) beaches to subsistence or personal use collecting of marine
 (3) invertebrates We provide people with this information and
 (4) they make up their own minds about whether they will go out
 and
 (5) harvest these resources for personal use Tens of thousands of
 (6) Alaskans do that every year
 (7) Q And some of them die don't they?
 (8) A Obviously
 (9) Q Some of them have died this year sir Isn't that correct?
 (10) A Yes there have been some deaths this year
 (11) Q Native woman from Old Harbor died this year from eating
 (12) paralytic shellfish from eating mussels contaminated with
 (13) paralytic shellfish poisoning correct?
 (14) A Unfortunately that's true
 (15) Q So although the State Division of Public Health recommends
 (16) that individuals should not eat shellfish collected from
 (17) Alaskan beaches Your Department doesn't go so far as that
 (18) you just say well take your own risk is that right?
 (19) A We tell - we tell people to weigh the risks as we do with
 (20) hunting goats on mountainsides and consider this information
 (21) and make up your mind about it
 (22) Q Now as part of your - the Task Force's effort to
 (23) communicate to Natives the information that the Task Force
 (24) learned about the safety of subsistence foods videotapes were
 (25) prepared correct?

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- (1) A Yes
 (2) Q And one of the videotapes showed Dr Nighswander who
 was
 (3) the head of the Task Force discussing the risks of paralytic
 (4) shellfish poisoning correct?
 (5) A There is a videotape where he's discussing that That
 (6) videotape unfortunately - at least the copy that I have
 (7) which was the copy distributed - does not attribute the tape
 (8) to any organization other than say that it is a - it's a
 (9) health update I believe the videotape was produced by Exxon
 (10) and Dr Nighswander does discuss PSP in that videotape
 (11) Q And it was disseminated to people for their information
 (12) correct?
 (13) A That's what I'm told
 (14) Q Okay
 (15) A By Exxon I believe
 (16) Q Let me ask -
 (17) A It wasn't the Oil Spill Health Task Force
 (18) MR SHAPIRA Let me ask for Exhibit 8171 to be
 (19) shown
 (20) (Videotape Played)
 (21) VIDEOTAPE VOICE I must remind people that the
 (22) Division of Health for the State of Alaska has a general health
 (23) advisory on all shellfish in this state because of paralytic
 (24) shellfish poisoning and it's a significant risk In the month
 (25) of August we had I believe a total of 13 cases one of which

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- (1) died from eating mussels that were exposed to paralytic
 (2) shellfish poisoning And so regardless of what the oil
 (3) levels are hydrocarbon levels are in any shellfish in the
 (4) State The - the number one recommendation is a - is an
 (5) advisory against using and eating shellfish unless they're on
 (6) monitored beaches These monitored beaches are related to
 (7) commercial harvests and they're monitored by the Division of
 (8) Environmental Conservation That's very few beaches in
 (9) Alaska Most of our beaches here are not monitored and do
 (10) carry a risk with them
 (11) As a general rule you have to exercise great caution in
 (12) eating any shellfish in the State of Alaska because - State of
 (13) Alaska because of paralytic shellfish poisoning
 (14) (Videotape Concluded)
 (15) BY MR SHAPIRA
 (16) Q Now Dr Fall you were very careful to say when I asked
 (17) you about that videotape a minute ago that was Exxon that
 (18) wasn't the Task Force right?
 (19) A Exxon produced that video It's my understanding that
 (20) Exxon produced that video It was not reviewed by Task Force
 (21) members to my knowledge and I was not asked for input on it
 (22) for example
 (23) Q You think Exxon shouldn't have done that? You don't think
 (24) that warning should have gotten out?
 (25) A Quite frankly -

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- (1) Q You don't think that warning should have gotten out to the
 (2) people of the State of Alaska?
 (3) A The warning gets out every year from the State of Alaska
 (4) Quite frankly I don't know why a discussion of PSP how it is
 (5) relevant to the discussion of oiling of beaches and the
 (6) question of - of PAH accumulation in - in shellfish From
 (7) the very start it was Steve Lewis on the Task Force who
 (8) insisted that the PSP warning be in some of our bulletins and
 (9) in - in the maps for example that we produced in the second
 (10) year
 (11) We went along with that because we don't disagree that it
 (12) is valuable information However we had a great deal of
 (13) debate about whether this was deflecting the issue and hurting
 (14) our credibility I mean why are we talking about PSP when
 (15) people want to know about oiling the beaches?
 (16) Q And you wouldn't put it in there correct?
 (17) A I would not have correct
 (18) Q You wouldn't have warned people about PSP?
 (19) A We warn people we distribute the bulletins when we go out
 (20) to communities We do it as a separate issue from questions
 (21) about oil spill contamination
 (22) Q That certainly is true isn't it because you sent a letter
 (23) to Tatitiek in which you discussed eating shellfish and you
 (24) didn't mention PSP at all correct? That was your practice at
 (25) the time?

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- (1) MR FORTIER The number please?
 (2) MR SHAPIRA DX2100
 (3) BY MR SHAPIRA
 (4) Q Now sir I m going to show you a letter on Department of
 (5) Fish and Game stationery not on the Task Force stationery
 (6) dated July 25 1991 and it s signed by you correct?
 (7) A Right
 (8) Q And Exhibit DX2100 that s a letter that you wrote and sent
 (9) to all the households in Tatitlek correct?
 (10) A That s right It looks like several of us had a hand in
 (11) writing it
 (12) Q I didn't mean to suggest you did it by yourself And in
 (13) that letter you advise the people from Tatitlek what you had
 (14) learned about food safety up until that date correct?
 (15) A That s right
 (16) Q July 25 1991
 (17) A Right
 (18) Q And you told them in community meetings newsletters and a
 (19) video the Task Force has informed people that all the fish
 (20) deer ducks seals and sea lions tested as part of the
 (21) Subsistence Program were found to be safe to eat Now is that
 (22) true?
 (23) A Yes all of the samples of - that are mentioned there are
 (24) safe to eat
 (25) Q But that people should not use clams and other shellfish

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- (1) from beaches where they can see oil on the surface or
 (2) subsurface correct?
 (3) A Right that s the advice that s the Task Force advice
 (4) Q Now you re suggesting to them there that it is okay to eat
 (5) clams and mussels from beaches that don t have any oil right?
 (6) A In terms of oil contamination that s correct
 (7) Q Then you say in the subsistence study about 1 000 samples
 (8) of fish and shellfish, 28 samples of deer 19 samples of ducks
 (9) and 144 samples of marine mammals were tested Levels of
 (10) hydrocarbons in the edible flesh were very low or
 (11) nondetectable even with very sensitive equipment This is
 (12) because fish birds marine mammals and land mammals are all
 (13) able to get rid of limited amounts of contamination in their
 (14) body Now, that was all true wasn't it?
 (15) A That s right as is the next sentence while this process
 (16) may cause added stress and potential harm to the organism it
 (17) prevents the hydrocarbons from building up and contaminating
 (18) the meat
 (19) Q So you re saying it might hurt the animal? .
 (20) A That s right
 (21) Q But it doesn t hurt the person who eats the animal?
 (22) A Who eats the meat from the animal? According to our
 (23) analysis based upon western scientific standards correct
 (24) Q I take it your concern in addressing the people of Tatitlek
 (25) here was to talk about human health hazards correct?

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- (1) A That s right That s right
 (2) Q And then you said some seals in the subsistence study did
 (3) show elevated levels of hydrocarbons in their blubber but
 (4) these samples came from seals that were heavily coated with
 (5) oil Even these levels were below those considered to be a
 (6) health risk by the federal Food and Drug Administration and the
 (7) Oil Spill Health Task Force However some of the
 (8) invertebrates tested including clams and mussels were
 (9) different because they do not have the ability to get rid of
 (10) hydrocarbons quickly They accumulate these toxins and retain
 (11) them for a long earth Therefore the Oil Spill Health Task
 (12) Force has advised people not to harvest shellfish from those
 (13) beaches where oil is still present The Task Force also advise
 (14) that if something smells bad or tastes bad it should not be
 (15) eaten
 (16) Now you were telling people here weren't you that
 (17) everything was safe to eat except clams and mussels from oiled
 (18) areas correct?
 (19) A In terms of oil contamination that s right
 (20) Q And you don t mention - now a person reading this
 (21) might - reading your letter a person from Tatitlek might
 (22) think, okay clams and mussels are fine as long as they re not
 (23) from oiled areas correct?
 (24) A That is the message in terms of oil contamination right?
 (25) Q And correct me if I m wrong sir there s not one word in

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- (1) your letter warning anybody anywhere that they could die from
 (2) paralytic shellfish poisoning if they -
 (3) A You don t have to hand it to me because no there isn t and
 (4) I ve explained that to the jury just before as to why every
 (5) time we talk about oil spill issues we don't immediately throw
 (6) in PSP We inform people about PSP People in these
 (7) communities know about PSP They have traditions about it
 (8) they want to know more information about it and they make up
 (9) their own minds about this Quite frankly, when we or someone
 (10) else such as Steve Lewis at Exxon starts talking about PSP
 (11) when he s talking - when we re addressing an oil spill issue
 (12) it really hurts the credibility of our oil spill message
 (13) People say to us you re diverting our attention from what we
 (14) really want to know about Don t tell us about PSP We know
 (15) about that Tell us about the oil spill That s what we re
 (16) doing
 (17) Q Everybody knows about PSP right?
 (18) A If that s what I said that is an over statement In
 (19) Tatitlek people know about PSP
 (20) Q Let s talk about land for a second Would anybody be
 (21) buying lands in Alaska coastal land so that they could dig
 (22) clams and mussels in light of the risk of PSP poisoning and
 (23) instant death
 (24) MR FORTIER I ll object Your Honor it s beyond the
 (25) scope

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- (1) THE COURT Objection s overruled
 (2) A I don t know I don t know why people - I mean in
 (3) general why people would buy land I don t know whether that
 (4) would - would be calculated into their decision or not
 (5) BY MR SHAPIRA
 (6) Q Based on what you know would that be a smart thing to do
 (7) to invest in coastal property so that you could dig clams and
 (8) mussels in light of the risk of instant death?
 (9) A I don t know whether I m supposed to sit here and speculate
 (10) about what I might do or what somebody might do Look as I
 (11) said before tens of thousands of people in Alaska dig clams
 (12) and use mussels and use other marine invertebrates every year
 (13) and it s fine I bet some of those people have bought coastal
 (14) property so that they could harvest marine invertebrates
 (15) weighing the risk They thought it was a good thing to do and
 (16) they wanted to do it
 (17) Q Do you dig clams and mussels?
 (18) A I have Clams
 (19) Q You have kids?
 (20) A No
 (21) MR SHAPIRA Your Honor I m going to move to another
 (22) subject now
 (23) THE COURT Do you want to take a break
 (24) MR SHAPIRA Yes that would be fine
 (25) THE CLERK Please rise this court stands in recess

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- (1) (Jury out at 10 21 a m)
 (2) (Recess taken from 10 21 a m To 10 37 a m)
 (3) (Jury in at 10 37 a m)
 (4) THE CLERK This court now resumes its session
 (5) Please be seated
 (6) BY MR SHAPIRA
 (7) Q Dr Fall we ve talked this morning about your subsistence
 (8) food test data and reporting to the villagers in 1989 and in
 (9) 1990 and in 1991 and as I believe the last exhibit I showed
 (10) you reflected results were all consistent right? Everything
 (11) was safe to eat except shellfish from oiled beaches you
 (12) recommended against eating?
 (13) A In terms of oil contamination and PAH levels that s
 (14) correct
 (15) Q Results were all consistent throughout that period?
 (16) A Yes they were yes
 (17) Q But your Department wasn t through testing yet was it?
 (18) A No
 (19) Q You applied for a grant to do still more testing in 1993
 (20) correct?
 (21) A Correct
 (22) Q And this time you weren t acting on behalf of the Task
 (23) Force the grant was just for your Department correct?
 (24) A I wouldn t put it that way no The - the work that -
 (25) what you re referring to is a - is a grant from the Oil Spill

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- (1) Trustee Council I believe I mentioned yesterday to continue
 (2) the food testing program in a limited number of sites in Prince
 (3) William Sound Lower Cook Inlet and Kodiak Island but as part
 (4) of that project the work is funneled directly into the
 (5) continuing activities of the Oil Spill Health Task Force So I
 (6) wouldn t say that the grants or the project is somehow separate
 (7) from the - from the Oil Spill Health Task Force activities or
 (8) the general umbrella of - of Task Force discussion
 (9) Q Did I misunderstand your testimony? I thought yesterday
 (10) you said your Department got the grant
 (11) A We did that s correct
 (12) Q All right
 (13) A The Oil Spill Task Force never got any sort of grant It
 (14) was an ad hoc group that met
 (15) Q Your Department got the grant to do still more testing in
 (16) 1993?
 (17) A That s correct
 (18) Q And you did still more testing correct?
 (19) A That s correct
 (20) Q And this time you - you shared your grant with the
 (21) Natives themselves right? You hired people from the Native
 (22) communities to help you collect your samples Isn t that right?
 (23) A Well that was done - yes yes and that was done in 1989
 (24) 1990 and 1991 by the Division of Subsistence and by the Exxon
 (25) crews that went out too We tried to involve local villagers

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- (1) in the work
 (2) Q You contracted out the collection of samples to a Native
 (3) organization called the Pacific Rim Villages Coalition
 (4) correct?
 (5) A We did
 (6) Q And part of the grant money that you got went to that
 (7) Native organization correct?
 (8) A That s correct.
 (9) Q And 20 local assistants in eight villages were hired to
 (10) collect still more samples correct?
 (11) A That sounds about right You re probably reading from one
 (12) of our newsletters where it gives the number I don t know the
 (13) exact number but that sound about right
 (14) Q I was reading from the speech you gave in March 1994
 (15) A Then it must be right
 (16) Q And you arranged to have the samples tested by the same
 (17) federal agency that had tested for the first three years
 (18) correct?
 (19) A We did that s right
 (20) Q And what you tested for again were those chemical PAHs
 (21) again correct?
 (22) A Correct
 (23) Q Same stuff you tested before?
 (24) A That s right
 (25) Q And that s because that s what the toxicologists told you

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- (1) to test in 1989 90 and 91 and they were still telling you
 (2) the same thing in 1993 correct?
 (3) A That s what we needed to look at
 (4) Q And you tested fish and shellfish and seals taken by the
 (5) Natives from their subsistence areas again correct?
 (6) A Yes The fish was just what s called a bile testing which
 (7) is a screening to see whether we should do the more expensive
 (8) tests With marine invertebrates it was the more detailed
 (9) testing for actual PAH levels
 (10) Q You published your results to the communities yet again
 (11) correct?
 (12) A We did
 (13) Q DX2115 November 1993 another report out to the
 (14) communities, right?
 (15) A That s right
 (16) Q And what you told the communities in 1993 - I guess I ll
 (17) have to read this one - is since 1990 the Oil Spill Health
 (18) Task Force has advised that all the fish deer ducks seals
 (19) and sea lions tested as part of the Subsistence Program are
 (20) found to be safe to eat but people should not use shellfish
 (21) from beaches where oil is still present right?
 (22) A That s correct
 (23) Q And you advised them further that samples were more -
 (24) samples had been collected in June and July of the year
 (25) correct?

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- (1) A Right
 (2) Q They had been tested by NOAA correct?
 (3) A That s correct
 (4) Q And you gave a reading of the samples correct?
 (5) A Correct
 (6) Q And you said the reference samples were collected in areas
 (7) not - I m sorry You said concentration of aromatic compounds
 (8) in all 51 samples of shellfish conducted at Chenega Bay
 (9) Karluk Larsen Bay Ouzinkie Port Graham Port Lions Tatitlek
 (10) and Windy Bay during the summer of 1993 were very low
 similar
 (11) to values generally found within samples for reference areas
 (12) correct?
 (13) A That s a quotation from the - from the lab, from the
 (14) report that the lab gave us
 (15) Q And that s what you told the villagers again right?
 (16) A It s right in the report
 (17) Q Yes sir And 'reference areas' meaning areas nowhere near
 (18) where oil hit correct?
 (19) A That s correct
 (20) Q Clean areas?
 (21) A That s correct
 (22) Q So the results you were getting from Windy Bay mussels you
 (23) tested before most heavily oiled ones you tested before
 (24) were - they weren t registering any more hydrocarbons than
 (25) mussels from totally clean areas correct never affected by

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- (1) the oil spill?
 (2) A According to this statement that s correct I d want to
 (3) look back to see just where in Windy Bay we managed to get
 (4) those - those samples that year Other samples taken in Windy
 (5) Bay continue to be elevated although the readings have gone
 (6) down over the years as you would expect
 (7) Q Well just a minute Dr Fall You mean this wasn t a good
 (8) sampling process you reported to people even though these
 (9) weren t fair samples in some way taken from Windy Bay?
 (10) A What I m saying is that we did several rounds of - of
 (11) collection in - in that year and because of weather we
 (12) didn t always get out to the sites that we wanted to All I m
 (13) saying is that I d wanted to look to see exactly where in Windy
 (14) Bay those samples came from, and I d want to see the range
 (15) of - of findings in order for me to - to evaluate the - the
 (16) statement at this point
 (17) Q So you think this statement might be a little tricky in
 (18) some way?
 (19) A Right might be a little tricky
 (20) Q Might be a little tricky But this is your statement this
 (21) is what you advised the villagers isn t it?
 (22) A This is a statement
 (23) Q This is the Department of Fish and Game Isn t it? This is
 (24) the testing program that you ran This is your report Why
 (25) would you put a tricky statement in there?

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- (1) MR PETUMENOS Could we have one question perhaps?
 (2) MR FORTIER Your Honor If we could have one
 (3) question at a time pleas He s arguing with the witness
 (4) THE COURT Sustained sustained sustained Okay
 (5) Now rephrase the question
 (6) BY MR SHAPIRA
 (7) Q Did you put a tricky statement in your report to the
 (8) villagers?
 (9) A No What I was saying is that In order for me sitting
 (10) here with the data in front of me I d want to look at that
 (11) data before I really made a lot of statements about that
 (12) particular quotation from that particular report
 (13) Q And then still more newsletters in February 1994 -
 (14) defendants exhibit 5925 - that s another one of your reports
 (15) right?
 (16) A That s correct
 (17) Q Is this a tricky one or a straight one?
 (18) A Excuse me?
 (19) Q Are there any tricky statements in this one?
 (20) A No sir
 (21) Q Now sir, you reported in this one 1994 samples of
 (22) shellfish were taken from the subsistence use areas of Chenega
 (23) Bay Tatitlek Port Graham Nanwalek Larsen Bay Ouzinkie
 and
 (24) Port Lions Bad weather prevented the collection of samples of
 (25) the subsistence use areas of Karluk and Akhiok and also

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- (1) prevent sampling crews from going to Windy Bay on the Kenai Peninsula and Delenia Island near Chenega Island and this time
- (3) you couldn't get to Windy Bay that was the next time When
- (4) you said maybe there was a weather problem on the last exhibit
- (5) you really confused the two correct?
- (6) A Maybe
- (7) Q Okay Now what you told people about the reports were
- (8) that according to NOAA concentrations of aromatic
- (9) contaminants in these mollusk samples were very low and did not
- (10) differ substantially from those found in samples from reference
- (11) areas That's what you'd been telling people for a long time
- (12) correct?
- (13) A From the unoiled beaches the clean beaches correct
- (14) Q No no no You mean the reference areas are the clean
- (15) beaches These were the samples that you took of shellfish
- (16) from the subsistence use areas of Chenega Bay Tatitlek Port
- (17) Graham Nanwalek Larsen Bay Ouzinkie and Port Lions That's
- (18) what you were testing right?
- (19) A That's right And these were beaches that did not exhibit
- (20) in 1993 visible signs of oiling so this is consistent with
- (21) what we've been telling people all along
- (22) Q Right consistent with what you've been telling people
- (23) since 1989
- (24) A That's correct About - about those particular kinds of
- (25) beaches

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- (1) Q And you also told them on the next page you talked about
- (2) seals right? You said that according to Dr Usha Varanasi is
- (3) she from NOAA?
- (4) A She is that's correct
- (5) Q Director of the lab where the tests were done the
- (6) concentrations of aromatic compounds in these harbor seal
- (7) samples were very low and did not differ substantially from the
- (8) method blanks Now sir method blanks means seals taken
- (9) from areas that were nowhere near any oil ever correct?
- (10) A No I thought we had a definition of method blank in
- (11) there It's explained in the next couple of sentences what a
- (12) method blank is It's some kind of reference sample It's not
- (13) an unoiled seal it's some other kind of - of thing that they
- (14) run through
- (15) Q It's the kind of PAH reading you get from a clean test
- (16) tube isn't it?
- (17) MR FORTIER Your Honor if he could finish his -
- (18) his statement
- (19) THE COURT I think he is finished counsel Go
- (20) ahead
- (21) A Yes it's a way it's a method that the lab uses to develop
- (22) something to compare with
- (23) BY MR SHAPIRA
- (24) Q Method blank is clean right no oil pollution?
- (25) A That's right

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- (1) Q All right And then you said a level of hydrocarbons found
- (2) in the blubber samples from the seals was as low as the levels
- (3) found in the method blanks which is to say very low or
- (4) background levels so low as not to be a concern for people
- (5) eating meat or using blubber from these seals Correct?
- (6) A That's correct
- (7) Q I know you'll be relieved to hear I'm done with testing
- (8) You talked about the seasonal round as you called it of
- (9) harvest activities You presented in your direct testimony a
- (10) very elaborate chart showing horizontal bars of when during
- (11) each period of the year different things were harvested in the
- (12) villages and I just want to make sure that you didn't mean to
- (13) say that that's different now than it was before the oil
- (14) spill You didn't say that in your direct testimony did you?
- (15) A I did not no
- (16) Q Let's talk about 1989 the year that the harvest declined
- (17) to that deepest trench we had in our bar graphs that I showed
- (18) you the first day One of the reasons the harvest declined was
- (19) because the oil spill generated a tremendous amount of
- (20) clean up
- (21) work at very high wages which the people in the Native
- (22) villages took and which took away from their subsistence
- (23) harvesting time Isn't that right?
- (24) A No No I disagree with that as a conclusion about the
- (25) major causes of declines in subsistence uses in the year after
- (26) the spill It is true that when we asked people why did your

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- (1) harvests go down in 1989 a fair number of people especially
- (2) in a couple of villages Port Graham and Nanwalek did site oil
- (3) spill work and the time that they spent cleaning up beaches as
- (4) a reason why they couldn't go subsistence fishing and
- (5) subsistence hunting Most of those people also cited a
- (6) contamination concern along with that - that time restraint
- (7) The reason I - another reason that I reject that
- (8) explanation for - for decline is that it suggests that there's
- (9) a trade-off that people were making a - a decision well
- (10) let's not go subsistence fishing this year let's go make a lot
- (11) of money and that is not consistent with - with our
- (12) findings It wasn't a trade-off People had in our view no
- (13) choice but to clean up that oil They were obligated to do
- (14) it. They live off of those beaches and off of those waters
- (15) What else could they do but clean it up?
- (16) Q You're becoming a real veteran at this sir because you
- (17) already knew what document I was going to show you didn't
- (18) you? You referred to Nanwalek and English Bay and the
- (19) reports
- (20) of why people said they weren't working on the oil spill and
- (21) that's what you had in mind when you gave that answer wasn't
- (22) it?
- (23) A I didn't have the document in mind but I have to admit
- (24) I've heard this argument before
- (25) Q You reviewed the document when we pre-designated it didn't
- (26) you? Exhibit 2064 It's a letter from Ron Stanek to Jim Fall

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- (1) about exactly this subject You reviewed that perhaps within
 (2) the last couple days?
 (3) A I did look at that the other day
 (4) Q In that document on September 15 1989 Ron Stanek who is
 (5) the one who did do the fieldwork and did do the key informant
 (6) interviews in Port Graham and English Bay he told you what he
 (7) had learned correct?
 (8) A Well let s remember that the systematic household surveys
 (9) where we collected the detailed information from most of the
 (10) people in that community about their reasons and about their
 (11) concerns were done in early 1990 The document that you are
 (12) showing now I don t see the date, but it s a 1989 document
 (13) which is early in - in our trying to - to respond to the
 (14) spill September 1989 and it - it presents an early
 (15) description of what was going on and some suggestions about
 -
 (16) about the - the oil spill and what it was doing to those
 (17) communities It doesn t represent an analysis of our
 (18) information or a technical paper or something that was reviewed
 (19) by me for - for more public distribution or by our research
 (20) director for accurate analysis
 (21) Q That s exactly correct You hadn t had a chance to go over
 (22) this one change the conclusion process it a little put it in
 (23) different words This is just the raw report to you from your
 (24) person doing fieldwork about what the people in the village
 (25) told him correct?

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- (1) A At that point a few of the people - and again he himself
 (2) - did not have the benefit of the additional work that he did
 (3) with most of the households in those communities in January
 and
 (4) February of that year
 (5) Q Let s see what he told you in September 89 shall we?
 (6) He said the following tables include data I collected from
 (7) harvest calendars most of the information was from recall and
 (8) is since not all households bothered getting calendars because
 (9) they didn t go fishing Normally I would anticipate a somewhat
 (10) larger harvest to occur in September since people have the time
 (11) to go fishing However with the large shipment of fish from
 (12) Cordova most people will have what they need
 (13) Now let me stop for a second What was he talking about
 (14) the large shipment of fish from Cordova?
 (15) A I m not exactly sure but there were food sharing programs
 (16) that occurred the year of the spill facilitated by a number of
 (17) organizations including Exxon
 (18) Q Cordova was a village - is a town in which there are many
 (19) Natives people from Eyak and they had access to a completely
 (20) unrolled highly productive salmon fishery in the Copper River
 (21) correct?
 (22) A That s correct
 (23) Q And they supplied lots of salmon to the people of English
 (24) Bay and Port Graham and the people from English Bay and Port
 (25) Graham didn t have to catch as much as a result isn t that

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- (1) correct?
 (2) A I m not sure it was lots I don t know what we mean by
 (3) lots They sent salmon there It was - it was not one or
 (4) two fish They did supply people with fish and therefore
 (5) people did not have to take the risk of - of harvesting fish
 (6) that they were suspect of
 (7) Q Now when your man in the field told you however with the
 (8) large shipment of fish from Cordova most people will have what
 (9) they need what do you mean when you say you don t know if it
 (10) was a lot? Did you not believe what your man was telling you
 (11) it was a large shipment and the people from Port Graham and
 (12) English Bay had what they needed as a result?
 (13) A Okay It was a large shipment correct
 (14) Q And the people had what they need?
 (15) A That s what he concluded at that time
 (16) Q Okay To continue when I collected the calendars I asked
 (17) each person why they did not go fishing Overwhelmingly
 those
 (18) who did not go said they were working Some said they were
 (19) afraid of the contaminated fish A few were gone commercial
 (20) fishing A few households gave more than one reason for not
 (21) fishing and these are their immediate responses and then he
 (22) lists the responses and you understood three the number there
 (23) to be the number of people who gave him the following
 response?
 (24) A Looks like it
 (25) Q Three people didn t fish because there were no red salmon

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- (1) and they wanted reds right? That s what he told you?
 (2) A That s what he says
 (3) Q Two people said, I was commercial fishing this month
 (4) right?
 (5) A Right
 (6) Q One said I had brand new nets and didn t want to get them
 (7) fouled in the oil nets cost about \$700 assembled and so
 (8) forth So let s count that as they were afraid of the oil
 (9) That s one response of somebody afraid of oil correct? Isn t
 (10) that fair?
 (11) A That s one
 (12) Q That s one Okay two people said my boat was on charter
 (13) to Exxon and I did not have the time to go fishing Let s
 (14) count that as two people who said they were busy working on
 (15) spill cleanup and couldn t fish is that fair?
 (16) A Sure
 (17) Q Okay 34 people said I was working for Veco on the
 (18) cleanup Now you understand Veco was the clean up
 contractor?
 (19) A That s correct
 (20) Q So these were Natives who were out earning wages to clean
 (21) up the beaches correct?
 (22) A I cannot say they were all Natives Remember we do talk
 (23) to all people or all households in the community I think it
 (24) is fair to say the majority of these were probably Native
 (25) people

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- (1) Q Aren't Port Graham and English Bay overwhelmingly Native
(2) communities?
(3) A 80 percent
(4) Q So I get those 34. Now 34 plus the two I had is 36 people
(5) who said it was because they were working on the spill cleanup
(6) right? Fair enough?
(7) A Right
(8) Q One I had no equipment to go fishing. Ten I was afraid
(9) of the contamination, told not to eat the fish. So that's ten
(10) people along with the ones on top who were afraid of oil
(11) right?
(12) A That said that in this context, right.
(13) Q That said that to your man in the field?
(14) A Uh huh.
(15) Q Right?
(16) A Right.
(17) Q And one I went to school part of the summer. One I worked
(18) for the Village Council on the oil spill. I don't know who to
(19) count on that one. I'll give them to you. That's 12 people
(20) now because of the oil spill. One I was pregnant, one I fished
(21) but put up lots less than normal because I was not sure of the
(22) results of the oil spill. Now you have 13. One worked on the
(23) hatchery program. One fish were being sent into the village
(24) and we were scared of the oil and told not to eat anything off
(25) the beach. That's another one for you which is - I lost

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- (1) count about 15 people said it was because of the oil and
(2) concerns about contamination, but 36 people said it was
(3) because
(4) they were working on the spill, right?
(5) A Yeah. I guess what I don't know from this memo is how many
(6) he actually talked to. Some of those 34 may also be
(7) represented in your 15, so there could be more than one
(8) response. That was often the case where at least later on
(9) where if a person responded why - or responded to the
(10) question, why did your harvests go down, they would say, well
(11) I was working, but I was also concerned about contamination.
(12) Q So my categories may overlap. I have at least 34 people
(13) though, wouldn't you say?
(14) A It has to be at least 34.
(15) Q Has to be at least 34?
(16) A That's right.
(17) Q And some of your categories may have to overlap, too, don't
(18) you think?
(19) A That's correct.
(20) Q The one who had brand new nets and the ten afraid of the
(21) contamination and the one who said they were told not to eat
(22) anything off the beach, they may overlap?
(23) A I don't think so, but -
(24) Q Your categories don't overlap, but mine do.
(25) A What I'm saying is that those are statements about oil
contamination that I don't think he would have separated out

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- (1) that way
(2) Q Now, given that I have at least 34 and you have at most 15
(3) it was fair to say, as Mr. Stanek told you, that when he
(4) investigated this question out in the field, overwhelmingly
(5) those who did not go said they were working, right? That's why
(6) they didn't fish then?
(7) A That's one of the reasons that they didn't fish. That's
(8) right.
(9) Q Overwhelmingly, the largest response that he heard from the
(10) people of Port Graham and English Bay, correct?
(11) A In that - in that particular survey. And then again, when
(12) we interviewed people about this particular subsistence
(13) activity later on, again people were consistent and brought up
(14) the reason of - of being busy cleaning up the oil.
(15) Q Your Division - I believe you said on direct yesterday
(16) one of the things that you've been studying is the relationship
(17) of wage income to subsistence harvests, correct?
(18) A I don't know whether I talked about that in direct or not
(19) yesterday.
(20) Q But it's true, isn't it?
(21) A Well, the Division itself has produced some studies, some
(22) reports that look at that question.
(23) Q Who's Robert J. Wolf?
(24) A He's the Research Director for the Division of Subsistence.
(25) Q Where does he stand on the hierarchy at your Division, does

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- (1) he report to you or vice versa?
(2) A Neither. He's off to the side.
(3) Q Off to the side?
(4) A Yeah.
(5) Q Now, he published a major study in an academic journal
(6) comparing how much income is made in a community and how
(7) much
(8) they subsistence harvest, didn't he? It's called the Wolf
(9) Locker Study?
(10) A Is this the one that's published in Arctic Anthropology?
(11) Q Yes, sir.
(12) A That's right.
(13) Q That's an academic journal -
(14) A It is.
(15) Q - of high repute among anthropologists?
(16) A I would say so.
(17) Q And to get an article published there, do you have to have
(18) it refereed? Do you have to have it reviewed by groups of your
(19) peers?
(20) A It's peer reviewed, that's correct.
(21) Q Peer reviewed. And in that article Dr. Wolf, who is
(22) alongside of you somewhere in the Division, concluded that for
(23) every thousand dollars more a community earns in cash income
(24) per person, their subsistence harvest decreases by 8.4 pounds
(25) correct?
A If you're reading from the article, yeah, I think that was

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- (1) his finding that -
 (2) Q When I wrote my outline I was reading from the article
 (3) Right now I m just reading from the outline That was his
 (4) finding wasn t it?
 (5) A He did find a relationship at the community level between
 (6) monetary income and size of subsistence harvests
 (7) Q The more money that s earned by a community the less
 (8) subsistence they do on average right? That s what he found?
 (9) A He found that in a sample of communities throughout Alaska
 (10) that that was true in a general sense and you found - we
 (11) found the largest incomes were in urban Alaska such as
 (12) Anchorage and Kenai and Homer and places like that while in
 (13) rural Alaska incomes year in year-out are generally small and
 (14) there is indeed a strong relationship between the size of the
 (15) subsistence harvests in these communities with low incomes in
 (16) contrast to the low subsis - relatively low harvests in
 (17) communities with high incomes
 (18) Q And that s because people in the high income communities
 (19) have jobs right? And there aren't many jobs available in the
 (20) small rural isolated villages out in the middle of Prince
 (21) William Sound?
 (22) A Year in year-out that is the case And what he was doing
 (23) in that article was developing a contrast between the mixed
 (24) subsistence/cash economies of these small communities which
 as
 (25) I pointed out yesterday do have scare jobs and relatively low

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- (1) incomes and what we call the industrial capital economy of
 (2) places like Anchorage and Fairbanks and Juneau where
 people
 (3) most people do work and do have higher incomes and you do
 find
 (4) lower resource harvests in those places with high incomes
 (5) year in year-out
 (6) Q And Kodiak for example that s a sizable city people have
 (7) jobs people earn higher incomes on average than they do in
 (8) Karluk or Larsen Bay or Old Harbor or Ouzinkie isn t that
 (9) correct?
 (10) A It s a safe statement or a correct statement that Kodiak
 (11) has a more developed cash economy than do those smaller
 (12) communities
 (13) Q And people earn more money there?
 (14) A On average they do
 (15) Q And that explains why the purple bars on this chart are
 (16) shorter than the bars shown for the isolated villages doesn t
 (17) it?
 (18) A No it does not No Bob Wolf did not conclude that
 (19) income was the sole or even the major cause of size of
 (20) subsistence harvests In fact the best predictor of the size
 (21) of a subsistence harvest for a community is the proportion of
 (22) that community that s Alaska Natives The real driving force
 (23) behind subsistence harvests isn t income It isn t jobs it s
 (24) ethnicity and it s culture and that s what he concluded
 (25) Q Not in the published Wolf Locker report?

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- (1) A He certainly did sir If you look in there you will see
 (2) that he concludes that the strongest relationship between
 (3) community subsistence harvest size is with percent Alaska
 (4) Natives He also found that there is this relationship between
 (5) income and subsistence harvests That is because most Alaska
 (6) Natives live in rural areas where there are not a lot of jobs
 (7) Q And he found - this time I am looking at his article -
 (8) quote a community s resource harvest decreased by 8 4
 pounds
 (9) for every thousand dollar increase in the community s mean
 (10) taxable income per income tax return correct?
 (11) A Again that is correct He did find a relationship But
 (12) the strongest predictor was ethnicity
 (13) Q Now when the - withdraw that
 (14) The four communities that you ve discussed as being hard
 (15) hit by the oil spill and having their subsistence harvests drop
 (16) off are Chenega Bay Tatitlek English Graham - English Bay
 (17) and Port Graham correct?
 (18) A Those are the ones we discussed yesterday There are
 (19) others but those are the ones we discussed yesterday
 (20) Q Those are all low income communities aren t they?
 (21) A Year in year-out they are low income communities yes
 (22) Q Not many jobs?
 (23) A There are not many jobs
 (24) Q And that s one of the reasons that people rely so heavily
 (25) on subsistence isn t it?

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- (1) A It is one of the reasons yes
 (2) Q I d like to read to you a deposition of James Kvasnikoff
 (3) from page 19 Mr Kvasnikoff was pointed as the spokesman for
 (4) the village of English Bay
 (5) MR FORTIER Your Honor if I - I d like to enter an
 (6) objection
 (7) MR SHAPIRA From a 30(b)(6) deposition taken in the
 (8) case
 (9) MR FORTIER I d like to enter an objection Your
 (10) Honor
 (11) First of all if this is being used as an impeachment
 (12) document I think that s improper It goes outside the scope
 (13) of direct testimony It s also irrelevant
 (14) THE COURT You re not impeaching him are you? He
 (15) agreed to that
 (16) MR SHAPIRA He said it s one of the reasons and the
 (17) witness who was officially designated
 (18) THE COURT Show him the document first
 (19) MR FORTIER Your Honor if we could approach the
 (20) bench for just a moment
 (21) THE COURT One of you is up here so I guess both of
 (22) you
 (23) MR FORTIER Thanks
 (24) (At side bar on the record)
 (25) THE COURT This is a -

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- (1) MR SHAPIRA It's a 30(b)(6) deponent produced by the
 (2) native village of English Bay for deposition. It was a village
 (3) document. He was testifying on behalf of the village.
 (4) THE COURT Okay. You can use it.
 (5) MR FORTIER Your Honor, if I could be heard for just
 (6) a moment.
 (7) THE COURT No counsel. I understand the objection.
 (8) It's overruled.
 (9) (Sidebar concluded).
 (10) BY MR SHAPIRA
 (11) Q Now sir, Mr. Kvasnikoff, who was the designated spokesman
 (12) for his village of English Bay, testified as follows during his
 (13) deposition:
 (14) Question: If the oil spill hadn't happened, how many
 (15) adults would have paying jobs in the summer of 1989?
 (16) Answer: Probably none of them.
 (17) Question: Was there not much employment available in the
 (18) village of Nanwalek?
 (19) Answer: The village of Nanwalek is a real low income
 (20) community. That is why subsistence is depended on for
 (21) survival.
 (22) Now, do you have any reason to doubt the accuracy of what
 (23) Mr. Kvasnikoff, the spokesman of the village, said under oath?
 (24) A Oh, no, not in terms of his pointing out that one of the
 (25) reasons why people in these small communities with mixed

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- (1) adult who didn't have some other full time job?
 (2) And he answered, I wouldn't say didn't have some other
 (3) full time job, because a lot of people who had full time jobs
 (4) left their jobs because the pay rate was a lot higher.
 (5) So Mr. Kompkoff was saying that in his village, everybody
 (6) who was able bodied worked on that oil spill, and some left
 (7) other jobs because the pay offered on oil spill cleanup was so
 (8) high, isn't that right?
 (9) A I wouldn't dispute his statement.
 (10) Q You wouldn't dispute that?
 (11) A No.
 (12) Q Now, if people left their own full time jobs or their own
 (13) - other employment to take the opportunities to earn high
 (14) wages on spill cleanup, doesn't it make sense to you that they
 (15) would also have walked away from doing subsistence activities
 (16) that year, going out hunting and fishing in order to take this
 (17) one time opportunity to earn extremely high wages?
 (18) A Well, as I explained before in my view, it was an
 (19) obligation there to clean up the beaches and the waters, and we
 (20) know that before the oil spill cleanup got really underway and
 (21) those high wages were available - or alleged high wages -
 (22) that people started doing this on their own, that - that there
 (23) was voluntary work to try to deal with the oil spill before
 (24) the - before the wage war started.
 (25) Q They didn't do it for the money, you think?

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- (1) subsistence/cash economies depend so much on subsistence
 is the
 (2) poorly developed cash sector. That is - that is certainly a
 (3) major reason why subsistence is important there.
 (4) If you asked Mr. Kvasnikoff, do you use subsistence because
 (5) you're an Alaska Native, of course he would have said yes, and
 (6) I've heard this many times in - in public forums before
 (7) regulatory boards, that Alaska Native people point out that
 (8) even if they do make money, they go subsistence hunting and
 (9) fishing because it is so important to them culturally.
 (10) Q Now it's true, isn't it, sir, that virtually every
 (11) able bodied adult in the village of Tatitlek got a high paying
 (12) job working on oil spill cleanup in the summer of 1989?
 (13) A I can't testify to the truth to that statement.
 (14) Q Okay. Let me then show you some testimony also given on
 (15) behalf of the village of Tatitlek by its officially designated
 (16) representative, Gary Kompkoff, who is the Chief of the
 (17) village.
 (18) Mr. Kompkoff was asked in his deposition of the people who
 (19) were living in Tatitlek before the oil spill about how many of
 (20) those people went to work on the oil spill clean up crews after
 (21) the spill. And he answered, after asking a question of his
 (22) own, I don't have exact numbers. Again, I could say that
 (23) almost every person who could, did go to work on the clean up
 (24) effort.
 (25) Question: And by that do you mean almost every able bodied

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- (1) A Given that people could not subsistence hunt and fish that
 (2) year because of the concern about contamination, it was very
 (3) important for them to earn money to develop some kind of
 (4) alternative food source to make up for it.
 (5) Q Isn't it true, sir, that the people in the village of
 (6) Tatitlek fought to keep the jobs to themselves and turned away
 (7) other workers who were showing up from all over Alaska to try
 (8) to get these high paying jobs?
 (9) A I have no knowledge of that.
 (10) Q Well, let me show you some more deposition testimony from
 (11) Gary Kompkoff, given on behalf of the village of Tatitlek.
 (12) MR FORTIER Your Honor, could we approach the bench
 (13) again, please?
 (14) THE COURT Sure, sure.
 (15) I don't need this on the record.
 (16) (Side bar conference off record).
 (17) BY MR SHAPIRA
 (18) Q What was the relative - withdraw that. Was there more
 (19) cash income earned by villagers in Tatitlek, Chenega Bay,
 (20) English Bay, and Port Graham in 1989 than ever before?
 (21) A I don't know.
 (22) Q Was there more cash income earned by villagers in Tatitlek,
 (23) Chenega Bay, Port Graham and English Bay than in a typical
 (24) year?
 (25) A I think it's fair to say that in the year of the spill, the

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- (1) average incomes in those communities rose compared to the -
 (2) the general level of income in the 1980s
 (3) Q It rose a lot didn't it?
 (4) A What do you mean by a lot?
 (5) Q Tens of thousands of dollars per person on average
 (6) A I've never seen data to demonstrate that not by tens of
 (7) thousands of dollars per person
 (8) Q What do you think the average increase was counting boat
 (9) charters and wage income at 16-some dollars an hour?
 (10) A The only way I can - I can answer that is looking at our
 (11) own information from what we collected from people about their
 (12) incomes in 1989 and then comparing them to more re - that
 (13) we've collected and what we have found is that for the most
 (14) part incomes in 1989 when looked at per person dollars per
 (15) person were much higher in 1989 than in more recent years
 and
 (16) I think it is reasonable to attribute that to the - the oil
 (17) spill clean up work that occurred that year
 (18) Per capita it's not on the order of tens of thousands of
 (19) dollars but it is some - sometimes double what we see now I
 (20) don't have the data in front of me I did not study it before
 (21) coming here but it is a - it is a fair statement to say in
 (22) most communities incomes were higher in 1989 perhaps
 overall
 (23) by a factor of two compared to now
 (24) Q Factor of two means doubled?
 (25) A It doubled That is based upon my memory right now of

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- (1) our - of our information which I don't have in front of me
 (2) Q Now considering for a moment your colleague on the side
 (3) Robert Wolf's analysis that as income goes up subsistence
 (4) harvests go down have you done any analysis of the degree to
 (5) which the drop in subsistence harvests in 1989 was due to the
 (6) fact that people were making twice as much money at
 high paying
 (7) jobs than they had before?
 (8) A No because Wolf's article does not suggest that there
 (9) would necessarily be such a relation- - a causal relationship
 (10) that simply because in one year, people made a lot of money
 (11) that they abandoned their traditional foods
 (12) Q The answer is then you didn't consider that?
 (13) A Because it - because it is not consistent with our
 (14) understanding of these kinds of - of communities indeed in
 (15) any particular year if there is a windfall kind of - of
 (16) income opportunity in a community it's not unusual to find
 (17) people investing in subsistence equipment and harvesting as
 (18) much or perhaps even more subsistence foods What Dr Wolf
 (19) concludes is that over the long term, let's say an oil spill
 (20) happened every year and people were out there cleaning up
 the
 (21) oil every year and making \$16 an hour every year perhaps then
 (22) we would see a reduction of some level in subsistence harvests
 (23) as a certain amount of substitution occurred One year a
 (24) windfall back down again no not separate from other kinds of
 (25) factors

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- (1) Q You make an interesting point and I'd like to digress to
 (2) follow up on it You said that if people make a lot of money
 (3) in one year it might help the subsistence right?
 (4) A It certainly might
 (5) Q Because they might go and use that money to buy new
 boats
 (6) correct?
 (7) A It happens
 (8) Q New nets correct?
 (9) A It happens
 (10) Q New rifles?
 (11) A Yes
 (12) Q New outboard motors?
 (13) A They invest in subsistence equipment
 (14) Q And invest in subsistence and that helps them with their
 (15) future subsistence harvests doesn't it?
 (16) A It very well might
 (17) Q And you know that that happened after 1989 in the villages
 (18) don't you? Because that's been reported to you by your field
 (19) workers?
 (20) A Yes it has People have invested some of the money they
 (21) made that year in subsistence equipment
 (22) Q Now I want to show you another memorandum from Mr
 Stanek
 (23) that was copied to you in December of 1989 It's DX2083
 (24) Now sir do you recognize Mr Stanek's initials on that
 (25) December 1 1989 memorandum?

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- (1) A Yes
 (2) Q And you received a copy of the memorandum is that
 correct?
 (3) A Yes I did
 (4) Q In that memorandum Mr Stanek reported to you that a large
 (5) quantity of salmon was sent to both villages and he means
 (6) English Bay and Port Graham doesn't he?
 (7) A That's correct yes
 (8) Q By the Chugach Regional Corporation Inc in order to ease
 (9) the effects of the oil spill There was about 15,000 pounds
 (10) sent to Port Graham and a similarly large amount sent to
 (11) English Bay you see that?
 (12) A Yes
 (13) Q Remember we quibbled a while before as to whether this was
 (14) a pretty darn big shipment of salmon
 (15) A Uh huh
 (16) Q That's pretty big isn't it?
 (17) A If correct yeah I mean if there's a - what 150 people
 (18) in each of those communities that's 100 pounds per person
 (19) Q A hundred pounds of salmon a person?
 (20) A Uh huh
 (21) Q Evidently These fish helped fill a large portion of the
 (22) village's fish needs and therefore many fishermen reported
 (23) that they did not feel the need to utilize the fall salmon
 (24) fisheries more extensively Had these fish not been sent from
 (25) outside the area there might have been a larger harvest of

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- (1) salmon and goes on because there was almost no halibut
 (2) fishing by either village owing to the oil spill cleanup
 (3) activity and the unknown edibility of halibut
 (4) Now my question for you first of all that was
 (5) Mr Stanek's report to you correct?
 (6) A That's right
 (7) Q When you talked your direct testimony about the drop in
 (8) subsistence harvesting in 1989 in many of these villages you
 (9) were only counting the fish and other wildlife that the Natives
 (10) harvested for themselves right?
 (11) A That is correct yes
 (12) Q All right So this 15 000 pounds per village or 100
 (13) pounds per person roughly that was in your data?
 (14) A It's not It's not included in the bar charts no
 (15) Q And the reason according to Mr Stanek that the villagers
 (16) didn't have a bigger harvest of salmon themselves was because
 (17) they had all the salmon they could use from this contributed
 (18) food correct?
 (19) A That's right That it made up for the lost opportunity
 (20) that they had had earlier and they had this food there and
 (21) they didn't have to harvest salmon which they may have
 (22) suspected of being unsafe but in any case this is his
 (23) conclusion and this is his interpretation
 (24) Q And the amount of contributed food - and you know don't
 (25) you that there was contributed food to many of the villages at

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- (1) issue in this case?
 (2) A Yes there was
 (3) Q The amount of contributed food is nowhere reflected in
 (4) those bar charts on your - showing your harvest statistics
 (5) correct?
 (6) A It is not because it would have been quite misleading to
 (7) include that given what we're trying to do is compare
 (8) subsistence activities before and after the spill And to
 (9) include the amount of food contributed from whatever source
 (10) would have been inconsistent with our - with our methods
 (11) Q You know don't you that nobody in any of these Native
 (12) villages went hungry in 1989?
 (13) A People went hungry for subsistence foods People have told
 (14) us that
 (15) Q You mean -
 (16) A Traditional foods
 (17) Q Maybe someone forced them to eat steak and roast beef for a
 (18) period of time in 1989 instead of seal and salmon is that what
 (19) you mean?
 (20) A I mean that people didn't have their traditional foods
 (21) available and they had to substitute other food for the
 (22) traditional foods
 (23) Q When I said nobody went hungry what I meant to say is
 (24) nobody didn't have enough to eat isn't that right?
 (25) A Well if you say that's what you meant I guess it's

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- (1) right But when I respond to a question like that I must
 (2) respond to it based upon my knowledge of these communities
 and
 (3) my role as a cultural anthropologist and my interpretation of
 (4) what hungry means and it carries a much wider connotation for
 (5) me and for these people than what you're suggesting
 (6) Q All right So if - if I want to go have Thai food for
 (7) dinner tonight and I discovered oh gosh it's Tuesday the
 (8) Thai restaurant is closed I have to have Chinese food and I
 (9) fill up on Chinese food According to your definition I'm
 (10) still hungry is that right?
 (11) A No
 (12) Q I'm hungry for Thai food?
 (13) A No not at all
 (14) Q Nobody went hungry in these villages in the sense that they
 (15) didn't have enough nourishment or food to eat did they in the
 (16) year 1989?
 (17) A As far as I know given the qualifications that I've
 (18) already stated no
 (19) Q It's true isn't it that harvests of seal and sea lions
 (20) throughout the region affected by the oil spill had been in a
 (21) long term period of decline beginning more than ten years
 (22) before the oil spill?
 (23) A We can say that for some communities I'm not sure I can
 (24) say that there had been a ten year period of decline in all -
 (25) all the communities of the area Certainly there was some

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- (1) which harvested more in the early 80s than the later 80s
 (2) Q Well let's see what you said about this in your
 (3) deposition sir Page 394
 (4) You were asked Dr Fall Are you aware as to whether or
 (5) not there has been a sharp population decline in marine
 mammals
 (6) throughout the Gulf of Alaska during the last decade?
 (7) And you answered During the entire - within the entire
 (8) Gulf of Alaska the biologists have concluded that there has
 (9) been a substantial drop in the populations of harbor seals and
 (10) sea lions over the last decade
 (11) Now that was true when you said it in deposition wasn't
 (12) it?
 (13) A That's right and I was responding to a different question
 (14) than you just asked You asked about harvest levels I was
 (15) responding there to population levels
 (16) Q Harvest levels you're not so sure about?
 (17) A I'm not sure about
 (18) Q So the people might have been killing them at the same
 (19) rate even though there was a sharp long term decline in
 (20) population is that what you're saying?
 (21) A What I'm saying is that if a particular population does
 (22) decline people can invest more time and effort to maintain a
 (23) subsistence level that is consistent with - with their needs
 (24) Q But you know don't you that the harvests too have been
 (25) in a long term decline not just the populations?

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- (1) MR FORTIER Let me know what page you re on
 (2) counsel?
 (3) MR SHAPIRA 339
 (4) BY MR SHAPIRA
 (5) Q Because you were asked in your deposition when you sent
 (6) this report to MMS Did you believe that to be accurate?
 (7) And you answered Over the - within the coastal area of
 (8) Alaska that we re talking about here there have been
 (9) documented reductions in sea lions and harbor seals And
 (10) therefore marine mammal harvests are subject to a long term
 (11) decline because of that is it an accurate statement That if
 (12) these resources are becoming scarce and people need to
 spend
 (13) more time and money to harvest them one could postulate a
 (14) decline in subsistence harvests not necessarily but it might
 (15) occur over the long term So this is one factor that one
 (16) would look at for changes
 (17) So you knew didn't you populations of seals and sea lions
 (18) were in a long-term decline a decade before the oil spill and
 (19) that harvests were going down too as a result?
 (20) A In some communities, that's - that's correct
 (21) THE COURT Counsel we re going to take a break
 (22) pretty soon Need to pick a time
 (23) MR SHAPIRA Now is fine Your Honor
 (24) THE CLERK. Please rise This court stands in
 (25) recess

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- (1) (Jury out at 11 36 a m)
 (2) (Recess from 11 36 a m to 11 54 a m)
 (3) (Jury in at 11 54 a m)
 (4) THE CLERK. Please rise This court now resumes its
 (5) session
 (6) Please be seated
 (7) BY MR SHAPIRA
 (8) Q Dr Fall before the break we discussed the long term
 (9) declines in seals and sea lion populations and harvests I now
 (10) want to switch from marine mammals to talk about land
 mammals
 (11) namely deer All right?
 (12) Deer are an important part of the Native diet correct?
 (13) A In Prince William Sound they don't make up much of the
 (14) diet in Port Graham and Nanwalek because there aren't deer
 (15) near those communities They might harvest some or receive
 (16) some but in Tatitlek and Chenega Bay deer are a major part of
 (17) the subsistence harvests
 (18) Q And I think you mentioned in your direct that deer were
 (19) harder to find nowadays you might have to go on more trips to
 (20) find them you might come back with less than your limit isn't
 (21) that what you said?
 (22) A That's what we re learning from our interviews with hunters
 (23) in these communities
 (24) Q And there are less deer aren't there?
 (25) A Yes

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- (1) Q And your Department the Department of Fish and Game has
 (2) done a study to see why there are less deer hasn't it?
 (3) A You'll need to mention the study to me
 (4) Q Exhibit 2141 It's called Terrestrial - if I'm saying
 (5) that right - Mammal Study Number 1 Final Report principal
 (6) investigator Jonathan P Lewis Alaska Department of Fish and
 (7) Game And I'll move it up for the date The study was done on
 (8) February 28 1991 You're familiar with that study aren't
 (9) you?
 (10) A I can't say that I am familiar with all of the contents of
 (11) the study I have read brief summaries of - of I guess what
 (12) are some of the findings of the study I have not read this
 (13) report I had not actually seen a copy of this report until I
 (14) saw it in the collection of pre-designated documents the other
 (15) day
 (16) Q But you know from your general knowledge of the report and
 (17) from reviewing it recently that your Department Department of
 (18) Fish and Game said as follows Today deer are the most
 (19) abundant large mammal in these areas However the
 populations
 (20) have declined from the highs in 1986 1987 due to wet springs
 (21) and deep winter snow You're aware of that conclusion aren't
 (22) you?
 (23) A Yes I am
 (24) Q And you know that this study went on to consider
 (25) specifically the question of whether the deer population had

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- (1) been dying off in any way related to the oil spill correct?
 (2) A Yes
 (3) Q And you know that they concluded that it had nothing to do
 (4) with the oil spill, don't you? You know that they concluded
 (5) that mortality surveys conducted in May and June of 1989 and
 (6) April of 1990 indicated that the primary cause of deer
 (7) mortality was starvation complicated by - mortality
 (8) complicated by oiling was not detected In other words
 (9) according to the Alaska Department of Fish and Game these -
 (10) it was bad weather conditions not oiling are accountable for
 (11) the deer population decline?
 (12) A That was the primary conclusion Of course he does go on
 (13) to talk about the possibility that there was some mortality
 (14) caused by subjecting deer to increased physiological stress
 due
 (15) to contact with the oil By earlier than normal displacement
 (16) from their winter habitat due to cleanup related disturbance
 (17) and that the study would not have documented these effects as
 (18) oil damage but instead would have attributed this to - to
 (19) cleanup related - I'm sorry contributed this to - this type
 (20) of mortality as malnutrition winter starvation So what he's
 (21) saying is there are some qualifications that he needs to place
 (22) on the conclusions in his study He can't discount the role
 (23) that - that cleanup or oiled beaches might have played but it
 (24) is his conclusion that - that the cause of deer mortality was
 (25) starvation for reasons other than - than the oil spill

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- (1) Q Do you have any basis to disagree with that conclusion of
 (2) your Department?
 (3) A Not - not at all no
 (4) Q Dr Fall before you testified here yesterday did you meet
 (5) with any of plaintiffs counsel to go over your testimony?
 (6) A Yes
 (7) Q About how long did you spend meeting with the plaintiffs
 (8) counsel?
 (9) A I m sorry I have trouble with these kinds of questions
 (10) thinking about how many hours and -
 (11) Q Well how many days?
 (12) A I think we - we met three or four times The first couple
 (13) times pretty briefly and then a couple of times for three
 (14) hours perhaps two hours something like that
 (15) Q And that was to prepare for your testimony here and you
 (16) went over what you would be asked and what you would
 answer?
 (17) A Essentially We went over the - the exhibits that we
 (18) would use and what points I would make about those particular
 (19) exhibits and what kinds of questions I could anticipate
 (20) Q And you re appearing here voluntarily you were not
 (21) subpoenaed were you?
 (22) A Actually I don t know
 (23) Q Well if no one served you with a subpoena did they?
 (24) A I didn t receive one directly but usually those things go
 (25) down to the AG s office or to Preston I actually don t know

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- (1) Q Now you have assisted plaintiffs counsel on behalf of
 (2) various Native interests in other lawsuits against Exxon
 (3) related to the oil spill haven t you?
 (4) A I guess you ll need to explain to me what you mean by
 (5) assisted plaintiffs counsel
 (6) Q Well first let me give you some names You re familiar
 (7) with plaintiffs lawyers name Hausfeld Miller do you know
 (8) those individuals?
 (9) A Yes I do
 (10) Q And you know that they have represented various Native
 (11) interests against Exxon arising from the oil spill don t you?
 (12) A Yes
 (13) Q All right And you know that they ve hired expert
 (14) witnesses to assist them including an anthropologist named
 (15) Steven Braund?
 (16) A Yes
 (17) Q You know him don t you?
 (18) A Yes I do
 (19) Q An economist named Duffield you know him?
 (20) A I have met him and I ve talked with him
 (21) Q And an economist named Lind correct?
 (22) A Yes
 (23) Q All right Now over a period of years you have met with
 (24) those individuals and other lawyers and expert witnesses
 (25) representing Native interests against Exxon many times haven t

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- (1) you?
 (2) A Many times? There s been a lot of meetings with those
 (3) individuals over the last several months as we reviewed our
 (4) information as I prepared exhibits for the federal trial
 (5) That s been the most intense period Prior to that I did not
 (6) meet with the - the attorneys for plaintiffs many times I
 (7) did not And I spoke with Duffield over the phone once or
 (8) twice over the course of several years Again it s only in
 (9) the last couple months when the trial approached that - that
 (10) I met with him maybe a half a dozen times to discuss our - to
 (11) discuss our work
 (12) Q How about Steven Braund the anthropologist who
 conducted a
 (13) study on behalf of the Native interests in another lawsuit
 (14) against Exxon You worked with him didn t you?
 (15) A I would not say that I ve worked with Steven Braund on his
 (16) study or on his work for - for the plaintiffs We certainly
 (17) provided Mr Braund and his study team with the results of our
 (18) work We discussed those results with them We re a State
 (19) agency We re in the information business It s what we do
 (20) And when we get calls from people we respond with
 (21) information Gee in 1989 and 1990 I can t - couldn t count
 (22) the number of times I got calls or met with Exxon experts such
 (23) as Judy Meidinger and Ole Olsen for our reports for updates
 (24) on your studies of what we were finding This is our normal
 (25) course of business

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- (1) Q You and I have met once before when I asked to meet with
 (2) you That was about three weeks ago correct?
 (3) A I - two or three weeks yeah
 (4) Q Two or three weeks ago?
 (5) A Something like that
 (6) Q And you insisted on bringing a State lawyer to the meeting
 (7) to supervise the contents of the meeting
 (8) A I did not insist on that That has been a general
 (9) directive that I have gotten from the AG s office and from the
 (10) people at the Preston law firm that - that work for the
 (11) State
 (12) Q And you gave me about 45 minutes of your time along with a
 (13) State lawyer who was there to supervise what I asked correct?
 (14) A That s a hard question to answer I don t know whether he
 (15) was there to supervise what you asked
 (16) Q She she
 (17) A I can t say why - if she was there to supervise what you
 (18) asked but we did meet for about an hour and there was an
 (19) attorney for the Preston law firm which is under contract to
 (20) the State She was present
 (21) Q Now has this attorney for the Preston law firm or any
 (22) other State lawyer been present at times when you met with
 (23) plaintiffs counsel?
 (24) A Some but not all
 (25) Q Not all You ve met many times with plaintiffs counsel

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- (1) without requiring the presence of your own counsel haven't you?
- (2) you?
- (3) A Over the last couple months when we have been going over the - the exhibits there have been times when I did meet with
- (4) Mike Hausfeld without a State attorney there that's correct
- (5) They - they had all of the exhibits They reviewed all of
- (6) them and were aware of the - the points that I was going to
- (7) make - I was going to make on them
- (8) Q Give me an estimate of the number of days that you've spent
- (9) consulting with lawyers or expert witnesses for the plaintiff
- (10) Native groups in litigation against Exxon in total
- (11) A I'm sorry attorneys just attorneys?
- (12) Q Attorneys or experts for plaintiff Native groups in
- (13) litigation against Exxon
- (14) A This is a really hard question to answer and the best way
- (15) that I can try to do it - and I'm going to have to almost
- (16) think out loud here - is to separate out the last few months
- (17) from the previous three or four years because as I mentioned
- (18) before
- (19) Q I want the total time
- (20) A I understand that
- (21) Q I want you to include the last two or three months
- (22) A I understand that But it's really difficult to just - to
- (23) think about the whole four or five years as opposed to the last
- (24) few months when it has been a lot
- (25)

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- (1) Q Just - I don't want to make it that difficult Ballpark
- (2) it for me and include telephone conversations
- (3) A The honest answer to your question is I don't know
- (4) Q Is it weeks of your time?
- (5) A If we added up every hour it - it probably goes into
- (6) weeks
- (7) Q And this time all along it's during business hours in your
- (8) job as a State employee?
- (9) A You know since the oil spill happened there's hardly been
- (10) a weekend when I haven't worked on something and the oil
- (11) spill overall has really increased the amount of work in my
- (12) office I don't keep regular business hours and a fair number
- (13) of the meetings with Mr. Hausfeld and Mr. Braund occurred on
- (14) the weekends
- (15) Q So you've done some of this consulting with plaintiffs on
- (16) your personal time?
- (17) A It's been as a State employee I put in a lot of time on
- (18) the job A lot of State employees do that. It's not
- (19) consulting however Consulting implies that I was being paid
- (20) by Mr. Hausfeld or Mr. Braund for my work I was not I was
- (21) there as a representative of the Division to make sure that our
- (22) information was being understood and would be used in a
- (23) correct
- (24) way in their - in their presentations and in their - in their
- (25) work
- (26) MR SHAPIRA No further questions Thank you

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- (1) REDIRECT EXAMINATION OF JAMES FALL
- (2) BY MR FORTIER
- (3) Q Mr - Dr Fall I have some questions for you I hate to
- (4) keep you on there too much longer but I have a few
- (5) What I'd like to begin with I suppose is where we -
- (6) where Mr. Shapira left off Who is Judy Meidinger?
- (7) A She was an individual hired by Exxon as a village liaison
- (8) person to assist Exxon with its interactions with the villages
- (9) after the oil spill and she was one of the primary
- (10) participants in the Oil Spill Health Task Force and helped out
- (11) a lot with - with setting up community meetings She was
- (12) involved in the discussions and participated a lot in - in
- (13) that activity She did other things for Exxon too I
- (14) suppose - I suppose but my interaction with Judy was as a
- (15) representative of the Oil Spill Task Force
- (16) Q So Ms. Meidinger was employed by Exxon?
- (17) A Yes
- (18) Q You spent time meeting with Ms. Meidinger too?
- (19) A Sure
- (20) Q In 1989?
- (21) A And later yes
- (22) Q 1990?
- (23) A Yes
- (24) Q 1991?
- (25) A Probably

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- (1) Q Were there State lawyers around every time you met with
- (2) Ms. Meidinger?
- (3) A I don't think there ever was
- (4) Q So you don't have any recollection of any of the times you
- (5) met with Ms. Meidinger that there were State lawyers around
- (6) then?
- (7) A There might have been one meeting of the Oil Spill Health
- (8) Task Force where a lawyer dropped by but no I don't
- (9) remember
- (10) any
- (11) Q Dr. Fall another name that's been mentioned here from time
- (12) to time is Steve Lewis Who do you remember is Steve Lewis?
- (13) A Steve Lewis is a toxicologist that works for a branch of
- (14) Exxon and he - his assignment in - I think starting in
- (15) approximately August of - of 1989 was to be the - the lead
- (16) for Exxon on its Subsistence Food Safety Project the project
- (17) that was being done for the Oil Spill Health Task Force funded
- (18) by Exxon under a memorandum of understanding with NOAA
- (19) and so
- (20) Steve participated in the Oil Spill Health Task Force
- (21) discussions He was a member of the Expert Toxicological
- (22) Committee In 1990 he was out there helping collect samples
- (23) and participated fully in that in the Task Force
- (24) Q When you say he was out there in 1990 collecting samples
- (25) do you mean he was collecting samples with the State?
- (26) A Actually there were - there were two collection programs
- (27) in 1990 There was one that was funded by the State of Alaska

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- (1) that we ran and there was another one that was funded by - by
 (2) Exxon where Steve and Judy and their consultants with Dames
 (3) and Moore with the - the scientists on the trips Both were
 (4) coordinated We - we interacted all the time We didn't
 (5) duplicate our efforts we figured out how to - which sites to
 (6) go to and so forth but there were those two collection crews
 (7) if you will
 (8) Q In 1989 did you meet with Steve Lewis?
 (9) A Yes
 (10) Q Well could you tell the jury how many times you met with
 (11) Steve Lewis in 1989?
 (12) A This is a tough one too
 (13) Q Sorry
 (14) A When we were preparing the script for the village meeting
 (15) Steve was a full participant in those preparations and we had
 (16) multiple meetings It wasn't ten but there might have been a
 (17) half a dozen meetings of some length where Steve and others -
 (18) where we sat around a table and we - let's call it discussed
 (19) the content of our meetings
 (20) Q And did you have meetings with Steve Lewis in 1990?
 (21) A Sure
 (22) Q What about 1991?
 (23) A Oh was Steve still on the scene in 1991? You know I
 (24) don't remember His real activity was in '90 He might have
 (25) come back up in '91 for some of the Oil Spill Health Task Force

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- (1) meetings and some of the activities I don't remember at this
 (2) point
 (3) Q And during these meetings when you were with Steve were
 (4) there State lawyers around?
 (5) A No
 (6) Q So you met with Steve and Judy without State lawyers then?
 (7) A Yes
 (8) Q Another name that was mentioned was Ole Olsen Who's
 (9) Ole Olsen Dr Fall?
 (10) A He was another employee of Exxon who was helping out with
 (11) village liaison work and he would attend Oil Spill Task Force
 (12) meetings on occasion Not as much as Judy He helped out
 (13) with the collection program and he helped set up some of the
 (14) meetings
 (15) Q Well Dr Fall do you have any recollection of the number
 (16) of times you met with Mr Olsen?
 (17) A No but it - it's a dozen or more
 (18) Q During any of these meetings were State lawyers present?
 (19) A Not that I can recall No I don't think so
 (20) Q Now you were asked some questions Dr Fall about when
 (21) you met with me Do you recall those questions?
 (22) A I do
 (23) Q Were there State lawyers present when you met with me
 (24) Dr Fall?
 (25) A Yes some of the time yes

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- (1) Q Another area I want to go into with you to talk with you
 (2) just briefly about Dr Fall you were asked some questions
 (3) about smoked salmon and you were also asked questions
 (4) about seals do you recall that?
 (5) A Yes
 (6) Q Seals do Native people - do they use a lot of the parts
 (7) of seals?
 (8) A Yes they do
 (9) Q They use seal oil?
 (10) A They do
 (11) Q What do they use seal oil for?
 (12) A They use it with dried and smoked fish salmon and halibut
 (13) mix it with berries and things
 (14) Q They dip the fish in the seal oil?
 (15) A Uh huh yes
 (16) Q And the - the berries they mix up with the seal oil?
 (17) A Yes Make Eskimo ice cream or Aleut ice cream
 (18) Q So does - when fish - or when fish are dipped in oil
 (19) that is seal oil that they're supposed to be dipped in right
 (20) Dr Fall?
 (21) A Yes it is
 (22) Q It's not Exxon Valdez crude oil?
 (23) A I don't think so
 (24) Q Dr Fall you were asked some questions about - about deer
 (25) populations Now you indicated you're familiar with a

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- (1) magazine called Alaska's Wildlife
 (2) A Yes
 (3) Q And that also has a report about deer populations in it
 (4) doesn't it?
 (5) A Yes it does if you're referring to the issue that
 (6) summarizes the oil spill
 (7) MR SHAPIRA Objection Your Honor Can we approach
 (8) the bench?
 (9) THE COURT Bring it here counsel
 (10) (At side bar on the record)
 (11) MR FORTIER Appears what was said what was not by
 (12) the oil spill There's a portion -
 (13) THE COURT Hold on hold on That's exactly
 (14) consistent with the other finding isn't it?
 (15) MR FORTIER Pretty much
 (16) THE COURT Don't use it
 (17) MR FORTIER Can I use the other finding?
 (18) THE COURT Don't use it Go on to another area
 (19) (Sidebar concluded)
 (20) BY MR FORTIER
 (21) Q Dr Fall with regard to the - to the deer study itself
 (22) do you recall whether or not in the same study that counsel
 (23) was asking you about there was a report concerning
 (24) observations of deer on the beach - on the beaches?
 (25) A No I don't recall no

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- (1) Q Let's turn for a moment to seals. Now you were asked some
 (2) questions concerning a report on - on seals as well do you
 (3) recall those?
 (4) A Yes
 (5) Q And do you know Dr. Fall whether or not there was any
 (6) finding by your Department the Department of Fish and Game
 (7) that oil on the seals could weaken them and therefore cause a
 (8) decline in the population further?
 (9) A Yes there was. There were those findings. The study was
 (10) by Kathy Frost of the Department of Fish and Game and she
 (11) did
 (12) conclude that there were lethal and sublethal effects of the
 (13) oil spill on the seal population in Prince William Sound
 (14) Q So Dr. Fall do you know whether or not the Department
 (15) then concluded that on account of the oil spill the deer
 (16) population - excuse me we're on the seal population now the
 (17) seal population was further threatened?
 (18) A That is the conclusion of the studies yes
 (19) Q On account of the oil spill?
 (20) A Yes
 (21) Q Dr. Fall, do you recall being asked a series of questions
 (22) about the number of people from English Bay Nanwalek that
 (23) were
 (24) working on the oil spill?
 (25) A Yes
 (26) Q Now do you recall counsel showed you a chart of the
 (27) people who were working on the oil spill - or the people had

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- (1) cited oil spill as one of the reasons -
 (2) A Oh yes yes
 (3) Q - work for Veco as one of the reasons?
 (4) A Yes
 (5) Q As I recall there were - I'll take a look I've got to
 (6) cheat - there were roughly 34 people that cited working for
 (7) Veco on the oil spill and then numerous other people citing oil
 (8) spill concerns. Do you recall that?
 (9) A Right
 (10) Q One person said she was pregnant and that was the
 (11) reason she didn't work?
 (12) A According to that list yes
 (13) Q When you add up the list Dr. Fall do you know whether or
 (14) not 50 of 54 people cited the oil spill as a reason why they
 (15) didn't subsistence hunt and fish?
 (16) A Well most likely most of those - most of those reasons
 (17) are oil spill related reasons. We don't know for certain just
 (18) how many people are represented on that - on that list it's
 (19) at least 34
 (20) Q Do you recall a series of questions -
 (21) MR SHAPIRA Wait a minute let me -
 (22) MR FORTIER I will
 (23) BY MR FORTIER
 (24) Q Do you recall a series of questions Dr. Fall about a
 (25) Mr. James Kvasnikoff of English Bay?

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- (1) A Yes
 (2) Q He was a representative of the Native village of Nanwalek?
 (3) A That's how he was portrayed yes
 (4) Q And Dr. Fall do you recall being asked whether or not
 (5) folks would voluntarily clean up the oil? Excuse me maybe it
 (6) was your testimony that folks would voluntarily clean up the
 (7) oil
 (8) A My testimony was that there was some voluntary effort that
 (9) oil containment and - that oil containment early in the
 (10) spill. And further it is my view that people in these
 (11) communities because of the tremendous importance of these -
 (12) of these beaches and waters to their survival felt an
 (13) obligation to - to clean up the environment to clean up their
 (14) homes basically
 (15) Q Dr. Fall I'd like to show you a page out of
 (16) Mr. Kvasnikoff's deposition as well. Specifically I'd like
 (17) to refer you to a question that is posed. Did there come a
 (18) time when a lot of villagers became employed by Veco to assist
 (19) in the oil spill cleanup?
 (20) The answer is Yes
 (21) Question When did that begin?
 (22) Mr. Kvasnikoff answers I think it was sometime in April
 (23) I don't remember the exact dates but you know we would have
 (24) went out and cleaned up our areas even if we didn't get paid
 (25) because we care so much about our subsistence way of life

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- (1) He goes on and he's posed with a question. It was a major
 (2) employment opportunity that the village had not previously
 (3) had
 (4) correct?
 (5) And he answered on that. It was pretty difficult to deal
 (6) with because we felt like we were invaded by people coming in
 (7) and telling us how to do this. That and throughout the
 (8) clean up process we had people telling us how to do a certain
 (9) cleaning on the beach and another time we had another person
 (10) come in and tell us no don't do it that way. And who do we
 (11) believe? You know there was a lot of chaos involved with it
 (12) and people were really frustrated with it
 (13) Now that all appears to refer to the oil spill itself
 (14) doesn't it?
 (15) A Yes
 (16) Q And Dr. Fall that statement that they would have gone
 (17) out and cleaned it up themselves is consistent with your
 (18) understanding of the importance of subsistence isn't it?
 (19) A It is yes it is
 (20) Q Okay Dr. Fall you were also asked some questions about -
 (21) excuse me I'll find it here in a minute - about what the
 (22) oil - or excuse me what the Toxicological Expert Committee
 (23) findings were. Recall that?
 (24) A Yes
 (25) Q You were shown an exhibit it's defendant's Exhibit 2188
 (26) What I'd like to do is show you a few other questions that I

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- (1) don't think counsel for Exxon addressed with you. One of those
 (2) questions begins at the top of the page. What do we believe
 (3) will be the long term fate of crude oil? Do you see that?
 (4) A Yes
 (5) Q Okay. Is that generally your understanding that oil will
 (6) be biodegraded eventually, pockets of oil in various forms
 (7) exist throughout the area?
 (8) A Yes
 (9) Q And it moves on that, as fin fish move into shallow areas
 (10) water turbulence and their exposure may increase resulting in
 (11) higher levels in bile and tissue, their continued monitoring of
 (12) these fish is necessary to document levels. You see that
 (13) Doctor?
 (14) A Yes. And that was one of the major conclusions of the
 (15) expert committee that was then summarized in one of our
 (16) newsletters that summarized these findings and we did
 indeed
 (17) continue to monitor the levels of bile in fish
 (18) Q And Doctor, can you tell the jury whether or not that's
 (19) the reason why you are continuing to monitor certain levels?
 (20) A Yes, it is.
 (21) Q Okay. Precisely because these fish are moving through
 (22) areas and stirring up the oil?
 (23) A Because there is - there is oil, there continues to be oil
 (24) in the environment. The - this - the expert committee
 (25) recommended that that monitoring occur to make sure that the

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- (1) health advice remain accurate. And in addition, people have
 (2) asked us to continue to do this. It is a variety of reasons
 (3) for continuing this work.
 (4) Q Okay. Now Doctor, when you're advising people on what is
 (5) safe to eat and what isn't safe to eat, that's a pretty big
 (6) obligation, isn't it?
 (7) A It definitely is.
 (8) Q Are you kind of acting then, like the federal - or the
 (9) Food and Drug Administration. Dr. Fall? Do you feel like that
 (10) sometimes?
 (11) A I guess in some ways, but the - the health advice has been
 (12) developed collaboratively and the lead agencies really for
 (13) developing health advice are the - are the - the State
 (14) Epidemiology Office and the federal Indian Health Service.
 (15) Without them being involved in developing the advice, the
 (16) Department of Fish & Game could not, because we're not in
 (17) that - in that business.
 (18) Q The next bullet point I wanted to direct your attention to
 (19) Dr. Fall, was the second one. Can recommendations be made
 only
 (20) for areas sampled or can they apply to all areas? It's noted
 (21) in the first sentence that it is impossible to provide
 (22) individual recommendations for specific beaches or harvest
 (23) areas.
 (24) Now Dr. Fall, my question is whether or not, when you went
 (25) out and did these studies and as you continued to do the

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- (1) studies - that's still true - it's impossible to provide
 (2) individual recommendations for specific beaches or harvest
 (3) areas?
 (4) A I think we have steered away from that kind of
 (5) recommendation. We do have the more general one about
 avoiding
 (6) beaches that you know are - have oil on the surface or
 (7) subsurface in a general sense. What I think that this also
 (8) illustrates is the committee's and the Task Force's
 (9) acknowledgment of questions raised by the communities about
 the
 (10) applicability of the findings for certain beaches to more -
 (11) to more general kinds of statements. And we had to tell them
 (12) well, no, I mean if we looked at this particular beach and we
 (13) found everything to be fine, can we give you a specific
 (14) recommendation for the beach around the corner? Well, no, we
 (15) can't do that. We didn't collect samples there, however.
 (16) Here's a more general statement to guide you - your own
 (17) conclusions about that beach that we didn't look at.
 (18) Q Okay. Now Doctor, this thing about the parts per billion
 (19) 50 parts per billion I heard you and Mr. Shapira talking about
 (20) do subsistence harvesters carry around instruments that would
 (21) measure parts per billion?
 (22) A No. This was a - no. The obvious answer is no, and
 (23) this - this definitely was an issue that - that developed, is
 (24) can we assist people in some way with - with detecting oiling
 (25) to basically supplement their - their senses. I mean

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- (1) certainly at a certain level, especially early in an oil spill
 (2) you can detect whether a resource or a beach is - is oiled.
 (3) Over time, with weathering, your - your ability to - to
 (4) detect that becomes much, much less. And certainly at the -
 (5) at the levels that we're talking about here, those are beyond
 (6) the - the limits of the human senses to detect, and there
 (7) really isn't any - any practical way to equip subsistence
 (8) harvesters to do that kind of - of testing.
 (9) Q Okay. The next couple of questions, Dr. Fall, if you note
 (10) point out that there are no established guidelines for
 (11) acceptable levels of aromatic hydrocarbons, and there are no
 (12) feasible tests to monitor for human exposures to those
 (13) hydrocarbons. You were aware of that, weren't you?
 (14) A Yes.
 (15) Q And Doctor, I just want to point out to you the next -
 (16) the last question on that page. Are there specific ways that
 (17) concerned Alaskan villagers can reduce their health risks? One
 (18) of the things that's pointed out is villagers should rely upon
 (19) common sense and their own judgment to avoid collecting
 foods
 (20) from obvious - from areas obviously impacted by oil. Now
 (21) that's consistent with what you've been saying, isn't it?
 (22) A It is, as well as the other statements in that paragraph
 (23) including the last one. If food is of doubtful quality, it
 (24) should not be consumed.
 (25) Q And Doctor, kind of following up with that, then, you were

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- (1) asked a series of questions about defendants Exhibit DX2154
 (2) That s the Oil Spill Health Task Force the little script that
 (3) you and Mr Lewis gave at a number of villages?
 (4) A Among other people We weren t the only two presenters
 (5) Q By the way you were traveling with Mr Lewis in those
 (6) villages weren t you?
 (7) A Yes
 (8) Q Were there any State employees - State lawyers along with
 (9) you when you were traveling?
 (10) A No
 (11) Q I just want to show you - I ll show it here to you It s
 (12) page 21 of the exhibit this first opening paragraph As for
 (13) fish it is not certain if the flesh will continue to stay
 (14) clean over time See that?
 (15) A Yes
 (16) Q It depends on if exposure to oil by fish increases stays
 (17) the same or increases in the areas that they live
 (18) So there were a lot of uncertainties?
 (19) A There definitely were a lot of uncertainties especially in
 (20) 1989 when we were doing this and we needed to be
 (21) forthcoming
 (22) and honest with people about the limitations of our work
 (23) Q Now Dr Fall you were also asked - and I hesitate to
 (24) explore this area because I think you were asked an awful lot
 (25) of questions about it - about PCP (sic) the paralytic
 (26) shellfish poisoning

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- (1) A PSP?
 (2) Q PSP excuse me And you had - you stated several times
 (3) more than one time that your concern in 1989 1990 and 1991
 (4) was a contamination on account of the oil do you recall that?
 (5) A That was our concern for this work and for the
 (6) communications that we developed for the Oil Spill Health Task
 (7) Force and now for the - for the - for the restoration
 (8) program I didn t state that we were unconcerned about PSP
 (9) In fact I pointed out that we have indeed provided villages
 (10) with - with the bulletins and information about it but in our
 (11) view is very important to separate out those two issues to
 (12) effectively communicate about the oil spill
 (13) Q Okay Now the folks you were - you were dealing with
 (14) these - the Native people of Chenega Port Graham English
 (15) Bay
 (16) and Tatitlek - were all folks that had been using those sort
 (17) of resources thousands of years isn t that right?
 (18) A Not them personally but those communities had been there
 (19) for a long time
 (20) Q Sorry?
 (21) A And yes yes
 (22) Q It s time for me to close my redirect Let me just show
 (23) you Doctor the bulletin the epidemiology bulletin I don t
 (24) know if I can zoom in on this or not It states that it was
 (25) the first reported death due to PSP in Alaska since prior to
 (26) 1976 so it s a fairly rare incidence isn t it?

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- (1) A Evidently
 (2) MR FORTIER That s all Doctor Thank you very
 (3) much
 (4) Oh let me just ask you - I m sorry That s not all
 (5) I ve got to ask you another question
 (6) BY MR FORTIER
 (7) Q Besides the - the hours you were on cross-examination over
 (8) yesterday and today you were deposed correct?
 (9) A Yes
 (10) Q How many days of deposition did you -
 (11) A Five days
 (12) Q Five days?
 (13) A Yes
 (14) MR FORTIER Thank you No further questions Thank
 (15) you
 (16) MR SHAPIRA I d like to approach the bench on one
 (17) question on recross
 (18) THE COURT Sure
 (19) (At side bar on the Record)
 (20) MR SHAPIRA Your Honor ruled during an objection
 (21) earlier by Mr Fortier that I could not use this excerpt I
 (22) believe it s been reopened on his redirect And he asked the
 (23) witness would they have volunteered to clean the beaches
 (24) This
 (25) shows that it was a financial decision If their pure interest
 (26) had been to clean the beaches they would have let other
 (27) people

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- (1) come in and clean them for money and they would have
 (2) volunteered This shows that they were protecting the
 (3) cash paying jobs and it s directly responsive to what he opened
 (4) on redirect
 (5) MR FORTIER You Honor the same objections It
 (6) doesn t show that nearly as much as it shows -
 (7) THE COURT Go ahead
 (8) MR FORTIER - that there was - that the Native
 (9) people he wants to use it for what it s going to be understood
 (10) as the Natives can t - it s clearly prejudicial
 (11) THE COURT The objection s still sustained
 (12) (Sidebar concluded)
 (13) MR SHAPIRA The witness can be excused Your Honor
 (14) THE COURT Shall we take a break counsel?
 (15) By the way what else do you have to present today?
 (16) MR PETUMENOS I have another witness, sir I m
 (17) raring to go I do all the witnesses at 12 30 he does them
 (18) all at 8 30 but we can take a short recess
 (19) THE COURT Ten minutes break and we can get it all
 (20) in
 (21) MR PETUMENOS I m going to do a short direct
 (22) THE COURT How short?
 (23) MR PETUMENOS 20 minutes 25 minutes 27 minutes
 (24) THE COURT So you want to be finished by 1 30 no
 (25) matter what right? Okay

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- (1) THE CLERK Please rise This court stands in
 (2) recess
 (3) (Jury out at 12 36 p m)
 (4) (Recess taken from 12 36 p m to 12 42 p m)
 (5) (Jury in at 12 42 p m)
 (6) THE CLERK This court now resumes its session
 (7) Please be seated
 (8) MR PETUMENOS Judge Shortell the plaintiffs call
 (9) Pamela Bridgen
 (10) THE CLERK Ma am could you attach the microphone to
 (11) your jacket and remain standing for the oath Please raise
 (12) your right hand
 (13) (The Witness Is Sworn)
 (14) THE CLERK Please be seated
 (15) Ma am for the record can you state your full name?
 (16) A I m sorry?
 (17) THE CLERK Can you state your full name please?
 (18) A Pamela Jane Bridgen
 (19) THE CLERK And could you spell your last name?
 (20) A B r i d g e n
 (21) THE CLERK And your occupation?
 (22) A I m an environmental consultant
 (23) THE CLERK Thank you
 (24) DIRECT EXAMINATION OF PAMELA J BRIDGEN
 (25) BY MR PETUMENOS

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- (1) Q Pamela Bridgen could you introduce yourself to the jury?
 (2) A Yes I was born in England and I grew up in a small
 (3) village in a rural area of northwest England I had a small
 (4) family I just have one brother and some of my extended
 (5) family lived in the village My aunts and uncles and cousins
 (6) and I lived there until I was about 18 when I went away to the
 (7) big city to go to the university
 (8) Q And what did you study at the university?
 (9) A Well I eventually studied biochemistry I started out
 (10) studying biophysics
 (11) Q And you received a Bachelor s degree in biochemistry?
 (12) A Yes
 (13) Q What year?
 (14) A 1972
 (15) Q And then you went on in your studies?
 (16) A Yes
 (17) Q And tell the jury what you studied next
 (18) A I completed a Ph D in biochemistry at Leicester in
 (19) England And then I went on to the University of Cambridge in
 (20) England to do a postdoctoral fellowship Then I came over to
 (21) the United States to work at the National Institute of Health
 (22) I had an opportunity to work with a Nobel laureate on the
 (23) purification of interferon and so I did that for a number of
 (24) years
 (25) Q Interferon is a chemical or a substance that was being

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- (1) worked on for what purpose?
 (2) A Well we were trying to - to purify interferon because it
 (3) had been found to have a number of positive effects on human
 (4) health It is mostly an antiviral agent It kills viruses
 (5) and we were trying to purify it so that we could potentially
 (6) get to the point of being able to - to make it so that it
 (7) could be used as a drug
 (8) Q And you worked on interferon in a laboratory context?
 (9) A Yes
 (10) Q And that was from 1976 to 1980?
 (11) A That sounds right
 (12) Q And after you worked on the interferon project did you
 (13) change jobs and take a different one?
 (14) A I worked for about three or four years in the biotechnology
 (15) industry I was working continuing to work on interferon with
 (16) - actually succeeded while I was at the National Institute of
 (17) Health we achieved the first purification of human
 (18) interferon and I was working in the industry on potential
 (19) production of interferon and other chemicals that had
 (20) beneficial purposes and were potential drugs
 (21) Q Then after you worked on that project did you become
 (22) employed by ICF?
 (23) A Well prior to that I decided to go back to business
 (24) school I - when I was working at my job we - I was
 (25) managing the lab and those of us in the lab there worked in an

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- (1) area typical laboratory area It didn t have windows as it
 (2) happened It had linoleum floors and steel cabinets and you
 (3) know it s not a particularly luxurious area There were big
 (4) double doors at the company where I was working big double
 (5) oak
 (6) doors that went from floor to ceiling, and on the other side of
 (7) the double doors were the business people who were sitting in
 (8) comparative luxury with the carpets and windows nice pictures
 (9) on the walls and I thought to myself hey you know I m at
 (10) least as smart as these people why am I on the other side of
 (11) the double doors And so I decided to go back to business
 (12) school to get - to get myself comfortable that I could really
 (13) be doing the business side of the work
 (14) Q Master s in business administration at the working school
 (15) of the University of Pennsylvania Wharton?
 (16) A That s correct
 (17) Q And then you went to ICF back to a laboratory with
 (18) linoleum and -
 (19) A No
 (20) Q No?
 (21) A No When I graduated from Wharton I did join ICF to work
 (22) in the environmental area and that was - in fact actually I
 (23) didn t have a window in my first office at ICF which was a
 (24) great disappointment to me but I did have carpet on the floor
 (25) and I did as I increased in seniority at ICF I did get a
 window but I joined them and they really - they basically

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(1) hired me for my scientific knowledge but only because I had
 (2) the MBA because they had a perception that a lot of the people
 (3) who were economists they had a perception of scientists can't
 (4) write but because I have an MBA they thought okay maybe I
 (5) proved I could write so they agreed to hire me
 (6) Q Tell the jury what you did at ICF
 (7) A Well I've been at ICF for ten years and I've worked on
 (8) many different projects but they mostly relate to chemicals
 (9) and effects in the environment I initially started out
 (10) working with some of the federal agencies mostly EPA on
 (11) whether or not chemicals should be regulated and providing
 (12) them with both technical support and policy support for whether
 (13) the chemical should be regulated
 (14) Then after I'd been at ICF for a year or two ICF acquired
 (15) another company called Clement Associates that actually had
 (16) mostly scientists on the staff, and I was asked to transfer
 (17) into Clement Associates and they were - it was - back then
 (18) it was fairly early in the days of human health risk
 (19) assessment and Clement had some expertise in that area so I
 (20) started working on human health risk assessment as one of my
 (21) duties
 (22) Q Human health risk assessment is the area about which we
 (23) want to talk about today, Dr Bridgen but I want to go back
 (24) briefly to something you said before about the Environmental
 (25) Protection Agency

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(1) Now do I have it right that ICF had a - at one time a
 (2) contract with the EPA to help them write the standards for
 (3) chemicals in the environment?
 (4) A Well yes ICF has had a number of contracts with EPA to
 (5) assist them on doing that One of the contracts was actually
 (6) to help them write the guidance manual for doing risk
 (7) assessment for - for superfund work for hazardous waste
 (8) cleanup
 (9) Q What is risk assessment? You mentioned that when you first
 (10) started at ICF it was an emergent field Could you tell the
 (11) jury what it is?
 (12) A Well it's really looking at if the - in terms of human
 (13) health risk assessment it's looking at potential exposure to
 (14) humans from a chemical that may be in the environment as a
 (15) result of a spill or dumping of - of chemicals and looking at
 (16) the potential routes of exposure of the humans to that
 (17) chemical looking at the toxicity of the chemical and
 (18) combining those to determine what the risk is to health from
 (19) the exposure that the human is likely to encounter
 (20) Q What kind of clients would hire a person like you
 (21) Dr Bridgen to conduct a risk assessment? Apart from the oil
 (22) spill area how is it applied in the private sector and in
 (23) industry?
 (24) A Well we've been hired we have worked both for regulatory
 (25) agencies and for private clients mostly to determine what

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(1) risks are from sites that have hazardous chemicals on them or
 (2) that have chemicals that are assumed to be hazardous and
 then
 (3) to determine how much these sites need to be cleaned up to
 make
 (4) themselves - to make them safe for human health and for the
 (5) environment
 (6) Q And you have done that on a number of occasions?
 (7) A Yeah, I've done that on dozens of occasions
 (8) Q And part of that process is also to communicate the risks
 (9) to your client?
 (10) A That is required There is a risk communication segment of
 (11) superfund risk assessment that the EPA requires but I also
 (12) developed a personal interest in risk communication and how to
 (13) communicate these things to the public, in general and so I
 (14) worked on that area even though in some cases it was not
 (15) required by the projects that - that I participated in in
 (16) general it's a good idea for companies even if they're not
 (17) required to let the public know what's going on for them to do
 (18) that
 (19) MR PETUMENOS Your Honor at this time I would
 (20) tender Dr Bridgen as an expert in the area of the assessment
 (21) and the reporting of the risks of contaminants to human
 (22) health
 (23) MR SHAPIRA Your Honor I do have a partial
 (24) objection We have no problem with Dr Bridgen's expertise in
 (25) human health risk assessment As to communication of risks

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(1) her experience in communicating risks to her corporate clients
 (2) is very different from the communication of risks to Native
 (3) communities in Prince William Sound and if she intends to
 (4) offer some opinion as to whether Dr Fall and the Task Force
 (5) went about it the right way to communicate the risks from the
 (6) oil spill to the Native communities we would say she lacks
 (7) expertise and I would ask to take it on voir dire There are
 (8) admissions that she has no experience of any such kind
 (9) THE COURT You have a response counsel?
 (10) MR PETUMENOS Judge I waive argument and I object
 (11) to the voir dire I believe she's qualified
 (12) THE COURT You want voir dire?
 (13) MR SHAPIRA I just - yes just a couple questions
 (14) THE COURT It's going to have to be very brief,
 (15) counsel You've got five minutes to do it
 (16) MR SHAPIRA Take two
 (17) VOIR DIRE EXAMINATION OF PAMELA J BRIDGEN
 (18) BY MR SHAPIRA
 (19) Q Dr Bridgen you've never met any of the Alaskan Natives
 (20) who are at issue in this case correct?
 (21) A That's - I believe that's correct.
 (22) Q And you have no opinion because you're not familiar with
 (23) these people or their customs or their knowledge as to what
 (24) would be the right way to go about communicating the risks of
 (25) the oil spill to their food system Isn't that correct?

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- (1) A I - no that's not correct First of all I do have an
 (2) opinion Secondly I do believe that I have some
 (3) qualification
 (4) It's true that I haven't met - I don't believe that I have
 (5) met and talked to any of the Natives that were affected in this
 (6) case but I have worked on other projects Most particularly
 (7) relevant I believe is communicating to Natives on the North
 (8) Slope of Alaska regarding their concerns about toxic chemicals
 (9) some of which were similar product and weren't identical
 (10) product but some of which were similar products to those from
 (11) the oil spill
 (12) Q I'd like to call your attention to pages 218 through 219 of
 (13) your deposition where you were asked as follows If - in
 (14) order to allow the people who were exposed to the salmon or
 (15) fish to make the decision as to whether the increase of less
 (16) than 5 parts per billion over 112 parts per billion is an
 (17) acceptable or unacceptable risk would you communicate that
 (18) information to them?
 (19) Answer I would think they would need to have the
 (20) information before they could make a decision
 (21) Question Okay And how else would you give them any
 (22) information that they needed to make the decision?
 (23) Answer Excuse me other than communicating it to them
 (24) Question Right
 (25) Well you would communicate - the tests have shown that

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- (1) smoked salmon has a mean parts per billion of 112 and the
 (2) tests of fish after the oil spill that were not smoked as an
 (3) increase of parts per billion of 5 Is that what you would
 (4) communicate or would it be something more?
 (5) And then I'll jump down to line five answer I don't
 (6) think I would do it exactly that way but those are parts of
 (7) the information that need to be communicated
 (8) Question How would you do it?
 (9) Answer I think - I don't know off the top of my head how
 (10) I would do it because I don't know exactly who I'm
 (11) communicating with and I haven't had any contact with these
 (12) people so I don't know what the best way would be to
 (13) communicate with them
 (14) Question You know the people you will be communicating
 (15) with will be the Alaska Natives as we defined it yesterday
 (16) right?
 (17) Answer I understand that but we also said I have never
 (18) spoken to any of these people so I don't really have a good
 (19) feel for how they process and understand information
 (20) Now those were truthful answers that you gave to that
 (21) question weren't they?
 (22) A Yes those were truthful answers and I still don't know
 (23) that I can tell you or the jury what the absolute best way
 (24) would be to communicate information to the Alaska Natives
 (25) and
 (25) I don't believe that I'm going to try and say that up on the

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- (1) stand today
 (2) What I'm going to - well I don't know what I'm going to
 (3) say I'm going to answer the questions but what I believe
 (4) that I have expertise in is whether or not some of the ways
 (5) that were employed really were - would lead to confusion and
 (6) uncertainty on the part of the Natives
 (7) MR SHAPIRA And Your Honor it's my position -
 (8) going back I'm finished with my voir dire and I'd just like
 (9) to argue briefly
 (10) THE COURT Your objection's overruled She's
 (11) qualified to - to testify as with regard to expert testimony
 (12) in the areas counsel outlined
 (13) DIRECT EXAMINATION OF PAMELA J BRIDGEN (Resumed)
 (14) BY MR PETUMENOS
 (15) Q Dr Bridgen I'm going to abbreviate some of your
 (16) examination because the jury has heard an awful lot from
 (17) Dr Fall about some of the things that you have looked at But
 (18) just to get the context again here after the oil spill did
 (19) there become an effort on the part of some of the people
 (20) involved to take a look at what the potential effects on human
 (21) beings that the oil spill might have on some of the foods that
 (22) they would eat?
 (23) A Yes I believe so The oil spill health Task Force was
 (24) formed because there was a concern on the part of - in
 (25) particular of Dr Nighswander who headed up the Oil Spill

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- (1) Health Task Force that the Natives be given the best
 (2) information possible Unfortunately they found out very early
 (3) on that
 (4) First of all they didn't have any toxicologists or people
 (5) experienced in that area on the Oil Spill Health Task Force
 (6) Secondly that it was difficult to get assistance from the
 (7) federal agencies And thirdly when they did start to look
 (8) that there really was no information available on health
 (9) effects from prior oil spills
 (10) Q And so what you have done on behalf of the plaintiffs in
 (11) this case is to look at the work of the Oil Spill Health Task
 (12) Force from the standpoint of a risk analysis and what was being
 (13) communicated?
 (14) A In general yes
 (15) Q All right And so what the first thing that they did was
 (16) to conduct what some scientists might call a literature search?
 (17) A Yes
 (18) Q And is that what you're referring to when you say that
 (19) there wasn't much out there?
 (20) A That's right A literature search was conducted I
 (21) believe by one of the scientific expert panel to determine
 (22) what information was available and as I said there was really
 (23) no information on the health effects from prior oil spills
 (24) Q As a result of the first then level of inquiry there was
 (25) uncertainty?

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- (1) A That's right
- (2) Q When was the first significant communication to the Native community following the oil spill about any advice whatsoever from this Task Force?
- (3) A I don't know exactly when the - I'm not sure what you mean by significant communication. I know there were meetings held. The first newsletter that the Task Force put out was in (4) I believe January of 1990.
- (5) Q Was there any report or documents that were generated by the Task Force prior to the fishing and hunting seasons in 1989 in the summer of 1989?
- (6) A Not that I'm aware of.
- (7) Q Was there any significant publication or newsletter in the fall of 1989 that addressed any of these issues?
- (8) A Again, not that I'm aware of. I believe that the first newsletter was January 1990.
- (9) Q Now, after the literature search, did the health Task Force make a request of any other agency for assistance to study?
- (10) A They requested the - that the Federal Drug Administration do an assessment of the risks from consuming fish and shellfish that might be affected by PAHs, polycyclic aromatic hydrocarbons.
- (11) Q Couple points. You said the Federal Drug Administration you mean the Food and Drug Administration?
- (12) A I'm sorry, the Food and Drug Administration, yes.

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- (1) Q When was that done?
- (2) A The federal Food and Drug Administration. I'm not sure when the request was made. It takes a while to do these studies, and the final health advisory came out. I believe in August of 1990.
- (3) Q And what was the final result of that? Did they study all kinds of different foods that the subsistence users might use?
- (4) A No. The request that was actually made to the FDA was to prepare a health advisory on the safety of consuming fish and shellfish. So that's all that the FDA looked at.
- (5) Q Did the FDA look at - and when they looked at it, what do we mean? What are they coming out with as a product when they're done?
- (6) A Their product is an estimate of the levels of, in this case, PAHs that could exist in fish and present a risk to health that is of not - not of significance.
- (7) Q What are PAHs?
- (8) A Those are polycyclic aromatic hydrocarbons, the complex chemicals.
- (9) Q Where are they found?
- (10) A Well, in this case, they're found in oil.
- (11) Q Crude oil?
- (12) A Crude oil.
- (13) Q What did the FDA conclude about fish in terms of what an acceptable amount of PAHs would be based upon their study?

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- (1) A I think the final conclusion was that it will be safe to consume salmon that contained PAHs at a level of 0.4 parts per billion and it would be safe to consume other fin fish that had levels of 0.7 parts per billion.
- (2) Q Now, if I were to go to a person like Dr. Bridgen and say what does that mean, one of the questions that I might ask, and I'll ask you now, is can I tell from looking at a fish that comes out of my net whether that fish has 4 parts per billion in its flesh by looking at it, smelling it, feeling it?
- (3) A I wouldn't think so.
- (4) Q What would I need to be able to tell?
- (5) A In order to do that, you need fairly sophisticated scientific instruments.
- (6) Q Did the scientific instruments that were available - was the Task Force conducting these kinds of tests?
- (7) A The Task Force had - I believe, the main lab that was conducting tests was from NOAA down in Seattle.
- (8) Q What about for the other kinds of fish, same result, same answer, that you can't tell by looking at it?
- (9) A Correct.
- (10) MR. PETUMENOS: Could we have the exhibit for Dr. Bridgen up, Exhibit Number 12247?
- (11) BY MR. PETUMENOS:
- (12) Q You have prepared an exhibit for the jury to discuss what was studied and what was not and what the significance of the

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- (1) various studies were, and I'll start off with my apologies to our clients for the rendition of the Alaskan Native in the middle of the exhibit. Must have been done by a graphic artist in Los Angeles or something. Tell the jury what - what is depicted on this exhibit.
- (2) A Well, basically the pictures around the outside demonstrate the different subsistence resources that are used by the Natives, and the lines to the middle are showing that the Native will be exposed to each of these different resources and the FDA only looked at the two components that are shown in
- (3) the top right hand side of the exhibit. They looked at fish and, based on their evaluation, the Oil Spill Health Task Force said that fish were safe to eat. They also looked at shellfish and, based on the evaluation, the Oil Spill Health Task Force warned the Natives that shellfish were probably of concern and you probably shouldn't eat them.
- (4) Then the other six subsistence resources were not looked at by the FDA. So based on the health advisory, there was no information as to whether levels in those particular resources would be safe or not.
- (5) Q And what is the significance of that in terms of the levels that the FDA came up with that they concluded were safe? We have I think you said 0.4 (sic) parts per billion?
- (6) A 4 parts per billion.
- (7) Q Reading this, what if I am a person who doesn't just eat

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- (1) fish but who also eats ducks geese eggs crabs and shrimp
 (2) these other things what does that tell you as a microbiologist
 (3) about the levels that were arrived at for fish?
 (4) A Well if you were doing a human health risk assessment
 (5) based on all the resources consumed you would have to take
 (6) into account all of these different - in this case food
 (7) sources and that may considerably reduce the levels that were
 (8) considered to be safe in fish because you would get exposure
 (9) from other sources too When the FDA is assessing the safe
 (10) levels of - or the levels that are without significant risk in
 (11) fish they were only looking at that in the absence of any
 (12) other exposure
 (13) Q Did the FDA ever come out with recommended safe levels of
 (14) PAHs for these other species?
 (15) A I don't believe so
 (16) Q Was there evidence or was there testing done that suggested
 (17) that there were higher levels of PAHs in certain mammals than
 (18) there were in fish for example?
 (19) A Well in the Oil Spill Health Task Force report there
 (20) were - there was information provided about levels that had
 (21) been found in mammals and land mammals and the seals and sea
 (22) lions and I believe also in birds These weren't provided
 (23) until the summer or fall of 1990 In the early newsletters it
 (24) was stated that these things were being tested but no one knew
 (25) what the - what the results were so there was uncertainty at

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- (1) that time But in the final - maybe it wasn't the final
 (2) report - a report in about September of 1990 the FDA health
 (3) advisory was presented with these levels of 4 parts per
 (4) billion and 7 parts per billion and there was also a segment
 (5) in that newsletter that talked about levels in deer I believe
 (6) and ducks and those levels were - some of those levels not
 (7) all of them but some of those levels were hundreds of parts
 (8) per billion which then would be thousands of times or many
 (9) hundreds of times higher than the levels that were being -
 (10) that were said to be safe in fish
 (11) Q The newsletters that were distributed in 1990 the ones
 (12) leading up to the - say the first five or six were they done
 (13) before the report came back from the FDA or after?
 (14) A The first ones were done while that was - while the FDA
 (15) was doing their health advisory And I believe that was
 (16) appropriate It wasn't appropriate to wait until September -
 (17) or August and September of 1990 before any information was
 (18) being given to the Natives I think the Task Force was doing
 (19) their best to keep the Natives informed The problem is they
 (20) didn't have very good information to pass along
 (21) Q Was there conflicting information in 1989 and 1990 about
 (22) the safety of foods? Not just - I'm thinking now about the
 (23) Task Force but from other sources as well?
 (24) A Well I think the most - the biggest area of concern that
 (25) would have been for me would have been that the Task Force
 were

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- (1) telling the Natives that the fish were safe to eat However
 (2) they were banning the sale of any commercially - any
 (3) commercially caught fish if it had any PAHs in it at all
 (4) Q Did there appear to be a different standard for the
 (5) commercial harvest than for the subsistence harvest?
 (6) A Well it would appear that way to me I would have had a
 (7) concern if I wasn't able to sell my fish to anyone else if it had
 (8) PAHs and I don't think I would have eaten it
 (9) Q Was there information coming from Exxon?
 (10) A Well I believe Exxon was involved in the Oil Spill Health
 (11) Task Force and I think they were assisting in providing some
 (12) of the information to the Natives saying that the fish was
 (13) apparently safe to eat
 (14) Q Based upon your review of the Oil Spill Task Force
 (15) literature and your review of the studies that they relied
 (16) upon do you believe that there was on the subject of risk
 (17) assessment for human consumption a substantial amount of
 (18) uncertainty in the post spill years as a result of the
 (19) information that was available?
 (20) MR SHAPIRA Objection Your Honor Post spill years
 (21) is a pretty broad range of time
 (22) THE COURT Limit it name the years counsel
 (23) MR SHAPIRA More over uncertainty in whose mind?
 (24) Uncertainty in her mind a trained toxicologist's mind?
 (25) THE COURT To the observer Is it to the observer?

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- (1) MR PETUMENOS I understand the objection Let me
 (2) try again
 (3) BY MR PETUMENOS
 (4) Q Rather than me naming what the post spill years are I'd
 (5) rather ask a nonleading question and ask you to do it And I
 (6) would also ask you to do it from the perspective of both you as
 (7) a scientist and from a perspective of a person reviewing the
 (8) material perhaps a consumer of the information
 (9) MR SHAPIRA I object as compound Your Honor
 (10) THE COURT Compound but I'm sure the witness can
 (11) handle the question And if she doesn't we'll deal with it
 (12) Go ahead
 (13) A I'm sorry Judge could you repeat the first part of the
 (14) question before all this -
 (15) MR PETUMENOS The witness can't handle it
 (16) THE COURT It's the lawyer that can't handle it
 (17) BY MR PETUMENOS
 (18) Q From your standpoint could you tell the jury whether there
 (19) was uncertainty about the risk to human health following the
 (20) spill? Tell the jury for what period of time and why you think
 (21) that
 (22) A Okay There was definitely uncertainty prior to the FDA
 (23) coming out with a health advisory just because there was
 (24) obviously a lack of information and it was very clear from the
 (25) newsletters that were communicated - in fact there was a

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- (1) paragraph in one of the first or second newsletter that said
 (2) you know this Task Force was breaking new ground that there
 (3) was absolutely no information available and so that the
 (4) testing that was being done was brand new and cutting edge
 and
 (5) so also the results for many of the tests were not yet
 (6) available So I think that's clear to anyone reading that
 (7) that there was significant uncertainty
 (8) In terms of the health advisory risk assessments in
 (9) general have a lot of uncertainty associated with them because
 (10) we don't know everything about all these chemicals and so
 (11) there are a lot of assumptions that have to be made So from
 (12) my perspective there would be a lot of uncertainty and I
 (13) would think that other people could understand that because
 (14) assumptions would be made and because that most of the
 (15) subsistence resources weren't included in the advisory there
 (16) would be significant uncertainty as to whether they were safe
 (17) to eat
 (18) Q How long has that uncertainty continued in your view?
 (19) It's a broad question
 (20) A I don't - I mean, I can give you my view I don't really
 (21) know a specific answer to that except that there is ongoing
 (22) information to this day I believe being provided to the
 (23) Natives that they should be concerned about some of the
 (24) subsistence resources and that would lead me to believe that
 (25) there is still some degree of uncertainty

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- (1) MR PETUMENOS I move into evidence Exhibit 1224
 (2) (Exhibit 1224 offered)
 (3) MR SHAPIRA No objection Your Honor
 (4) THE COURT It's admitted
 (5) (Exhibit 1224 received)
 (6) MR PETUMENOS I have no further questions
 (7) THE COURT Thank you counsel
 (8) Give it a try counsel
 (9) MR SHAPIRA Pardon me?
 (10) THE COURT Give it a try You've got 12 minutes
 (11) MR SHAPIRA Your Honor the - let me give this a
 (12) try first She's raised some very technical issues I've
 (13) just completed the cross-examination of Dr. Fall on some of
 (14) these parallel issues I need to pull from Fall's
 (15) cross-examination outline materials to deal with her I won't
 (16) take longer than a half an hour with her tomorrow morning if
 (17) you would allow me that time
 (18) THE COURT All right I'll give you a break
 (19) MR SHAPIRA Thank you sir
 (20) THE COURT And I'll give you a break too until 8:30
 (21) tomorrow Don't talk about this with anyone and don't form or
 (22) express any opinion on it until it's submitted to you for your
 (23) deliberation We'll see you tomorrow
 (24) (Jury out at 1:19 p.m.)
 (25) THE COURT All right Anything to - you can step

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- (1) down
 (2) (Witness excused)
 (3) THE COURT Anything on record?
 (4) MR FORTIER Your Honor I'd like to move in some
 (5) exhibits Fall exhibits if I could
 (6) THE COURT Sure go ahead
 (7) MR FORTIER Plaintiffs move into evidence exhibits
 (8) 1309 1310 1362 1364 1561 1562, 1563 6095 6104 6105
 (9) 6107 6108 6110 6115 6116 6117 and 6122
 (10) (Exhibits 1309 1310 1362 1364 1561 1562 1563 6095
 (11) 6104 6105 6107 6108 6110 6115 6116 6117 and 6122
 (12) offered)
 (13) MR SHAPIRA Your Honor I'd like to reserve until
 (14) tomorrow morning responding to those exhibit proffers I also
 (15) have a list of my own but I would like to -
 (16) THE COURT You can do it tomorrow morning I'll put
 (17) them - whatever goes in will go in tomorrow morning
 (18) MR SHAPIRA Thank you Your Honor
 (19) THE COURT Anything else?
 (20) MR DIAMOND No Your Honor
 (21) THE COURT All right So there's no miscommunication
 (22) here communication being a large issue in this trial
 (23) Yesterday I said to everybody - not everybody but
 (24) representatives for each party - I'll see you in chambers and
 (25) then I didn't because some of you just left So what I'm

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- (1) saying now is those of you who should have been in chambers
 at
 (2) the conclusion of yesterday's session should be in chambers in
 (3) five minutes Got it? That includes you Mr. Stoll too but
 (4) of course I didn't tell you to be in chambers yesterday All
 (5) right?
 (6) MR STOLL All right
 (7) THE CLERK Please rise this court stands in recess
 (8) (Recess at 1:22 p.m.)

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- (1) STATE OF ALASKA)
 (2) Reporter s Certificate
 (3) DISTRICT OF ALASKA)
 (6) I Joy S Brauer RPR a Registered Professional
 (7) Reporter and Notary Public
 (8) DO HERBY CERTIFY
 (9) That the foregoing transcript contains a true and
 (10) accurate transcription of my shorthand notes of all requested
 (11) matters held in the foregoing captioned case
 (12) Further that the transcript was prepared by me
 (13) or under my direction
 (14) DATED this day
 (15) of 1994
 (21) JOY S BRAUER RPR
 Notary Public for Alaska
 (22) My Commission Expires 5 10 97

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Look-See Concordance Report

UNIQUE WORDS 2,608
TOTAL OCCURRENCES 11,359
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SINGLE FILE CONCORDANCE**CASE SENSITIVE****NOISE WORD LIST(S)
NOISE NOI****INCLUDES ALL TEXT
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(1) 'N THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (2) THIRD JUDICIAL DISTRICT
 (4) In re) Case No JAN 89 2533 Civil
) Anchorage Alaska
 (5) The EXXON VALDEZ) Wednesday August 3 1994
) 8 30 a m
 (6))
 (8) VOLUME 28 Pages 4325 through 4515
 (10) TRANSCRIPT OF PROCEEDINGS (Continued)
 (11) TRIAL BY JURY
 (12) BEFORE THE HONORABLE BRIAN C. SHORTELL
 Superior Court Judge
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(1) PROCEEDINGS
 (2) (Jury in at 8 39 a m)
 (3) (Call to Order of the Court)
 (4) THE COURT Good morning everybody
 (5) MR SHAPIRA Your Honor as a housekeeping matter we
 (6) do not object to any of the exhibits that plaintiffs have
 (7) proffered at the end of the day yesterday and I brought my own
 (8) list with me but reviewing it this morning before court
 (9) there s one exhibit on there I m not actually sure I used and
 (10) I want to check that on break
 (11) THE COURT Sure that would be fine counsel The
 (12) documents that were read into the record yesterday are
 (13) admitted
 (14) (Exhibits 1309 1310 1362 1364 1561 1562 1563 6095
 (15) 6104 6105 6107 6108 6110 6115 6116 6117 AND 6122
 (16) received)
 (17) CROSS-EXAMINATION OF PAMELA J. BRIDGEN
 (18) BY MR SHAPIRA
 (19) Q Good morning Dr Bridgen
 (20) A Good morning
 (21) Q Your testimony went on very quickly at the end of a long
 (22) day yesterday and I not only needed time to gather some of my
 (23) exhibits together but I wanted to read the transcript to see
 (24) exactly what you had said on a couple of points and I d like
 (25) to go over to begin with part of your testimony from

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(1) yesterday
 (2) Mr Petumenos asked you When was the first significant
 (3) communication to the Native community following the oil spill
 (4) about any advice whatsoever from this Task Force
 (5) And you answered I don t know exactly when the - I m not
 (6) sure what you mean by significant communication I know there
 (7) were meetings held The first newsletter that the Task Force
 (8) put out was in I believe January of 1990
 (9) And then Mr Petumenos asked you Was there any report or
 (10) documents that were generated by the Task Force prior to the
 (11) fishing and hunting seasons in 1989 in the summer of 1989?
 (12) And you said Not that I m aware
 (13) And then Mr Petumenos asked you Was there any
 (14) significant publication or newsletter in the fall of 1989 that
 (15) addressed any of these issues?
 (16) And you answered Again not that I m aware of I believe
 (17) that the first newsletter was January 1990
 (18) And I want to begin by focusing on the last question and
 (19) answer You were asked Was there any significant publication
 (20) or newsletter in the fall of 1989 that addressed any of these
 (21) issues?
 (22) And you answered Again not that I m aware of I believe
 (23) that the first newsletter was January 1990
 (24) I want to show you a document that s marked as defendants
 (25) Exhibit 2178 Now, defendants Exhibit 2178 is a bulletin on

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- (1) State of Alaska Department of Health and Social Services
 (2) stationery and it's dated April 28 1989 barely more than a
 (3) month one month after the oil spill About five weeks after
 (4) the oil spill And I want to ask you whether when you
 (5) testified yesterday that you didn't know about any significant
 (6) publication you hadn't been aware of any significant
 (7) publication before January 1990 I want to ask you had you
 (8) seen and were you aware of this State of Alaska bulletin which
 (9) was issued just five weeks after the oil spill?
 (10) A Well first of all counsel I would like to say that the
 (11) line of questioning that you referred to yesterday was my
 (12) understanding regarding the Oil Spill Health Task Force and
 (13) what the Oil Spill Health Task Force had done And what I said
 (14) yesterday I still believe to be true that there had been some
 (15) meetings of members of the Oil Spill Health Task Force but
 (16) that that first newsletter was - and I'm still not sure
 (17) whether it was January or February of 1990
 (18) I don't per se recognize this - this bulletin in this
 (19) form I suspect that maybe it didn't come out in this form
 (20) because the bulletins that I have seen were one page or
 (21) possibly two pages and they - they looked a lot more formal
 (22) than this But I really - you know basically the bulletin
 (23) says that you should be concerned about the subsistence
 (24) resources and we don't know anything about them So I don't
 (25) really think it's saying anything any different

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- (1) Q This bulletin says you should be concerned about
 (2) subsistence resources and we don't know anything about them
 (3) is
 (4) that how you read it?
 (5) A Well I haven't read everything here but it says -
 (6) Q Let me draw your attention -
 (7) A - great concern exists about the potential impact of crude
 (8) oil on fish and other seafood and that to me indicates that
 (9) you know there's concern that there's a problem
 (10) Q Let me draw your attention to Page 4 of the section of
 (11) the - this April 28 bulletin that I have highlighted It's on
 (12) the video monitor in front of you, if that would be more
 (13) convenient
 (14) That bulletin said and I quote "The best tests available
 (15) at this time are the smell and taste of the fish If the fish
 (16) smell or taste of petroleum they should not be eaten If they
 (17) don't it is almost certainly safe to eat the fish It is
 (18) probable that living clams mussels and shellfish from
 (19) intertidal areas are also safe if the same standards are
 (20) applied"
 (21) Now that information came out of the State of Alaska
 (22) government in April 1989 correct?
 (23) A That's right And as I said it says great concern
 (24) exists "It says "Things are probably safe to eat and then
 (25) you know continuing reports to the Natives later on say well
 some of the stuff isn't safe to eat you should be wary of it

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- (1) Which gives rise as I explained yesterday to a great deal of
 (2) uncertainty and whether or not the Natives could believe what
 (3) they were being told in the instances they were being told it
 (4) was safe to eat
 (5) Q And just once again to be clear when you were asked
 (6) yesterday and testified Was there any significant publication
 (7) or newsletter in the fall of 1989 that addressed any of these
 (8) issues?
 (9) And you answered again Not that I'm aware of I believe
 (10) that the first newsletter was January 1990
 (11) Were you or were you not aware of defendants Exhibit 2178?
 (12) A I thought I answered that I don't recognize this format
 (13) I know there were some statements put out by the section the
 (14) section for epidemiology My understanding in my questioning
 (15) yesterday was that it was about the Oil Spill Health Task
 (16) Force since that was what I was asked to review as my task in
 (17) this - in this case
 (18) Q 2179 - and you've referred to a different form of a
 (19) similar publication Let me show you now defendants
 (20) Exhibit 2179 That's a bulletin State of Alaska
 (21) Epidemiology Department of Health and Social Services
 (22) Division of Public Health dated May 5 1989 I think that's
 (23) about six weeks after the oil spill And when you said you
 (24) thought you'd seen the same thing in a different format is
 (25) this the document you were referring to?

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- (1) A Those are the documents that I have seen that were put out
 (2) yes by the Division of Epidemiology
 (3) Q So you knew that these bulletins had been issued six weeks
 (4) after the oil spill?
 (5) A I knew that the State of Alaska Department of Epidemiology
 (6) had put out some bulletins to the Natives As you see it says
 (7) we are unable to provide absolute assurance at this time -
 (8) absolute assurances at this time and are working to have better
 (9) information That to me is not terribly reassuring
 (10) Q And as you see the language that I've highlighted at the
 (11) bottom of that bulletin it says Great concern exists about
 (12) the potential impact of the oil upon fish and other seafood
 (13) The best tests available at this time are the smell and taste
 (14) of the fish If the fish smell or taste of petroleum they
 (15) should not be eaten If they don't it is almost certainly
 (16) safe to eat It is probable that living clams mussels and
 (17) shellfish from intertidal areas are also safe if the same
 (18) standards are applied
 (19) And you knew that advice had been given to the Natives
 (20) correct six weeks after the oil spill?
 (21) A I knew that consistently throughout the last three to four
 (22) years that the Natives have been told yes some of this stuff
 (23) is safe to eat and no some things aren't safe to eat or no
 (24) we don't have any information And that if it were me and if
 (25) it were most of the people that I have ever dealt with in risk

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- (1) communication they would be totally confused as to whether
 (2) things would be safe to eat or not
 (3) Q You think the Natives would have been confused by that?
 (4) A Yes When it says we are unable to provide absolute
 (5) assurances at this time and are working to have better
 (6) information as more information becomes available we will
 (7) provide additional reports and if it were me and any other
 (8) person that I have ever dealt with as I say in risk
 (9) communication they would be waiting for more reports
 (10) Q They wouldn't eat the fish If they caught fish and it
 (11) didn't look or taste or smell of oil then if it had been you
 (12) you wouldn't have eaten it is that right?
 (13) A That's right
 (14) Q Okay And when you testified yesterday that the first
 (15) significant publication or newsletter was in January 1990 did
 (16) you know about this State of Alaska bulletin dated July 14
 (17) 1989 that's Exhibit DX21817?
 (18) A The answer to your question as I said before I knew that
 (19) the Department of Epidemiology had put out some bulletins
 (20) Again saying that they're working on doing testing that when
 (21) all the results of the tests and interpretations of the results
 (22) are available we will all work together with the Alaska Native
 (23) Health Service to report and discuss the project's findings in
 (24) each community
 (25) Q Let me just read to you exactly what this bulletin did tell

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- (1) the Natives
 (2) A Well that was actually one of the things the bulletin did
 (3) tell the Natives I was reading it from the bulletin that you
 (4) just put in front of me
 (5) Q Thank you And permit me to read some other parts of the
 (6) bulletin
 (7) A Go ahead
 (8) Q The bulletin said Under potential impact on seafood that
 (9) in May the Division of Subsistence of the Alaska Department of
 (10) Fish and Game began a pilot study called Testing Subsistence
 (11) Foods for Contaminants in Prince William Sound and Lower
 (12) Cook Inlet in Collaboration with the Alaska Department of
 (13) Environmental Conservation and the U S Food and Drug
 (14) Administration The purpose of the study was to collect and
 (15) provide information about the level of contamination and
 (16) relative health risks if any of consuming selected types of
 (17) subsistence foods harvested in customary village harvest
 (18) areas Efforts have been focused on the villages of Tatitlek
 (19) Chenega Bay Port Graham and English Bay And on the next
 (20) column it says While testing continues all test results so
 (21) far have been negative
 (22) And then it says So far more than 300 samples have been
 (23) tested None have shown signs of contamination with oil And
 (24) then it advises These findings reinforce our recommendation
 (25) that living clams mussels and shellfish from intertidal areas

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- (1) and fish which do not smell or taste of oil are safe to eat
 (2) Seafoods that smell or taste of petroleum should not be eaten
 (3) Now is that advice unclear to you?
 (4) A No the advice is not unclear to me I am also reading in
 (5) there that they're still doing tests and until they have the
 (6) results of those tests they don't have absolute results
 (7) Q Well as Dr Fall testified yesterday I think they're
 (8) still doing tests today in 1994
 (9) A And they're still saying to the Natives that some of the
 (10) subsistence foods they should have concern about
 (11) Q The ones that smell or taste of oil correct?
 (12) A Counselor no The ones that have more than 4 parts per
 (13) billion of oil which you can't measure by smell or taste
 (14) Q And then they tell exactly in this report in July 1989 what
 (15) samples had been taken and they said Samples tested
 (16) include
 (17) salmon cockles bidarki chitons snails dead worms crab
 (18) blue mussels halibut butter clams little neck clams razor
 (19) clams tom cod and gray cod from English Bay Port Graham
 (20) Larsen Bay Tatitlek Karluk Jacobs Beach Pilot Point Akhiok
 (21) Skinny Bay Bligh Island Busby Island Ouzinkie Cat Island
 (22) Camel Rock and Boneyard beach
 (23) A That's right And it doesn't include any of the categories
 (24) that I included on that chart that I showed the Court
 (25) yesterday It only includes fish and shellfish and I believe
 (26) there are about six other categories of subsistence resources

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- (1) that haven't even been considered to be tested at this point
 (2) Q I promise you we'll get to that in just a minute
 (3) A Well thank you
 (4) Q Also when you testified yesterday that the first
 (5) significant publication and newsletter was in January 1990 -
 (6) actually let me take that back
 (7) When you were asked yesterday by Mr Petumenos When was
 (8) the first significant communication to the Native community
 (9) following the oil spill about any advice whatsoever from this
 (10) Task Force
 (11) And you said I don't know exactly when the - I'm not
 (12) sure what you mean by significant communication I know
 (13) there were meetings held The first newsletter that the Task Force
 (14) put out was in I believe January 1990
 (15) You do know from listening to Dr Fall testify that there
 (16) were meetings in Native communities in September and
 (17) October of 1989 correct?
 (18) A I think that was what I said in my testimony
 (19) Q And you saw because I handed it to Dr Fall a thick
 (20) package of handouts detailed written information that were
 (21) given to the Natives at those meetings correct? You're aware
 (22) of that?
 (23) A I'm - I saw it to the extent that you handed it to
 (24) Dr Fall yesterday and Dr Fall said yes those were handed
 (25) out That's about as much as I know about those documents

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- (1) Q Well you hadn't previously seen then Exhibit DX2154
 (2) these handouts that were made to the Natives in September and
 (3) October of 1989?
 (4) A Yes I've seen them very briefly. You designated them as
 (5) one of the documents that you would use in my
 (6) cross-examination.
 (7) Q So when you, as an expert, attempted to evaluate the
 (8) communications that had been given to the Natives, you
 (9) didn't - you hadn't seen this handout that was given in
 (10) September and October 1989?
 (11) A No, I hadn't seen the handout. I talked to Dr. Nighswander
 (12) about what the Oil Spill Health Task Force had done.
 (13) Q Now you did watch most of Dr. Fall's testimony, didn't
 (14) you?
 (15) A Yes, I did.
 (16) Q And you know I asked him repeatedly - I'm sure I bored the
 (17) jury I asked this so often - I said Dr. Fall, I went through
 (18) one communication after another. I said this says the fish are
 (19) safe to eat, doesn't it? And he would always correct me, and
 (20) he said well yes, but you have to look later. It also says
 (21) that the Natives should use their common sense and smell and
 (22) taste and not eat anything that's unusual. Do you remember
 (23) that? He corrected me almost every time on that.
 (24) A That's right. And he didn't only refer to smell and
 (25) taste. He referred to the Natives' expertise in judging you

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- (1) know how their subsistence resources had been affected.
 (2) Q That's exactly right. And I've put before you now on your
 (3) screen an excerpt of Dr. Fall's testimony where he did exactly
 (4) that. I said to him - and this is one of many times - I said
 (5) let's turn to one more finding of the Expert Toxicological
 (6) Committee on Page 3 where they advise people that any risk of
 (7) adverse health effects as a result of the oil spill from
 (8) consumption of Alaskan fish and shellfish is very small.
 (9) correct?
 (10) And he answered - he corrected me. He said we told them
 (11) that it's very important to read that entire paragraph.
 (12) Villagers should rely on common sense and their own judgment
 (13) to
 (14) avoid collecting foods from areas obviously impacted by oil.
 (15) In addition, individuals should decide, based on the
 (16) appearance, smell, texture and taste of subsistence foods, if
 (17) food is of doubtful quality, it should not be consumed, and
 (18) that's one of many examples where he corrected me on that.
 (19) front, isn't it?
 (20) A I believe so.
 (21) Q And he said that that's what he and the Task Force had been
 (22) advising people consistently for years, correct?
 (23) A I think that's true. I also think that in some of these
 (24) newsletters that are sent out, there are additional information
 (25) that would lead to confusion on - on the part of the Natives.
 (26) Q And this advice that Dr. Fall and the Task Force has given

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- (1) the Natives for all these years, do you think it's good
 (2) advice?
 (3) A I believe it's probably the best advice that they can
 (4) give. It doesn't mean that they know all the answers.
 (5) Q Well, they've been testing now from 1989 to 1994, and this
 (6) is still the advice that they're giving, correct?
 (7) A I believe so.
 (8) Q All right. Now I want to take you back to Exhibit 2178
 (9) the first exhibit that I showed you today, the bulletin issued
 (10) within five weeks of the oil spill. And I want to go back to
 (11) that advice that was given by the State of Alaska five weeks
 (12) after the oil spill to the Natives, where the Natives were told
 (13) then the best tests available at this time are the smell and
 (14) taste of the fish. If the fish smell or taste of petroleum
 (15) they should not be eaten. If they don't, it is almost
 (16) certainly safe to eat the fish.
 (17) MR. PETUMENOS: Excuse me, counsel, before you
 (18) continue, I'm sorry to interrupt, but as the preamble to your
 (19) question you indicated that this was the document sent to the
 (20) Natives, and I would object to foundation. There's no
 (21) testimony - in fact, the testimony has been that it was a
 (22) different document sent to the Natives that this was perhaps a
 (23) precursor to it, and so we're going to assert it. Let's have
 (24) the right document.
 (25) BY MR. SHAPIRA:

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- (1) Q Based on Mr. Petumenos' objection, I'll use instead the
 (2) bulletin which the witness has acknowledged was sent to the
 (3) Natives on May 5, 1989, about six weeks after the oil spill.
 (4) And I'd like now to go to that advice at the bottom that we
 (5) read before and that I'll read again. The Natives were then
 (6) advised the best tests available - beginning right there -
 (7) the best tests available at this time are the smell and taste
 (8) of the fish. If the fish smell or taste of petroleum, they
 (9) should not be eaten. If they don't, it is almost certainly
 (10) safe to eat. It is probable that living clams, mussels, and
 (11) shellfish from intertidal areas are also safe if the same
 (12) standards are applied.
 (13) Now, after five years of testing, that's exactly the same
 (14) message still being given the Natives, isn't it?
 (15) A I don't believe so, actually. I think that the message
 (16) on - about the shellfish has consistently been, after some of
 (17) the more sensitive tests have been done, that the Natives
 (18) should be concerned about the shellfish because they have a
 (19) hard time getting rid of the PAHs that they have in their
 (20) systems and, again, this is an inconsistency and would lead to
 (21) concern. I believe on whether the other tests are good or
 (22) not.
 (23) Q Well, I'll take that up in a minute. Let's talk about fish
 (24) for a minute.
 (25) Now you are aware, aren't you - and I'm showing you now

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- (1) page 17 of Exhibit 2154 these are the handouts given the
 (2) Natives at the September and October meetings that Dr Fall
 (3) attended - you are aware aren't you that approximately
 (4) two-thirds of the typical subsistence diet - I'm sorry that
 (5) fin fish make up approximately two thirds of the typical
 (6) subsistence diet correct?
 (7) A I'm not an expert Dr Fall is the expert on the typical
 (8) subsistence diet and I don't know whether or not he answered
 (9) that question yesterday But some of the data I saw on some of
 (10) the different villages showed that the seals and sea lions were
 (11) over a third of the subsistence diet and that then there
 (12) were - there were small contributions from some of the other
 (13) routes and then you know fish and shellfish made up
 (14) definitely a significant portion But the salmon and the
 (15) halibut separately were in each case less than the mammals in
 (16) some of the data that I saw
 (17) Q Yes you're quite right Dr Fall did say that in some
 (18) communities at some times fish were less than two-thirds of
 (19) the diet But you heard him also testify that he had reviewed
 (20) these handouts before they were handed out and you heard
 (21) him
 (22) testify that yes indeed on an area wide average fish were
 (23) about roughly two thirds of the diet didn't you hear that?
 (24) A I don't remember all of Dr Fall's testimony counselor
 (25) You certainly in cross examination went on for a very long
 time and I am afraid that I can't tell you exactly what I

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- (1) heard That may have been what he said
 (2) Q Well based on your knowledge do you have any reason to
 (3) doubt the accuracy of what was given the Natives in the
 handout
 (4) that fish are about two-thirds of the diet?
 (5) A I have no reason to doubt what Dr Fall said yesterday as
 (6) an expert witness
 (7) Q All right Then isn't it true that the same advice that
 (8) the Task Force has been giving for five years about fish
 (9) continues to give today even though tests are still going on
 (10) was exactly the same advice that the Natives got within six
 (11) weeks of the oil spill in a bulletin sent out by the State of
 (12) Alaska that fish were almost certainly safe to eat unless they
 (13) smelled or tasted of oil?
 (14) A With regard to fish that seems to be the case With
 (15) regard to shellfish I believe there was a change in what the
 (16) Natives were being told
 (17) Q Now Mr Petumenos asked you in that same question and
 (18) answer that I've shown you before whether there were any
 (19) reports or documents that were generated by the Task Force
 (20) prior to the fishing and hunting seasons in 1989 in the summer
 (21) of 1989 and you said not that I'm aware of
 (22) Now would your answer have been different if you had
 (23) included this information that I've just shown you that was
 (24) sent to the Natives in early May 1989? That was before the
 (25) fishing season in 1989 wasn't it?

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- (1) A Well clearly this information was sent out to the Natives
 (2) yes
 (3) Q Before the fishing season?
 (4) A I believe so
 (5) Q I promised you that we would return to the subject of the
 (6) other resources that you said weren't tested And this is the
 (7) graphic illustration that you used with that testimony
 (8) correct?
 (9) A Yes
 (10) Q And you said in your testimony yesterday that the other six
 (11) subsistence resources weren't looked at by the FDA So based
 (12) on the health advisory there was no information as to whether
 (13) levels of those particular resources would be safe or not
 (14) right? Isn't that what you said?
 (15) A That's what I said
 (16) Q Now I also showed to Dr Fall yesterday Exhibit 2100
 (17) which was a letter that Dr Fall himself had written and sent
 (18) to the residents of Tatitlek in July 1991 You see that
 (19) Department of Fish and Game stationery This was a letter that
 (20) Dr Fall signed correct?
 (21) A It looks as though he signed it yes I have never seen
 (22) his signature before
 (23) Q But you heard him testify yesterday that he signed the
 (24) letter didn't you?
 (25) A Yeah there was a letter that you showed him that he said

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- (1) he signed
 (2) Q Okay Let me tell you - let me read to you what Dr Fall
 (3) told the Natives of Tatitlek in July 1991 He said that in
 (4) community meetings newsletters and a video the Task Force
 (5) has informed people that all the fish deer ducks seals and
 (6) sea lions tested as part of the Subsistence Program were found
 (7) to be safe to eat But that people should not use clams and
 (8) other shellfish from beaches if they can see oil on the surface
 (9) or subsurface In the subsistence study about 1 000 samples of
 (10) fish and shellfish 28 samples of deer 19 samples of ducks and
 (11) 144 samples of marine mammals were tested Levels of
 (12) hydrocarbons in the edible flesh were very low or
 (13) nondetectable even with very sensitive equipment This is
 (14) because fish birds marine mammals and land mammals are all
 (15) able to get rid of limited amounts of contamination in their
 (16) bile
 (17) Now when you told the jury yesterday that there hadn't
 (18) been testing of all these other resources did you know about
 (19) what Dr Fall had told the Natives?
 (20) A I didn't tell the jury yesterday, in the statement at least
 (21) that you just read to me that there hadn't been testing of all
 (22) these other resources What I said was that the FDA advisory
 (23) was limited to fish and shellfish and it didn't look at
 (24) consumption of any of these other resources when they were
 (25) coming up with the numbers to tell the Natives what would be

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- (1) safe to eat - to eat excuse me
 (2) Q So you were only talking about FDA testing when you said
 (3) that right?
 (4) A It's not testing. It was an FDA health advisory. The Task
 (5) Force requested the FDA to do something similar to - or using
 (6) the same techniques as we use in risk assessment to determine
 (7) what levels of PAHs would be safe for consumption by the
 (8) Natives eating fish and shellfish and that's what the FDA did.
 (9) They didn't look at any of the other subsistence resources.
 (10) Q Well, let me ask you again. When Dr. Fall told the Natives
 (11) about all this testing that had been done on deer, ducks,
 (12) seals, and sea lions, he - and he gives the number of samples
 (13) that were tested and so forth, he knew what he was talking
 (14) about, didn't he?
 (15) A I have no idea whether or not Dr. Fall knew what he was
 (16) talking about. He seems to be a very knowledgeable man.
 (17) He's
 (18) not a toxicologist and, based on the information available,
 (19) this is just expert opinion because as far as I know, no one
 (20) has done a health advisory that considers deer, ducks, marine
 (21) mammals, and all the other things listed here.
 (22) Q This is expert opinion from the blue ribbon panel of
 (23) toxicologists from around the country, isn't it?
 (24) A I don't know whose expert opinion it is, but the bottom
 (25) line is there are a lot of calculations that go into this.
 (26) That's why it took the FDA until August of 1990 to come out

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- (1) with their health advisory for fish and shellfish, and I can
 (2) give you an expert opinion on whether things are safe to eat or
 (3) not. That doesn't mean that I know the answer.
 (4) Q Well, I'd like to think that if you gave me your expert
 (5) opinion, you would know the answer.
 (6) A An opinion is just that, counselor. It's an opinion. It's
 (7) not a fact.
 (8) Q I see. So when Dr. Fall told the Natives that all this
 (9) testing had been done, first of all, you don't know whether he
 (10) was right or not, whether all this testing had been done?
 (11) A There was a lot of testing that was done. I have not gone
 (12) through these statements one by one to determine if they're
 (13) accurate. I believe that Dr. Fall probably did, and he
 (14) probably gave accurate information.
 (15) Q All right. And when you showed the jury yesterday this
 (16) graphic with all these question marks - see all the question
 (17) marks? - you weren't intending to say that the Natives hadn't
 (18) been given advice about all these resources, were you?
 (19) A What I was saying when I showed the graphic yesterday was
 (20) that the FDA hadn't looked at these six resources that have
 (21) question marks, and those could affect the numbers that they
 (22) came up with for fish and shellfish.
 (23) Q But you weren't saying that the Task Force hadn't looked at
 (24) these other resources, had you - were you?
 (25) A I don't believe that I said that they hadn't been looked

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- (1) at, and I'm sure that you know, I know that some testing had
 (2) been done. The newsletters that were put out by the Oil Spill
 (3) Health Task Force reported the results of the testing, and in
 (4) some cases, some of the numbers were much higher than those
 (5) for - excuse me - that were published as the safe levels from
 (6) the FDA.
 (7) Q Well, then, let me ask you about this. Once again, when
 (8) Dr. Fall told the Natives that all these resources had been
 (9) tested and that they were safe, was he wrong? Where he said
 (10) that all the fish, deer, ducks, seals, and sea lions tested as
 (11) part of the Subsistence Program were found to be safe to eat?
 (12) A You just -
 (13) Q You think he was wrong about that?
 (14) A You just refreshed my memory, counselor. And as Dr. Fall
 (15) told you yesterday, the resources that were tested were safe to
 (16) eat. But that doesn't necessarily mean that all the resources
 (17) that were out there were safe to eat. He was very specific. I
 (18) believe yesterday in explaining to you that the ones that had
 (19) been tested - which were a fairly limited number - except
 (20) perhaps in the case of some of the fish - were safe to eat.
 (21) Q So what you meant when you put these question marks
 (22) around
 (23) the other resources was just that the FDA, in a particular
 (24) study that it did, didn't look at the other resources
 (25) correct? You didn't mean to say the Task Force hadn't looked
 (26) at these and advised the Natives about them, correct?

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- (1) A That's correct. I think you've made your point.
 (2) Q You've never been to Prince William Sound or any of the
 (3) areas you're discussing in your testimony, is that right?
 (4) A That's correct.
 (5) Q And you've never talked with any Natives, correct?
 (6) A I'm sure I have talked with Natives. I don't believe that
 (7) I've had significant discussions with an Alaskan Native about
 (8) this case.
 (9) Q And you concluded that Natives were uncertain about
 (10) resources without ever talking to them about that subject
 (11) correct?
 (12) A I concluded that, based on my knowledge of the information
 (13) that was distributed and my contacts with Alaskan Natives in
 (14) other contexts, that it was very reasonable to assume that
 (15) there was a lot of confusion based on the information that was
 (16) put out.
 (17) Q Do you think the Task Force did a bad job?
 (18) A No, I don't. I think that the Task Force - and if you
 (19) read my section of the report that you've referred to, I think
 (20) that the Task Force did the best that they could with the
 (21) information that they had available. Unfortunately, they had a
 (22) lot of difficulties because they didn't have information
 (23) available. There had been no studies on the effect of oil
 (24) spills on human health, and they didn't have data available for
 (25) a long time.

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- (1) Q Do you think that the NOAA testing laboratory messed up in
 (2) any way?
 (3) A I have no reason to think that NOAA would mess up I think
 (4) they re competent scientists
 (5) Q Do you think that the blue ribbon panel of toxicologists
 (6) that were formed to advise the Task Force did they do a bad
 (7) job?
 (8) A I don t believe so
 (9) Q Do you have any criticisms whatsoever of the work of the
 (10) blue ribbon panel of expert toxicologists that advised the Task
 (11) Force?
 (12) A I don t have criticisms of what they did no
 (13) Q Do you think that Dr Nighswander did a bad job as the head
 (14) of the Task Force?
 (15) A I think Dr Nighswander did an excellent job but he
 (16) himself told me that in retrospect that he would have done
 (17) some things differently One of which was that including Exxon
 (18) in the testing and providing the information in retrospect
 (19) was a very bad idea and led to distrust of the whole Health
 (20) Task Force on the part of the Natives
 (21) Q Do you think any - I withdraw that
 (22) Do you think that the Task Force gave the Natives bad
 (23) advice at any time?
 (24) A I think the Task Force gave the Natives some confusing
 (25) advice and I think things could have been clarified For

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- (1) instance in the newsletter that was put out that talked about
 (2) the FDA health advisory in that very same newsletter there
 (3) were reports of testing from some of the other subsistence
 (4) resources that were significantly higher than the levels that
 (5) were found in the fish and there was no mention made of how
 (6) those two related to each other
 (7) Q So you could have written it more clearly is that right?
 (8) Is that what you re saying?
 (9) A I think if there was more time available there were -
 (10) potentially an expert in communications consulted that they
 (11) may
 (12) have been able to raise some of these issues before the
 (13) newsletter was put out
 (14) Q Now Mr Petumenos made a joke at the beginning of your
 (15) testimony He said that that drawing of the Alaska Native
 (16) isn t really how they looked and he apologized He said it
 (17) must have been done by a graphic artist from Los Angeles Do
 (18) you remember that?
 (19) A It was actually done by a graphic artist in Richland
 (20) Washington and it was the only picture that they had
 (21) available
 (22) MR SHAPIRA I have no further questions
 (23) MR PETUMENOS I m trying to figure out how to attack
 (24) this last point Judge Could we have the Alaska Native from
 (25) Richland Washington back on the Elmo please?
 (26) REDIRECT EXAMINATION OF PAMELA J BRIDGEN

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- (1) BY MR PETUMENOS
 (2) Q To straighten this out let me ask you a few questions
 (3) That picture down in the - about five o clock on the - on the
 (4) chart there what is that I can t see it from here It s a
 (5) seal Thank you
 (6) A I m not sure if it s a seal or a sea lion It was supposed
 (7) to represent marine mammals
 (8) Q What parts per billion did the FDA come up with for a safe
 (9) level to eat seals?
 (10) A They didn t come up with a safe level for seals
 (11) Q Ever?
 (12) A No
 (13) Q And so if we were to have an oil spill tomorrow and someone
 (14) wanted to know what the safe parts per billion of eating a seal
 (15) were and they were to conduct that literature search we talked
 (16) about what would they find out that there s no information?
 (17) A In terms of safe levels in seals they would not be able to
 (18) find any information
 (19) Q The invertebrates that we see in the next little circle
 (20) what parts per billion did the FDA come up with as a safe level
 (21) to eat?
 (22) A They didn t look at those in their advisory report
 (23) Q And every place that we see a question mark did the Food
 (24) and Drug Administration ever to this day come up with a safe
 (25) level?

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- (1) A No they have not done a health advisory on PAHs in any of
 (2) those subsistence resources
 (3) Q Now 4 parts per billion is something they came up with
 (4) for fish that s where the little ok sign is?
 (5) A That was for salmon I think for other fin fish the level
 (6) was 7 parts per billion which is a little higher
 (7) Q Is there an inconsistency Dr Bridgen with telling people
 (8) that the safe level in fish is 4 parts per billion and at the
 (9) same time telling them that if they can t smell it or see it on
 (10) the fish that it s safe?
 (11) A Well I would think that that would lead to some concern
 (12) yes because as I said I believe earlier, there is no way that
 (13) by smelling or tasting the fish you can detect 4 parts per
 (14) billion You need a sensitive scientific instrument to go down
 (15) to those levels
 (16) Q Now I m going to show you an exhibit October 13 1989
 (17) which is actually curiously a defendants exhibit 2222 that
 (18) Mr Shapira did not show you This is another one of these
 (19) bulletins am I right?
 (20) A Yeah
 (21) Q Another piece of information at the close of the 1989
 (22) season that was communicated to Alaska Natives And it says
 (23) among other things The major findings from the August
 (24) sampling are clear evidence of low level contamination of some
 (25) fish and shellfish at some places from the oil spill For

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- (1) example pink salmon collected from Kodiak and Chenega show the
- (2) presence of aromatic hydrocarbons at low levels but
- (3) considerably higher than those found in specimens collected
- (4) from Angoon and the other villages tested Mussels butter
- (5) clams and little neck clams from Windy Bay Kodiak and Chenega
- (6) show the greatest exposure to petroleum with Windy Bay
- (7) specimens having the highest levels Most specimens taken from
- (8) Prince William Sound and Kodiak villages had levels for
- (9) aromatic hydrocarbons comparable to very low levels observed in
- (10) the same species from Angoon
- (11) Now that was another communication sent to the Natives?
- (12) A Uh huh
- (13) Q And do you believe that that communication could have
- (14) caused some uncertainty in the reader?
- (15) A I believe that anyone reading that communication would
- (16) think that maybe the fish are contaminated and there may be
- (17) some concern about whether they should be eaten or not
- (18) Q And counsel do you have the version of the May 5th 1989
- (19) Exhibit 2179 with your highlighting on it? Just so the final
- (20) words of that document we spent so much time on in
- (21) cross-examination are not lost -
- (22) MR PETUMENOS Actually you know you can't even fit
- (23) it on the Elmo the way this thing - do you mind if I fold it
- (24) so I can get the last line on it?
- (25) MR SHAPIRA Feel free

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- (1) MR PETUMENOS Maybe that's why we couldn't get it on
- (2) there before
- (3) BY MR PETUMENOS
- (4) Q The last line the last statement to the reader in this
- (5) 1989 document is We are unable to provide absolute assurances
- (6) at this time and are working to have better information as our
- (7) highest priority As more information becomes available we
- (8) will provide additional reports
- (9) If that were the last line that you were to hear
- (10) Dr Bridgen with all of your training and experience would
- (11) you have your children eating this food?
- (12) A I don't actually have any children counselor, but I
- (13) wouldn't -
- (14) Q Do you have a niece or do you have a cousin or something
- (15) like that?
- (16) A I would not eat the food I wouldn't - I wouldn't have
- (17) anyone that I liked eat the food
- (18) MR PETUMENOS Mr Shapira I won't ask the
- (19) question
- (20) BY MR PETUMENOS
- (21) Q The final question Dr Bridgen is this Based upon your
- (22) experience what conclusion would you draw about this
- (23) program
- (24) and what are the reasons why if you would with respect to
- (25) whether or not the people hearing the information from the
- (26) Health Task Force in the State of Alaska and from whatever

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- (1) source should eat the food in 1989 1990 and 1991?
- (2) A Well I think the overall conclusion is that there was a
- (3) lot of uncertainty about whether or not the food was safe to
- (4) eat and there were a number of reasons and a number of factors
- (5) that would give rise to such uncertainty The - first of all
- (6) the Oil Spill Health Task Force no one on the Task Force had
- (7) expertise in toxicity of oil so they did convene the expert
- (8) panel but when the literature search was done it was found
- (9) that there was essentially no information on the health effects
- (10) from previous oil spills
- (11) Secondly the testing in most of those cases was ongoing
- (12) and although there was some advice that the fish were safe to
- (13) eat there was repeated statement in - at least in the Task
- (14) Force newsletters and in most of these bulletins that testing
- (15) was ongoing because they needed to gather further
- (16) information The shellfish were designated as unsafe and
- (17) everything else was being tested As I said information did
- (18) come out in some of these bulletins but when some of the
- (19) information did come out the numbers were higher than the
- (20) levels that had been indicated for fish and shellfish
- (21) As I mentioned earlier Dr Nighswander considered that
- (22) greatest error had been made in including Exxon on the Oil
- (23) Spill Health Task Force because that led to a lack of
- (24) credibility in general of the Task Force with the Natives
- (25) And based on my past history with risk communication that is

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- (1) true in general You really need to have an independent body
- (2) who is providing the information
- (3) There were a couple of other points One is the - in
- (4) spite of the assurances that fish were safe to eat for the
- (5) Alaskan Natives the commercial sale was banned of fish If it
- (6) had any PAHs present in it at all - which I think is really
- (7) one of the major things that would lead me to have concern and
- (8) it's very basic - well it's okay for you to eat the fish
- (9) but it's not okay for anybody else to eat it That is a real
- (10) inconsistency that I would consider probably provided the most
- (11) concern on the part of the Natives
- (12) And then finally in this last report when the FDA advisory
- (13) was passed on to the Natives, the levels that were said to be
- (14) safe in the fin fish were these low levels of 4 or 7 parts
- (15) per billion which the Natives knew that they couldn't detect
- (16) by smell and taste and I believe that would give rise to a
- (17) great deal of concern that they didn't know they couldn't
- (18) tell you know Smelling the fish was not going to tell them
- (19) whether it was safe to eat or not And again in that same
- (20) report there were levels reported in deer and in the blubber
- (21) of the marine mammals that were hundreds of times higher than
- (22) that and no indication of how those compared with the fish and
- (23) shellfish
- (24) So overall I would believe as a result of all these
- (25) factors that there would be significant confusion and

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- (1) uncertainty on the part of the Natives as to whether their
 (2) subsistence resources as a whole would be safe to eat
 (3) MR PETUMENOS Dr Bridgen thank you very much
 (4) RECROSS EXAMINATION OF PAMELA J BRIDGEN
 (5) BY MR SHAPIRA
 (6) Q Just a couple of additional things The FDA never tested
 (7) seals to determine how much PAH they have within safe levels
 (8) right?
 (9) A That s a compound question The FDA never came up or
 never
 (10) has developed an advisory on what levels of PAHs in seals
 would
 (11) be safe to consume
 (12) Q Same question with regard to deer
 (13) A That s correct
 (14) Q Same question with regard to ducks
 (15) A That s right
 (16) Q Now if a Native came to you today and said Dr Bridgen
 (17) I m very impressed with your expertise in this area Is it safe
 (18) to eat the deer today what would you say?
 (19) A I don t know the answer to that
 (20) Q What would you say to the Native who sought your advice?
 (21) A I would say I don t know the answer to that question
 (22) Q Don t know whether it s safe to eat the deer today
 (23) correct?
 (24) A Correct
 (25) Q All right And if a Native came to you and said I just

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- (1) shot a seal It doesn t smell funny doesn t look funny
 (2) appeared to be a perfectly healthy seal Is it safe to eat
 (3) it? What would you say?
 (4) A I would say I don t know the answer to that I would
 (5) advise the Native to use their traditional methods and to - if
 (6) they had a concern to inquire as to whether the tissue could
 (7) be tested
 (8) Q I think you changed the question a little on me Remember
 (9) the Native who comes to you says I ve just shot a seal It
 (10) doesn t look funny it doesn t taste funny it doesn t smell
 (11) funny doesn t appear to be anything wrong with it perfectly
 (12) healthy seal those are the traditional tests right?
 (13) A Well those are some I believe and I don t know in detail
 (14) all the you know Native tests but knowledge of you know
 (15) where the seal has come from and you know whether or not
 that
 (16) might be an area for concern I think may be one of the things
 (17) that they consider
 (18) Q Let s go with the question a little further A Native
 (19) comes to you today from Chenega Bay says I just shot a seal
 (20) right in front of the village looks okay smells okay seemed
 (21) like a perfectly healthy seal is it safe for me to feed it to
 (22) my kids? What would you say?
 (23) A That doesn t sound to me any different from the question
 (24) that I answered before which I answered by saying I don t
 (25) know If you have a concern I would advise you to see if you

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- (1) can get the seal tested
 (2) Q Well you know the Native had a concern because he came
 to
 (3) you with the question
 (4) A Well okay so I m repeating it back to him You
 (5) clearly - I m sorry I maybe said it wrongly to he or to him
 (6) or to her I would then say you clearly have a concern I
 (7) would see if you can arrange to get the sample tested
 (8) Q How much would it cost for a Native to have a sample tested
 (9) in the way that would be necessary?
 (10) A I don t know I would ask - I would suspect that if they
 (11) wanted to have it tested they would go to someone who s been
 (12) involved in the Oil Spill Health Task Force to see if that
 (13) could be done
 (14) Q How long do you think it would take?
 (15) A It depends on what priority was put on the sample
 (16) Q And let s say the Native gets lucky he shot the seal
 (17) comes to you gets this good advice he should have it tested
 (18) since he has a concern He goes to a member of the Oil Spill
 (19) Health Task Force they say we ll rush it right off to the NOAA
 (20) lab in Seattle and we ll have it tested highest priority and
 (21) it comes back and the NOAA lab says there s fifty - point -
 (22) there s 50 parts per billion of PAHs in the seal and the
 (23) background levels are 25 parts per billion so it s a little
 (24) higher than background parts Now what does the Native do?
 (25) The FDA has never given an advisory that says what level is

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- (1) safe in seals correct?
 (2) A That s correct
 (3) Q So what does the Native do - give the seal to his children
 (4) or not - if he asks you for advice?
 (5) A I would explain to the Native that the levels that the FDA
 (6) have advised to be safe in fish and shellfish are 4 and 7
 (7) parts per billion respectfully and that he should consider
 (8) whether or not that is an issue Because based on our current
 (9) level of knowledge there will be a small increase in the
 (10) potential risk of cancer if he continues to consume such food
 (11) Q All right Now you ve criticized some of the advice of
 (12) the Task Force as containing some mixed messages and being
 a
 (13) little unclear and creating some uncertainty in the Native Do
 (14) you think your advice would create any uncertainty in the
 (15) Native?
 (16) A I would believe there would be uncertainty I think as a
 (17) result of the oil spill there is uncertainty I have
 (18) uncertainty so I m sure my advice would pass along
 (19) uncertainty yes
 (20) Q Now if a Native came to you and said should I eat the
 (21) salmon I ve just caught what would you say to that?
 (22) A I would tell them that I m not a sufficient expert in the
 (23) area of what they should be eating to make the determination
 (24) for them It s their determination And that I would ensure
 (25) that they had all the information that was available that they

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- (1) would be aware that there was some uncertainty but that the
 (2) Oil Spill Health Task Force has recommended that fish is safe
 (3) to eat
 (4) Q Now what would you do if a Native came to you and said
 (5) for thousands of years my people have been preserving
 salmon
 (6) by smoking it in smoke houses but I've seen some of these
 (7) reports from the Oil Spill Health Task Force and they say that
 (8) smoking the salmon gives it PAH levels that are hundreds of
 (9) times worse maybe thousands of times worse than anything
 (10) tested from oiled samples Dr Bridgen is it safe to eat
 (11) smoked salmon as my people always have? What would you
 (12) answer?
 (13) A I would basically give them the same advice counselor I
 (14) would tell them that PAHs do have some potential risk of
 (15) causing cancer and that they need to consider the information
 (16) themselves which is the best information they have available
 (17) and decide whether it is of concern to them They're the
 (18) expert in whether it's of concern to them not me
 (19) Q So let's see did you just advise them to eat smoked salmon
 (20) or not to eat smoked salmon?
 (21) A I decided - I advised them to make their own decision
 (22) based on the best knowledge that they have available
 (23) Q But suppose a Native comes to you and says I have eight
 (24) children nothing is more important to me than the health of my
 (25) children I believe in my traditional ways We've smoked

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- (1) salmon for thousands of years We like the taste of it As
 (2) Dr Fall said we crave the taste of our Native foods We
 (3) really want to go on living in our traditional way but I've
 (4) seen these reports there's thousands of times levels of PAH
 (5) higher in smoked salmon than there is in the worst oiled salmon
 (6) anyone ever saw What should I do Dr Bridgen you're the
 (7) expert in this area? Can I feed my children smoked salmon?
 (8) What do you advise?
 (9) A Is this a different question than the previous question?
 (10) MR PETUMENOS Judge I make objection at this point
 (11) THE COURT I think the witness already has counsel
 (12) Go ahead you can answer
 (13) A I'm sorry is it different from the previous question?
 (14) BY MR SHAPIRA
 (15) Q It was certainly longer Do you want me to try it again?
 (16) I'll try to shorten it
 (17) A Native comes to you today, says I have eight children
 (18) I'm concerned about their health more than anything else in the
 (19) world I don't want them to get sick I don't want them to
 (20) get cancer when they're 50 years old We have smoked fish for
 (21) generations in our family but I have seen reports from the Oil
 (22) Spill Health Task Force in which the amount of potentially
 (23) carcinogenic PAHs in smoked fish was shown to be vastly in
 (24) excess of the levels of PAH even in oiled fish I'm worried
 (25) about my family's safety and I want your advice Is it okay

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- (1) for us to go on eating smoked salmon in our traditional way?
 (2) And he pauses and waits for your answer What is your
 answer?
 (3) A I would tell them that there is indeed a risk of getting
 (4) cancer from the consumption of PAHs but that they need to rely
 (5) on their experience that they have been you know consuming
 (6) this for as you say hundreds of years and so that they've
 (7) seen what increase this will give and they need to make their
 (8) own decision about whether they are going to be concerned
 about
 (9) it or not
 (10) Q They should rely on their experience to see whether people
 (11) have gotten sick from eating smoked salmon in the past Is that
 (12) what you're saying?
 (13) A They should rely on their experience of living in general
 (14) and knowing what the subsistence resources are that they
 (15) consume to determine whether or not they believe that there's
 (16) owe they should be concerned about eating the smoked
 salmon
 (17) MR SHAPIRA No further questions
 (18) THE COURT We'll take a break
 (19) THE CLERK Please rise This court stands in
 (20) recess
 (21) (Jury out at 9 44 a.m.)
 (22) (Recess from 9 44 a.m. to 9 59 a.m.)
 (23) (Jury in at 9 59 a.m.)
 (24) THE CLERK This court now resumes its session
 (25) Please be seated

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- (1) THE COURT Counsel?
 (2) MR STOLL Your Honor we have an instruction that -
 (3) THE COURT Yes counsel
 (4) MR DIAMOND There's no objection to that
 (5) THE COURT All right The parties have asked me to
 (6) give you an instruction at this point and it is appropriate
 (7) so I'm going to read the following instruction The Kodiak
 (8) village municipalities of Port Lions Ouzinkie Larsen Bay and
 (9) Old Harbor have now settled with Exxon the claims that were
 (10) before you regarding damages to their lands Thus the only
 (11) claims remaining before you pertaining to any of the
 (12) municipalities are those of Kodiak Island Borough regarding its
 (13) claim for damages resulting from the Exxon Valdez oil spill
 (14) That is the instruction
 (15) MR PETUMENOS Judge we're still here the other
 (16) Native corporations
 (17) THE COURT I thought that was implicit in the
 (18) instruction counsel and we see you
 (19) MR STOLL Your Honor we'll call Jerome Selby
 (20) THE CLERK Sir can you please attach the microphone
 (21) to your tie and remain standing for the oath? Please stand up
 (22) and raise your right hand please
 (23) (The Witness is Sworn)
 (24) THE CLERK Please be seated
 (25) Sir for the record can you state your full name spelling

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- (1) your last name?
- (2) A Jerome M Selby S e l b y
- (3) THE CLERK And your occupation?
- (4) A Mayor of the Kodiak Island Borough
- (5) THE CLERK Thank you.
- (6) DIRECT EXAMINATION OF JEROME M SELBY
- (7) BY MR STOLL
- (8) Q Obviously - good morning Mr Selby
- (9) A Good morning
- (10) Q Obviously you re a resident of Kodiak
- (11) A Correct
- (12) Q And you re married I believe?
- (13) A That s correct
- (14) Q You ve been married for 25 years?
- (15) A That s correct
- (16) Q And do you have some children?
- (17) A Yes I have three
- (18) Q Okay would you tell the jury please the ages of your children?
- (19)
- (20) A I have a daughter 18 years old a son 16 and a son 10
- (21) Q And I believe professionally before you were Mayor of Kodiak you were an accountant by training or you are an accountant by training?
- (22)
- (23)
- (24) A Actually I m a mathematician by training I have an accounting practice and I ve been involved with public
- (25)

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- (1) administration for about 23 years
- (2) Q And before - how long have you been Mayor?
- (3) A For 11 years
- (4) Q Since 1983?
- (5) A That s correct
- (6) Q And what kind of outside activities do you like to engage in if any?
- (7)
- (8) A In terms of being outdoors you mean?
- (9) Q Yes outdoors
- (10) A I do a lot of hunting and fishing I am a registered guide in the State of Alaska I do a lot of hunting fishing boating anytime I get outside I m outside
- (11)
- (12)
- (13) Q And before becoming Mayor of Kodiak Island Borough in 1983 were you an assembly member of the Kodiak Island Borough?
- (14)
- (15) A That s correct from 1980 I was
- (16) Q And are you a member and have you since you ve been Mayor been a member of the Emergency Services Council?
- (17)
- (18) A That s correct The Mayor and the presiding officer of the assembly the Mayor of the City of Kodiak and the manager for the City of Kodiak and then the captain of the United States Coast Guard s base at Kodiak the five those five individuals by ordinance comprise the Emergency Services Council
- (19)
- (20)
- (21)
- (22)
- (23) Q What is the Emergency Services Council?
- (24) A It s a council that s designed to take - in effect take control and run the response to any kind of natural or other
- (25)

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- (1) disaster that occurs within the Kodiak Island Borough The concept came out of the 1964 earthquake when folks were somewhat unprepared in Kodiak as in the rest of Alaska for that magnitude of a natural disaster
- (2)
- (3)
- (4)
- (5) What Kodiak basically had done is developed a methodology where the key functions of governmental agencies being the City of Kodiak the Kodiak Island Borough and the United States Coast Guard base would function jointly and would - took control of the response under joint command immediately upon any kind of event like that
- (6)
- (7)
- (8)
- (9)
- (10)
- (11) Q And was the Emergency Services Council activated or active as a result of the Exxon Valdez oil spill?
- (12)
- (13) A Yes sir We activated the Emergency Services Council on the Monday following the Friday accident
- (14)
- (15) Q And how often during 1989 did the Emergency Services Council meet on the average?
- (16)
- (17) A Well we met daily until - I believe until mid September and then went to three times a week and then continued to meet on the oil spill until - through the summer 1990
- (18)
- (19)
- (20) Q Okay And you met three times a week even during the winter months?
- (21)
- (22) A No we cut back met periodically then after - I d say after January of 1990 probably about once a month for January February March got more frequent again then during April and May when the planning for the summer of 1990 s clean up effort
- (23)
- (24)
- (25)

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- (1) was to take place and then tapered off and pretty much closed out the Emergency Services Council meeting by the fall of 1990
- (2)
- (3) Q And you were still doing cleanup in the spring and summer of 1990 in Kodiak?
- (4)
- (5) A That s correct We were continually reoiled In Kodiak the problem was as the oil cleaned out and Mother Nature took care even during the winter months of cleaning out Prince William Sound that oil would break loose and continue to come down to Kodiak We had reoiling and new mousse on the beach
- (6)
- (7)
- (8)
- (9)
- (10) reported as I recall the last report I received of active new mousse on the beach was in April of 1990 reported both by the Federal Park Service on the Katmai coast and the State Park Service on Shuyak Island
- (11)
- (12)
- (13)
- (14) Q Shuyak Island is part of Kodiak Island Borough?
- (15)
- (16) A That s where our largest land parcel is on Shuyak Island that s correct
- (17)
- (18) Q And in the Emergency Services Council would the Emergency Services Council in the regular course of its business get reports as to oiling?
- (19)
- (20) A Yes, we got daily reports We had all of the agency personnel as well as United States Coast Guard and Exxon were present at each of those daily meetings giving us reports and we also had reports of the United States government Fish & Wildlife the Park Service the State s Park Service the Alaskan Department of Environmental Conservation Fish and
- (21)
- (22)
- (23)
- (24)
- (25)

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- (1) Game Alaska Department of Fish and Game So all of the agency
- (2) people that were directly involved with responding to the spill
- (3) were at these meetings and gave daily reports of their
- (4) activities where they were finding new oil where they were
- (5) finding fresh bird kills fresh dead otter kills All of the
- (6) reports were in the daily meetings
- (7) Q And what was the purpose of getting those reports?
- (8) A The purpose of getting those reports were so that we could
- (9) plan and try to - as best we could - respond and plan how we
- (10) were going to continue to respond and try to fight the oil
- (11) spill as best we could and obviously we were totally - we
- (12) felt totally inadequate We were overwhelmed We had never
- (13) staffed and never had enough beach crews funded by Exxon
- (14) We
- (15) had to fight to get any beach crews at all
- (16) They came down and were supposed to do five crews on Kodiak
- (17) Island and as we got those daily reports in and tracked the
- (18) spill as it came beginning in early April began to hit Shuyak
- (19) Island first and continued to hit Shuyak Island throughout the
- (20) summer and as I've indicated until the following March of
- (21) 1990 we tracked that We initially were the only response
- (22) Exxon did not come to Kodiak for a good three weeks after the
- (23) spill We had initiated our own response
- (24) MR CLOUGH Excuse me excuse me Mayor Selby I'm
- (25) sorry
- (26) I'd like to object Your Honor to further response as

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- (1) beyond the scope of the question pending
- (2) THE COURT Objections overruled Go ahead
- (3) BY MR STOLL
- (4) Q Go ahead
- (5) A We were then tracking and did all of the mapping of where
- (6) the oil was actually hitting the beaches through late July of
- (7) 1989 We were the only folks doing the mapping We have an
- (8) AutoCad system in the Kodiak Island Borough It was my map
- (9) fellow that does the AutoCad work that was the one that was
- (10) tracking based on the agency reports of the oil And as those
- (11) reports came in we determined of the 2900 miles of shoreline
- (12) within the Kodiak Island Borough 2 000 miles of that
- (13) shoreline during the summer of 1989 had some amount of oil
- (14) on
- (15) it
- (16) MR CLOUGH Your Honor excuse me I'd like to object
- (17) as to the foundation of that
- (18) THE COURT The objections overruled counsel
- (19) BY MR STOLL
- (20) Q Now Mr Selby in addition to being one of the five
- (21) members of the emergency service council you also are on the
- (22) executive committee of the Resource Development Council in
- (23) Alaska?
- (24) A That's correct
- (25) Q What is the Resource Development Council?
- (26) A The Resource Development Council is a statewide

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- (1) organization that's oriented towards trying to develop the
- (2) resources with the State of Alaska to develop the economic
- (3) base
- (4) for Alaska as a state and as a whole and it's - supports
- (5) reasonable development responsible development and looks
- (6) across all of the natural resources fish That's partly why
- (7) I'm involved with fisheries forestry mining oil and any
- (8) other potential economic development capability of the State of
- (9) Alaska
- (10) Q And you say the one reason you're involved in the executive
- (11) committee is because of fish Is Kodiak - could you tell the
- (12) jury please how Kodiak is in terms of the fishery the
- (13) significance of the fishery there as to Kodiak?
- (14) A Well the fishery is pretty much our livelihood Kodiak
- (15) and the entire Kodiak Island Borough the City of Kodiak as
- (16) well as the villages our whole economy is basically based on
- (17) the fisheries In fact the presence of the United States
- (18) Coast Guard base in Kodiak is also a - pretty much based on
- (19) the fact of the large fishery because of their enforcement
- (20) of - of international fisheries treaties search and rescue
- (21) for the fishing fleet all those sorts of activities that the
- (22) Coast Guard engages in the communications So the base is
- (23) there largely because of the fishery as well so it's pretty
- (24) easy for you to understand the - pretty much the whole
- (25) operation
- (26) We do have a little bit of timber activity on Afognak

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- (1) Island with the Native corporations but - so in terms of
- (2) overall volume the fishery is - about 150 million dollars
- (3) worth of fish product cross the dock on an annual basis
- (4) That's what the fishermen get paid And then of course the
- (5) canneries the processors some additional cash involved there
- (6) but you can understand it's a very large part of our
- (7) operation
- (8) Q And in addition to the - these other councils that you're
- (9) on you're also I believe the - actually the co-chairman of
- (10) an organization called Arctic Power?
- (11) A That's correct
- (12) Q And what is Arctic Power?
- (13) A Arctic Power is an organization of citizens that is working
- (14) for the opening of the oil exploration and development of the
- (15) coastal plane of the Arctic National Wildlife resource on the
- (16) North Slope of Alaska and we're supporting the responsible
- (17) development of that on land as a part of the economic base for
- (18) the future of Alaska and the people of Alaska
- (19) Q So you're actually as co-chairman of Arctic Power you're
- (20) actually working towards the development of oil exploration on
- (21) the North Slope?
- (22) A That's correct
- (23) Q And Arctic Power am I correct is sort of the leading
- (24) organization for this development of the North Slope oil
- (25) development actually?

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- (1) A That is correct And it s a single purpose organization
 (2) for that purpose
 (3) Q And I notice you have a little pin on your lapel there
 (4) A Yes
 (5) Q I believe you re on the National Board of Governors of the
 (6) National Red Cross organization?
 (7) A That s correct I m the only Alaskan that s ever been a
 (8) member of the Board of Governors of the American Red Cross
 (9) Q And in 1989 and until it disbanded you were a member of
 (10) the so called Oiled Mayors organization too isn t that right?
 (11) A That is correct
 (12) Q And I believe you re also a registered brown bear guide?
 (13) A Correct
 (14) Q Okay Now I d like you to tell the jury - you ve told
 (15) the jury a little bit about the fishing industry and how
 (16) important that is to Kodiak What do people do for recreation
 (17) in Kodiak?
 (18) A Well Kodiak is obviously - people who live in Kodiak like
 (19) to be outdoors or you don t come and choose to live in Kodiak
 (20) I think mostly people live in Kodiak because they choose to
 (21) live there and a lot of it just is because of the natural
 (22) pristine beauty and the opportunities to get outside hunt
 (23) fish We have all four species of salmon halibut are - you
 (24) can literally catch them off the dock in Kodiak and they re
 (25) plentifully available There s an opportunity for deer

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- (1) hunting There s elk available on Afognak Island which is
 (2) about a 15 minute skiff ride out of Kodiak You can do a lot
 (3) of hiking camping lots of abundant wildlife lots of foxes
 (4) lots of marine mammals It s great to get out this time of
 (5) year The whales are around and you can go out and watch
 (6) those
 (7) big bruisers out there feeding and swimming around and it s
 (8) just a great place to live where you can drop a line over to
 (9) fish for a halibut and watch sea otters float by Watch a pod
 (10) of killer whales come by It s a fantastic place if you like
 (11) to be outdoors Lots of wild flowers people who are into
 (12) photography of wild flowers Of course there s brown bear
 (13) those big bruisers are around and they re fun to watch if you
 (14) can get a little ways away from them and not too close So
 (15) it s just for someone who likes to live outdoors Kodiak
 (16) Island is a fantastic place to be
 (17) Q Why do you live in Kodiak?
 (18) A For the above reasons That s my kind of stuff
 (19) Q Okay And I d like to show a few pictures of Kodiak
 (20) First of all the City of Kodiak We have Exhibit 1031 an
 (21) aerial photograph of Kodiak
 (22) MR PETUMENOS Is this Kodiak at night counsel
 (23) or -
 (24) MR STOLL This is Kodiak at night or in the
 (25) wintertime
 (26) BY MR STOLL

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- (1) Q This is a little aerial photograph of actually the City of
 (2) Kodiak is that right?
 (3) A That s correct And the one I can see here is about a
 (4) third of the City of Kodiak itself You can see the bridge
 (5) across to Near Island and the second small boat harbor We
 (6) have two in Kodiak the original one and the new one that s
 (7) over on Near Island here
 (8) Q Now I just have a few photographs 1218 A B and C Is
 (9) this the harbor on Kodiak?
 (10) A Yes it is
 (11) Q How many people live on the entire - within the borough?
 (12) A Kodiak Island Borough s population is about 15 600
 (13) Q These are some more pictures from Kodiak?
 (14) A This is ice skating
 (15) Q Another picture in the harbor there at the City of Kodiak?
 (16) A Right Obviously salmon season
 (17) Q And I have here a map of Kodiak which has been - is in
 (18) evidence as exhibit 1354 A and this is a - shows the island
 (19) of Kodiak and some of the Alaska Peninsula is that -
 (20) A That s correct
 (21) Q And on here there s various green parcels and those have
 (22) been identified as the Kodiak Island Borough remote parcels
 (23) of - is that correct?
 (24) A That is correct yes
 (25) Q And these are the - this is the land that Kodiak Island

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- (1) Borough is making a claim for in this lawsuit?
 (2) A That s correct
 (3) Q Now what I d like to do is go through and have you explain
 (4) a little bit on these - about these various parcels and we ll
 (5) start off with the largest parcel which is up here in the
 (6) north end of Shuyak Island And I have here an exhibit 1521
 (7) Could you tell the jury please what the green area in 1521
 (8) depicts?
 (9) A Well the green area is the 26 000 - little over 26 000
 (10) acres that is owned by the Kodiak Island Borough that was
 (11) selected as a result of the State of Alaska s Municipal Land
 (12) Selection Act that was passed actually in 1964 The borough
 (13) actually only got title to this after some prolonged efforts
 (14) with the State of Alaska in about 1980
 (15) Q All right And could you describe a little bit - you can
 (16) come down here Mayor Selby - and talk a little bit about -
 (17) explain to the jury what the topography is of this parcel and
 (18) the terrain and the - and the coves and so on about the
 (19) property
 (20) A Well the topography this area down in here is pretty
 (21) protected as you can see from the straits here Great
 (22) coastline along in here and this is probably some of the most
 (23) pristine area for kayaking in the world that I know of This
 (24) is always heavily timbered in here There s a lot of bear
 (25) deer other animals lot of marine mammal and bird activity

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- (1) This is one of the most - the highest rated bird sanctuaries
 (2) in the whole spill area as a result of the Exxon Valdez Trustee
 (3) Council studies that have been done So this is an estuary in
 (4) effect for all of the bird species Every bird species that s
 (5) in this area of the world is - has some base here on Shuyak
 (6) Island
 (7) These areas down in here are beautiful coastal areas
 (8) There s a few lots that have been selected either through
 (9) Native selection Port William was an old cannery site that was
 (10) selected that is still owned privately The rest of this is
 (11) pretty much rolling gentle rolling hills has a great deal of
 (12) timber on it in here So it s fantastic country
 (13) Q What is - what do the citizens of Kodiak or others
 (14) tourists say or what do they use this property for? How is
 (15) this property used?
 (16) A Well it s heavily used for recreation hunting fishing
 (17) hiking those sorts of activities There s a silver salmon run
 (18) in Shangan Bay here This is actually State Park lands here
 (19) that come across to about this line right here The rest of
 (20) this is State Park basically and this is nominated as a state
 (21) wildlife refuge over on this piece of State-owned land so the
 (22) entire island is owned either by the State of Alaska for parks
 (23) wildlife refuge and by the Kodiak Island Borough
 (24) I think basically the citizens want this whole island to be
 (25) a park and feel it should be preserved for the future because

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- (1) of its high amount of birds marine mammals and other game
 (2) that s up there And it s so beautiful, there s some -
 (3) there s a number of hiking trails that criss-cross the island
 (4) and as I say there s a great deal of fishing opportunity all
 (5) the way around the island particularly the silver salmon in
 (6) the fall in Shangan Bay
 (7) Q Do people use it for those purposes?
 (8) A It is heavily used actually on a year round basis It s
 (9) interesting how many people you can find up here even
 (10) January
 (11) and February months because it is protected If you go up
 (12) there in a fishing vessel state parks have some cabins over
 (13) here on the park you can stay in and so it basically is a
 (14) year-round recreational opportunity
 (15) Q And how do you get - how do you get to this property?
 (16) A Well you either have to go by plane or boat Float planes
 (17) can land virtually anywhere in these protected areas
 (18) Obviously you can come by boat as you can see from here just
 (19) come out of Kodiak here come up around Afognak Island and
 (20) you
 (21) can pretty much get ashore most of the places
 (22) There s a few cliffs cliffy areas but usually even where
 (23) some of the cliffs are there s an area where you can get on the
 (24) beach that s - partly cliff and then it drops off And
 (25) there s a creek that comes down and a beach there so you can
 (26) pretty much access the island 360 degrees around the island
 (27) Q And when you say by plane you mean by float plane?

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- (1) A Correct Right There s no landing strips it s all by
 (2) float plane
 (3) Q So you have to go in through the beach or through the beach
 (4) areas?
 (5) A Right
 (6) Q Okay And in 1989 in this map 1354 A - excuse me -
 (7) there s indications - well this shows a mapping of oil by
 (8) various programs and it shows in Shuyak as pretty well
 (9) encircled I think it is encircled
 (10) A Yes it was encircled
 (11) MR CLOUGH Objection Your Honor as to foundation
 (12) of this witness knowledge
 (13) THE COURT Objection sustained Let s hear how this
 (14) witness comes by his knowledge
 (15) MR STOLL Can I ask a question first?
 (16) THE COURT Yes
 (17) MR STOLL I think the map is in evidence Your
 (18) Honor and Mr Bush testified that the - the oiling is
 (19) indicated from the programs that this island was - anywhere
 (20) there was this magenta or red color that that was oiled
 (21) THE COURT So he s simply testifying that the map
 (22) shows -
 (23) MR STOLL That s right he s testifying that
 (24) THE COURT All right
 (25) MR STOLL That s first of all Now what I want -

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- (1) my second question is -
 (2) MR CLOUGH Maybe I didn t - he s just going to
 (3) testify as to the colors on the map Your Honor?
 (4) THE COURT He will and he s going to go on
 (5) MR STOLL Now he s going to go on
 (6) THE COURT We don t know what he s going to go on
 (7) to
 (8) MR STOLL Phase two
 (9) BY MR STOLL
 (10) Q Did you by the way Mr Selby did you happen to go to
 (11) Shuyak as the Mayor in 1989?
 (12) A Yes I did
 (13) Q And did you observe oil at Shuyak?
 (14) A Yes I did
 (15) Q And would you tell the jury what you observed?
 (16) A We flew up to - during the first hnts in early April flew
 (17) up to this northern part which is probably one of the hardest
 (18) hit spots on Shuyak Island Shuyak Island was the hardest hit
 (19) part of the Kodiak Island because again keep in mind up here
 (20) is where Prince William Sound is Basically the entire load
 (21) flushed out of the Sound came along the Kenai Peninsula here
 (22) swung up and either came directly in to hit Shuyak or north
 (23) Afognak here or swung up into Lower Cook Inlet swirled
 (24) around
 (25) a bit and came back down which some of - which again hit
 (26) Shuyak Island And the rest of it flushed on down into the

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- (1) Shelikof Straits hitting both the peninsula side and the
- (2) Kodiak Island side of the island
- (3) And so as I mentioned part of the - the biggest problem
- (4) we had really in Kodiak other than the initial hit was that
- (5) we kept getting reoiled So they would clean a beach and it
- (6) would get reoiled and they'd go back and clean it again and it
- (7) would get reoiled We did - throughout the summer it got
- (8) reoiled through the fall and as I indicated we had reoiling
- (9) on Shuyak as late as March of 1990 as reported by the State
- (10) Parks folks
- (11) MR CLOUGH Objection foundation Your Honor
- (12) reiterate that objection This appears to be hearsay to me
- (13) that last portion of the answer
- (14) THE COURT Let's break it down Did you observe the
- (15) March 1990 oiling?
- (16) A I did not observe it It was reported to me by the State
- (17) Parks people who did observe it on the beach
- (18) MR STOLL I'll lay a foundation Your Honor
- (19) THE COURT Okay
- (20) BY MR STOLL
- (21) Q Were these reports by the State Parks people was this at
- (22) Emergency Service Council meetings?
- (23) A That is correct
- (24) Q You were one of the five members of the Emergency Service
- (25) Council?

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- (1) A That's correct
- (2) Q And the purpose of these - these reports that you got from
- (3) the parks people or other people at the Emergency Service
- (4) Council again were made in the regular course of business of
- (5) the Emergency Service Council?
- (6) A That is correct
- (7) Q And the purpose of the - of getting these reports from the
- (8) Emergency Services Council was what again?
- (9) A Again was response to the oil spill and we were very
- (10) concerned about that during February and March And it is
- (11) again reflected in those minutes about whether or not there was
- (12) going to be an impact of the fishing season in 1990 We had
- (13) lost the entire fishing season in 1989 because Fish & Game and
- (14) DEC had closed all of the base on Kodiak Island because of the
- (15) oiling and constant reoiling that was occurring
- (16) We were very concerned in February and March because we
- (17) were still getting reports of fresh mousse about whether or
- (18) not we would be able to have a fishing season in 1990 or if
- (19) again we might lose some portion of the fishing season in 1990
- (20) so these reports were being brought in and the Department of
- (21) Fish and Game was making an analysis to determine at that
- (22) point whether or not there would be a fishing season in 1990
- (23) Q All right. So then -
- (24) THE COURT Hold on
- (25) MR CLOUGH Your Honor I'd like to reiterate the

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- (1) foundation objection I don't think this is a demonstrated
- (2) exception to the hearsay rule
- (3) THE COURT It's a foundation - it's a hearsay
- (4) objection correct?
- (5) MR CLOUGH Yes
- (6) THE COURT Where's the reports?
- (7) MR STOLL They're oral reports Your Honor There's
- (8) nothing in the rule in 803 that requires that they be
- (9) written I think we have oral also - we have written also in
- (10) the minutes
- (11) THE COURT Do you have them?
- (12) MR STOLL Yes Here are the complete set of the
- (13) minutes Your Honor
- (14) THE COURT Show them to the witness
- (15) MR STOLL They don't have to be written
- (16) MR CLOUGH Your Honor these weren't designated
- (17) through the witness I'd like an opportunity to see the
- (18) document and what portions are going to be presented to the
- (19) witness as well
- (20) MR STOLL They're on the exhibit list.
- (21) MR CLOUGH Which exhibit list?
- (22) MR STOLL We gave it to you Friday
- (23) MR CLOUGH Withdraw that I'll get my own copy
- (24) THE COURT All right
- (25) MR STOLL Your Honor just so we can speed this up a

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- (1) little bit we'll offer the exhibit but I think that - I
- (2) think the witness though under the rule can testify as to
- (3) oral reports as well as written reports
- (4) (Exhibit 915 offered)
- (5) THE COURT You got a case for that proposition
- (6) counsel?
- (7) MR STOLL There's no case for it but it doesn't say
- (8) it can't either
- (9) THE COURT I disagree with that - that point
- (10) counsel but as long as you've got it in writing and it's a
- (11) business record then what's in there is admissible So let's
- (12) go on to the record
- (13) MR STOLL We'll come back to that Your Honor I
- (14) think to move this -
- (15) THE COURT All right
- (16) MR STOLL Mayor Selby I think we'll just move ahead
- (17) and come back to that later
- (18) THE COURT For now the objection's sustained
- (19) MR STOLL All right Do you have it right there?
- (20) Oh okay He has it right there so I guess there is no
- (21) delay I'd like to move along
- (22) THE COURT Your objection has been sustained with
- (23) regard to verbal communications On the other hand these
- (24) minutes appear to be business records and they're probably
- (25) admissible

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- (1) MR CLOUGH I d like an opportunity to see the page
 (2) and I do actually have a second point I d like to bring up
 (3) THE COURT You certainly can look at what page we re
 (4) looking at
 (5) MR STOLL Your Honor if I can I think we can skip
 (6) ahead
 (7) THE COURT That s fine if you want to skip ahead
 (8) The objection for now is sustained
 (9) BY MR STOLL
 (10) Q Mayor Selby I think we can skip ahead and go to other
 (11) parcels and we can take it up at the break
 (12) THE COURT Mayor what is the exhibit number on
 (13) that?
 (14) THE WITNESS The Exhibit Number is 31813
 (15) THE COURT Thank you
 (16) MR STOLL It s 915 Your Honor plaintiffs Exhibit
 (17) 915
 (18) THE COURT 915?
 (19) MR STOLL Yeah
 (20) THE COURT All right
 (21) MR STOLL Okay that s fine
 (22) BY MR STOLL
 (23) Q Now I d like to turn your attention to the next - the
 (24) next board of parcels and I d like - and this is the Kodiak
 (25) Island Borough land holdings on Raspberry Island and the

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- (1) Kupreanof Peninsula And could you show the jury first off on
 (2) exhibit 1354-A where this is? Just point it out.
 (3) A This is on Raspberry Island here and the other parcel is
 (4) on the Kupreanof Peninsula right here this parcel
 (5) Q Now would you tell the jury please - there s actually
 (6) several parcels here - and would you tell the jury, sort of
 (7) describe these various parcels to the jury? This is on exhibit
 (8) 1525
 (9) MR CLOUGH Your Honor could we have some brief
 (10) foundation that this witness has been to these parcels just to
 (11) clarify for the jury?
 (12) BY MR STOLL
 (13) Q Mayor Selby you ve been to these parcels?
 (14) A Yes I have This is - this is Raspberry Straits which
 (15) is a very protected body of water This is a nice beach
 (16) property along here There s some fairly steep cliffs along
 (17) here then this is good beach along in here again This is a
 (18) relatively flat valley in here called Bear Valley This
 (19) actually is fairly steep and mountainous right in this region
 (20) Here drops down into a flat on both sides of Onion Bay here
 (21) with good beach access except for the upper portion in here
 (22) There s some steep area in there This has good beach access
 (23) on both sides here of the Kupreanof Peninsula parcel
 (24) Q And did you - did you either observe oiling on these
 (25) parcels or did you observe personally observe oil on any of

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- (1) these parcels?
 (2) A No I did not Observed this portion of Raspberry Straits
 (3) during the summer of 89 but I did not get out this way and I
 (4) did not get to Onion Bay and I did not get out to Kupreanof
 (5) Q And did you receive reports of oiling in these areas as a
 (6) member of the Emergency Services Council?
 (7) A Yes I did
 (8) MR CLOUGH Objection hearsay Your Honor
 (9) THE COURT Sustained
 (10) BY MR STOLL
 (11) Q Now I d like you to describe the parcel that is called the
 (12) Kizhuyak Bay?
 (13) A This is a parcel that sits just off of the beach Kizhuyak
 (14) Bay it s right on a river delta at that so it s relatively
 (15) flat little bit of rolling hills quite a bit of cottonwood
 (16) trees The only access is from the area here at the head of
 (17) Kizhuyak Bay
 (18) Q By there you mean from the water - this is exhibit 1523 -
 (19) but the access is from Kizhuyak Bay up this stream to this
 (20) river to - to the property?
 (21) A Correct This is a road that goes to the Terra Lake hydro
 (22) project but is not open to the public It s a roadway that s
 (23) available only to the Kodiak Inspectors
 (24) Q How is this parcel utilized?
 (25) A It s utilized for deer hunting and recreational purposes

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- (1) This is a good salmon stream here so there s also good
 (2) fishing
 (3) Q And is that - is that walking distance from the bay
 (4) there?
 (5) A Oh sure Yeah this is just a short hike up there
 (6) Q That s the only parcel I believe that is not actually on
 (7) the ocean?
 (8) A That s correct
 (9) Q It s on the rivers - well the river and then two streams
 (10) I believe
 (11) A It doesn t have a beach front though
 (12) Q And then I d like you to describe the holdings land
 (13) holdings of Kodiak Island Borough in Ugak Bay please?
 (14) A Actually this is several different parcels owned by the
 (15) Kodiak Island Borough here starting here in Hidden Basin
 (16) This is probably some of the nicest property around because of
 (17) the nice - you can get in here with a boat and it s totally
 (18) protected obviously because of this land out here So it s a
 (19) great harborage even in a wind storm
 (20) This is relatively flat down here and starts getting steep
 (21) back on the two edges There is some cliffs along part of it
 (22) but it does have good - pretty much has access all the way
 (23) around This parcel here is flat for about oh six seven
 (24) hundred feet back from the beach And then there s a ridge
 (25) that actually runs down and ends and drops then down to the

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- (1) water here coming in on this parcel This is a relatively
 (2) flat parcel here that has pretty good anchorage right here As
 (3) you can see it s fairly protected from most wind problems
 (4) This one has a little bit of harborage here Also is
 (5) basically a flat with some cottonwoods and some - some land
 (6) there
 (7) And then this Eagle Harbor is also very nice piece of
 (8) property basically flat starts getting back into the hill
 (9) here but pretty reasonable anchorage there except on
 (10) northwest winds that blow down through that channel there
 (11) Q And you ve seen - you ve been to these sites?
 (12) A I haven t been to all of them I ve been in Hidden Basin
 (13) but I ve not necessarily stopped on this one here I ve flown
 (14) over all of them and we have - on the AutoCad mapping
 program
 (15) we have in the borough we ve got the topographical maps of all
 (16) these that show the contour lines and what they are We also
 (17) have aerial photos of some of them
 (18) Q And did you receive reports -
 (19) MR CLOUGH Objection Your Honor hearsay
 (20) THE COURT This is not - not to prove the matter
 (21) asserted counsel
 (22) MR STOLL Pardon me?
 (23) THE COURT Not to prove the truths of the matter
 (24) asserted at this time?
 (25) MR STOLL I just asked if he got reports

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- (1) THE COURT Yes I know
 (2) BY MR STOLL
 (3) Q Did you get reports in the Emergency Services Council with
 (4) respect to these areas?
 (5) A Yes we did And as you can see from this map here this
 (6) entire bay was oiled
 (7) MR CLOUGH Objection You Honor
 (8) THE COURT As you can see from what map?
 (9) A This map
 (10) THE COURT Name the exhibit please
 (11) MR STOLL He s referring to 1354-A
 (12) A 1354-A
 (13) THE COURT Thank you
 (14) BY MR STOLL
 (15) Q Mayor Selby you weren t here there was some testimony
 (16) last week from Andre Krault and Matt Keplinger who were
 hired
 (17) by the ADF&G in the summer of 1989 and at least one of them
 (18) was involved in the cleaning up of this bay
 (19) Now I d like to ask -
 (20) MR CLOUGH Your Honor may we approach?
 (21) THE COURT Keep making the objections
 (22) (At side bar on the Record)
 (23) MR CLOUGH This one I think is significant
 (24) First I think that is a mischaracterization of the testimony
 (25) Both said they did not participate they were observers with

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- (1) ADF&G
 (2) Secondly -
 (3) MR STOLL I can t hear you
 (4) MR CLOUGH There was no question that that statement
 (5) seemed to be that they participated
 (6) THE COURT What your objection is is Mr Stoll not
 (7) asking the question but providing evidentiary information?
 (8) MR CLOUGH Yes
 (9) THE COURT Be advised counsel don t do that again
 (10) MR PETUMENOS Judge I m working on getting a case
 (11) on the oral- on the oral business record
 (12) THE COURT Should have done that before this issue
 (13) came up
 (14) MR PETUMENOS I didn t know it was going to be an
 (15) issue We re working on it
 (16) THE COURT Okay
 (17) (Side bar concluded)
 (18) MR STOLL Let s see where were we? Oh I know we
 (19) were -
 (20) BY MR STOLL
 (21) Q The Kodiak Island Borough land holdings at Shearwater Bay
 (22) would you show the jury on exhibit 1354-A that s the big map
 (23) there where Shearwater Bay is?
 (24) A Shearwater Bay sets off of - Kiliuda Bay is the main bay
 (25) and then the place we re looking at there is actually the place

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- (1) here and it s called Shearwater Bay
 (2) Q It s right in here?
 (3) A Right
 (4) Q And would you describe - can the jury see that?
 (5) Can you describe the parcel of land that s owned by Kodiak
 (6) Kodiak Island Borough in Shearwater please?
 (7) A This is the parcel that s owned right here by the Kodiak
 (8) Island Borough Access again is from the beach here which
 (9) is a nice flat beach There s a salmon stream that comes in
 (10) on this side of it The hill starts back on this corner This
 (11) is a relatively flat cottonwood tree area around both sides of
 (12) the stream There s great harborage up here too for
 (13) protecting your vessel in wind and whatnot so it s actually a
 (14) pretty good parcel
 (15) Q Okay And then I d like you to - the final parcel is on
 (16) Sitkinak and Sitkinak Lagoon And would you point that out
 (17) again to the jury?
 (18) A Right right here
 (19) Q That s down there And there was some testimony also I
 (20) think with respect to that Would you describe that parcel
 (21) that s owned by Kodiak Island Borough on Sitkinak Lagoon?
 (22) A This is a relatively flat parcel with the exception of the
 (23) hill actually starts back in these two corners here There s
 (24) actually an airstrip an old airstrip on Sitkinak that was
 (25) developed by the Coast Guard and so there s - you can land a

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- (1) plane there as well as boat access into Sitkinak Lagoon here
 (2) This is relatively flat Little bit of rolling hill to it in
 (3) here excellent property
 (4) Q Incidentally and is this - you have some plans for this
 (5) for a future village?
 (6) A Well it would certainly be - lend itself by virtue of
 (7) already having an airstrip there which is obviously a pretty
 (8) expensive part of developing a community but just because of
 (9) the nature the flat nature of this land here would be an
 (10) excellent location for a village in the future
 (11) Q And is that - what is that parcel used for by tourists and
 (12) Kodiak residents?
 (13) A Yes it is It's used heavily It's also an excellent
 (14) place A lot of the fishing fleet if they get caught down on
 (15) the south end of the island this is one of the more protective
 (16) areas They can run in here and hide with their fishing
 (17) vessels
 (18) This lagoon also is a very rich crab - estuary for crab
 (19) Little crab grow up in here and come out into the bay here so
 (20) there's a lot of crab fishing that happens on the south end of
 (21) the island down in this region here And Sitkinak Lagoon is
 (22) one of the primary estuaries as well as Tugidak over here
 (23) Both of those little lagoon situations are very rich in biota
 (24) for the small crab and development of the fishery so it gets a
 (25) lot of use down there by the crab industry in particular

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- (1) It's a great place to go for birds a lot of emperor geese
 (2) winter down here on these islands as well as a lot of other
 (3) bird life that's just there on a year round basis So it's a
 (4) very rich portion for bird life again Lot of marine mammals
 (5) as well
 (6) Q Incidentally I'd like to go back to a couple of the maps
 (7) that we already talked about One of them is on Kizhuyak Did
 (8) you go to Kizhuyak Bay in 1989?
 (9) A Yes I did
 (10) Q And did you personally observe any oiling out there
 (11) yourself?
 (12) A Well in Kizhuyak Bay the village of Port Lions is just a
 (13) little further down the bay right in here on this bigger map
 (14) We spent a lot of time in Port Lions My wife's family is -
 (15) she was born and raised in Port Lions Afognak It's the
 (16) relocation of the Afognak village after the '64 earthquake so
 (17) we spend a fair amount of time in Port Lions I go in and out
 (18) of there a lot and yes we did see oil along the - would be
 (19) the west side of Kizhuyak Bay on our trips to Port Lions off
 (20) and on during that summer and the village crews picked up a
 (21) lot of the mousse all the way around this bay during the summer
 (22) of 1989
 (23) Q And I forgot to ask you another question on another map
 (24) here and that was regarding Raspberry Island Now in the
 (25) summer of 1989 did you - you meaning the Kodiak Island

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- (1) Borough - did you have any plans to sell any of the property
 (2) that was owned by Kodiak Island Borough?
 (3) A Yes we did
 (4) Q And where was that located?
 (5) A It was some of the lots here in Onion Bay on both sides of
 (6) the bay
 (7) Q All right And did you in fact have that sale in 1989?
 (8) A No we had to postpone the sale and it occurred in 1990
 (9) Q And why was that?
 (10) A Well the lands manager got pulled off and became a
 (11) full time oil spill worker from about the first of April until
 (12) mid June It's a critical time period when we needed - would
 (13) have had to have moved actually all the sale details through
 (14) the assembly in the normal course of events in order to have
 (15) the sale occur in October So all the authorizations by the
 (16) assembly the identification of the parcels the terms of the
 (17) sale all of those needed to be set in advance so that then the
 (18) land manager would then normally follow with the development
 (19) of
 (20) a sales brochure that we make available for the public for
 (21) about two months before a sale were to actually occur So his
 (22) disruption and total focus on the oil spill precluded us moving
 (23) that paperwork through in the normal course of events and we
 (24) just couldn't have a sale in 1989
 (25) Q So when did you have the sale?
 (26) A We had it in the fall of 1990

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- (1) Q The fall - excuse me the fall of 1990?
 (2) A Correct
 (3) Q And was that a sale where you put up a listing or what
 (4) kind of a sale was that? I mean did you have a sign outside
 (5) that said you know "for sale or what - what was it an
 (6) auction or what - how did you -
 (7) A It was a sealed bid auction type of a sale where we put out
 (8) again a sales brochure And with the sales brochure we
 (9) advertise in the newspaper and on the radio for like a month
 (10) before the actual sale were to occur Folks would come in
 (11) pick up the sales brochure and the bid sheets then they could
 (12) make their bid out and seal it in an envelope and submit it to
 (13) us by you know five o'clock on Friday or whatever the
 (14) scheduled date was
 (15) Q The idea was people would come in and get the brochures?
 (16) A Right They would pick up the brochures and the bid form
 (17) and write down on the bid the parcel number and their bid what
 (18) their bid was and seal it and submit it to us And then on
 (19) the sale actual sale day we would open those envelopes
 (20) identify the ones - the bids that were for the same parcel
 (21) and then determine who the highest bidder was for that
 (22) particular parcel
 (23) Q Okay And incidentally when you saw oil yourself in 1989
 (24) at various places in Kodiak Island Borough did you see any
 (25) what's been referred to as mousse?

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- (1) A Yes
 (2) Q And now I have here what's been identified as exhibit 1536
 (3) and we are not claiming that this is - we're not claiming that
 (4) this is mousse from the Exxon Valdez oil spill but does this
 (5) look at all like the appearance of what you saw?
 (6) A It's mousse all right I don't know what you - what else
 (7) I need to say but it's - yeah
 (8) Q Is that what you're talking about?
 (9) A We saw - we saw like this - we saw anywhere from little
 (10) cakes like this to oh five six foot in diameter
 (11) tabletop size pieces and then offshore when it was coming
 (12) down up in the Shuyak area in particular
 (13) Q I'll take that -
 (14) A When we - you could see ribbons of it looked like ribbons
 (15) of the stuff in the water like up to a quarter mile long I
 (16) don't know how wide they might have been at that point in time
 (17) but when it was first flushing down from the Sound there were
 (18) ribbons of large mousse in the water
 (19) Q Thank you Now what - you can resume the stand there
 (20) MS SMITH Then I can see
 (21) MR STOLL Sure
 (22) MS SMITH Thanks Bob
 (23) MR STOLL Okay
 (24) BY MR STOLL
 (25) Q Mayor Selby what effects if any did the oil spill in

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- (1) 1989 have upon the usage of the Kodiak parcels other than the
 (2) testimony you've already given about the - putting off the
 (3) sale of those parcels in 1989 to 1990 but what - other than
 (4) that what effects if any did the -
 (5) A Well there would have been a large reduction in use of all
 (6) of that land All of the land on Kodiak Island Borough owns
 (7) as well as land on Kodiak Island in general for a multiple -
 (8) for a multitude of reasons
 (9) First of all folks who normally would have been out
 (10) subsisting and who use these lands for either subsistence
 (11) hunting or fish there was very little subsistence hunting and
 (12) fishing that occurred during that year In fact the Fish and
 (13) Game when they made the decision to open the deer season in
 (14) August obviously there had been enough of a concern about
 (15) whether or not oil was impacting the deer that they did make a
 (16) conscious decision about whether or not to open the season or
 (17) not And in their publication where they decided to make the
 (18) decision to open the deer season they mentioned that folks
 (19) may
 (20) not want to hunt
 (21) MR CLOUGH Objection Your Honor he's reciting a
 (22) publication It's hearsay
 (23) MR STOLL You don't need to go into the publication
 (24) THE COURT Excuse me
 (25) MR STOLL He doesn't need to state what -
 (26) THE COURT All right The jury is to disregard the

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- (1) statement about publications Go ahead
 (2) BY MR STOLL
 (3) Q But go ahead and explain the change in uses of the - of
 (4) the Kodiak parcels
 (5) A Well it's just the recognition that didn't want to wade
 (6) ashore to hunt deer through oil and similar thing if you go
 (7) picnicking if you want to go recreate on the beach we have
 (8) people there in Kodiak and Monashka Bay and City of Kodiak
 (9) where the oil came ashore who went down not realizing that
 (10) there was oil on the beach and pretty soon they realized that
 (11) their children's clothes was all covered with oil from just
 (12) playing along on the beach
 (13) So fairly quickly folks figured out that picnicking on the
 (14) beach was not something you're going to be able to do
 (15) anymore
 (16) during the summer of 1989 even right around the City of Kodiak
 (17) there So all of the parcels were impacted from the
 (18) perspective of no hunting no fishing no subsistence use no
 (19) picnicking on the beach You really had to consider whether or
 (20) not if you wanted to go hiking even and use the uplands
 (21) whether or not you wanted to wade ashore and potentially get
 (22) oiled get oil on your boat get impacted by oil whether or
 (23) not you really wanted to go hiking that bad or not because
 (24) when you came home you had the mammoth task of trying to
 (25) remove the stuff DEC was issuing all sort of guidelines about
 (26) if you have oil on your boat

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- (1) MR CLOUGH Objection Your Honor he's reciting a -
 (2) MR STOLL No this is for the purpose Your Honor
 (3) showing statements were made not whether they're true or not
 (4) MR CLOUGH I believe the pending question is -
 (5) THE COURT What's the purpose it's showing then?
 (6) MR STOLL That the effect - it affected the use of
 (7) the parcels
 (8) THE COURT What is this counsel lay opinion? Is
 (9) that what it is?
 (10) MR STOLL He's expressing what he observed
 (11) THE COURT Counsel?
 (12) MR CLOUGH I have no objections whatsoever to Mayor
 (13) Selby describing what he personally observed and I have not
 (14) posed a -
 (15) THE COURT Question is whether it's lay opinion
 (16) counsel Lay opinion is admissible if it's rationally based on
 (17) the perception of the witness and helpful to the testimony
 (18) isn't it?
 (19) MR CLOUGH That wasn't the nature of my objection
 (20) The objection is he's referring and citing an out-of-court
 (21) document was is not citing an opinion he's citing from a
 (22) document
 (23) THE COURT The objection's overruled
 (24) MR STOLL Go ahead
 (25) A Well the DEC established a boat washing facility at the

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- (1) public dock in Kodiak so that not only the folks working on
 (2) the spill under contract with the vessels you could see the
 (3) oil line on the vessels as they came back into town They had
 (4) to go out around the channel in Kodiak outside of the islands
 (5) in the open ocean and approach the boat harbor from the south
 (6) side so as not to bring the oil through the channel was the
 (7) idea and that was a requirement by DEC to this boat washing
 (8) statement where the boats would then be cleaned up
 (9) So if you took your personal vessel out you had to do the
 (10) same thing If you got oil on it you had to bring it back in
 (11) and have it washed down at the boat washing facility before you
 (12) could then go ahead and either put it on your trailer or take
 (13) it to the boat harbor So that was the level of concern that
 (14) there was and the level of impact So obviously you had to
 (15) think about how bad you wanted to go out and then come home
 and
 (16) spend several hours waiting to get your boat washed down
 (17) because of the boat washing exercise as far as recreational
 (18) use
 (19) So it was a definite impact and a lot of people chose to
 (20) not have to go through that hassle not to use these lands so
 (21) it was a major impact on - major reduction in utilization of
 (22) all of the lands on Kodiak Island
 (23) Q Did the oil spill have any effect on tourism?
 (24) A Yes There was about a 34 percent reduction in tourism
 (25) contacts at the Kodiak Island Convention and Visitors Bureau

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- (1) by tourist contacts between 1988 and 1989 It came back some
 (2) in 90 but I think it actually took three years to get back to
 (3) the level of the 1988 tourism visits to Kodiak as was
 (4) documented by Convention and Visitors Bureau
 (5) Q And did you observe any changes in the use of subsistence
 (6) food gathering on Kodiak?
 (7) A There was a major change in the subsistence food gathering
 (8) on Kodiak It came up very early in the Emergency Services
 (9) Council minutes meetings about the concern about whether or
 (10) not fish and some mussels and clams and other animals would
 be
 (11) impacted by the oil
 (12) The State epidemiologists came to Kodiak in one of the
 (13) early meetings and indicated that yes It was a problem but
 (14) no one knew to what level or how to tell if there was a problem
 (15) or not a problem And it became very apparent very early on to
 (16) everybody in the community that the only wise course of action
 (17) was to not eat subsistence salmon or other foods One of the
 (18) early things also happened to some people saw some deer
 eating
 (19) kelp on the beach that was oiled then brown bear were
 (20) observed
 (21) MR CLOUGH Objection Your Honor foundation and
 (22) hearsay
 (23) THE COURT Sustained That last statement is
 (24) stricken
 (25) BY MR STOLL

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- (1) Q Were -
 (2) THE COURT Your question was what did you see
 (3) counsel
 (4) MR STOLL Right
 (5) THE COURT So he should be confined to what he saw
 (6) MR STOLL I agree
 (7) THE COURT Go ahead
 (8) BY MR STOLL
 (9) Q Have you - were you here in the courtroom when Dr Bridgen
 (10) testified about a directive in August of 1990 that it was safe
 (11) to eat salmon if there was - I think it was 4 parts per
 (12) billion the hydrocarbons didn't exceed that amount? Were you
 (13) here for that?
 (14) A I was here this morning for the last portion but I
 (15) understand that there was some discussion yesterday
 afternoon
 (16) as well
 (17) Q Now I just want to get this straight here This is 4
 (18) it's like four-tenths of one part versus one billion Now
 (19) after - I think I got that right Is that right?
 (20) A Yeah
 (21) Q Now once that directive came out in August of 1990 did
 (22) people - did you observe whether or not people in Kodiak felt
 (23) safe about eating salmon?
 (24) A I think by that point in time there was so little
 (25) credibility from any of the agencies in the public's opinion

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- (1) that it really didn't matter what they said Not only that
 (2) they couldn't - there's no physical way for me to determine
 (3) what four-tenths of one part per billion is on a fish - I'm
 (4) holding up here - and the whole thing from the start became an
 (5) idiocy exercise because from the get-go what became very
 clear
 (6) is that the State and the federal people - Joe Talbot from
 (7) NOAA stood up at a meeting and -
 (8) MR CLOUGH Objection Your Honor it's recitation of
 (9) hearsay
 (10) THE COURT To prove the truth of the matter
 (11) counsel The objection's overruled
 (12) A And this is what happened, folks Is that people were
 (13) asking mothers were in there very concerned about should I
 (14) catch a salmon or should I feed clams to my family And the
 (15) basic answer that came back from the federal and state people
 (16) was that we don't know And when pinned down in those public
 (17) meetings by the Native people they - the question that was
 (18) raised was Would you feed your own family these fish? And
 (19) the answer was no from these public officials
 (20) That - for the rest of the summer it really didn't matter
 (21) what these paper exercises that came out because the next
 (22) thing that followed was the verbal statement that if it smelled
 (23) of oil and it had obviously had oil on it don't eat it I
 (24) mean it was like an idiot statement I mean everybody could
 (25) figure that out If you pull a fish out of the water and he's

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- (1) got oil dripping off of him you re not going to eat it so why
 (2) bother making the statement Anyone could figure that out So
 (3) the credibility went right to the bottom very quickly as far
 (4) as the public was concerned about all these big official
 (5) statements about whether stuff was safe or not
 (6) It was inconsistent They d tell you well we think it s
 (7) okay here today but it s probably not okay there And
 (8) throughout these daily meetings where it was a daily subject
 (9) we had asked Exxon to bring in a portable laboratory so that we
 (10) could start running some analysis on some of these fish and
 (11) mussels and whatnot They refused to pay to bring it in
 (12) We asked them just to bring up the piece of equipment We
 (13) got the University of Alaska folks at the Fish Tech Center who
 (14) have microbiologists on the staff and could run this equipment
 (15) we asked them just bring up a piece of equipment These
 people
 (16) will run these tests for free so that we can tell people
 (17) whether this stuff is safe or not They wouldn t pay for it
 (18) They wouldn t find the piece of equipment They wouldn t get
 (19) it into the community and so as a result we had all sorts of
 (20) misinformation flying around and it became very apparent to
 (21) everyone very quickly that the only safe course if you love
 (22) your family was to not eat subsistence foods until you could
 (23) try to get this thing sorted out And the first - any kind of
 (24) indication that even came back was a year later so any
 (25) subsistence during the summer of 1989 basically went out the

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- (1) window
 (2) Q Now were you involved - I ll take this down so you can
 (3) sit down
 (4) THE COURT Mr Stoll we re going to take a break
 (5) pretty soon You can pick the time
 (6) MR STOLL I ve got - can we just go five minutes
 (7) more?
 (8) THE COURT Sure
 (9) BY MR STOLL
 (10) Q Were you involved at all in the 1989 1990 so-called
 (11) monitoring program of Kodiak Island Borough oil monitoring?
 (12) A The winter shoreline monitoring?
 (13) Q Yes
 (14) A Yes
 (15) Q How were you involved?
 (16) A We had a contract from Exxon for winter shoreline
 (17) monitoring that was a \$70 000 contract 20 000 of which was for
 (18) monitoring and the other 50 000 was to pick oil up off the
 (19) beach
 (20) THE COURT Who is we sir?
 (21) A The Kodiak Island Borough and we - the Kodiak Island
 (22) Borough subcontracted that effort to the Kodiak Environmental
 (23) Cleanup Incorporation
 (24) BY MR STOLL
 (25) Q You turned it over then to - now how were the sites

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- (1) selected for the - how were the monitoring sites selected?
 (2) A Well in all cases for Kodiak Island Borough as well as
 (3) for the six villages the sites were selected for ease of
 (4) access during the winter months A great deal of concern about
 (5) safety folks going out having to go out in boats during the
 (6) winter months in order to keep the schedule because it was -
 (7) the contract called for an every two-weeks visit throughout the
 (8) winter and so obviously it was a concern that if you had a
 (9) storm you might miss a week sort of a thing
 (10) So the sites basically were selected not because of whether
 (11) they were oiled or had a lot of oil or didn t have a lot of
 (12) oil but because of ease of access so that - and they were
 (13) mainly intended to be kind of just one indicator among others
 (14) that we would look at to keep a feel for how the oil was moving
 (15) around during the winter months
 (16) As I indicated the reoiling continued to occur and
 (17) occurring very actively in the fall when we started these
 (18) contracts And the idea was to be able to track through the
 (19) winter how active the movement of the oil off of one beach to
 (20) another beach reoiling those sorts of activities was
 (21) occurring through the winter months as an indicator
 (22) Then the following spring about you know how hard is it
 (23) going to be to track could we be confident that if there was a
 (24) lot of oil on the beach in the fall of 89 that it would still
 (25) pretty much be there in the spring of 90 or could it maybe

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- (1) have moved over to a different beach or could it have flushed
 (2) out entirely I mean we just didn t know And the idea of
 (3) monitoring was to try to get some feel for what was going on
 (4) during the winter months
 (5) Q And was that idea of the monitoring program was that one
 (6) of the Oiled Mayors or was that one of Exxon?
 (7) A No that was at our request We had wanted to continue to
 (8) do cleanup and particularly the village crews who at that
 (9) point were trained and actually were some of the most effective
 (10) clean up crews we had had wanted to continue to clean past
 (11) Exxon s declared unsafe day of September 15th to be on the
 (12) water ever again till the following summer The village folks
 (13) obviously live on the waters and could have worked throughout
 (14) the winter and basically the shoreline monitoring project
 (15) allowed us to do that
 (16) Q Now the jury - excuse me for interrupting - the jury
 (17) hasn t heard about the cut-off date before What do you mean
 (18) by the cut-off date? Tell the jury what you mean by the
 (19) cutoff September 15th?
 (20) A Well the cutoff was Exxon determined in their infinite
 (21) wisdom that it was unsafe to have beach crews out past
 (22) September 15th In Kodiak s case they actually pulled out
 (23) about the 10th of September and said that s it for this year
 (24) we don t care how much oil is still on the beach but we re
 (25) going home for the winter we ll come back next spring and see

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- (1) how much oil is still around
- (2) MR STOLL Your Honor this might be a good time to
- (3) take a break
- (4) THE COURT Okay we'll take a break
- (5) THE CLERK Please rise This court stands in
- (6) recess
- (7) (Jury out at 11 03 a m)
- (8) (Recess from 11 03 a m to 11 16 a m)
- (9) THE CLERK Please rise This court now resumes its
- (10) session Please be seated
- (11) THE COURT All right counsel we're on the record
- (12) The jury is not present
- (13) Who wanted to see me and out of the presence of the jury?
- (14) MR STOLL Your Honor we cannot find a case
- (15) THE COURT Surprises me counsel
- (16) MR STOLL That stands for the proposition that we
- (17) can have the oral statement And we had been under the
- (18) impression quite frankly we had done a Lexis search earlier
- (19) We had not found a case We were under the impression that
- (20) under subsection 8 of the public records exception when it said
- (21) or data compilation compilations in any form that that would
- (22) include oral as well as written form That's why I'll say in
- (23) any form
- (24) And Mr Petumenos thought also that we were correct but
- (25) during the course of the examination he left the courtroom and

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- (1) did some - his own Lexis search in addition to the one we had
- (2) done before this and he has informed me that there is a case
- (3) and the case is against us So just to advise the Court
- (4) accordingly
- (5) THE COURT Advising me -
- (6) MR PETUMENOS Just a minute I found a business
- (7) record case
- (8) THE COURT Advising the Court that its instincts are
- (9) correct that's very good counsel
- (10) MR PETUMENOS Do you remember when Mr Diamond
- (11) came
- (12) in and informed you he misquoted a phrase and his authority
- (13) went up?
- (14) THE COURT Counsel all of your credibilities are
- (15) very high level and it has never dipped below that line On
- (16) the other hand when somebody - when somebody tells me that
- (17) a
- (18) proposition they can't give me a case in support of it then I
- (19) have an index of supervision suspicion So where are we?
- (20) MR STOLL We have the ESC meeting minutes which were
- (21) kept and we'll lay a foundation for that and we've had time
- (22) during the break for Mr Selby to go through those and at
- (23) least with several of them we'll have reference to those
- (24) minutes and we will offer those minutes
- (25) MR CLOUGH I haven't - they still haven't given me
- (26) the reference I would like an opportunity -
- (27) THE COURT You need the references but I'm not going

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- (1) to deal with this in the presence of the jury so get the
- (2) references now I'm going to sit here and watch you read them
- (3) and then I'm going to - if there's an objection I'll rule on
- (4) it If there is no objection we'll go on
- (5) MR DIAMOND Can we just understand from Mr Stoll
- (6) what his purpose is in introducing these records? As a
- (7) spectator -
- (8) THE COURT His purpose to introduce these records is
- (9) the classic hearsay purpose which is to show oiling that this
- (10) witness didn't observe
- (11) MR DIAMOND And I think we have a hearsay within
- (12) hearsay problem because the records themselves -
- (13) THE COURT Well counsel wait until the redirect
- (14) all right? Read the references already because I thought we
- (15) might have one too but we won't know until you read the
- (16) references right?
- (17) MR DIAMOND We can only suspect Well counsel
- (18) wait until you read the references all right because -
- (19) MR CLOUGH Your Honor just to advise the Court of
- (20) this I've been advised that the stickers mark the pages and
- (21) there's a lot of stickers and it's going to take me a while
- (22) THE COURT All right we'll have the jury wait and
- (23) I've got a directive for you
- (24) No one steps on the verbal presentation because the clerk
- (25) is not getting this record correctly okay? So in spite of the

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- (1) fact that you've got this great funnel of energy - I can see
- (2) that you both do - one of you speaks at a time and one lawyer
- (3) will handle this Mr Diamond One lawyer I'll get
- (4) Mr Clough because he's the - doing the examination He
- (5) can - you can consult with him but not with the Court
- (6) understood?
- (7) MR DIAMOND Understood Your Honor
- (8) MR CLOUGH Your Honor to make things work even
- (9) better I think the clerk is also - at least she's informed me
- (10) she's had a problem because the witness has continued with
- (11) his
- (12) answers
- (13) THE COURT That's true That's absolutely true The
- (14) witness should be cautioned when there's an objection
- (15) pending
- (16) you're simply to stop talking okay?
- (17) MR CLOUGH Thank you
- (18) THE CLERK Please rise This court stands in
- (19) recess
- (20) (Recess from 11 21 a m to 11 38 a m) Terry I have a note
- (21) going back to Clough's speaking about the stickers and the
- (22) judge's response Please check that for me
- (23) THE CLERK Please rise This court now resumes its
- (24) session Please be seated
- (25) THE COURT Are we ready?
- (26) MR STOLL We're ready Your Honor
- (27) MR CLOUGH I guess it's my objection so with the

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- (1) Court's permission I'll go first
 (2) THE COURT I'm going to need to see the document
 (3) MR CLOUGH I have some copies and what might work
 (4) best Your Honor -
 (5) MR STOLL I can just hand you a copy my copy
 (6) THE COURT That's great
 (7) MR CLOUGH And I believe the notebook you've been
 (8) handed that's the same one I was looking at has the little
 (9) flags with the dates on the margin and I'll refer you to a
 (10) couple of the examples There are so many flags in there
 (11) literally there's not time for us I discussed with Mr Stoll
 (12) to go through each and every one and develop an individual
 (13) objection to each and every comment Instead I phrase the
 (14) objections insofar as it would apply to all introducing any of
 (15) the highlighted entries
 (16) And it's my understanding what Mr Stoll is seeking to do
 (17) is introduce the highlighted portion of the particular flagged
 (18) documents The objection Your Honor is hearsay within
 (19) hearsay and in many cases within hearsay In other words
 (20) triple hearsay I would contend that - that it is governed by
 (21) Rule 805 which talks about hearsay within hearsay and which
 (22) says hearsay within hearsay is admissible if and only if the
 (23) hearsay within the hearsay on its own falls into an exception
 (24) with the rule to the hearsay rules And in the case of triple
 (25) hearsay I guess one would have to be able to make a pretty

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- (1) cogent argument that there was an exception for each of the
 (2) levels If I could perhaps direct the Court's attention first
 (3) to the April 19th 1989 set of minutes and the highlighted
 (4) language on that
 (5) THE COURT April what?
 (6) MR CLOUGH April 19th 1989 I believe it might be
 (7) the very first one in the notebook
 (8) THE COURT It is yeah
 (9) MR CLOUGH We picked it because it was easy to
 (10) find The highlighted portion from there is I believe a
 (11) statement from Mr Madden who I believe is a Coast Guard
 (12) officer who at that time was working on the spill in Kodiak
 (13) What you see here is we have the written document which is of
 (14) course hearsay itself And the argument is that it falls
 (15) within a public records exception but within that the hearsay
 (16) within the hearsay is Mr Madden's oral statement as
 (17) purportedly made here to the emergency service at oil spill
 (18) management council and we would say that his oral statement
 (19) does not fit within a recognized exception to the hearsay
 (20) rule
 (21) So we would say the second level of hearsay is
 (22) inadmissible but if you look at the particular entry you'll
 (23) see there's actually a third level of hearsay because what
 (24) Mr Madden is orally reporting is an oral report he received
 (25) from - apparently we're assuming it's a boat named the Rough

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- (1) and Ready And again we would say that that hearsay within
 (2) hearsay within hearsay the triple level of the hearsay does
 (3) not fall within any recognized exception to the rule
 (4) I believe another good example of this the Court will see
 (5) on May 12th 1989 I'll give you a moment to find that one I
 (6) believe you'll see there's a highlighted entry right at the top
 (7) of that page from Mr Ford of the Coast Guard
 (8) THE COURT I got it
 (9) MR CLOUGH Similar situation I won't go through it
 (10) word for word but precisely the same type of triple hearsay
 (11) problem that we saw on the first one hearsay within hearsay
 (12) within hearsay And clearly I think there's no argument that
 (13) can be made - or at least I do not understand a recognized
 (14) exception to the rule for either the second or the third level
 (15) of the hearsay either the Coast Guard's oral report to the -
 (16) to the council or out of the third level of hearsay the report
 (17) which was delivered by someone to the Coast Guard which is
 (18) then
 (19) being delivered to the council
 (20) And the last example I would point to the Court is on
 (21) August 31st 1989 It's again a hearsay within hearsay within
 (22) hearsay and I think it's a particularly good example of the
 (23) danger that we're facing here with introducing these matters
 (24) these statements and this will be on Page 2 of the August
 (25) 31st 1989 minutes There's a single highlighted statement
 (26) from Mr Hopkins

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- (1) THE COURT I got it
 (2) MR CLOUGH You see here what they're seeking to
 (3) introduce is hearsay within hearsay within hearsay Even on
 (4) its face is unconfirmed reports of oil in Shuyak recently and
 (5) new reports of oil in northern Afognak I mean to me this is
 (6) a very good example of very perilous waters if I may use that
 (7) analogy that we're entering into
 (8) The objection we have is hearsay within hearsay within
 (9) hearsay In many instances we see no recognized exceptions
 (10) to
 (11) the second level of the hearsay or the third level of the
 (12) hearsay and beyond that I'd also pointed out that these
 (13) minutes contain very substantial extraneous information Only
 (14) very small portions of them are being offered and we haven't
 (15) even begun to address that issue yet And I offer these three
 (16) as examples of the type of the problem that we're facing in the
 (17) related file
 (18) THE COURT Yes counsel
 (19) MR STOLL Your Honor I think that these come within
 (20) the - let me say one thing with respect to the last
 (21) statement I don't - the Court has my copy of the minutes
 (22) but with the exception of an unconfirmed report which we're
 (23) not going to offer but where there is a statement that is made
 (24) in the minutes of an oiling I think that that does come within
 (25) the - both the business record and the public records
 (26) exception to the hearsay rule and we have - in the limited

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- (1) time we've had here we have had a - we do have a case that
 (2) we've found Amos versus Norfolk and Western Railway
 Company
 (3) I've got It I can just hand it forward to the Court
 (4) MR CLOUGH May I get a look at that as well
 (5) counsel?
 (6) MR STOLL Sure
 (7) MR CLOUGH Would it help Your Honor if we all
 (8) stepped forward?
 (9) THE COURT No
 (10) MR CLOUGH Okay I'll wait my turn
 (11) THE COURT I love these little computer summaries
 (12) counsel Here's the summary counsel See if you can find any
 (13) infirmities in this particular case As supported Mr Stoll's
 (14) proposition Summaries of recorded statements of three
 railway
 (15) employees taken by railway claims agent and related to
 (16) employee's injuries were admissible against the railroad in the
 (17) Federal Employers Liability Act action under business
 exemption
 (18) of the hearsay rule Since the summaries were damaging to the
 (19) employer who had them prepared claims agents who prepared
 (20) summaries testified at trial as to their accuracy and oral
 (21) statements were taken within approximately a month of the
 (22) employee's injury and were preserved by tape recording so that
 (23) the summaries based thereon could be checked for accuracy
 (24) That's 191 Illinois App 3d 637
 (25) MR CLOUGH It just doesn't sound like our situation

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- (1) whatsoever Your Honor
 (2) THE COURT At first blush doesn't seem that way to
 (3) me
 (4) MR STOLL Your Honor we just had a limited time
 (5) but I think -
 (6) THE COURT That's the problem It's limited time
 (7) It's a very complicated evidentiary area and I am not going to
 (8) use it - for analogy to swim in those waters - right now so
 (9) the objection is sustained
 (10) I want the jury to know to the extent that this witness
 (11) testimony is based on his own observation I want it clearly
 (12) understood what is his own observation I'll leave open the
 (13) question of whether or not I admit some part of these records
 (14) but I am not going to deal with comprehensive records It's
 (15) just not the right time And to the extent you give me one
 (16) case that's clearly not on point once again my problems are
 (17) compound This is something that should have been
 (18) anticipated It wasn't and I'm not going to deal with it
 (19) right now
 (20) MR STOLL You Honor I apologize for not
 (21) anticipating it but we gave them our list on Friday last
 (22) Friday We have not had any objection We got objections to
 (23) various exhibits We did not get any objections to these
 (24) minutes until today I mean in the middle of trial So this
 (25) is the first time we've had any notice from them that they were

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- (1) going to object to -
 (2) THE COURT Are they required to file written notice
 (3) of what their objections are going to be?
 (4) MR STOLL They have been I thought that that's
 (5) what they were -
 (6) MR CLOUGH I believe it's in the courtroom When we
 (7) can see an obvious objection we try and raise it in advance
 (8) and I think the Court's aware we resolved them in advance We
 (9) weren't given any edited copy of this with little flags and
 (10) highlights
 (11) MR STOLL We offered the whole -
 (12) MR CLOUGH They put in the whole stack
 (13) THE COURT Clearly I'm not going to let in this
 (14) whole document no way I'm going to do that even if you
 (15) agreed both of you
 (16) Are you ready for the jury?
 (17) MR STOLL In one moment Your Honor
 (18) As far as laying a foundation is concerned just so I don't
 (19) have to call Mr Selby back if portions of this are
 (20) admissible can we dispense counsel with calling him back to
 (21) lay a foundation for the - that he was at these - I mean I
 (22) think he's indicated on the -
 (23) MR CLOUGH I am highly reluctant to do that since
 (24) there's so many entries We haven't gone through some of
 (25) them He may have been present at the recording of the

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- (1) minutes some he may not so I'm reluctant to dispense with any
 (2) foundation
 (3) THE COURT Tell me what this organization is sir
 (4) What organization is it that those minutes are recorded from?
 (5) A The Emergency Services Council
 (6) THE COURT You're a part of the Emergency Services
 (7) Council?
 (8) A I'm a member of the council
 (9) THE COURT And those particular minute entries are
 (10) they regularly kept? Were they regularly kept as part of the
 (11) business of that organization?
 (12) A Yes They were kept every meeting was a public meeting
 (13) public would come in held in assembly chambers of the Kodiak
 (14) Island Borough public was in the back of the room and the
 (15) council was up front and it was held as a public meeting and a
 (16) public record
 (17) THE COURT Now the minutes themselves are they
 (18) verbatim records of everything that was said at those - in
 (19) those meetings?
 (20) A I think they're pretty close to verbatim Your Honor I'm
 (21) not positive that every word that was - that was you know I
 (22) notice there are some references where discussion ensued on
 (23) this topic type of thing So there's a lot of verbatim with a
 (24) person's name identified but then if it wasn't verbatim it was
 (25) identified in the minutes that a discussion of some sort where

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- (1) multiple parties discussed it was
 (2) THE COURT Now the typed version of that is that
 (3) backed up by - by recordings?
 (4) A I taped yes
 (5) THE COURT Do you have the tapes?
 (6) A Yes
 (7) THE COURT And what was the purpose of keeping these
 (8) minutes?
 (9) A The purpose was to document the entire experience of the
 (10) Emergency Services Council throughout the spill experience
 (11) THE COURT Anything else counsel?
 (12) MR CLOUGH No Your Honor I think maybe I misled
 (13) the Court What I'm just saying if those come in we may seek
 (14) to recall Mr Selby to testify not about the foundation but
 (15) the substance of the events
 (16) THE COURT Oh sure No I'm sorry I did
 (17) misunderstand
 (18) MR STOLL That's fine I think he also testified -
 (19) Your Honor just so my record's complete - that the Emergency
 (20) Services Council obtained its oiling information so that it
 (21) could respond to the oil spill know where to send crews
 (22) THE COURT Is that true sir?
 (23) A Yes
 (24) (Jury in at 11 50 a m)
 (25) THE COURT All right The jury's present Mr

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- (1) Stoll You can go ahead counsel
 (2) BY MR STOLL
 (3) Q I just did a little mess there I need my own monitoring
 (4) equipment.
 (5) Mr Selby we were talking about the winter monitoring
 (6) program We're not into winter yet At each one of these
 (7) sites that - where you testified I think that just before
 (8) the break about a - these sites being selected for ease of
 (9) access et cetera on each one of these sites how long - how
 (10) large a site was this? Was this a whole beach? In other
 (11) words if you described a beach near Ouzinkie was that the
 (12) entire beach area or was it limited in any way to certain
 (13) size?
 (14) A Well again for each - there were seven contracts one
 (15) for each of the six villages plus one for the Kodiak Island
 (16) Borough And each of those contracts then identified four
 (17) sites that would be monitored Each of the sites was a
 (18) 100-yard segment of land of beach basically that was
 (19) selected again primarily for ease of access and again as an
 (20) indicator
 (21) Now that was the monitoring portion of the contract The
 (22) contract was a \$70 000 contract per contract for each of the
 (23) seven \$20 000 of which was to be used for monitoring and the
 (24) other \$50 000 was to continue to pick up oil and remove it from
 (25) the beach And there was a dumpster provided at each of the

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- (1) villages for them to actually put the oily bags of waste into
 (2) the dumpsters So the beach the village crews continued to
 (3) pick up oil off the beach Other beaches didn't have to be
 (4) Just the monitoring the four sites It could be any beach
 (5) that they had access to from the village and particularly the
 (6) idea was that if any of the oil as it was moving around came in
 (7) right in front of the village or the main beach for the access
 (8) of the village was - obviously they'd want to pick that up and
 (9) get it in the bags and put it in the dumpster so they weren't
 (10) having to wade in and out of oil as they came and went in their
 (11) skiffs throughout the winter So there was two aspects to the
 (12) monitoring and winter clean up project Each of those
 (13) dumpsters then was filled during the course of the winter and
 (14) that was removed the following spring with the summer
 cleanup
 (15) Q All right Now the first question I've got is the - the
 (16) site of there's some confusion of this in my mind at least
 (17) because there was a reference by another attorney that it was
 (18) per hundred yards The site itself was only a hundred yards
 (19) long the inspection site the monitoring site each of these
 (20) monitoring sites?
 (21) A Each of the four sites was a 100-yard segment only so -
 (22) total per village you're talking 400 yards four 100-yard long
 (23) sites
 (24) Q And there were signs where these sites were so it was the
 (25) same place each time?

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- (1) A I believe most of them had a marker on each end so that as
 (2) the crew went back to check that they could be sure that they
 (3) were checking the same hundred yard segments
 (4) Q Okay And in the following - during that winter were
 (5) these - in fact were these dumpsters filled with oiled debris
 (6) from these monitoring?
 (7) A That's correct
 (8) Q And in the spring are you - did you personally observe
 (9) oil on the beaches of Kodiak?
 (10) A During the spring of 1990?
 (11) Q 1990 yes
 (12) A No I did not get out and get to get on the beaches until
 (13) later in the summer
 (14) Q Did you go out then in the summer of 1990?
 (15) A Yes
 (16) Q Did you see oil then?
 (17) A No I did not
 (18) Q And in the - did you - did there come a time in 1993 when
 (19) you went on a tour of Prince William Sound?
 (20) A That's correct
 (21) Q And when was that?
 (22) A I don't recall the exact date
 (23) Q September does that sound about right?
 (24) A Yeah it was late late summer of 1993
 (25) Q So that was just last September?

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- (1) A Correct
- (2) Q And who - who was invited on that? How was this tour
- (3) arranged first of all?
- (4) A The tour was arranged by Arctic Power and executive
- (5) director of Arctic Power Debbie Reinwand put it together It
- (6) was at a point in time when Mano Frey and I had become the
- (7) co-chairs of Arctic Power and were replacing Steve McAlpine
- and
- (8) Jim Campbell who decided to run against each other for
- (9) Governor so they were departing Arctic Power to go have at
- (10) each other So we - Mano Frey and I became co chairs They
- (11) invited Mano and I Jim Campbell Steve McAlpine Debbie
- (12) Reinwand who is the executive director of Arctic Power and
- (13) Dave Parrish with Exxon
- (14) Q And was this - was the price of this or the cost and so
- (15) on was this paid for by Exxon?
- (16) A I believe that's correct
- (17) MR STOLL And could I have the Elmo please
- (18) BY MR STOLL
- (19) Q Now I'm showing you what's been marked as exhibit 1519 B
- (20) and is this a page within the sort of cover page of the little
- (21) note - the notebook that you received?
- (22) A Yes This was the intended itinerary for the day at the
- (23) start of the morning and I should make it clear that Jim
- (24) Campbell was tied up and unable to go with us so he did not
- (25) go

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- (1) Q So there were four of you - excuse me five - four of you
- (2) plus the pilot and were the other people on this helicopter
- (3) tour?
- (4) A Yes Dave Parrish and - and an Exxon geologist Mike was
- (5) his first name I don't recall his last name
- (6) Q A scientist some kind of scientist?
- (7) A I was told he was a geologist
- (8) Q Okay And then you went to various areas in Prince William
- (9) Sound?
- (10) A Yes
- (11) Q And then there was a map looks like the State of Exxon
- (12) there is that the map inside there?
- (13) A That's the map we were provided that day yes
- (14) Q Let me get this focused there And then this is exhibit
- (15) 1519-D and then 1519-F just a little test this is a - this
- (16) is part of this brochure is that correct?
- (17) A That was a brochure in the back of the - of the notebook
- (18) yes
- (19) Q And first of all in the bottom here it shows a map of
- (20) the - just see if I can get this - the impacted area?
- (21) A Yes That's what we call the oil spill area yes
- (22) Q And the - and is this area right here is that - is that
- (23) Kodiak Island? That about where -
- (24) A That's the representation of Kodiak Island It looks a
- (25) little different than that but -

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- (1) Q Okay And on the same page when they took you and these
- (2) two gubernatorial - or one gubernatorial candidate I guess
- (3) went and these other people they gave you this brochure?
- (4) A Yes
- (5) Q Could you just read to the jury what that says?
- (6) A Says Prince William Sound and the western Gulf of Alaska
- (7) portions of which were impacted by the 1989 Valdez spill are
- (8) today essentially free of oil Life in the area is abundant
- (9) and thriving and new generations of flora and fauna testify to
- (10) the robust environment conditions of this unique harsh and
- (11) remote environment
- (12) Q You can read a little slower Go ahead
- (13) A Keep going?
- (14) Q Let's just stop right there So was that sort of - was
- (15) that a repetitive - was that idea sort of repeated during the
- (16) course of this trip?
- (17) A Well actually we went - the beaches we went to all had
- (18) oil on them
- (19) Q Okay But did the - why don't you read further? We'll
- (20) get to the oil that you saw on the beaches
- (21) A Says since the spill the U S Coast Guard has coordinated
- (22) four spring/summer clean up operations in the area In June of
- (23) 1992 government officials announced that the cleanup was
- (24) complete and met federal and state standards
- (25) Q I'd like to ask you a question As a member of the

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- (1) Emergency Services Council and the Oiled Mayors
- organization
- (2) were you involved at all when the government officials - I
- (3) guess you're a government official too - the government
- (4) officials announced the cleanup was complete? Was the 1992 -
- (5) did the government decide that everything was clean?
- (6) A No I don't believe that there was any indication that the
- (7) government decided it was clean There was a great deal of
- (8) discussion throughout the spill starting in 1989
- (9) MR CLOUGH Excuse me could we have some foundation
- (10) for this testimony?
- (11) THE COURT Yes you're going to have to have the
- (12) foundation
- (13) MR STOLL Okay
- (14) BY MR STOLL
- (15) Q You were a member of the Emergency Services Council?
- (16) A Yes I was
- (17) Q And were you involved when the Coast Guard I think it was
- (18) the Coast Guard and Exxon determined that no further cleanup
- (19) was going to occur?
- (20) A Yes Admiral Ciancaglini came to Kodiak and we
- (21) participated in that discussion
- (22) Q All right And did - was there an indication at that time
- (23) that the - by the Admiral or by anybody from Exxon that
- (24) everything was clean?
- (25) A There was never any claim that beaches were clean

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- (1) Q What was the idea then? Why did - did they express why
- (2) they left at that point?
- (3) MR CLOUGH Objection Your Honor
- (4) THE COURT That depends who they are
- (5) BY MR STOLL
- (6) Q Did the government officials indicate as to why they left?
- (7) MR CLOUGH Objection Your Honor hearsay
- (8) THE COURT Excuse me
- (9) MR CLOUGH Hearsay
- (10) THE COURT It s hearsay isn t it?
- (11) MR STOLL Pardon me?
- (12) THE COURT It s hearsay isn t it?
- (13) MR STOLL Yes
- (14) THE COURT The objection s sustained
- (15) BY MR STOLL
- (16) Q Now was there any determination - well there was no
- (17) determination made by any government officials that you re
- (18) aware of that the beaches were clean in 1992?
- (19) A I m not aware of any government official ever claiming any
- (20) beach was clean
- (21) Q Now did you go to various sites in - in Prince William
- (22) Sound in that trip in September of last year?
- (23) A Yes we did
- (24) Q And would you tell the jury I think there were supposed to
- (25) be four sites that you were going to go to?

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- (1) A Correct uh huh
- (2) Q And did you go to Northwest Bay on Eleanor Island was that
- (3) one of them?
- (4) A Yes we did Actually the itinerary you saw there earlier
- (5) we had to amend slightly because there was a great deal of fog
- (6) in Prince William Sound the day that went so Eleanor Island
- (7) was not on the schedule but we went there first because the
- (8) fog was lesser up on the north end of Prince William Sound So
- (9) we went to Eleanor Island first even though it was not on the
- (10) schedule
- (11) Q All right And when you went to - I want to show you this
- (12) document and this is another map out of focus Is this your
- (13) handwriting? Incidentally says Eleanor Island
- (14) A Yes it is
- (15) Q And Northwest Bay?
- (16) A Right
- (17) Q Is that - is that where you - you went?
- (18) A Yes We set down on the southern tip of the bay there
- (19) Q Okay And this is exhibit 1519-C and did you find oil in
- (20) that location?
- (21) A Yes we did We found little spots of oil that had
- (22) hardened onto the rocks at various places around the head of
- (23) the bay there
- (24) Q And was it difficult to find the oil?
- (25) A Wasn t very difficult It was on a number of the rocks

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- (1) along the shoreline
- (2) Q All right Then did you go to a place called Quail Beach
- (3) on Smith Island?
- (4) A Yes we did
- (5) Q And let s see that s - that s over here?
- (6) A Correct
- (7) Q Is that your handwriting there that says Quail Beach?
- (8) A Yes
- (9) Q And that s called Quail Beach because somebody took
- (10) Vice president Quail there one time?
- (11) A During 1989 that s where the Vice president actually
- (12) inspected the beach yes
- (13) Q And did you find oil there?
- (14) A Yes we did
- (15) Q And how difficult was that to find oil?
- (16) A Again it was not difficult It was pretty much on the
- (17) rocks and in that case there was some on the logs as well
- (18) there along the beach on Smith Island
- (19) Q Then you went to Sleepy Bay We ve heard a lot about
- (20) Sleepy Bay
- (21) A Yes
- (22) Q And that s - that s down here -
- (23) A Correct
- (24) Q - is that right? And that s your X ?
- (25) A Correct

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- (1) Q And did you find oil at Sleepy Bay?
- (2) A Yes we did
- (3) Q This was last September?
- (4) A Correct uh huh
- (5) Q And did you have to use any kind of - you know air gun
- (6) or anything like that to get in the ground and pump oil out or
- (7) did you - how hard was it to find oil there?
- (8) A No all we had to do was turn over rocks on the beach and
- (9) it was on the bottom of each of the rocks that we turned over
- (10) in one area of the beach And basically that s a fairly
- (11) complicated story as far as what goes on in Sleepy Bay
- (12) because the - the one - about half of the beach roughly
- (13) more in my perspective had received hot water washing
- (14) MR CLOUGH Objection Your Honor foundation for
- (15) this testimony
- (16) THE COURT Just say what you saw
- (17) MR STOLL Let me ask - can I ask a foundational
- (18) question?
- (19) BY MR STOLL
- (20) Q Did anybody from Exxon tell you that it had received hot
- (21) water washing?
- (22) A Yes the Exxon geologist that was with us that day was
- (23) explaining what had happened on basically the three sections
- (24) of
- (25) the beach
- (26) Q All right What did he tell you about hot water washes?

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- (1) A The section over near the stream where the helicopter set
 (2) down had been multiple hot water washed was not - it looked
 (3) fairly clean on the surface but under the bigger rocks you
 (4) could still find oil The next section was a section where
 (5) there s a large mussel bed which had considerable amount of
 (6) discussion and still is being discussed today at the Exxon
 (7) Valdez Trustee Council meetings as far as how to treated
 (8) MR CLOUGH Excuse me Mayor Selby I apologize
 (9) Objection I believe the witness has gone beyond his personal
 (10) knowledge and again objection to hearsay
 (11) THE COURT He may very well be So far he hasn't
 (12) said hearsay You re not going to go further than that
 (13) right?
 (14) Okay It s overruled
 (15) BY MR STOLL
 (16) Q Okay You went to that area of the beach?
 (17) A Yes
 (18) Q Did you see oil there?
 (19) A Yes There virtually any significant rock you turned over
 (20) the concern being that the oil is under the mussels and how to
 (21) get the oil out without destroying the mussel bed was a
 (22) problem scientifically
 (23) Q There s a third area?
 (24) A And the third area is the area that was referred to as the
 (25) experimental section where they were trying some new

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- (1) bioremediation techniques and I believe that that s been
 (2) discussed in court to some extent here
 (3) Q Okay Now then the fourth place you went you went to
 (4) Snug Harbor?
 (5) A Yes
 (6) Q And there I believe you didn't actually land up on the
 (7) beach?
 (8) A No The fog was blowing in and out and the pilot was not
 (9) comfortable that we could stay in there and not get immersed in
 (10) fog and we were up in the head of Snug Snug Harbor there
 (11) Q That s - that s this place right here?
 (12) A Yes
 (13) Q That s your handwriting there?
 (14) A Right And so we descended down just a little above the
 (15) beach but he was looking around at the way the fog was
 (16) moving
 (17) and we only - we kind of did a quick little tour of and went
 (18) back up and left - left the area
 (19) Q Now most of this map that Exxon furnished you in this
 (20) book most of the lines on this I notice are - I'd call them
 (21) purple
 (22) A Yes
 (23) Q Look like -
 (24) MR STOLL Can I approach the witness so I can just
 (25) confirm these colors with him?
 THE COURT Sure

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- (1) MR STOLL I'll come back to the Elmo in a minute
 (2) BY MR STOLL
 (3) Q Look purple to you?
 (4) A Yes purple Pretty much predominantly along the
 (5) coastline
 (6) Q There are some marked yellow?
 (7) A Right
 (8) Q And then there s something called narrow moderate wide
 (9) right?
 (10) A Correct
 (11) Q Okay Now let me back up here for a second As I say
 (12) most of this is -
 (13) MR STOLL Your Honor we'd offer this particular
 (14) exhibit 1519 C and the others 1519 B F and D
 (15) (Exhibits 1519 B 1519 C 1519 D and 1519 F offered)
 (16) MR CLOUGH Your Honor my only objection is one
 (17) that s easily cured for a change Rule 106 I believe
 (18) requires a certain circumstance of the entire document going
 (19) in I've got a copy of the entire document I intend to use
 (20) it for the witness so I've got no objection provided -
 (21) THE COURT I'll let these in now I may substitute
 (22) with the entire document As I understand it his copy this
 (23) witness has made some notations right and they wouldn't be
 (24) on
 (25) the -
 MR CLOUGH And I have no objection to the copy of

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- (1) that map with his notations on it
 (2) THE COURT So they re all admitted
 (3) (Exhibits 1519-B 1519-C 1519-D and 1519-F received)
 (4) BY MR STOLL
 (5) Q Now Mr Selby with respect to this - this map that is
 (6) mostly in purple It says 1990 - at the bottom here it says
 (7) 1991 Spring Oiling Survey Was there any reference to that
 (8) that you recall by the Exxon people?
 (9) A Reference in what regard?
 (10) Q Well you re in 1993 and this says 1991 Spring Oiling
 (11) Survey Did you recall anything about that?
 (12) A No I believe the map was just a map of convenience for the
 (13) tour that day and also an indication since 1991 was really
 (14) the - the last major effort for cleanup that was done so this
 (15) would be the last survey probably that was done in
 (16) significant - of any significance but part of the problem
 (17) that we had with that from -
 (18) Q Just a minute let me ask you a question first of all
 (19) What problem - what problem did you have with that?
 (20) A Well from our perspective there had been a major
 (21) reduction of what got surveyed even from 1989 to 1990
 (22) Q Oh I'll get into that in a minute We'll come back to
 (23) that I want to concentrate on this purple map I call it
 (24) purple but a lot of purple and there s a few other colors as
 (25) you indicated right?

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- (1) A Correct
 (2) Q Now the bottom here there's a - there's a description of
 (3) what this means and you see - you probably can't see it too
 (4) well on the screen there but the purple that's - the purple
 (5) line is the bottom one isn't that right?
 (6) A Correct uh huh
 (7) Q And then it says - what does that say there?
 (8) A No oil or unsurveyed
 (9) Q All right And then what's the yellow line?
 (10) A Very light
 (11) Q Then it's got three narrow moderate and wide?
 (12) A Correct
 (13) Q Correct? And with the exception - I'm going to take this
 (14) up to the witness Your Honor
 (15) Can you tell the jury - and they'll have this with them in
 (16) the jury room - how many areas are wide oiled in all that
 (17) map?
 (18) A I only see I believe three - three pieces of red which
 (19) is the wide oiling
 (20) Q And incidentally at Snug Harbor - you couldn't land
 (21) there you testified?
 (22) A Right
 (23) Q I'll take that back But from the air could you see -
 (24) could you see any oil?
 (25) A Yes In Snug Harbor there's an asphalt band around the

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- (1) their various lands that they're responsible for managing
 (2) throughout the winter of 1989 They all had a pretty good idea
 (3) of beaches that they felt should get visited for at least a
 (4) consideration of additional treatment as opposed to no further
 (5) treatment either because they felt no further treatment
 (6) sometimes occurred because there was considered to be more
 risk
 (7) to doing more damage to the environment by going back in and
 (8) continuing to treat a beach was one possibility for no
 (9) further treatment
 (10) The other one was that there was - the oil had sunk down
 (11) into the beach to where there was no effective way of actually
 (12) removing it from the beach other than going in with like a
 (13) backhoe or something and just totally destroying the beach
 (14) which nobody wanted to go in to do that kind of a removal
 (15) There was a great deal of debate and discussion about
 (16) bioremediation which basically was a chemical treatment of
 (17) some of the beaches There was a great deal of uncertainty
 (18) about what chemical treatment might do to other - like to
 (19) fish and again the same birds those sorts of things as it
 (20) came off the beach after being treated with the
 (21) bioremediation There was a great deal of controversy about
 (22) that And there was - so there was a lot of debate going on
 (23) during the spring months January through May of 1990 about
 (24) what should be done during the spring and summer of 1990 in
 (25) terms of treatment

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- (1) head of the harbor
 (2) Q What do you mean by an asphalt band?
 (3) A Well it's where the oil had hardened It's mixed with
 (4) rock and whatever else is there on the beach and then it's
 (5) been left obviously for four years had not been picked up and
 (6) had hardened in looked you know just like an asphalt street
 (7) or a bike path or whatever probably about eight ten feet
 (8) wide just went around the tide line at the head of the bay
 (9) Q You can turn that off then
 (10) Now I'd like to ask you a couple questions about these
 (11) surveys Were you present during this - the course since
 (12) 1993 helicopter trip that you and these other people went on
 (13) these four other people and the Exxon scientist did you -
 (14) were you told then or were you told at other times by Exxon the
 (15) number of miles of beach that they were surveying different
 (16) years?
 (17) A Not in 1993
 (18) Q Okay Had you been told by Exxon previously how many
 miles
 (19) of beach they were going to survey?
 (20) A Well surveys in the spring of 1990 were very controversial
 (21) topic
 (22) Q How is that?
 (23) A Well the agency people again Fish & Wildlife Department
 (24) of Fish and Game Department of Environmental Conservation
 (25) federal parks and state parks had all been keeping an eye on

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- (1) The big - biggest controversy came when the Coast Guard
 (2) came out with a potential list of beaches that they wanted to
 (3) survey for - for possible continued treatment
 (4) Q All right Now so in the - and that was a list of that
 (5) worked out between the Coast Guard and Exxon?
 (6) A That's correct During the winter of 1989 and 90 with no
 (7) input from these land managers or the local municipalities
 (8) Q All right And so how many miles in 1990 was - was it
 (9) proposed that would be surveyed do you recall?
 (10) A They were proposing to survey at most in the entire spill
 (11) area about 300 miles
 (12) Q Okay And then in 19 - that would be 1990 And in 1991
 (13) how many miles were proposed to be surveyed?
 (14) A I believe it had shrunk down at that point to something
 (15) like 50 to 70 miles is all that was proposed
 (16) Q And 1992 which is the year that they pulled out stopped
 (17) any cleanup anywhere how many miles were surveyed that
 year?
 (18) A I'm not sure because by that time they had dropped Kodiak
 (19) out of the loop so -
 (20) Q Incidentally I want to just jump back to Kodiak for a
 (21) moment and that is in October or November of 1989 did there
 (22) come a time when there was an accumulation of bags of oiled
 (23) debris that was left in Shuyak Island Shuyak Island?
 (24) A Yes there was
 (25) Q And how many bags are we talking about?

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- (1) MR CLOUGH Excuse me Your Honor I d like to object
 (2) on the basis of relevance unless we can establish this was on
 (3) the parcel It very well may have been I just don t know
 (4) That foundation question hasn't been asked
 (5) MR STOLL All right
 (6) BY MR STOLL
 (7) Q Is this oiled debris in the area of the parcel owned by
 (8) Kodiak Island Borough?
 (9) A Yes it was
 (10) Q And I ll just bring this over to you Could you tell the
 (11) jury point out to the jury in exhibit 1521 where where we re
 (12) talking about?
 (13) A Well the material was all picked up mainly in the Shuyak
 (14) Strats both on the Kodiak Island Borough parcel here as well
 (15) as some of the North Afognak parcels in here and was
 (16) accumulated on the dock at Port Williams which is right here
 (17) at Shuyak Island
 (18) MR CLOUGH Excuse me Mr Stoll I d like to
 (19) object
 (20) Your Honor I believe he pointed to the dock at Port
 (21) Williams which I don t believe is part of the parcel
 (22) MR STOLL We agree with that
 (23) THE COURT It s not - the property where the debris
 (24) was is not in the green section
 (25) MR STOLL That s correct

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- (1) THE COURT That delineates the Kodiak Island Borough
 (2) landowners right.
 (3) MR STOLL That s correct Your Honor
 (4) THE COURT On the other hand It s on the coastline
 (5) of the - that green section
 (6) MR STOLL That s correct Your Honor
 (7) THE COURT All right thank you You maintain your
 (8) objection?
 (9) MR CLOUGH Yes Your Honor we d say that this
 (10) particular incidence of bags being left for a period of time on
 (11) a dock that s not on their parcel is irrelevant
 (12) THE COURT The objection s overruled Go ahead
 (13) BY MR STOLL
 (14) Q Okay So the bags were left How many bags were we
 (15) talking about?
 (16) A It was 15 000 pounds The bags had variable amount I m
 (17) not positive about how many bags It was done by weight
 (18) Q Oh okay Had there been accumulated debris in this area
 (19) before? I mean this wasn't the only time that this had
 (20) been -
 (21) A No the clean up crews had gone through and cleaned this
 (22) area at least twice during the summer of 1989 This was in
 (23) September and October and was run by the Kodiak Island
 (24) Borough
 (25) again through the environmental - Kodiak Environmental
 Cleanup
 Incorporated It was a group of seiners salmon seiners from

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- (1) Kodiak who went up and cleaned up that particular portion and
 (2) collected that debris in October and early November of 1989
 (3) Q Now did there come a time Mayor Selby when you asked
 (4) your assessor - that s Mr Pat Carlson Isn t that right?
 (5) A Yes that s the assessor
 (6) Q Did there come a time when you asked Mr Pat Carlson to do
 (7) an appraisal of the value of the remote parcels owned by
 Kodiak
 (8) Island Borough?
 (9) A Yes we did
 (10) Q And when did you first ask him about doing an appraisal?
 (11) A Well the first discussion about value of remote parcels on
 (12) Kodiak Island actually occurred back in - starting about
 (13) 1985 - or 86 and basically it was a discussion that got
 (14) instituted because of the audit and the auditors were coming
 (15) to Kodiak Island Borough doing the audit
 (16) On our balance sheet where we have to identify the 56 000
 (17) acres that s owned by the Kodiak Island Borough as an asset
 (18) obviously because it s a pretty significant part of our assets
 (19) the problem the auditors have is we did not have a good value
 (20) determination of the value of those lands on the record and so
 (21) in the process of discussing this with the auditors over a
 (22) couple of years we determined that we should go out and after
 (23) they d be giving us an audit - exception on the audits So
 (24) the one thing that kept us from having a clean audit finding by
 (25) the auditors became the land issue about 1985 or 86 so we

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- (1) decided that we should figure out a way to fix that problem
 (2) and we were going to have to go out and determine the value of
 (3) these lands accurately so we could get a clean - the purpose
 (4) being to get a clean audit opinion
 (5) Q Now a clean audit opinion does the borough issue bonds?
 (6) A Yes, we do
 (7) Q So you need the so-called clean audit opinion from the
 (8) auditors that s a national or international accounting firm?
 (9) A Yes, we use one of the - used to be the big eight
 (10) They re shuffling I think it s big five now I think at the
 (11) time it was Ernst & Whinney was the audit firm
 (12) Q At any rate to get the clean opinion you had to get the
 (13) opinion from them so Mr Carlson I don t believe became the
 (14) assessor until February of 1989?
 (15) A That s correct
 (16) Q And did you talk to Mr Carlson then about doing these - I
 (17) don t mean the day he arrived but I mean shortly thereafter
 (18) about doing an appraisal?
 (19) A Yes we did because - and that was one of the key things
 (20) in fact that we talked to him about when we were interviewing
 (21) candidates and selected Mr Carlson because in the 88 audit
 (22) we basically had worked out a formula with the auditors to
 (23) establish a value for the lands for that 1988 audit which they
 (24) completed the fiscal year 88 which ends June 30th for the
 (25) Kodiak Island Borough of 1988 so the audit was completed
 then

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- (1) during September and October of 1988 And based on your
 (2) discussions with the auditors as they completed that audit we
 (3) had committed to them that we would go out in 1989 and do those
 (4) appraisals so that we could establish a clean value and an
 (5) accurate value for the lands
 (6) Q All right And then did Mr Carlson then do that appraisal
 (7) of the remote parcels in 1989?
 (8) A Well we had scheduled it and put it into the budget to do
 (9) it that summer but he got diverted became a boom - oil spill
 (10) boom full time person for a couple of months and we were
 (11) unable to do it during 1989
 (12) Q So then did you subsequently ask him to do that appraisal?
 (13) A Yes And he went out in 1990 and conducted the appraisal
 (14) Q And did he do that as of - did you ask him to do it as of
 (15) a particular date?
 (16) A Yes I did I asked him specifically to do it as of the
 (17) day before the oil spill because what we needed to get on the
 (18) record is what the value of the Kodiak Island Borough lands
 (19) were before this disruption called the Exxon Valdez oil spill
 (20) occurred So what we needed was value of lands and what
 (21) should have been on the balance sheet throughout those other
 (22) audit periods is what we were seeking at that point
 (23) Q Okay And did you ask Mr Carlson to do any damage
 (24) assessment?
 (25) A No we did not

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- (1) MR STOLL Your witness
 (2) Your Honor excuse me before I do that I d like to offer
 (3) these exhibits which are 1521 1525 1523 1522 1526 and
 (4) 1524 They may already be in
 (5) (Exhibits 1521 1522 1523 1524 1525 and 1526 offered)
 (6) THE COURT What was that last one? 1524 was the last
 (7) one?
 (8) MR STOLL Yes Yes Your Honor
 (9) THE COURT They re all admitted 1521 25 23 22
 (10) 26 and 24
 (11) (Exhibits 1521 1522 1523 1524 1525 and 1526 received)
 (12) MR CLOUGH Your Honor if we could have a really
 (13) short break I think I ll be able to cut some stuff out and I
 (14) don t think we ll push through to 1 30 without another break
 (15) anyway so -
 (16) THE COURT Yeah sure I ll give you a break
 (17) THE CLERK. Please rise This court stands in
 (18) recess
 (19) (Jury out at 12 28 p m)
 (20) (Recess from 12 28 p m to 12 40 p m)
 (21) (Jury in at 12 40 p m)
 (22) THE CLERK This court now resumes its session
 (23) Please be seated
 (24) MR CLOUGH Hi Mayor Selby I am John Clough I m
 (25) going to be cross examining you for probably the remainder of

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- (1) today If I can t finish today I will - one thing may seem
 (2) like I m going slow but I m going to at times take a break and
 (3) switch things because I m literally trying to cut back as we go
 (4) along So I apologize if every now and then I need to
 (5) reshuffle my papers But you ve been talking for a long time
 (6) and I ve got a couple things to ask you some questions about
 (7) sir
 (8) CROSS EXAMINATION OF JEROME M SELBY
 (9) BY MR CLOUGH
 (10) Q I d like to start with just the debris on the dock the
 (11) bags you were talking about?
 (12) A At Port Williams?
 (13) Q Port Williams thank you They were evidently taken away
 (14) right?
 (15) A Yes they were after - I had to be somewhat aggressive in
 (16) getting the Coast Guard to require they be removed
 (17) Q You hollered you hollered about it?
 (18) A That s correct
 (19) Q You didn t hesitate to be aggressive when you felt your
 (20) borough s interest was on the line?
 (21) A Well wasn t only the borough s interest was just Exxon s
 (22) failure to respond to that aspect of cleanup of the oil spill
 (23) It was their oil we felt they should remove it We had - we
 (24) had collected with a State-financed program to pick the oil
 (25) up They were saying since it was a State-financed program

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- (1) they had no responsibility to pick it up It was still Exxon
 (2) Valdez oil and needed to be picked up
 (3) Q And as a Mayor you were upset about it and you hollered
 (4) about it?
 (5) A That s correct
 (6) Q And you wanted action?
 (7) A That s correct
 (8) Q And you got it?
 (9) A Correct
 (10) Q Because it was taken away?
 (11) A Later
 (12) Q By Exxon right?
 (13) A Correct
 (14) Q The audit you referred to sir you - and there was a bond
 (15) issue in there as well Remember your testimony of that
 (16) towards the end of the testimony with Mr Stoll you were
 (17) talking about the bond issue - there was a clean audit for a
 (18) bond issue?
 (19) A No no no The bond issues and audits - you know we
 (20) have an audit every year Our - the clean opinion on an audit
 (21) is what Mr Stoll was referring to allows us so have a little
 (22) better advantage in terms of - when we do issue bonds we get
 (23) a little better interest rate so we usually if you have a
 (24) clean audit opinion your interest rate will drop down by maybe
 (25) as much as a half a percentage point on when you sell the

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- (1) bonds So it's - it's significant from that perspective
 (2) because a half of a percent on say a ten million dollar bond
 (3) issue is a lot of money over a 20-year pay back period
 (4) Q Did you sell some bonds?
 (5) A We sell bonds on a regular basis yes
 (6) Q Now was the appraisal that you were talking about from
 (7) Mr. Carlson was that for one of these bond issues?
 (8) A No the appraisal was for the purpose of the audit so
 (9) don't mix the audit and the bond issues
 (10) Q Oh so the appraisal really doesn't - isn't related to any
 (11) audit - to any bond issue?
 (12) MR STOLL Excuse me Your Honor I just want to save
 (13) some time if I may I'm not tying that in That was just an
 (14) incidental point I wasn't tying in the - maybe he wants to
 (15) ask the questions
 (16) THE COURT Maybe we better let the witness answer the
 (17) questions I think it would be wise
 (18) MR CLOUGH One question and we can get out of here
 (19) on this point
 (20) BY MR CLOUGH
 (21) Q The appraisal was not done for any bond issue right?
 (22) A The appraisal was done for the audit purposes of having a
 (23) clean audit and a clear statement of the assets in the Kodiak
 (24) Island Borough
 (25) Q My question was it wasn't done for a bond issue?

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- (1) A Indirectly it's done for a bond issue because a clean audit
 (2) again impacts every bond that's issued So yes it was - it
 (3) had an impact on bond sales but the purpose for doing the
 (4) appraisal was to get the audit cleaned up so that we could get
 (5) a clean audit
 (6) Q Which bond sales did this appraisal have an impact on?
 (7) A I believe - well it would be any bond sale since 1990
 (8) when we got the clean audit opinion so I think we've issued -
 (9) I think we've had two bonds sales since 1990
 (10) Q The appraisal wasn't done till March 20th 1992 was it?
 (11) A No but as I'd indicated with the auditors we had arranged
 (12) with them to come up with a formula that we could get a clean
 (13) audit opinion pending moving ahead on completing the
 (14) appraisal
 (15) so we were able to get a clean audit opinion before the
 (16) completion of the appraisal pending getting the appraisal work
 (17) done
 (18) Q But the appraisal done March 20th of 1992 had nothing to do
 (19) with any bonds issued before then right because the appraisal
 (20) wasn't done?
 (21) A Well it would have anything after 1990 when we actually
 (22) initiated the work on the - on the appraisals
 (23) Q But if you have a bond sale before March 20th 1992 you
 (24) couldn't have used that appraisal for it could you?
 (25) A The appraisal was connected to the audit for 1990 91 and
 92 because we were required and working with the auditors

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- (1) getting the appraisal done and a clean audit opinion was
 (2) conditional on completing that appraisal work So yes it did
 (3) have an impact Even though it wasn't completed until 92 it
 (4) did have an impact
 (5) Q But you didn't use that appraisal for any bond issues prior
 (6) to March 20th 1992 because it wasn't in existence yet you
 (7) couldn't have used it could you?
 (8) A It impacted the bond sale yes
 (9) Q I asked you if you used it for any bond issues used the
 (10) appraisal itself for any bond issues prior to March 20th
 (11) 1992
 (12) A I didn't use the appraisal before it existed no
 (13) Q Okay And did you use it for any bond issues after
 (14) March 20th 1992?
 (15) A Yes
 (16) Q You did? You did?
 (17) A Yes
 (18) Q Which ones?
 (19) A I sold bonds in December of 1993 and January of 1994
 (20) Q So you used an appraisal that didn't reflect the fact that
 (21) the oil spill had happened before your bond issues that
 (22) happened as late as 93 and 94?
 (23) A That appraisal is the only value statement which is used in
 (24) reflecting in the audit report for the Kodiak Borough so it
 (25) impacts the bonds from that appraisal

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- (1) Q So you felt comfortable as the KIB Mayor to use the
 (2) appraisal which valued the properties before the oil spill for
 (3) bond issues done as recently as this year?
 (4) A That's correct
 (5) Q Now I'd like to talk a little bit about the spill response
 (6) structure in place in Kodiak during 1989 sir And again I
 (7) apologize for switching hats but I do have to jump from topic
 (8) to topic You talked a lot about the EMC Do you recall your
 (9) testimony on that?
 (10) A The Emergency Management Council yes
 (11) Q There is also a separate organization called - I hate to
 (12) be into acronyms but the KISCC right?
 (13) A That would be the Kodiak Island Shoreline Cleanup
 (14) Committee
 (15) Q What is that sir?
 (16) A That was a committee of the Emergency Services Council
 (17) Q A subcommittee?
 (18) A A committee of -
 (19) Q Well what's the relationship between the Emergency
 (20) Services Council and the KISCC?
 (21) A The KISCC was under the direction of the Emergency
 (22) Services Council
 (23) Q Who directed the Emergency Services Council?
 (24) A That's a self-directing body
 (25) Q So you were one of the directors of it?

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- (1) A That s correct
 (2) Q So you were one of the directors of the cleanup?
 (3) A For the Kodiak Island Borough that s correct
 (4) Q Correct me if I m wrong I thought the United States Coast
 (5) Guard under federal law was the federal on scene coordinator
 in
 (6) charge of all of the cleanup for the Exxon Valdez oil spill?
 (7) A As a matter of fact the Exxon Company was supposed to be
 (8) in charge but their totally inadequate response to the spill
 (9) forced all of the municipalities in the spill area to have to
 (10) respond and have to start trying to protect our own shorelines
 (11) and have to get into the spill clean up business We didn t
 (12) want to get into the business Exxon s failure to respond
 (13) forced us into the business
 (14) Q Mr Selby I apologize I think I must have spoken too
 (15) quickly because I don t think you heard what I said Because
 (16) what I said is Under federal law the United States Coast
 (17) Guard is the federal on scene coordinator in charge of the
 (18) cleanup of the Exxon Valdez oil spill isn t that correct sir?
 (19) A No it is not correct The Coast Guard made it clear on
 (20) repeated occasions that Exxon was responsible for the spill
 (21) cleanup that they were the coordinator federally there to
 (22) oversee the cleanup and make sure that it was done correctly
 (23) under federal statutes but the people who were responsible for
 (24) the spill cleanup was Exxon
 (25) Q Responsible but who - as I understand how the cleanup

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- (1) worked there were work order issues for say particular
 (2) beaches - and let s use your area Kodiak as an example -
 (3) correct? All right and as I understand it isn t it true
 (4) sir that the KISCC this Intershoreline Cleanup Committee -
 (5) do I have that right?
 (6) A No it s Kodiak Island Shoreline Cleanup Committee
 (7) Q Kodiak Island Shoreline Cleanup Committee They would
 (8) review all proposed work orders for cleanup in the Kodiak area
 (9) isn t that correct?
 (10) A They developed the requests for the work orders which were
 (11) subsequently approved that s correct
 (12) Q And there s actually approval forms signed for them
 (13) weren t there?
 (14) A That s correct
 (15) Q And the ultimate approval form was signed by the federal
 (16) on scene coordinator the officer of the United States Coast
 (17) Guard responsible for Kodiak isn t that correct?
 (18) A That s correct
 (19) Q You know Joe Talbot don t you? You mentioned him earlier
 (20) in your testimony
 (21) A Yes works for NOAA
 (22) Q Well who - as of 1989 how did you know Joe?
 (23) A He came to Kodiak as the NOAA representative and was
 (24) involved in the spill clean up effort
 (25) Q And did he stay in Kodiak throughout the summer of 1989?

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- (1) A I m not really sure if he stayed all summer or not He was
 (2) there for a good portion of it but I believe he came and
 (3) went It was like a revolving door for many of the federal
 (4) agency people as well as the Exxon people so we keep getting
 (5) a constant turnover of personnel through the - through the
 (6) Emergency Services Council meetings You d never know who
 was
 (7) going to show up from any of these people
 (8) Q Well from your recollection since you were at most of
 (9) these meetings wasn t Joe Talbot there quite a bit throughout
 (10) the summer of 1989?
 (11) A I think he was yes
 (12) Q And he was there as NOAA s representative on the KISCC
 (13) right?
 (14) A That s correct
 (15) Q And NOAA was designated as the science advisor to the
 Coast
 (16) Guard the federal on scene coordinator in charge of the spill
 (17) isn t that correct?
 (18) A That s correct
 (19) Q And for the Kodiak area Mr Talbot was NOAA s lead guy
 (20) their science advisor for Kodiak correct?
 (21) A As far as I know that s correct
 (22) Q And in that capacity to your own personal knowledge he
 (23) worked very extensively on the issues of oiling in Kodiak and
 (24) what to do about it isn t that correct?
 (25) A Well he was there quite a bit but he also was gone quite

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- (1) a bit so -
 (2) Q But he was there quite a bit wasn t he?
 (3) A Yeah
 (4) Q And he had other people from NOAA and other agencies
 (5) working with him on that Intershoreline - Kodiak Interagency
 (6) Shoreline Cleanup Committee right?
 (7) A Yeah he was - but he was pretty much of a bit player on
 (8) the Shoreline Cleanup Committee
 (9) Q He was NOAA s senior representative at Kodiak?
 (10) A If that s what they say
 (11) Q And this KISCC formulated the work plans and made the
 (12) recommendations not to the Emergency Management
 Committee but
 (13) to the FOSC the Coast Guard for the final work order isn t
 (14) that correct sir?
 (15) A Once we moved into the beach clean up phase that s
 (16) correct
 (17) Q And you generally felt the Coast Guard did a heck of a job
 (18) in your area didn t you?
 (19) A That s not - never been my statement. That s not
 (20) correct
 (21) Q Well do you think they did an excellent job?
 (22) A No
 (23) Q You don t? Do you recall being deposed in this case Mayor
 (24) Selby not too long ago? I think back in - get the date here
 (25) someplace - February February 15th?

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- (1) A Yes
- (2) Q Do you recall being asked generally about the Coast Guard?
- (3) A Yes I was
- (4) Q This is page 2 - excuse me 1 041 because you were
deposed
- (5) a lot Mayor Selby weren't you?
- (6) A Seven days
- (7) Q 1 041 of volume six and you were asked how the Coast
Guard
- (8) -
- (9) MR STOLL Just a minute Just a minute counsel
- (10) MR CLOUGH You bet
- (11) MR STOLL What's the page number?
- (12) MR CLOUGH 1 041
- (13) MR STOLL Okay
- (14) BY MR CLOUGH
- (15) Q You were asked some questions about Veco people and
Exxon
- (16) people and you were asked about the Coast Guard and you
said
- (17) Coast Guard people generally did an excellent job If we
- (18) hadn't had the Coast Guard nothing would have been
- (19) accomplished You said that testified under oath to that back
- (20) in February didn't you?
- (21) A That's the local Coast Guard based in Kodiak that is
- (22) correct I'll stand by that statement
- (23) Q And you feel that they generally did do an excellent job
- (24) don't you?
- (25) A The Coast Guard based in Kodiak

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- (1) Q And Coast Guard based in Kodiak and officers stationed at
- (2) that base had the function of the federal on scene coordinator
- (3) in charge of coordinating the cleanup of your island?
- (4) A No they did not
- (5) Q The Coast Guard didn't have that function?
- (6) A Coast Guard did but not the Kodiak base
- (7) Q But the officers the officer who fulfilled that function
- (8) assigned to the Kodiak base at least for the duration of the
- (9) summer?
- (10) A He was under the immediate supervision of the federal
- (11) on scene coordinator who stayed in Juneau throughout the
- (12) summer
- (13) Q That was Admiral Ciancaglini and in subsequent years
- (14) Admiral Robbins?
- (15) A That's correct
- (16) Q And they were the ultimate authority for the spill weren't
they?
- (17)
- (18) A They were in regard to that but they had no direct to the
- (19) Kodiak base it was like two different units to a federal
- (20) government operation
- (21) Q And the Coast Guard people were directing the actual
- (22) clean-up activities weren't they?
- (23) A Talking about the Kodiak base Coast Guard people now?
- (24) Q No the people working for the FOSC
- (25) A FOSC people were in charge of the spill that's correct as

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- (1) far as the coordination function
- (2) Q Did you - as I recall you had a couple of visits from the
- (3) ultimate federal on scene coordinators didn't you? You had
- (4) Admiral Yost out there one time?
- (5) A That's correct
- (6) Q And I believe - did Admiral Robbins make it out there to
- (7) meet with you?
- (8) A Admiral Robbins was out several times Admiral Yost was
- (9) actually out twice Admiral Ciancaglini was out multiple
- (10) occasions
- (11) Q And did you think in your opinion that they did a good
- (12) job in their role as federal on scene coordinator for the Exxon
- (13) Valdez oil spill?
- (14) A Admiral Yost was good I appealed to him twice to get
- (15) beach clean up crews when Exxon refused to put more crews
on
- (16) the beach Admiral Robbins had done a lot with them I
- (17) appealed to the commandant twice in Washington D C and
both
- (18) cases he put additional crews on the beach So Admiral Yost I
- (19) give high ratings He was very responsive He was very
- (20) concerned about what was going on in the communities and the
- (21) unresponsive nature of the Exxon Corporation
- (22) Admiral Robbins I think was too close to working with the
- (23) Exxon people on a daily basis I had difficulty
- (24) differentiating the community needs and the needs of the spill
- (25) area and in my view did not do that good of a job

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- (1) Q All right For - you say he didn't do a good job Can
- (2) you name for the jury sir a single instance - and if you
- (3) have the letter here I'd like you to produce it - where you
- (4) sent a letter to Admiral Robbins requesting particular action
- (5) that he didn't deliver for you or that he didn't explain the
- (6) reason why?
- (7) A No I don't have such a letter
- (8) Q How about for Admiral Ciancaglini? Can you name for the
- (9) jury a single time you wrote him and said I want this action
- (10) or I want an explanation why and you didn't get it?
- (11) A No I didn't communicate in writing I used the
- (12) telephone
- (13) Q Now Admiral Ciancaglini we - talking in terms of the
- (14) cleanup itself in Kodiak one thing I want to make - make
- (15) clear, there wasn't any cleanup in Kodiak in either 1991 or
- (16) 1992 was there?
- (17) A I think there was a little bit in '91 but there was none
- (18) in '92
- (19) Q Where was the cleanup in '91?
- (20) A I'm not sure about that but I thought that there was a
- (21) little bit on a couple of beaches still in '91
- (22) Q Can you give us any idea where this occurred?
- (23) A No I don't know for a fact I was not directly involved
- (24) with that part of it
- (25) Q So to the best of your knowledge you can't identify any

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- (1) locations in 1991 where the federal on scene coordinator
 (2) required any cleanup whatsoever in Kodiak in 1992 right?
 (3) A Correct 92 I know there was no effort
 (4) Q Can you identify so much as a single stretch of beach
 (5) anywhere in the whole Kodiak area that the Coast Guard in its
 (6) role as federal on scene coordinator felt required cleanup in
 (7) 1991?
 (8) A I m not certain about 91
 (9) Q Now Admiral Ciancaglini came out to visit you or sent you
 (10) some correspondence early in 1991 soliciting information
 (11) suggestions for places to get cleaned up do you recall that?
 (12) A Yes
 (13) Q In fact he sent that to - not just to you a letter not
 (14) just to you but a letter to all the Mayors of all the
 (15) communities that you talked about on Kodiak Island correct?
 (16) A It was sent out throughout the whole spill area
 (17) Q What beaches did you suggest to Admiral Ciancaglini
 needed
 (18) cleaning in 1991?
 (19) A I didn t suggest any
 (20) Q What beaches did Kodiak Island Borough suggest needed
 (21) cleaning in 1991?
 (22) A None
 (23) Q What beaches did any of the little communities suggest
 (24) needing cleaning in 1991?
 (25) A I do not have that information

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- (1) Q Do the best of your knowledge did they suggest any even
 (2) one?
 (3) A I said I don t have the information
 (4) Q Now you talked a lot about clean up crews and getting more
 (5) people on at various times That was all during 1989 isn t
 (6) that correct?
 (7) A That s correct
 (8) Q What was the total number of people -
 (9) A Let me correct that Actually during the spring of 90 we
 (10) were asking for a great deal more beach survey and more
 crews
 (11) Q Now who did you ask?
 (12) A Admiral Ciancaglini
 (13) Q And what did he do?
 (14) A They revised considerably what they were going to do but
 (15) they came nowhere near addressing the miles of beach that
 had
 (16) been identified by the various agencies and owners of the land
 (17) and many of the beaches that the owners particularly the Park
 (18) Service I recall was very upset along the Katmai coast about
 (19) the fact that many of the segments they identified that they
 (20) knew had oil on them were not going to be surveyed even let
 (21) alone no effort - because in order to have clean up activity
 (22) occur you had to be surveyed first Well they came back with
 (23) the 300-mile coast survey 300 miles of beach to survey
 (24) keeping in mind we had 2 000 miles of beach just in Kodiak
 (25) Island Borough had some amount of oil in 89 You can see

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- (1) how - we went from 2 000 to 300 is all they were even going
 (2) to look at you know so it s pretty obvious it was a fair
 (3) amount of beach out there that wasn t even going to be looked
 (4) at probably had some oil on it
 (5) Q These 300 miles you re talking about all on Kodiak Island
 (6) or the whole spill area?
 (7) A That was the whole spill area so it shrunk down even
 (8) more I think we were allocated about 50 miles proposed within
 (9) the Kodiak Island Borough that they were going to look at out
 (10) of the 2 000 that we had documented oil on during 1989
 (11) Q I want to make sure I m not confused here we re talking
 (12) 1990?
 (13) A Spring of 1990
 (14) Q And it s your testimony to these people in the jury box
 (15) that the Coast Guard in the joint survey done in 1990 only
 (16) had 300 miles surveyed in the entire area impacted by the oil
 (17) spill is that your testimony here sir?
 (18) A That s their original proposal when they came to Kodiak in
 (19) March it s documented in these minutes
 (20) Q That s the original proposal Well how many did they
 (21) actually survey?
 (22) A I m not sure what the total was because we focused on
 (23) Kodiak and I don t know what they did up in Prince William
 (24) Sound and on the Kenai Peninsula so I m not sure what the
 (25) total amount that they finally surveyed was

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- (1) Q Do you ever recall being told it was over 1200 miles four
 (2) times that?
 (3) A I was never told that that I m aware of
 (4) Q Well we ll get back to that one We ll get back to that
 (5) one
 (6) My question for you is How many people actually were
 (7) hired by Exxon or its subcontractors throughout Kodiak to work
 (8) on the cleanup down there in the summer of 1989?
 (9) A How many people were hired?
 (10) Q Yeah how many people were hired?
 (11) A They put - they hired 17 beach crews for the entire Kodiak
 (12) Island Borough and 2 000 miles of coastline to clean Was
 (13) taking them about a week to clean as much as a mile of beach
 (14) sometimes less than that. And so it doesn t take too much
 (15) difficulty to figure out that 17 crews was never going to cover
 (16) 2 000 miles of coastline even if you don t have any reoiling
 (17) And then when you consider the fact that after they d cleaned
 (18) beaches many times they got another load of oil later so they
 (19) had to go back and reclean them So it s pretty obvious that
 (20) 17 beach crews was pitifully inadequate didn t come anywhere
 (21) close to addressing cleaning up the oil off the beach in Kodiak
 (22) Island
 (23) Q Maybe again I didn t speak loudly enough because I asked
 (24) how many people they hired to work on the cleanup in 1989
 How
 (25) many people?

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- (1) A Well beach crews had 20 people per crew so 17 times 20 is
 (2) 340 people plus they had a command center and they
 probably
 (3) had another hundred people working there so - you know I
 (4) don't know what the total was because I'm not the record
 (5) keeper for Exxon activity that aspect of it
 (6) Q My question for you was just do you know If you don't
 (7) know it's okay to say you don't know Do you know how many
 (8) people -
 (9) A No
 (10) Q - Exxon hired?
 (11) A No I do not know the extent
 (12) Q Do you know if in fact the cleanup crews the 17 you
 (13) talked about were limited to 20 people each do you know that
 (14) personally sir?
 (15) A Yes that was what was reported to us
 (16) Q I asked you if you knew that of your own personal
 (17) knowledge
 (18) A I did not go out and count each of the 17 beach crews no
 (19) Q And all the 17 crews that you're talking about worked
 (20) for - that's what they called the Exxon Beach Clean up Crews
 (21) wasn't it?
 (22) A Yes they actually worked for Veco
 (23) Q Right They actually worked for Veco and it doesn't count
 (24) the Village Clean up Program does it?
 (25) A No the Village Clean up Program was much later

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- (1) Q But it was in the summer of 1989?
 (2) A Only after again basically the villages had to come in
 (3) and beg on hands and knees the Coast Guard representatives
 to
 (4) be able to go out and clean up the doggone beaches in front of
 (5) their own village I mean this is pretty ridiculous
 (6) Q And we've heard testimony from a couple of the Mayors
 (7) Mr Chichenoff - you know Mr Chichenoff don't you?
 (8) A Yes I do
 (9) Q And Pete Squartsoff you know him?
 (10) A Yes I do
 (11) Q And they've talked about the hiring of many many people
 (12) from their villages to work on that program Do you sir know
 (13) of your own personal knowledge -
 (14) MR STOLL Your Honor, I think that's a
 (15) mischaracterization of testimony
 (16) MR CLOUGH The question -
 (17) THE COURT Rephrase the question
 (18) MR CLOUGH Thank you Your Honor
 (19) BY MR CLOUGH
 (20) Q Do you know of your own personal knowledge how many
 people
 (21) from the villages were hired separately by Exxon in addition
 (22) to these 17 or whatever number of crews it was how many
 people
 (23) from the villages were hired to work on the cleanup?
 (24) A They told me it was an inadequate number to cover the miles
 (25) of beach that they had That's what I do know I do not have

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- (1) a exact count village by village and it doesn't really
 (2) matter The point is they were totally inaccurate
 (3) MR CLOUGH Your Honor at this point I'd like to
 (4) object he's clearly not responding to my question I only
 (5) asked if he knew the number
 (6) THE COURT Be responsive to the question If you
 (7) need to explain I'll give you an opportunity to explain
 (8) BY MR CLOUGH
 (9) Q Just for the jury so my objection didn't lose it all do
 (10) you know how many people were hired from the villages to work
 (11) on the village clean up program?
 (12) A No I wasn't counting the number of employees
 (13) Q There was also a separate program called the Setnet
 Program
 (14) as well wasn't there?
 (15) A Not funded by Exxon
 (16) Q Oh there wasn't? I mean to your knowledge as a Mayor of
 (17) Kodiak Island Borough were you aware that Exxon had a
 separate
 (18) clean up program where they hired setnetters to perform
 (19) clean up operations in the locations around their setnet sites
 (20) which were active during that summer?
 (21) A I'm aware of the Setnet Program yes
 (22) Q And cleanup was conducted by those individuals as well
 (23) right?
 (24) A Some of them that's correct
 (25) Q Do you know of your own personal knowledge how many
 people

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- (1) worked on the setnet clean up program?
 (2) A Again we - I haven't run a count on the number of
 (3) employees
 (4) Q Just asking if you know You've banded around the figure
 (5) of 2 000 miles of oiled shoreline on Kodiak Island quite a
 (6) bit
 (7) A That's correct
 (8) Q And you mentioned some type of a computer or an AutoCad
 (9) system right?
 (10) A Correct
 (11) Q Do you know folks at ICF Have you had any contact with
 (12) them?
 (13) A Who is ICF
 (14) Q ICF has sent Mr Bush in here to testify on issues like
 (15) oiling and the extent of oiling in the areas throughout the
 (16) area affected by the oil spill?
 (17) A I still don't know who ICF is
 (18) Q What is it I forget?
 (19) MR STOLL It's ICF Kaiser Engineering
 (20) BY MR CLOUGH
 (21) Q ICF Kaiser Engineering
 (22) A I don't know them or Mr Bush so -
 (23) Q Let me ask you this To your knowledge did you ever give
 (24) any of this data on oiling to ICF? Did anybody at KIB ever do
 (25) that?

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- (1) A We turned over the entire file to the Coast Guard as part
 (2) of clean up activity in late July of 1989
 (3) Q Okay So you did turn that over to the agencies?
 (4) A Yes we did
 (5) Q And they had an opportunity to at some point if they chose
 (6) to do so Check your data
 (7) A I wouldn't bet there was a whole lot of data checking that
 (8) went on but given the activity during 1989 but sure they
 (9) had - they had the data so they wanted to check it They
 (10) could check it
 (11) Q Do you know if they did or not?
 (12) A No I do not
 (13) Q You also talked about the cut off date of the oil - for
 (14) the summer response in '89 I think it was September 15th?
 (15) A Yes
 (16) Q And several occasions you talked about Exxon - I m
 (17) paraphrasing you I m not trying to put - I can't remember your
 (18) exact quote but you re essentially - did you testify that
 (19) Exxon sort of arbitrarily picked that date?
 (20) A That's correct
 (21) Q Isn't it true sir that the date was actually approved by
 (22) the federal on scene coordinator the Coast Guard officer in
 (23) charge of directing the spill cleanup down there?
 (24) A Upon the insistence of Exxon that's correct
 (25) Q Isn't it true that the federal on scene coordinator

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- (1) approved the September 15th date to cut off clean up
 operations
 (2) in Kodiak?
 (3) A That's correct
 (4) Q And isn't the reason he did it safety?
 (5) A No it's because it was the date that Exxon insisted upon
 (6) doing it under the guise claiming safety Kodiak Island
 (7) September 15th is not a safety issue Our fall weather is very
 (8) good and many people come down to Kodiak and hunt deer
 clear
 (9) into December up on Shuyak Island and other places around
 the
 (10) island so you know it's really just not a safety issue
 (11) Q Sometimes the weather then can be good and sometimes it
 (12) can be bad isn't that the truth?
 (13) A That's true year-round
 (14) Q That's true And - but is it - I mean come on I mean
 (15) isn't the weather in the fall in Kodiak worse than the weather
 (16) in the summer?
 (17) A Not necessarily
 (18) Q As a general - you've lived there most of your life come
 (19) on
 (20) A I know summer days that have been a lot worse than a lot of
 (21) fall days so I m sorry but I cannot say that generally the
 (22) fall weather is always a lot worse than summer weather
 (23) Q That was not my -
 (24) A That's not true
 (25) Q I live in southeast - I would agree with you

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- (1) wholeheartedly I've had days in October I would have killed
 (2) for
 (3) THE COURT Counsel counsel
 (4) MR CLOUGH I know I love my state I apologize
 (5) THE COURT We like Juneau too but it's irrelevant
 (6) to these issues Let's get to the question
 (7) BY MR CLOUGH
 (8) Q The question is all right as a general rule based on
 (9) your years of living down there the weather in the fall as a
 (10) general rule not on a particular day or a particular occasion
 (11) isn't as good as it is in the summer isn't that true?
 (12) A I think the weather varies so much on Kodiak Island that
 (13) you could have good weather or bad weather anytime of the
 (14) year I would characterize fall as necessarily being our worst
 (15) weather time Actually fall generally is pretty nice weather
 (16) on Kodiak Island
 (17) Q I didn't ask you if it was your worst weather time I
 (18) asked if generally impaired to the summer the weather isn't
 (19) worse than the summer generally based on the years living
 (20) down there?
 (21) A I'd say generally they're about the same
 (22) Q About the same?
 (23) A About the same
 (24) Q Let's switch hats here for just a second Just a couple of
 (25) quick questions on this one The 1991 spring oiling survey

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- (1) This was part of the package in the book that was given to you
 (2) right?
 (3) A Correct uh huh
 (4) Q Okay And you were asked some questions about the
 (5) classifications of the bottom of it with the colors See
 (6) that? I think you were asked a question about how many sites
 (7) were wide do you remember that question -
 (8) A Yes
 (9) Q - from Mr Stoll?
 (10) A Uh huh
 (11) Q Do you know what the definition is of a wide site under
 (12) this survey?
 (13) A No I don't
 (14) Q Do you know the definition is of a moderate site?
 (15) A No
 (16) Q Do you know what the definition according to this survey
 (17) of how much oiling it takes to qualify as any of these
 (18) particular categories?
 (19) A No
 (20) Q Do you know the definition -
 (21) A Except obviously the bottom one with no oil or unsurveyed
 (22) means nobody even looked it's most likely if they did look
 (23) they'd claim they didn't find oil So I can figure that one
 (24) out
 (25) Q All right we're in agreement there No dispute on that

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- (1) one
 (2) For any of the surveys that you talked about are you aware
 (3) of the criterion used for the classifications?
 (4) A I m not clear on what you re talking about about areas
 (5) that -
 (6) Q You talked about a number of surveys you know miles for
 (7) this survey miles for that survey in years subsequent to
 (8) 1989
 (9) A So you re talking about the surveys that were done in the
 (10) spring of 90 for example?
 (11) Q Spring of 90 there was a survey in 90 right?
 (12) A Right
 (13) Q And there was a survey in 91?
 (14) A Right
 (15) Q 92 right?
 (16) A Okay
 (17) Q And my only question for you is Are you aware of the
 (18) definitions that they used in those surveys for classifying of
 (19) beaches as - or shoreline of one category versus another?
 (20) A Yes I m aware of the survey you re talking about heavy
 (21) oiling moderate oiling light oiling categories is that it?
 (22) Q You have some general familiarities for it?
 (23) A Yes I do
 (24) Q And in Kodiak they actually came up with an additional
 (25) category didn't they?

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- (1) A I don't recall that they did but perhaps they did
 (2) Q Do you remember the category very light oiling?
 (3) A Oh sure that was part of the categorization throughout
 (4) the spill years
 (5) Q Wait a second wasn't that first developed down in Kodiak
 (6) to describe the unique very light oiling found on beaches in
 (7) Kodiak?
 (8) A Oh I don't know that But -
 (9) Q You don't know if that's the case?
 (10) A No
 (11) Q This is going to be one of those times where I shift the
 (12) file
 (13) A Okay
 (14) Q Shift the file and put up a map We talked about your
 (15) deposition just a minute ago your testimony about the Coast
 (16) Guard Do you remember also at your - can you see that there
 (17) Mayor Selby?
 (18) A Yes I can
 (19) Q How's it working - I think it would probably work best if
 (20) you'd be willing to come down going to move this over a little
 (21) closer to the jury - let's try that.
 (22) Now in 1989 Mayor Selby you actually got out to inspect
 (23) certain parts of Kodiak Island and Afog - this by the way
 (24) we're looking at Afognak Island at the very - at the top?
 (25) A Shuyak's at the top

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- (1) Q Shuyak's at the very top then Afognak right?
 (2) A Right
 (3) Q Then Raspberry Island you talked about that a little bit
 (4) and Kodiak Island is the large one and then finally - this
 (5) is by the way defendants Exhibit 15606 for the record
 (6) Finally at the bottom we've got Sitkinak?
 (7) A Right
 (8) Q Now in the course of 1989 you got out for some overflights
 (9) and also some trips in skiff or boat?
 (10) A Correct
 (11) Q And at your deposition you were asked fairly extensively
 (12) about those trips do you recall that?
 (13) A Yes
 (14) Q At your deposition they gave you a copy of a nautical chart
 (15) and they asked you to write in in handwriting you know
 (16) basically sketch out the routes that you went to and when you
 (17) went to them isn't that correct?
 (18) A Uh huh
 (19) Q Now is what's been marked defendants exhibit 15606 is
 (20) that a blowup of the NOAA chart that you used in your
 (21) deposition?
 (22) A Looks like the same chart as near as I can tell
 (23) Q Is that your handwriting on it sir?
 (24) A No it's not
 (25) Q Was that handwriting put on by the attorney who was taking

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- (1) your deposition?
 (2) A I believe so yes
 (3) Q Take a second and look at the - at the descriptions To
 (4) do the handwritten descriptions of the dates accurately
 (5) reflect to the best of your recollection when you made some
 (6) of these trips
 (7) A More or less it looks like - uh huh
 (8) Q And do the arrows and lines generally reflect the locations
 (9) that you visited?
 (10) A Roughly uh huh roughly
 (11) Q Now I think at your deposition you were asked whether in
 (12) the course of these trips you made in 1989 you personally
 (13) observed any oil on any KIB parcels do you recall that?
 (14) A No I don't recall that question about KIB parcels I was
 (15) asked if I observed oil as we - as we flew on the trips
 (16) Q Let me ask you this Did you personally observe in 89 any
 (17) oil on KIB parcels KIB-owned parcels that are the ones at
 (18) issue in this case?
 (19) A No because I wouldn't have - the only place that I even
 (20) got close to seeing Kodiak Island Borough land would have been
 (21) up here on Shuyak and we actually didn't fly along this
 (22) coastline
 (23) Q So even Shuyak you didn't personally?
 (24) A So I didn't actually see the coastline of Kodiak Island
 (25) Borough property on those trips that's correct

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- (1) Q So for those parcels you re not in a position to describe
 (2) personally of your own knowledge the degree of oiling on
 (3) those shorelines are you?
 (4) A No I m not
 (5) Q Now you did obviously at least for the upper half of the
 (6) map you did cover a fair amount of area in your skiff or on
 (7) the airplane flights right?
 (8) A Correct
 (9) Q And to save us some time going through it site by site is
 (10) it true that as a general rule some of the places you
 (11) observed were oiled they had oiling on them and some of them
 (12) were not?
 (13) A That s correct
 (14) Q And in fact a number of places that you observed on these
 (15) travels didn t have any oil on them when you were there isn t
 (16) that correct?
 (17) A That s true yes
 (18) Q Is it your testimony here for the jury that all of Kodiak
 (19) Island was oiled by the oil spill?
 (20) A No I never claimed that all of Kodiak Island was oiled by
 (21) the oil spill We ve said 2 000 miles out of 2900 on the
 (22) shoreline
 (23) Q But that s based just on that AutoCad system nothing
 (24) else - not your own personal knowledge right?
 (25) A No based on people observed oil on the beach came in and

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- (1) reported it to our mapmaker who then logged it on the map
 with
 (2) their firsthand information and then he summed that up for
 (3) us
 (4) Q And this is the information you turned over to the Coast
 (5) Guard?
 (6) A That s correct
 (7) Q And of your own personal knowledge you never - you can t
 (8) talk about the degree of oiling on any of the KIB parcels can
 (9) you?
 (10) A Not from having seen it myself no
 (11) Q Okay why don t you retake the stand there
 (12) MR STOLL You got another one?
 (13) MR CLOUGH No not right now
 (14) BY MR CLOUGH
 (15) Q Now during your direct testimony you talked about the
 (16) winter monitoring program that - the contract that you entered
 (17) into - you meaning the KIB Kodiak Island Borough entered
 (18) into with Exxon
 (19) A Yes uh huh
 (20) Q And wasn t one of the terms of that contract - wasn t one
 (21) of the terms of that contract a requirement that KIB or I
 (22) guess actually in this case the subcontractor that you let the
 (23) subcontract to maintain records of the visits to each of the
 (24) monitoring locations?
 (25) A Correct uh huh

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- (1) Q And those records include a reflection of what they found
 (2) when they went there?
 (3) A Correct
 (4) Q And those records include photographs of what they found
 (5) when they went there?
 (6) A Yes uh huh
 (7) Q And this program was conducted throughout the winter of
 (8) 1989 into 1990?
 (9) A Well first portion of the winter yes
 (10) Q Right I d like to show you what s been marked defendants
 (11) Exhibit 16245 and defendants Exhibit 16246 and ask you to
 (12) take a moment if you could to thumb through them The
 (13) question I m going to be asking you sir is Are these the
 (14) records - the records maintained by the Kodiak Island Borough
 (15) of the work done on the winter monitoring program at the four
 (16) sites which you inspected under the contract?
 (17) MR STOLL Are these two of the documents?
 (18) MR CLOUGH No these were both designated
 (19) MR STOLL These weren t designated - I m sorry we
 (20) do have them
 (21) BY MR CLOUGH
 (22) Q The question was Are these the records maintained by the
 (23) Kodiak Island Borough showing the results of the winter
 (24) monitoring program for those four sites?
 (25) A They appear to be yes

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- (1) Q And without taking the jury s time or hours to go through
 (2) them page by page is it fair to say sir that they generally
 (3) reflect finding very very little oil out there at those sites?
 (4) A Well having not reviewed them for quite a while -
 (5) Q Would you like to take a few minutes to look through them?
 (6) A I don t really need to do that. I think that the important
 (7) point was that these were set up as monitoring stations again
 (8) for us to try to get an idea of how much oil was moving
 (9) around
 (10) Other than Monashka Bay and Near Island which did receive
 (11) a fair amount of oil during the summer of 1989 the other two
 (12) sites had never been heavily hit and we knew that going in but
 (13) again this was - these sites were picked a hundred yards to
 (14) monitor again to see if as oil was moving around during the
 (15) winter if we had more come in on these - in the area right
 (16) around the City of Kodiak because these bays two of them are
 (17) on the west side of Kodiak city and two of them are on the
 (18) east side and so the idea was to try to see how much was
 (19) moving around during the winter there
 (20) Q But my question -
 (21) A These were never claimed to be heavily oiled beaches
 (22) Q But my question for you sir is Isn t it true that the
 (23) records reflect that these sites they found very very little
 (24) oil out there?
 (25) A At these two - at these four sites we were pretty

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- (1) fortunate that's correct
 (2) Q They found almost nothing isn't that right?
 (3) A Well they found some They picked some oil up off the
 (4) beaches around Kodiak Island or around the City of Kodiak
 (5) throughout the winter but you know by comparison to Shuyak
 (6) for example which got hammered these were very very light
 (7) Q But we're talking about this was the program done over the
 (8) winter of '89 and '90?
 (9) A Correct
 (10) Q By Kodiak Island Borough?
 (11) A Correct
 (12) Q For Exxon?
 (13) A Correct
 (14) Q At these four sites?
 (15) A Correct
 (16) Q They found virtually nothing isn't that what the records
 (17) show?
 (18) A I wouldn't characterize it as virtually nothing
 (19) Q How would you characterize it?
 (20) A I would say they found small amounts of oil that had come
 (21) ashore
 (22) Q Can you show us in there in the records you think support
 (23) that?
 (24) A You want me to go through these things page by page?
 (25) Q Is it - wouldn't you agree with me that what they found

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- (1) was very very small?
 (2) A These sites that's correct
 (3) Q Okay you don't need to go through it page by page
 (4) MR CLOUGH Your Honor this is - I'm about to shift
 (5) areas entirely so it would probably be a good time to break for
 (6) the day with your permission
 (7) THE COURT Can't you finish in ten minutes?
 (8) MR CLOUGH A simple and honest answer to that is no
 (9) THE COURT Shift into the other area counsel I
 (10) want you to take the ten minutes
 (11) MR CLOUGH I can do a different shorter one
 (12) perhaps
 (13) BY MR CLOUGH
 (14) Q Let's talk about commercial fishery just for a couple of
 (15) seconds I believe you testified that there was no - no
 (16) commercial fishing done anywhere in Kodiak during that
 (17) summer of '89?
 (18) A There was the Olga Bay section was opened and it did allow
 (19) them to go inside the booms at Kitoi Bay which is the
 (20) hatchery and I think it's about five to six million pink
 (21) salmon out of Kitoi with the idea of not wiping out the
 (22) hatchery program because they would have had such a huge
 (23) overescapement of fish into that system it would have just
 (24) totally wiped it out So they actually took the booms aside
 (25) and let three or four boats at a time go in and catch fish in

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- (1) Kitoi Bay so there were two fisheries that occurred One was
 (2) the south end in Olga Bay which is a totally almost landlocked
 (3) bay which has a very small entrance the south end of the
 (4) island And then the fish were taken at Kitoi but otherwise
 (5) all of the bays on Kodiak Island and on the mainland which is
 (6) part of Kodiak Island Fishing District were closed and were
 (7) not fished for salmon during the summer of 1989
 (8) Q Let's talk first about Kitoi first five or six million
 (9) pinks were taken out of there?
 (10) A That's correct
 (11) Q By commercial fishing boats?
 (12) A That's correct
 (13) Q And they were sold -
 (14) A That's correct
 (15) Q - to the public?
 (16) A Sold to the canneries and normal processors
 (17) Q For eating?
 (18) A Correct
 (19) Q By people right?
 (20) A Correct
 (21) Q And there wasn't any concern that those fish would be
 (22) harmful to anybody was there?
 (23) A No not at that time there wasn't
 (24) Q And the other one Olga Moser now that was actually -
 (25) you're personally familiar with that opening aren't you?

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- (1) A No
 (2) Q Weren't you involved in getting - getting that opening or
 (3) at least wasn't KIB involved?
 (4) A You're talking about the subsistence harvest that took
 (5) place as opposed to the commercial fishery?
 (6) Q Let's break them down Obviously I've got the two
 (7) confused So there was a commercial fishery conducted down
 (8) at
 (9) Olga Moser Bay?
 (10) A That's correct For part of the summer they allowed them
 (11) to fish down there
 (12) Q And in addition to that commercial fishery that went on
 (13) down there those fish were also sold to the public like the
 (14) ones at Kitoi right?
 (15) A Right
 (16) Q In addition to that there was also a special fishery down
 (17) there a subsistence fishery right?
 (18) A There and in the Karluk Lagoon that's correct
 (19) Q And that was later in the summer?
 (20) A September
 (21) Q Septemberish?
 (22) A September that's correct
 (23) Q And in this instance you, in capacity of the Mayor of
 (24) Kodiak Island Borough were involved in arranging this
 (25) opening
 (26) correct?
 (27) A That's correct

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- (1) Q And you helped get the permits from the ADF&G to do that?
- (2) A Right
- (3) Q In fact you requested that it happen?
- (4) A Correct
- (5) Q And the purpose of this fishery was to allow residents to
- (6) conduct the subsistence fishery wasn't it?
- (7) A That's correct
- (8) Q And in fact they went down there and using seine boats
- (9) they harvested a whole bunch of fish for subsistence purposes
- (10) didn't they?
- (11) A That is correct
- (12) Q And they ate them?
- (13) A As far as I know they did
- (14) Q So there wasn't a total shutdown of subsistence throughout
- (15) Kodiak Island in 1989 was there?
- (16) A Well that was a replacement fishery and the only reason
- (17) we were able to get the permits was because of the
- (18) acknowledgment that folks had basically been told to not fish
- (19) for and use subsistence salmon fisheries throughout the
- (20) summer
- (21) because of all of the uncertainty that I've mentioned earlier
- (22) But you know the comparison that I would make is that if you
- (23) had - were raising a garden and had been used to canning your
- (24) own garden vegetables every year as part of your winter
- (25) supplies basically I come over and rototill your garden up
- (26) and then long about in June - long about September I come

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- (1) along and say gee you know I really feel kind of bad about
- (2) that Tell you what I'll do I'll run over to the Safeway
- (3) store and I'll get you a big case of carrots and boom I drop
- (4) it on the front porch I say here's your winter's vegetables
- (5) for the winter
- (6) What I've done to you is I've eliminated your livelihood
- (7) throughout the summer because you usually go out and tend
- (8) your
- (9) garden I've taken away from you the pleasure of personally
- (10) canning all of your own subsistence food for the winter I've
- (11) taken away from you you know the quality of that stuff that
- (12) you've canned because you did it The stuff that somebody
- (13) drops on your doorstep you don't know what the quality is
- (14) Q But Mayor Selby -
- (15) A Then somebody comes along and adds insult to injury and
- (16) says boom everything's wonderful because I dropped this
- (17) load
- (18) of carrots on your porch There's no comparison between the
- (19) two
- (20) Q Who caught the fish?
- (21) A Who caught the fish?
- (22) Q Uh huh
- (23) A A number of people including fish and game officers came
- (24) from all over the island They took some people out of the
- (25) villages some from Kodiak There were a lot of folks
- (26) involved
- (27) Q But you testified earlier on direct today about this big

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- (1) fear and uncertainty about the fish so that people wouldn't
- (2) take any chances with their families eating it yet thousands
- (3) of fish were caught down here off the waters of Kodiak you
- (4) lobbied to get the subsistence fishery open and it was to give
- (5) to the people to eat and they ate it isn't that true? Isn't
- (6) that true yes or no?
- (7) A What you've said isn't totally true
- (8) Q Isn't it true that you lobbied for the subsistence fishery
- (9) to be opened?
- (10) A That's true
- (11) Q Is it true the fishing was conducted in waters off of
- (12) Kodiak Alaska?
- (13) A That is not true
- (14) Q Where was it conducted?
- (15) A It was conducted inside the Karluk Lagoon which is fresh
- (16) water after the fish had been - come in and been washed off
- (17) with fresh water inside of Olga Bay which there was never any
- (18) claim that there was oil inside of Olga Bay throughout the
- (19) summer of 1989 so the two places that we had selected to do
- (20) this fishery were places that we knew there wouldn't be any
- (21) possibility of oil being in the area and the fish would have
- (22) had an opportunity if they would have been in the base for a
- (23) considerable time because you're talking it was late
- (24) September It was silver salmon that we took so those salmon
- (25) would have been in those bays for a good two to three weeks

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- (1) normally swimming around inside the bays so those were fish
- (2) that we felt that there was a pleasant excellent probability
- (3) that they would be relatively clean fish and you could eat
- (4) them with some confidence in terms of providing food for
- (5) people
- (6) Q Fish in fresh water you felt were relatively safe?
- (7) A After they had been washed for a while
- (8) Q And in fact isn't it true that on the road system up near
- (9) where you live people harvested subsistence salmon in pretty
- (10) much normal numbers throughout 1989?
- (11) A Need to keep in mind though that that fishery basically
- (12) occurred before the oil got that far south on Kodiak Island
- (13) Q Okay isn't that true?
- (14) A That's true
- (15) MR CLOUGH Your Honor I think this time we have
- (16) reached a good point
- (17) THE COURT Okay Remember don't talk about the case
- (18) with anybody don't form or express any opinion until it's
- (19) submitted to you for deliberation See you tomorrow at 8:30
- (20) (Jury out at 1:28 p.m.)
- (21) THE COURT All right counsel Anything on the
- (22) record?
- (23) MR STOLL Yes Your Honor we have a motion relative
- (24) to the scientists tapes
- (25) THE COURT I can - I can deal with that motion Is

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- (1) there anything else?
- (2) MR DIAMOND Exhibits
- (3) MR STOLL Oh yeah I have some exhibits also
- (4) THE COURT That's fine We - let's do that You
- (5) can step down
- (6) MR DIAMOND Can we do the Lora Johnson exhibits and
- (7) let me read them - with Mr Fortier's permission I'll read his
- (8) exhibits too which we have no objection
- (9) THE COURT These are admitted as they're named
- (10) MR DIAMOND And then our exhibits as to which there
- (11) is no objection then we can address the objections
- (12) Okay these are the plaintiffs' exhibits as to which there
- (13) are no defense objections 1110-A 1128 A 1167 A 1287 A
- (14) 1287 B 1289-B 1290-B 1291 B and I say that there are no
- (15) objections beyond those which we've already stated and
- (16) argued
- (17) to you
- (18) Photographs identified as 1295-1 through 1295-3 1295-5
- (19) through 1295-8 1295-10 and 11 1295-14 and because I
- (20) apparently stipulated to this 1295-15 through 17 and 20
- (21) 1315-B 1317 B 1366-A 1366-B 1366 C 1387 1501 A 1501 B
- (22) 1538
- (23) Those are the plaintiffs' exhibits as to which we have no
- (24) further objections
- (25) (Exhibits 1110-A 1128-A 1167 A 1287 A 1287-B 1289 B
- (26) 1290-B 1291 B 1295-1 through 1295-3 1295-5 through 1295-8

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- (1) 1295-10 and-11 1295-14 1295-15 through 17 and 20 1315-B
- (2) 1317-B 1366-A 1366-B 1366-C 1387 1501 A 1501 B 1538
- (3) offered)
- (4) THE COURT They've been admitted counsel
- (5) (Exhibits 1110-A 1128-A 1167 A 1287-A 1287 B 1289-B
- (6) 1290-B 1291-B 1295-1 through 1295-3 1295-5 through 1295-8
- (7) 1295-10 and 11 1295-14 1295-15 through 17 and 20 1315-B
- (8) 1317 B 1366-A 1366-B 1366-C 1387 1501 A 1501-B 1538
- (9) received)
- (10) MR DIAMOND I was not nearly as fastidious as was
- (11) Mr Fortier in identifying exhibits during the course of the
- (12) examination and I've been told I need to identify some as to
- (13) which - I described them as to what they were but didn't give
- (14) an exhibit number on the record The ones that fall into that
- (15) category are DX16241 the Gallison map of Seward 242
- (16) DX16141 22 the AHRS form for Seward 248 DX16141 41
- (17) which is
- (18) the AHRS for Seward 474 DX10600-9A which was a markup
- (19) of
- (20) McArthur Pass photograph that was created on the system
- (21) And
- (22) DX16198 - I'm sorry there's an objection to that one I will
- (23) identify that. 16198 was the CFR section 2653 5
- (24) Additionally the record has erroneous exhibit numbers for
- (25) two exhibits what is identified as DX1614 13 should be
- (26) 16141 3 and DX160082 identified in the record should be
- (27) DX16006-18
- (28) With those caveats the defendants' exhibits for Johnson

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- (1) which are being admitted without objection with the following
- (2) DX16142 13 15335 10597 10600 83 16142 11 16141 3
- (3) 16141 56 10600 87 16141 44 10600 129 16230 16 - I'm
- (4) sorry 10600 156 10600 157 16141 18 16130 16139 16062
- (5) 16108 16241 16141 22 16141 41 16243 plaintiffs 1288 2
- (6) defendants 15293 defendants 10600-9 A 10600-18 10600 17
- (7) 15513 1 15512 15514 16197
- (8) (Exhibits 16241 16141 22 16141 41 10600 9A 16198
- (9) 16141 3 16006 18 DX16142 13 15335 10597 10600 83
- (10) 16142 11 16141 3 16141 56 10600-87 16141 44 10600 129
- (11) 16230 10600 156 10600 157 16141 18 16130 16139 16062
- (12) 16108 16241 16141 22 16141 41 16243 plaintiffs 1288 2
- (13) defendants 15293 defendants 10600-9 A 10600-18 10600 17
- (14) 15513 1 15512 15514 16197 offered)
- (15) (Exhibits 16241 16141 22 16141 41 10600 9A 16198
- (16) 16141 3 16006-18 DX16142 13 15335 10597 10600-83
- (17) 16142 11 16141 3 16141 56 10600 87 16141 44 10600 129
- (18) 16230 10600-156 10600-157 16141 18 16130 16139 16062
- (19) 16108 16241 16141 22 16141 41 16243 plaintiffs 1288 2
- (20) defendants 15293 defendants 10600-9 A 10600-18 10600 17
- (21) 15513 1 15512 15514 16197 received)
- (22) MR DIAMOND Plaintiffs object to the admission of
- (23) 16193 which is a xerox copy of CFR section 2653 5 which are
- (24) the procedures outlined for publication of 14-H 1
- (25) applications You may remember during the course of the

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- (1) cross-examination we raised that subject They object to it
- (2) We think it's appropriate I'll let Mr Fortier -
- (3) (Exhibit 16193 offered)
- (4) THE COURT What's the objection?
- (5) MR FORTIER Well the objection Your Honor was
- (6) that there was no foundation to the - to the CFR site at all
- (7) THE COURT No foundation?
- (8) MR FORTIER Right In addition to that Your
- (9) Honor -
- (10) THE COURT Foundation what foundation would you have
- (11) them lay?
- (12) MR FORTIER In addition to that Your Honor I don't
- (13) think it was authenticated Let me talk about the second first
- (14) and the first second
- (15) THE COURT Is it inaccurate?
- (16) MR FORTIER Yeah Well Your Honor I don't - I
- (17) believe that it was a CFR site for many years ago I don't
- (18) know what's its applicability is with regard to the 14-H 1
- (19) procedures today
- (20) THE COURT Has the section changed?
- (21) MR FORTIER I don't believe there was any
- (22) testimony - I'm sorry
- (23) THE COURT Has the section changed?
- (24) MR FORTIER Well Your Honor I haven't thoroughly
- (25) researched that issue

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- (1) THE COURT Counsel before you make an objection do
 (2) that it's admitted You come back in and show me it's
 (3) somehow different or it's been changed then maybe I'll listen
 (4) to you
 (5) (Exhibit 16193 received) -
 (6) MR FORTIER Okay I shall do so Your Honor
 (7) MR DIAMOND Our objections to the plaintiffs
 (8) exhibit are as follows 1288 was Lora Johnson's photo
 (9) notebook We have no objections to those photographs which
 (10) were identified and authenticated on the record They were
 (11) 57 58 and 59 There are scores of other photographs as to
 (12) which there was no testimony Had they been offered I would
 (13) have objected Some of them are bones of indistinguishable
 (14) origin In view of the fact there is no foundation for them
 (15) made by the witness I don't think they ought to come in We
 (16) certainly didn't cross-examine on them
 (17) THE COURT That sounds like a rational objection
 (18) counsel What's the - what's the -
 (19) MR FORTIER Your Honor I wasn't aware of the
 (20) objection until today so I - I haven't had a chance to look
 (21) at the transcript I had thought that I had showed them to
 (22) Dr Johnson and Dr Johnson had looked through the
 (23) photographs and I informed counsel that I was going to do that
 (24) prior to taking them up to her in order to save time because of
 (25) the - the extensive nature of her - of her direct

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- (1) examination So perhaps there's a misunderstanding I
 (2) obviously can't represent to you without looking at the
 (3) transcript whether or not that's what transpired
 (4) THE COURT I won't admit them now but you can renew
 (5) your request And I'll admit those certainly admit those that
 (6) were described in testimony If there are others that I should
 (7) admit you have to let me know counsel and I'll consider them
 (8) individually or as a package all right?
 (9) MR FORTIER Okay Your Honor
 (10) (Exhibits 1288-57 1288-58 and 1288 59 received)
 (11) MR DIAMOND 1296 is an Exxon cultural resource
 (12) program photo album together with Dr Johnson's captions of
 (13) that photo album If I understand Mr - well the only
 (14) testimony was - was that these were Exxon photographs that
 (15) she understood came from the cultural resources program
 (16) There
 (17) is no - there was no photograph by photograph identification
 (18) of anything no testimony establishing that any photographs
 (19) accurately depicted any sites If I understand the basis is
 (20) that this constitutes a statement of a party opponent I went
 (21) back and Rule 801 doesn't talk about photographs It talks
 (22) about verbal statements of a party and I don't think
 (23) photographs come in as admissions without requisite
 (24) foundations
 (25) being laid So we would object to that collection which is
 (26) 1296
 (27) MR FORTIER Your Honor on that score I don't -

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- (1) you know again I don't have the transcript pulled out to show
 (2) you but my recollection is that Dr Johnson testified under a
 (3) similar objection which was raised by Mr Diamond at that time
 (4) that she had looked at the photo logs and had compared the
 (5) photo logs to her recollection with the pictures themselves
 (6) and that she was - she was certain that the pictures
 (7) accurately depicted those scenes and the photo logs are
 (8) attached to the back We advance the theory that the photo
 (9) logs themselves constituted admissions under Rule 801 and
 (10) that
 (11) they also constituted business records regularly maintained by
 (12) Exxon under - under 803 I believe it's 6 So that was a
 (13) reason why we had some discussion by Dr Johnson
 (14) concerning
 (15) those photos If you recall they were scenes of Crafton
 (16) Island and other areas
 (17) THE COURT Are these the scenes with the steam
 (18) cleaning going on -
 (19) MR DIAMOND No we don't object -
 (20) THE COURT - of all the teams of people on the
 (21) beach?
 (22) MR DIAMOND We don't object to those Those are in
 (23) the 295 - 295 series of photographs This is a separate
 (24) collection of Exxon CRP photographs that were not shown
 (25) individually to the jury You didn't see any individually At
 (26) the end of her examination she was just shown a collection and
 (27) said where do these come from where did the captions come

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- (1) from She identified the source of the captions as being the
 (2) photo log
 (3) THE COURT Do you have them? I just want to take a
 (4) look at them
 (5) MR FORTIER I don't have them Your Honor but
 (6) Mr Diamond's description of what they were is fine
 (7) THE COURT Yeah but I want to see them counsel It
 (8) would be interesting to find out if they have any probative
 (9) value
 (10) MR DIAMOND I have them Your Honor
 (11) THE COURT Thanks The notations on them are they
 (12) hers? Is that her writing?
 (13) MR DIAMOND I believe she wrote on them and she
 (14) testified that those come from the CRP logs to which these
 (15) photographs were attached
 (16) MR FORTIER That's correct Your Honor There were
 (17) also - I believe she testified that there were - the captions
 (18) were actually on the back of those photos as received
 (19) THE COURT You mean this is a simple rendering of
 (20) what's on the back of the photos?
 (21) MR FORTIER That's correct Your Honor
 (22) THE COURT The CRP logs those are Exxon's notations
 (23) aren't they?
 (24) MR DIAMOND They are Exxon's notations of these
 (25) photographs that is correct

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- (1) THE COURT So they are admissions?
- (2) MR DIAMOND The statements would be admissions
- (3) THE COURT Yeah
- (4) MR DIAMOND Do the photographs come in is that
- (5) sufficient -
- (6) THE COURT Well if in fact - what the photographs
- (7) were just simply displayed on a page and underneath it it said
- (8) in the beautifully typed graphics oil stained pompom do you
- (9) think that's an Exxon admission?
- (10) MR DIAMOND I would think -
- (11) THE COURT And there was an arrow drawn from the
- (12) legend to the photograph by an Exxon employee would that be
- (13) an admission?
- (14) MR DIAMOND It - I think it would depend on -
- (15) you're not giving me enough information to answer this
- (16) question I think it would depend on the context I think you
- (17) need some foundation that this is an accurate depiction of
- (18) something
- (19) These are basically innocuous photographs and I don't
- (20) object to the jury being shown innocuous photographs except
- (21) what are they why are they there No one's given any
- (22) testimony about them no one has explained what they are
- (23) what
- (24) they purport to depict other than cryptic captions
- (25) THE COURT So your Rule 403 objection it's not
- (26) admissible except as it relates to its probative value as

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- (1) compared to its prejudicial effect right?
- (2) MR DIAMOND I don't think the photographs even with
- (3) captions constitute statements of a party opponent without
- (4) some foundational requirement that in addition to the
- (5) photographs or accurate depictions by the party party
- (6) opponent You know I don't want to make mountains out of
- (7) molehills but why do we need these?
- (8) THE COURT You don't
- (9) MR DIAMOND I mean this - these are - these are a
- (10) collection of photographs that no one's offered any testimony
- (11) over We don't know why they're being offered
- (12) THE COURT Don't they show the extent of the cleanup
- (13) and how many people are out there and isn't that an issue in
- (14) this case?
- (15) MR DIAMOND I stipulated to the admissibility of
- (16) dozens and dozens of the same photographs
- (17) THE COURT Yeah you probably did so it's - so it
- (18) is - the question is whether it's cumulative or over - or
- (19) unfairly prejudicial That's a Rule 403 objection right?
- (20) MR DIAMOND I amend my objection to include Rule 403
- (21) and the fact that they're cumulative
- (22) THE COURT Thank you and I'll amend it to include
- (23) the mountain and the molehill argument and I'll admit the
- (24) document
- (25) MR DIAMOND Okay

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- (1) (Exhibit 1296 received)
- (2) MR DIAMOND There was a memorandum an Exxon
- (3) memorandum Exhibit 1297 which we would concede -
- (4) THE COURT You know counsel I - actually I want
- (5) to see the foundation because I don't recall the foundation
- (6) for this I would like to see what she said about these
- (7) photographs just to be careful So I'm going to require you
- (8) Mr Fortier to show me by transcript what she said so I know
- (9) that this is the right ruling
- (10) MR FORTIER I will do that Your Honor
- (11) MR DIAMOND If I may approach the Court with exhibit
- (12) 1297 this is a January 13 1990 memo to which is attached what
- (13) is roughly a 15 page cultural resources program components
- (14) and
- (15) tasks for winter 1990 We concede that the - this is a
- (16) statement of party opponent It is a very lengthy document
- (17) that deals with all sorts of subjects including budgets and
- (18) many many things that are not relevant to any of the issues in
- (19) the case The pages that were referred to during the course of
- (20) the examination are on the - the cover page as well as pages
- (21) 6 7 and 9 We have no objection to pages 6 7 and 9 going in
- (22) along with the cover page I do object to irrelevant portions
- (23) going in simply because we didn't cross-examine on those
- (24) There was no testimony about them and they're not relevant for
- (25) any purpose
- (26) THE COURT Counsel why should the complete document

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- (1) go in?
- (2) MR FORTIER Well Your Honor because I think it
- (3) could only be according to in the whole part We did just
- (4) offer testimony on the pages identified but we had it
- (5) identified as well by - by the witness on the stand It just
- (6) seemed as if it ought to all come in in order to -
- (7) THE COURT What does it do for you? I mean what are
- (8) you going to argue that you couldn't argue from the three pages
- (9) that Mr Diamond wants - says can be admitted?
- (10) MR FORTIER That's fine Your Honor
- (11) THE COURT Good No mountains or molehills here
- (12) counsel
- (13) (Exhibit 1297 received)
- (14) MR FORTIER Not from this side Your Honor
- (15) THE COURT Not this time
- (16) MR DIAMOND This is PX1297
- (17) Almost finally - well let me say before I get to the big
- (18) issue that I wanted to talk to you about one small issue the
- (19) attachments to the summaries the Lora Johnson
- (20) archaeological
- (21) disturbance summaries that relate to sites at issue in the
- (22) case as to which we've already voiced objections you've
- (23) already ruled there is a - those are basically field notes
- (24) that are attached as support which is what you ordered done
- (25) In one instance there is a letter from Mrs Miraglia of CAC
- (26) dated October 16 1989 which we believe is patently hearsay

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- (1) attached as support for one of the entries It is not an Exxon
 (2) field note It s one of their documents We think that that
 (3) ought to be removed
 (4) MR FORTIER Your Honor I don t have any objection
 (5) I thought we had removed it
 (6) THE COURT Fine you can remove it
 (7) MR DIAMOND That s the one thing that persisted in
 (8) those
 (9) We filed a brief memorandum discussing the admissibility
 (10) of collateral proof You obviously haven t seen it
 (11) THE COURT No but as long as it s brief I can
 (12) handle it Bring it here I ll read it
 (13) MR DIAMOND I said it was a brief I didn t say it
 (14) was brief
 (15) THE COURT You weren t kidding
 (16) MR DIAMOND Perhaps we can talk about this tomorrow
 (17) because I think there are actually cases cited there
 (18) THE COURT Good Oh I ve seen this It s on my
 (19) desk yeah let s talk about it tomorrow
 (20) MR DIAMOND Your Honor you know it was over our
 (21) objection that you allowed the offer of proof and you amended
 (22) PTO 76 I think it was to allow Dr Johnson latitude to talk
 (23) about disturbances at other sites sites for which damages
 (24) aren t being claimed and we thought initially that was going to
 (25) vandalism It broadened out It was a proffer concerning

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- (1) oiling at sites that weren t at issue and other things The
 (2) witness has - was given latitude to testify about those things
 (3) on her redirect examination We object to the introduction of
 (4) the collateral proof of disturbances at sites for which there
 (5) are no claims being made
 (6) THE COURT The collateral proof what are you talking
 (7) about?
 (8) MR DIAMOND All right Well she talked about
 (9) vandalism - actually she didn t talk about vandalism that
 (10) much She talked about disturbances at sites for which no
 (11) claims are being made Her basis for rendering opinions in
 (12) this case that there had been on site disturbances was the fact
 (13) that there - the field notes documented cases both things
 (14) that happened on sites for which there are claims being made
 (15) and things that happened for which claims are not being made
 (16) You will remember that the only reason you allowed events
 (17) that took place off sites for which claims are being made is
 (18) because it was a basis for her overall views and her overall
 (19) opinion and you said otherwise it would be inadmissible to
 (20) talk about what happened on Kodiak or what happened on Park
 (21) Service lands except it was a basis of her - of her opinion
 (22) We requested and you gave a limiting instruction that
 (23) disturbances that took place on park land or on Kodiak land or
 (24) anywhere other than plaintiffs land was not being offered for
 (25) the proof for the truth of the matter asserted Indeed

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- (1) Mr Fortier in his offer of proof said he wasn t introducing it
 (2) to prove the matter asserted
 (3) Dr Johnson had an opportunity to testify on redirect as to
 (4) what she knew about disturbances on sites for which claims are
 (5) not being made that supported her opinion and no - no
 (6) limitations were imposed on that testimony by the Court and
 (7) that s come in The jury has heard that there were various
 (8) disturbances at sites on park land Knight Island for example
 (9) sites at Kodiak and other places for which claims are not
 (10) being made
 (11) We re not seeking to exclude that That s already in
 (12) that s already before the jury Now plaintiffs want to go a
 (13) step further and they want to document those off site
 (14) disturbances by putting in written evidence the field notes
 (15) and the summaries that Mr Fortier s office prepared of them
 (16) to establish ostensibly that those things happened Now that s
 (17) otherwise inadmissible evidence The only reason it came in -
 (18) THE COURT What exhibit number is it?
 (19) MR DIAMOND These are the A versions of the summary
 (20) sheets It s 1289 1290 1291 1315 and 1317 Those are all the
 (21) A versions They are the same documents as the summaries of
 (22) what happened on sites for which claims are being made
 (23) except
 (24) it s expanded
 (25) THE COURT I d like to see them
 (26) MR FORTIER Your Honor I don t think I have a set

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- (1) with me I know that Mr Clough has just - or excuse me
 (2) Mr Diamond has just presented you with a memorandum We
 (3) would
 (4) like an opportunity to brief it as well
 (5) MR DIAMOND I m sorry
 (6) MR FORTIER I had briefed it once before the issue
 (7) once before -
 (8) THE COURT Oh okay all right I m sorry
 (9) MR DIAMOND I had thought Mr Fortier was going to
 (10) deal with this orally If he wants to respond I ll hold it
 (11) THE COURT That s fine sure
 (12) MR FORTIER I think the Court indicated you wanted
 (13) to read it
 (14) THE COURT Don t worry about it counsel
 (15) Miscommunication my fault
 (16) MR DIAMOND That takes care of the - let me
 (17) double-check something - that takes care of this round of
 (18) exhibits
 (19) MR SHAPIRA I have some exhibits
 (20) MR DIAMOND And we have some others for other
 (21) witnesses
 (22) MR PETUMENOS Judge I - for Dr Mundy I
 (23) apparently misspoke when - I m not sure I did but probably
 (24) 1292 I move its admission It s one of the exhibits that
 (25) there s no objection to 1292 I believe was the one that
 (26) was -

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- (1) (Exhibit 1292 offered)
 (2) THE COURT I'm assuming there's no objection. It's
 (3) admitted. Check it, counsel.
 (4) (Exhibit 1292 received)
 (5) MR OPPENHEIMER I'll double-check it, but on
 (6) Mr. Petumenos' representation it was stipulated -
 (7) THE COURT That's fine.
 (8) MR SHAPIRA For Dr. Fall, Your Honor, I have a
 (9) number I've gone through and determined which exhibits we'd
 (10) like to have introduced, but I've not run all this by
 (11) plaintiffs yet so -
 (12) THE COURT I think I'd prefer you do that and you can
 (13) put them in tomorrow, all right?
 (14) MR SHAPIRA That would be fine.
 (15) MR FORTIER We had moved in a number of Fall
 (16) exhibits yesterday. I don't know if they've been admitted.
 (17) THE COURT Did I let them in?
 (18) THE CLERK This morning.
 (19) MR SHAPIRA I said first thing this morning that we
 (20) had no objection.
 (21) THE COURT Yeah, those are in.
 (22) MR FORTIER Okay. Sorry, Your Honor.
 (23) MR PETUMENOS Only other matter I know of, Judge, is
 (24) I don't think it requires a hearing, but the issue of the OPA 90
 (25) instruction and the nature of those claims is fully briefed.

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- (1) is?
 (2) MR PETUMENOS Well, we've already written it. We
 (3) could probably - perhaps if you want to hear it right now.
 (4) Judge, we could argue it and file it at the same time.
 (5) THE COURT Why don't I just tell you right now, the
 (6) answer is no. I won't allow a jury view, but I'll certainly
 (7) listen to Exxon's evidence and determine whether or not on the
 (8) basis of the whole record a jury view is appropriate, and
 (9) expense is not my main concern, counsel. It's whether a jury
 (10) view is appropriate.
 (11) MR DIAMOND I think that's perfectly fair of you.
 (12) We are going to have in the first week of our case people
 (13) principal people who are going to be talking about oiling
 (14) subsurface oiling and those kinds of issues. We are going to
 (15) try to keep our case brief, but quite honestly, even given our
 (16) best attempts and our most major successes, if you hold
 (17) decision until all of our witnesses have testified, you will
 (18) have effectively foreclosed a jury view because it will be too
 (19) late in the year. May we raise this or may I have relief to
 (20) raise this again in about a week's time?
 (21) THE COURT Counsel, too late in the year? I come
 (22) from Anchorage and in this time of the year, we can go almost
 (23) anywhere, just like in Juneau, you can do that.
 (24) MR DIAMOND I'm told in Prince William Sound in
 (25) helicopters with people who you need to take particularly good

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- (1) with an opening opposition and reply and I don't think we
 (2) require argument unless the Court desires it. You can just, at
 (3) your determination -
 (4) THE COURT Fine. I'll read those briefs.
 (5) MR FORTIER Your Honor, there's one more matter, and
 (6) that was the instruction with regard to state law and
 (7) archaeological deposits. We submitted to you some briefing on
 (8) that sometime back.
 (9) THE COURT I'll look, counsel.
 (10) MR DIAMOND We are due a response. I don't think we
 (11) have - I don't think we have responded to that and I will find
 (12) out whether we've decided not to or if we - if that's not -
 (13) THE COURT If you decide not to because there's no
 (14) controversy, that's what I want you to let me know about.
 (15) MR DIAMOND All right. I understand there's going
 (16) to be final briefing today on the jury view question. I was
 (17) wondering whether we could schedule that for a hearing if you
 (18) were going to hold one for tomorrow. I'm being pressed by my
 (19) client for reasons - just logistical reasons and economic
 (20) reasons. There is some urgency to getting that decided one
 (21) way or the other.
 (22) THE COURT Well, all right. I'll hear it right now.
 (23) MR DIAMOND Have you filed your -
 (24) THE COURT You really need to brief it? You think
 (25) that I haven't dealt with it enough to know where the issue

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- (1) care of like jurors, there are some real concerns. Once we
 (2) get beyond August 15th, it's a problem.
 (3) THE COURT Yeah, it's - but I - I've seen that
 (4) problem from the very - very beginning. It would have been a
 (5) problem for me in June, so without some sort of sworn
 (6) testimony.
 (7) suggesting that August 16th is a terrible day and August 14th
 (8) is okay, then it's not too persuasive.
 (9) MR DIAMOND So the answer is no. We'll raise it
 (10) after our -
 (11) THE COURT Well, the answer is no, with
 (12) qualification.
 (13) MR DIAMOND Thank you.
 (14) MR STOLL Your Honor, I have some exhibits I'd like
 (15) to get in.
 (16) THE COURT No, you've talked it over with counsel.
 (17) haven't you? I just don't want to -
 (18) MR STOLL These are just those photos that we used
 (19) MR CLOUGH The photos I have no objection to, Your
 (20) Honor.
 (21) THE COURT What are they?
 (22) MR STOLL These are 1231, 1218-A, B and C.
 (23) (Exhibits 1231, 1218-A, 1218-B and 1218-C offered)
 (24) THE COURT No objection? They're admitted.
 (25) (Exhibit 1231, 1218-A, 1218-B and 1218-C received)
 (26) MR STOLL Now, Your Honor, we have the matter of the

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- (1) scientists
- (2) THE COURT Yeah let s talk about it
- (3) MR DIAMOND I m sorry I was - my good ear was
- (4) being spoken into Is this the Katzke tape again
- (5) THE COURT I don t know what it is counsel You
- (6) have to tell me Are you talking about the videotape of -
- (7) MR STOLL Yes
- (8) THE COURT - Ms Katzke took with the various people
- (9) who may or may not be people who are directly responsible at
- (10) Exxon or reporting to Exxon?
- (11) MR STOLL That s correct Your Honor
- (12) THE COURT Go ahead make your argument
- (13) MR STOLL Well Your Honor if it would be better to
- (14) come back later I mean -
- (15) THE COURT No I ve seen it I ve seen the video
- (16) MR STOLL I m not asking about that but we briefed
- (17) this and we attached to the brief large number of cases that we
- (18) believe demonstrates that these witnesses these people are
- (19) agents of Exxon for purposes of AO 1
- (20) THE COURT All right I give up counsel I won t do
- (21) it now
- (22) MR DIAMOND Your Honor we ve submitted a response
- (23) to that and we would submit on the papers and not - it s a
- (24) motion for reconsideration I don t know that anyone s
- (25) entitled to a hearing anyway If you want to hold a hearing

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- (1) why don t you invite us back I don t think we need to -
- (2) THE COURT I told - I think I sent the message to
- (3) Mr Stoll s office that I would grant a hearing on this If he
- (4) insists on it I ll grant one And do you insist on it?
- (5) MR STOLL Yes I do
- (6) THE COURT When?
- (7) MR STOLL Any time
- (8) THE COURT Well It s not critical today Is it?
- (9) MR STOLL No Your Honor
- (10) THE COURT Okay I ll do it tomorrow afternoon
- (11) then Tomorrow afternoon is Thursday Tomorrow afternoon is
- (12) a problem I will - I ll do it tomorrow Be prepared to argue
- (13) it at the end of the trial day
- (14) MR STOLL Okay or Your Honor if - you know if
- (15) you want to have a little break between then and the thing
- (16) it s okay
- (17) THE COURT Well what I want counsel is minor
- (18) concern as this trial makes very clear It s what you need
- (19) that I m interested in and whether or not you re going to get
- (20) it I ll hear it at the end of the trial day tomorrow
- (21) MR STOLL Fine
- (22) THE COURT But I m confident counsel I can make a
- (23) fairly decisive ruling on this issue Is there anything else?
- (24) MR STOLL That s all
- (25) THE COURT Okay

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- (1) THE CLERK Please rise This court stands in
- (2) recess
- (3) MR STOLL Oh Your Honor I would like to say one
- (4) thing
- (5) THE COURT I m listening
- (6) MR STOLL Okay There is - there are two cases
- (7) that we cited in particular that I d like to -
- (8) THE COURT On that particular issue?
- (9) MR STOLL Yes
- (10) THE COURT You want to give me copies?
- (11) MR STOLL We gave you copies with our brief
- (12) THE COURT That s fine yeah I told you I d read
- (13) the brief
- (14) MR STOLL Okay
- (15) (Recess at 2 00 p m)

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- (1) I N D E X
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- (3) BY MR SHAPIRA 4327
- (5) REDIRECT EXAMINATION OF PAMELA J BRIDGEN
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- (8) RECROSS-EXAMINATION OF PAMELA J BRIDGEN
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- (12) BY MR STOLL 4365
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- (1) EXHIBITS
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- (9) 1501 B 1538 offered 4490
- (10) 16241 16141 22 16141 41 10600-9A 16198 16141 3
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- (21) 1309 1310 1362 1364 1561 1562 1563 6095 6104
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- (23) received 4327
- (24) 1519 B 1519-C 1519 D and 1519 F received 4436
- (25) 1521 1522 1523 1524 1525 and 1526 received 4446

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- (18) 1231 1218 A 1218-B and 1218-C received 4508

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- (1) STATE OF ALASKA)
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA)
- (6) I Joy S Brauer RPR a Registered Professional
- (7) Reporter and Notary Public
- (8) DO HERBY CERTIFY
- (9) That the foregoing transcript contains a true and
- (10) accurate transcription of my shorthand notes of all requested
- (11) matters held in the foregoing captioned case
- (12) Further that the transcript was prepared by me
- (13) or under my direction
- (14) DATED this day
- (15) of 1994
- (21) JOY S BRAUER RPR
- Notary Public for Alaska
- (22) My Commission Expires 5-10 97

Look-See Concordance Report

 UNIQUE WORDS 2,830
 TOTAL OCCURRENCES 13,518
 NOISE WORDS 385
 TOTAL WORDS IN FILE 40,945

SINGLE FILE CONCORDANCE**CASE SENSITIVE**

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(1) IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (2) THIRD JUDICIAL DISTRICT
 (4) In re) Case No JAN 89 2533 Civil
) Anchorage Alaska
 (5) The EXXON VALDEZ) Thursday August 4 1994
) 8 37 a m
 (6))
 (8) VOLUME 29 Pages 4516 through 4681
 (10) TRANSCRIPT OF PROCEEDINGS (Continued)
 (11) TRIAL BY JURY
 (12) BEFORE THE HONORABLE BRIAN C. SHORTELL
 Superior Court Judge
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(1) PROCEEDINGS
 (2) (Jury in at 8 37 a m)
 (3) (Call to Order of the Court)
 (4) THE COURT Good morning
 (5) MR. CLOUGH Good morning Your Honor
 (6) THE COURT Fire away counsel
 (7) MR. CLOUGH I don't know what else to say I'm happy
 (8) to be here in Anchorage
 (9) THE COURT Great weather
 (10) MR. CLOUGH Reminds me of home
 (11) CROSS EXAMINATION OF JEROME M. SELBY
 (12) BY MR. CLOUGH
 (13) Q Good morning Mr. Mayor
 (14) A Good morning
 (15) Q Couple basic questions I don't know whether they came out
 (16) yesterday in either your direct or cross-examination How many
 (17) people live within Kodiak Island Borough sir?
 (18) A About 15 600
 (19) Q About how many of those live up in the area that's called
 (20) you know on the road system?
 (21) A On just the road system part of the island?
 (22) Q Yeah
 (23) A Roughly 14 000
 (24) Q So most of the people on the island live up on the road
 (25) system right?

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(1) A Correct
 (2) Q I'm going to use for this purpose your map that was used
 (3) yesterday the blowup Remember this? This is for the
 (4) record, DX15606
 (5) A Yes
 (6) Q Could you come down here for the jury? I just want to be
 (7) able to show them what we mean by the road system where
 (8) those people live
 (9) A The road system would pretty much include this area right
 (10) in here There's roads out Cape Chiniak is pretty much the end
 (11) of the road down in here All of Kalsin Bay There's also a
 (12) road that comes across to Saltery Cove and Pasagshak and
 runs
 (13) out on Narrow Cape here so there's roads in this general area
 (14) of the island there so that section right there is what we
 (15) call the road system
 (16) Q Now to remind the jury what these arrows depict is the
 (17) places you went, either in your skiff or your boat in the
 (18) summer of 1989 is that correct, sir?
 (19) A Or flew Personal curiosity trips There was nothing
 (20) entered on the record from those trips
 (21) Q And to your recollection during the summer of 1989 did
 (22) ADF&G have a program where they had boats out on the water
 (23) looking to report on oil on the water floating oil?
 (24) A Yes there was what they called test fishery vessels
 (25) spotted in various bays along the island there who were looking

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- (1) for floating mousse in the water and it was those reports as
 (2) they came back in to the Emergency Service Council meetings
 (3) both in the morning at 10 o'clock and in the evening at five
 (4) o'clock We met twice a day They reported which bays they
 (5) found floating oil and those were used to make the decision to
 (6) keep the bays closed for fishing
 (7) Q I'm going to ask you about your personal observations here
 (8) sir In some of your overflights or skiff trips did you see
 (9) oil in the water in any of these areas here in the road system
 (10) area?
 (11) A Not on -
 (12) MR STOLL Excuse me excuse me that's a double
 (13) question Are you talking about the "road system" or are you
 (14) talking about where he flew elsewhere on the island?
 (15) BY MR CLOUGH
 (16) Q For now I'm just asking about the general vicinity of what
 (17) you called the road system here I forget the name of the
 (18) peninsula Chiniak? Chiniak Bay and above that this is Kodiak
 (19) city right here right?
 (20) A Right
 (21) Q This area up in here you've got a lot of arrows showing
 (22) skiff trips or overflights?
 (23) A Right
 (24) Q Do you recall if you saw any oil on the water in any of
 (25) those trips?

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- (1) A In this area here
 (2) Q This area is where you traveled in your trips?
 (3) A Not around the City of Kodiak Out in here yes
 (4) Particularly in Nichawak (phonetic) Bay It was a very hard
 (5) hit area
 (6) Q You saw oil floating out in these areas where it says
 (7) skiff summer 89 those type of areas?
 (8) A Yes
 (9) Q How about when you came over to the other side of the
 (10) island the west side of the island looks like you had an
 (11) overflight here on one occasion right?
 (12) A Correct
 (13) Q Do you remember what this arrow here refers to in the
 (14) Shelikof Straits Was that another overflight?
 (15) A No I'm not sure what that arrow is there
 (16) Q You had an overflight up around Raspberry to Afognak
 (17) right?
 (18) A Right there was one flight here This was another
 (19) flight I don't know what this arrow is
 (20) Q On - on these overflights did you see - do you recall
 (21) personally seeing oil in the water on the western side of the
 (22) island?
 (23) A Yes we did
 (24) Q On both of those overflights?
 (25) A Yes

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- (1) Q Including the one that went past - okay Now just for -
 (2) you can sit down we won't need that again for a bit
 (3) MR CLOUGH Counsel I'm going to refer to PX1546
 (4) BY MR CLOUGH
 (5) Q Mayor Selby I'm going to give you a copy of something I
 (6) believe you've seen before It's been marked as plaintiffs
 (7) exhibit 1546 and it's entitled Kodiak Island Convention and
 (8) Visitors Bureau Visitor Information Center Data Have you
 (9) seen that document before sir?
 (10) A Yes I have
 (11) MR CLOUGH And with your permission I'm going to
 (12) publish it to the jury
 (13) MR STOLL All right
 (14) BY MR CLOUGH
 (15) Q Is this the document that you generally relied on yesterday
 (16) for your testimony about tourism dropping off 34 percent or
 (17) something like that?
 (18) A That's correct
 (19) Q Looking at the - and what this shows is total number of
 (20) written and walk in - written telephonic and walk in visits to
 (21) the center right?
 (22) A Correct
 (23) Q What's the total number they had down for 87 two years
 (24) before the spill?
 (25) A I believe it's - kind of smeared on here 51 103 or - or

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- (1) 61 103 one of the two I can't tell if it's a five or a six
 (2) Q It's either 51 103 or 61 103 right?
 (3) A Right
 (4) Q Next year what did it go up to?
 (5) A 8836
 (6) Q And then the year of the spill it dropped some What did
 (7) it drop to?
 (8) MR CLOUGH I'm going to try to tighten this up so
 (9) jurors you may not be able to read this I apologize it's the
 (10) best copy we've got
 (11) A 5864
 (12) BY MR CLOUGH
 (13) Q For which year was that sir?
 (14) A For 1990?
 (15) Q No for 1989 I was asking 5864 for 1989 right?
 (16) A I'm sorry 1989?
 (17) Q We have to move to the next page for 1990 and it looks -
 (18) back in 1990 jumps back up again right?
 (19) A 7 380
 (20) Q And then in 91 drops back down to 5 680?
 (21) A Correct
 (22) Q So when you look at that the numbers have varied over the
 (23) years both before and after the year from a low of 5 103 a
 (24) couple years before the spill to a high of 8 000 the year
 (25) before the spill down to 58 the year of the spill up to 73 a

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- (1) year later, back down to 5600 the year after that, so it's
 (2) varied some over the years; has it?
 (3) A I would say that's a misrepresentation. Basically when the
 (4) Kodiak Convention and Visitors Bureau started, if you look at
 (5) the pattern before 1986 you'll see a substantial steady growth
 (6) until 1989.
 (7) Q For these years, do the numbers go up and down over the
 (8) period of 1987 through 1991, yes or no?
 (9) A Yes.
 (10) Q Okay Do you know what the Alaska Journal of Commerce
 is?
 (11) A Yes, I do.
 (12) Q What is it?
 (13) A It's a publication published from here in Anchorage.
 (14) Q DX16264.
 (15) MR. STOLL: What's the number?
 (16) MR. CLOUGH: 16264.
 (17) BY MR. CLOUGH:
 (18) Q And you've been interviewed by it on a number of occasions,
 (19) haven't you?
 (20) A Yes, I have.
 (21) Q And you've been interviewed about the issue of tourism in
 (22) Kodiak, haven't you?
 (23) A Yes.
 (24) Q And you were interviewed by a Carol Merkowski (phonetic)
 (25) for an article published January 14th, 1991, weren't you?

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- (1) A I'm not sure about the dates. Like you say, I've been
 (2) interviewed several times by those folks.
 (3) MR. CLOUGH: Permission to approach the witness, Your
 (4) Honor.
 (5) THE COURT: Yes.
 (6) BY MR. CLOUGH:
 (7) Q It's not a great copy. I have to point out to you the
 (8) particular location. This is the article, sir, and the
 (9) paragraph I'm going to be referring to is right there. They
 (10) start the interview up here. If you'd take a moment to look at
 (11) that. Now, the date is January 14th, 1991.
 (12) MR. CLOUGH: Counsel, any objection if I publish this
 (13) to the jury?
 (14) MR. STOLL: Well, this - the quotation from him, if
 (15) he made that statement, is fine. Why don't you ask him if he
 (16) made the statement?
 (17) BY MR. CLOUGH:
 (18) Q First of all, Mayor Selby, this was published on
 (19) January 14th, 1991; right?
 (20) A Correct.
 (21) Q So you must have been interviewed before that date?
 (22) A Correct.
 (23) Q And you were interviewed after the oil spill; right?
 (24) A 1991 is after the oil spill, yes, if that's what you're
 (25) asking.

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- (1) Q I just want to make sure the interview occurred after the
 (2) oil spill; right?
 (3) A Yes.
 (4) Q Pointing to the second column, the third or fourth
 (5) paragraph down, did you make the quotes attributed to you
 (6) there?
 (7) A They appear to be pretty accurate.
 (8) Q And doesn't it say in the article, Ms. Merkowski's article,
 (9) in another field Kodiak's tourism industry thrives. The number
 (10) of boats licensed to carry passengers continues to increase,
 (11) Selby said, that's you; right?
 (12) A Correct.
 (13) Q And the local bed and breakfast trade is, quote, growing
 (14) like gangbusters, end quote; right?
 (15) A Correct, uh-huh.
 (16) Q So at least as of January 14th, 1991, tourism trade was
 (17) doing pretty darn well in Kodiak, wasn't it?
 (18) A I don't think you can take these two small instances and
 (19) say the tourism trade overall. This is two small pieces of
 (20) tourism trade.
 (21) Q So you disagree with the article when it says the Kodiak
 (22) tourism industry thrives?
 (23) A I didn't make that comment.
 (24) Q I just asked you if you disagreed with it.
 (25) A We pointed out that there were aspects of our tourism trade

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- (1) that were growing. You don't see me quoting that the tourism
 (2) industry was going gangbusters in Kodiak, in general.
 (3) Q Articles after the Merkowski - after the interview with
 (4) you in another area, Kodiak's tourism industry thrives, do you
 (5) disagree with that statement?
 (6) A It was recovering.
 (7) Q Do you disagree with the statement that it thrives?
 (8) A Yes, I would.
 (9) Q But it was recovering, even in your opinion; right?
 (10) A That's correct.
 (11) Q And the bed and breakfast business was growing like
 (12) gangbusters?
 (13) A It was doing very well.
 (14) Q Now, you talked about the fact that one of the reasons you
 (15) like to live in Kodiak, sir, is because you like to hunt and
 (16) fish.
 (17) A That's correct.
 (18) Q And you enjoy sport hunting and sport fishing.
 (19) A Correct.
 (20) Q And many residents of Kodiak do that.
 (21) A A large number of them, yes.
 (22) Q That's right. And, in fact, they use lands and waters
 (23) throughout the Kodiak Island area for hunting and fishing;
 (24) isn't that correct?
 (25) A That's correct.

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- (1) Q And for sport hunting and fishing; correct?
 (2) A Correct.
 (3) Q Now, is it your testimony that, in your opinion, sport
 (4) hunting and fishing in those areas decreased as a result of the
 (5) oil spill?
 (6) A Yes, it is.
 (7) Q Sport fishing seasons weren't closed in 1989, were they?
 (8) A Were they closed?
 (9) Q Yeah.
 (10) A Not for sport fishery, no.
 (11) Q Not at all, were they?
 (12) A Just the commercial fishery.
 (13) Q Sport fishing wasn't even closed for one day because of the
 (14) oil spill; was it?
 (15) A No, sir.
 (16) Q Could we have DX16262, please?
 (17) While they're getting that, Mayor Selby, residents of
 (18) Kodiak like to go salmon sport fishing; don't they?
 (19) A Yes, they do.
 (20) Q In fact, that's probably been the number one sport fishing
 (21) item in Kodiak?
 (22) A It's heavily used. I'm not sure whether pound-wise if it's
 (23) halibut or salmon, but they both get a lot of action.
 (24) Q Halibut's another big one; right?
 (25) A Right.

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- (1) Q Some steelhead?
 (2) A Small amount.
 (3) Q Some rainbows?
 (4) A Small amount.
 (5) Q Some dolly varden and some chum?
 (6) A Yes.
 (7) Q And the residents enjoy sport fishing for all those; don't
 (8) they?
 (9) A Yes, they do.
 (10) Q Mayor Selby, I need the one with the -
 (11) Mayor Selby, what I have for you is a report prepared by
 (12) the Alaska Department of Fish and Game. It's entitled Harvest
 (13) Catch and Participation in Alaska Sport Fisheries During 1992.
 (14) It's by Mr. Michael J. Mills, and I also have with it an
 (15) affidavit from the Department of Fish and Game certifying this
 (16) as a true and correct copy of the data compilation on record
 (17) for the Department of Fish and Game; all right?
 (18) A Okay.
 (19) Q I'm going to ask you some questions about this. You'll
 (20) note there's some red flags in it. I want to caution, those
 (21) are not part of the original, obviously. To ease this process
 (22) for you and for me, I flagged a couple of pages that I want to
 (23) talk to you about, and that might make it easier for you to
 (24) find them, but I'll give you the exact page references as we go
 (25) through it.

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- (1) First, just to show the jury the cover of what we're
 (2) talking about here. If you can see this on your screen as
 (3) well, Mayor Selby?
 (4) A Yes.
 (5) Q That's the cover of the document that you have there?
 (6) A Correct, uh-huh.
 (7) Q And it's dated - you can't read it very well in this one,
 (8) but it's October 1993, prepared by the Alaska Department of
 (9) Fish and Game, Division of Sports Fish; isn't that correct?
 (10) A Yes.
 (11) Q I'd like to direct your attention, sir, to Page 33. There
 (12) should be a little red flag on that for us. There will be an
 (13) appendix called A-21, Alaska Sports Sea Run Salmon Harvest.
 (14) Do you see that?
 (15) A Yes, uh-huh.
 (16) Q Okay.
 (17) MR. CLOUGH: Counsel, do you have that there?
 (18) MR. STOLL: Yeah.
 (19) BY MR. CLOUGH:
 (20) Q Now, what we're going to have to do here, because again
 (21) this is just the original document from Fish and Game, and they
 (22) didn't prepare this as a fancy exhibit for us to put up on the
 (23) machine here. I'm going to need your help going through this.
 (24) First of all, let's look at the top. It does say that this
 (25) is an appendix of Alaska Sport Sea Run Salmon Harvest from the

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- (1) year of 1982 to 1992, shows the catch by region and area;
 (2) right?
 (3) A That's what it says, yes.
 (4) Q And if you look down, it has areas fished, and about
 (5) two-thirds of the way through it's got Kodiak.
 (6) A Yes.
 (7) Q And for Kodiak it lists starting with 1982 the harvest data
 (8) for sport salmon fishing in the Kodiak area; right?
 (9) A Correct, uh-huh.
 (10) Q What I'd like to do - the jury probably isn't going to be
 (11) able to read these numbers. I'm going to blow it up best I
 (12) can. Yeah, that's better. We'll sort of move the document
 (13) along. To move things quicker, we won't start back at 1982,
 (14) but why don't we start with, oh, let's say '85. 36,211 sport
 (15) fish salmon caught in Kodiak that year; right?
 (16) A That's what it says, yes.
 (17) Q Next year, '86, 41,497; right?
 (18) A Correct, uh-huh.
 (19) Q For the next year, '87, down a little bit, 33,681. Not as
 (20) good a year for the sport fishermen, huh?
 (21) A I have no idea.
 (22) Q Next year, '88, year before the spill, 47,185; right?
 (23) Isn't that the number?
 (24) A Yes, uh-huh.
 (25) Q 1989 - let me get the date so the jury can see the year

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- (1) here - the year of the oil spill 46 103 which by my
- (2) calculation is 1 182 fish less than the year before is that
- (3) the number that's listed there?
- (4) A The 46 103? Correct
- (5) Q 46 103 sport fish salmon catches in Kodiak that year
- (6) right?
- (7) A That's what it says yes
- (8) Q With - according to the numbers from the Fish and Game
- (9) it's only 1 182 fish less than the year before -
- (10) A I haven't done that calculation
- (11) Q - according to these numbers You want to take a minute?
- (12) THE COURT That's all right counsel We can all see
- (13) that
- (14) BY MR CLOUGH
- (15) Q The 1990 goes down a little bit 28 000 backup to 38 in
- (16) 91 Okay are those the numbers that are there?
- (17) A Yes that's correct
- (18) Q Let's look at steelhead This is going to be on page 48
- (19) Widen it so we can see the caption Let me know when
- (20) you've found that sir?
- (21) A 48 you say?
- (22) Q Yes page 48 of the appendix A 36
- (23) A Okay
- (24) Q You ready?
- (25) A Yes uh huh

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- (1) Q This is for sport steelhead harvests again the years 82
- (2) to 92 right?
- (3) A Correct uh huh
- (4) Q And we've got the Kodiak numbers again About two-thirds
- (5) of the way down the page see how steelhead fishing is doing
- (6) over the years? Start with 86 how about there? 1986 looks
- (7) like they picked up 321 according to the data right?
- (8) A Right
- (9) Q 253 in 87?
- (10) A Correct
- (11) Q 853 in 88?
- (12) A Right
- (13) Q 788 1989 the year of the oil spill
- (14) A Correct
- (15) Q Weren't any sport fishing closures, were there, that year
- (16) right?
- (17) A Steelhead season is not during the summer
- (18) Q But in fact there weren't any sport fishing summers of
- (19) any type during the year of the oil spill?
- (20) A Not in the spring for steelhead
- (21) Q By my math - and I won't ask you to do it - it looks like
- (22) 65 less steelhead were caught that year?
- (23) A Whatever you say
- (24) Q Jumps up to 1120 in 90?
- (25) A Yes

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- (1) Q Some reason it goes down to 327 in 91 right?
- (2) A Right
- (3) Q Look at rainbow trout That's another one you sport fish
- (4) for to a certain extent in Kodiak right?
- (5) A Correct uh huh
- (6) Q This is going to be sir on page 49 probably the very
- (7) next - should be the very next page?
- (8) A Right
- (9) Q And here we've got the chart for Alaska sport rainbow trout
- (10) harvests compiled by the Department - zoom into Kodiak -
- (11) start with 86 again 841 in 86 right?
- (12) A Yes uh huh
- (13) Q 1 448 in 87?
- (14) A Correct
- (15) Q 855 in 88?
- (16) A Yes uh huh
- (17) Q 1 534 in 89 for rainbows?
- (18) A Correct
- (19) Q In fact best year over the last five years according to
- (20) the data for rainbows wasn't it?
- (21) A Looks like the lakes got hit pretty hard
- (22) Q Some people out there doing some serious rainbow fishing
- (23) that year?
- (24) A In the lakes yes
- (25) Q 1 484 the next year?

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- (1) A Correct
- (2) Q 1 296 in 91 right?
- (3) A Right
- (4) Q Said they did some dolly varden some arctic char fishing
- (5) right sport fishing?
- (6) A Yes uh huh
- (7) Q This is on page 53 same report Tighten in here on this
- (8) show the jury here The highlighted line is Kodiak I can't
- (9) keep the word Kodiak in the picture and show you the numbers
- (10) at
- (11) the same time and I apologize
- (12) Start with 86 20 657 in 88 right?
- (13) A Correct
- (14) Q 8 763 in 87?
- (15) A Yes
- (16) Q 18 663 in 88?
- (17) A Yes
- (18) Q 14 266 in 89 the year of the spill?
- (19) A Yes uh huh And almost exactly the same number 14 235
- (20) the following year
- (21) Q You mentioned halibut Halibut don't live in the lakes
- (22) right?
- (23) A Halibut don't what?
- (24) Q Halibut aren't in the lakes are they?
- (25) A No
- (26) Q They're out in the ocean?

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- (1) A Correct
 (2) Q This is going to be on Page 33 - oh I've got to give you
 (3) a different report I apologize Let me have DX16255 For
 (4) some reason they break out halibut as a separate report
 (5) What I have here is a certified copy of a report entitled
 (6) Fishery Data Series Number 93 18 Biological Characteristics of
 (7) the Sport Harvest of Pacific Halibut in South Central Alaska
 (8) 1992 by Scott C Meyer prepared August 1993 by the Alaska
 (9) Department of Fish and Game Division of Sport Fish And
 (10) again accompanying affidavit certifying this as the true and
 (11) correct copy from the Division And I'll be asking you some
 (12) questions on halibut from this document And I believe it's
 (13) Page 33 sir
 (14) Do you have that in front of you now?
 (15) A Yes I do uh huh
 (16) Q This is entitled at the top Appendix A 2 Estimated Sport
 (17) Harvest by Region of Halibut for the Years 1977 to 1991 And
 (18) they've got - this is arranged a little differently - they've
 (19) got columns and they've got Kodiak as the column for all those
 (20) years on the far left And then they've got a definition of
 (21) Kodiak says Kodiak marine waters surrounding the Kodiak and
 (22) Afognak Island groups right?
 (23) A Right
 (24) Q And just so the jury knows exactly where we're talking
 (25) about this is Kodiak here correct?

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- (1) A Well the fishing district extends off the chart both to
 (2) the north and to the south
 (3) Q My question to you is this Kodiak Island?
 (4) A Yes that is Kodiak Island
 (5) Q And this is Afognak Island right?
 (6) A Right
 (7) Q Okay Let's look at the numbers for halibut Let's start
 (8) with 85 33 032 Zoom it in for people to see here
 (9) MR STOLL 33 000?
 (10) BY MR CLOUGH
 (11) Q I read the wrong number looked at the wrong chart Let's
 (12) start with number of fish harvested Here we go For 1985
 (13) 7 303?
 (14) A Correct
 (15) Q For 86 10 960?
 (16) A Yes
 (17) Q 87 9 889?
 (18) A Yes uh huh
 (19) Q 88 7 749?
 (20) A Uh huh
 (21) Q 1989 the year of the oil spill 10 435 halibut?
 (22) A Yes uh huh
 (23) Q No halibut sport fishing closures at any time during the
 (24) oil spill were there?
 (25) A No there were not

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- (1) Q On to the next year 1990 9 134 right?
 (2) A Correct
 (3) Q 91 it goes up to 12 000?
 (4) A Correct uh huh
 (5) Q So actually the oil spill year they caught over 2500 more
 (6) halibut in '89 than they did in 1988 didn't they?
 (7) A Either that or they did a better job reporting This is
 (8) pretty inaccurate data
 (9) Q According to this data are there approximately 2500 more
 (10) fish caught halibut caught in 1989 than in 1988?
 (11) A I've not done that calculation
 (12) Q Approximately?
 (13) A I can't verify that
 (14) Q Approximately we'll take - just give me an
 (15) approximation
 (16) A If that's what you've calculated it fine
 (17) Q Well it goes from 7 749 to 10 435 -
 (18) MR STOLL Stipulate - counsel stipulate to
 (19) whatever the numbers say That's fine
 (20) BY MR CLOUGH
 (21) Q If you could turn now to the preceding page Page 32 the
 (22) Department also keeps track of something they called angler
 (23) days How many days people spend out there sport fishing for
 (24) recreation sport fishing for sport whatever you want to call
 (25) it This is Appendix A 1 Estimated Angler Efforts by a

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- (1) Region says Estimated Effort and Angler Days See how many
 (2) days people spent out there sport fishing This is just for
 (3) halibut here 85 33 032 angler days Right?
 (4) A I don't think this is just for halibut This says
 (5) saltwater fin fish
 (6) Q Oh you are correct
 (7) A Halibut is not a fin fish
 (8) Q I have to expand that a little bit
 (9) A I don't know what fish this is
 (10) Q Saltwater fin fish that's right This is saltwater fin
 (11) fish you got it not just halibut
 (12) A Well I don't believe it would include halibut at all
 (13) Q This would include salmon?
 (14) A Halibut is not a fin fish I'm assuming it's salmon but I
 (15) don't know what's included in the definition of saltwater
 (16) Q What we do know is it's sport harvest for fin fish in
 (17) Kodiak right?
 (18) A It says for saltwater fin fish I don't know what that
 (19) is
 (20) Q Okay But we know it's for sport right? It says -
 (21) right? Excuse me we know it's estimated angler effort by
 (22) region for saltwater fin fish that's what it says at the top
 (23) right?
 (24) A That's what it says I have no idea what that means quite
 (25) frankly

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- (1) Q And the estimated angler effort for 85 33 032 angler
- (2) days right for Kodiak?
- (3) A For which year?
- (4) Q 1985 32 032?
- (5) A Right uh huh
- (6) Q Angler days 1986 31 762 correct?
- (7) A Correct uh huh
- (8) Q Angler days 87 38 671 correct?
- (9) A That's what it says yes
- (10) Q 1988 angler days 30 522?
- (11) A Correct
- (12) Q Angler days for the Kodiak area year of the spill 1989
- (13) 35 485?
- (14) A Correct uh huh
- (15) Q 1990 the year after 34 969 right?
- (16) A Correct that's what it says
- (17) Q And then it says - for 91 it jumps up to 42?
- (18) A Yes
- (19) Q So according to the Department of Fish and Game statistics
- (20) on angler days there was actually 5 000 more angler days in
- (21) the Kodiak area in 1989 the year of the spill than in 1988
- (22) the year before?
- (23) A That's what this statistic says but in 20 years of living
- (24) on Kodiak Island I've never had anyone ask me how many days
- (25) spent fishing so this statistic is virtually worthless in my

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- (1) perspective I don't know where they get these numbers
- (2) Q You have no idea do you?
- (3) A Well it's obviously inaccurate
- (4) Q You have no idea where they get these numbers do you?
- (5) A No I don't
- (6) Q You don't know what time the surveys they base it on?
- (7) A No
- (8) Q You don't know if it's mail surveys you don't know that
- (9) do you?
- (10) A I have no idea
- (11) Q Do you know if it's interviews on the docks?
- (12) A I've never been contacted
- (13) Q You have no idea what this data is based on?
- (14) A Absolutely not
- (15) Q You do know it comes from the Department of Fish and Game?
- (16) A Correct
- (17) Q Division of Sport Fishing?
- (18) A Correct
- (19) Q It's a certified copy of the data they keep in your files
- (20) because I showed you the affidavit?
- (21) A Correct
- (22) Q DX16256 please I'm going to take those from you so we
- (23) don't get the affidavits mixed up
- (24) MR STOLL What's the number?
- (25) MR CLOUGH The next one coming is DX16256

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- (1) BY MR CLOUGH
- (2) Q I'm going to get this out for just a second
- (3) Mayor Selby I need to have you by the maps again for just
- (4) a second Probably the best way if you stand in between the
- (5) two How about that?
- (6) Now I've got in my hand sir DX15606 which is the you
- (7) know the marine map that we've used a couple times before
- (8) with
- (9) the marks
- (10) A Right That's a nautical chart
- (11) Q Thank you that's the word I was looking for the nautical
- (12) chart And this is the nautical chart which you showed us
- (13) where the road system's located right?
- (14) A Correct
- (15) Q You said it stretched down Chiniak Bay up past Kodiak and
- (16) up around Sheratin Bay roughly?
- (17) A Correct
- (18) Q Could you show the jury on your oiling data map the
- (19) plaintiffs oiling data map which is PX1534 where those same
- (20) locations are?
- (21) A Which locations?
- (22) Q The road the same ones we just talked about where the road
- (23) system is?
- (24) A Where the road system is?
- (25) Q Yeah
- (26) A On this map?

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- (1) Q Yeah
- (2) A Would run from roughly here all along in through here over
- (3) to here And then there's a road over to Anton Larsen Bay over
- (4) here as well So this general area right in there
- (5) Q As Mr Stoll was fond of pointing out without saying
- (6) anything to the truth of the matter asserted but according to
- (7) the map all those little black triangles and circles
- (8) represent according to the legend something to do with
- (9) oiling right?
- (10) A Correct?
- (11) MR STOLL That's not all it says has to do with
- (12) oiling on this map
- (13) MR CLOUGH I'll read each one
- (14) BY MR CLOUGH
- (15) Q The triangles say oiled Veco and the circles say oiled
- (16) ADF&G is that what that says Mayor Selby?
- (17) A Correct
- (18) Q Would you agree with me that according to this map
- (19) there's just a whole bunch of triangles and circles along that
- (20) coastline where the road system is?
- (21) A That's correct uh-huh
- (22) Q You can retake your seat now Got all my stuff out of
- (23) whack here sorry One more question before we get to the
- (24) report
- (25) Yesterday you were asked a number of questions about

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- (1) subsistence food right?
 (2) A Right
 (3) Q And first of all make things clear here you said there
 (4) are 15 000 people on Kodiak Island Borough overall?
 (5) A Right right About 15 600 correct
 (6) Q And you said about 14 000 of them live up on the road
 (7) system right?
 (8) A That s correct
 (9) Q Now yesterday you were asked about concerns about
 (10) subsistence food
 (11) A Yes uh huh
 (12) Q You were talking about concerns that all Kodiak residents
 (13) had right?
 (14) A Correct
 (15) Q And do you remember this particular testimony? Do you
 (16) remember saying it became very apparent to everyone By
 (17) everyone you meant all Kodiak residents didn t you?
 (18) A Correct
 (19) Q Very quickly that the only safe course if you love your
 (20) family was to not eat subsistence foods until you could try to
 (21) get this thing sorted out?
 (22) A Correct uh huh
 (23) Q Now I d like to show you - got another ADF&G report for
 (24) you sir also with a certified affidavit saying this is a true
 (25) and correct copy This one s entitled Salmon Harvest and

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- (1) Escapement Data for the Chiniak Bay and Kodiak Road System
 for
 (2) the Periods of 1980 to 1990 It s defendants Exhibit 16256
 (3) It s by a guy named Len Schwarz It s fishery data series
 (4) number 93 24 and it s prepared in August of 1993 by the
 Alaska
 (5) Department of Fish and Game Division of Sports Fish I have a
 (6) couple questions There s the affidavit that goes with it
 (7) Now first I d like to direct your attention if I could
 (8) to page 11 You see that?
 (9) A Yes uh huh
 (10) Q What the Division of Sport Fish does among its compilations
 (11) is they keep track of subsistence harvests of salmon from
 (12) locations along the Kodiak road system
 (13) Now so there s no confusion the road system that you just
 (14) described here the one with all these triangles and circles
 (15) along there it s the only road system in Kodiak isn t it?
 (16) A Well other than each village has a small amount of road
 (17) but as far as a public called road system that s it yes
 (18) Q That s it right? Now these - this report as you can see
 (19) - let s blow up just blow up 1980 there first - breaks out
 (20) by five different types of subsistence salmon chinook
 (21) sockeye coho pink and chum and then it breaks it down by
 (22) certain locations It s got Monashka Bay Womens Bay Middle
 (23) Bay Kalsin Bay Buskin River Chiniak Roslyn Creek Isthmus
 (24) Point Is that right?
 (25) A Yes

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- (1) Q Cliff Point And then it s got Chiniak Bay total right?
 (2) A Yes uh huh
 (3) Q All of those listed there are along this coast lane along
 (4) the road system isn t that correct?
 (5) A Correct uh huh
 (6) Q The one with all the triangles and circles on it?
 (7) A Correct
 (8) Q Let s see what the Department Division of Sport Fish has
 (9) for subsistence salmon harvest for those areas We can pick a
 (10) year to start with To save some time I suggest we turn to
 (11) page 13 because that has all on one page 1988 1989 and 1990
 (12) so we can do some before during and after comparisons
 (13) Now this is - this for 1988 is broken down just exactly
 (14) the same way isn t it for each of those same areas along the
 (15) road system?
 (16) A Correct uh huh
 (17) Q And it shows the permits and it shows the numbers for each
 (18) of the various species of salmon right?
 (19) A Correct uh huh
 (20) Q And the total that they ve got for 1988 Chiniak Bay total
 (21) 31 chinooks those are kings right?
 (22) A Right uh huh
 (23) Q 31 chinooks kings whatever 3200 sockeye correct?
 (24) A Correct
 (25) Q 21 - 2 184 coho?

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- (1) A Right
 (2) Q 507 pink?
 (3) A Right
 (4) Q 135 chum?
 (5) A Right
 (6) Q Now this is '88 the year before the spill no confusion
 (7) This is not the spill year?
 (8) A Right
 (9) Q Let s look at 1989 And again what this is by the way
 (10) table 4 subsistence harvests of salmon from locations along
 (11) the Kodiak road system 1989 the year of the spill go
 (12) through the totals six chinooks kings right?
 (13) A Right
 (14) Q 3 391 sockeyes subsistence salmon harvested along the
 (15) Kodiak road system in 1989?
 (16) A Correct most of which before the oil got to Kodiak
 (17) Q We ll talk about that Cohos 1 859?
 (18) A Correct
 (19) Q Pinks 489?
 (20) A Yes
 (21) Q Chums 144?
 (22) A Right uh huh
 (23) Q Look to 1990 Chinooks 9 sockeye 3 862 That s for the
 (24) whole year of 1990 isn t it?
 (25) A Right

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- (1) Q Coho 2 656?
 (2) A Yes uh huh
 (3) Q Pinks 469 chums 189 So let s just pick coho as an
 (4) example here Coho was 2 184 subsistence salmon harvested
 (5) along the Kodiak road system in 1988 right? Isn t that what
 (6) the data says?
 (7) A For 2184 is that what you said?
 (8) Q For 1988 according to the Alaska Department of Fish and
 (9) Game there were 2 184 subsistence salmon harvested along
 the
 (10) Kodiak road system
 (11) A Correct uh huh
 (12) Q The year of the spill 1 859 Now I know I m not too good
 (13) at math but it looks like it dropped off maybe 300 right?
 (14) A If that s your calculation
 (15) Q Year after the spill pops up to 2 656 Now the coho
 (16) salmon that run usually starts about mid August doesn t it?
 (17) A Yes mid August and actually - it s actually best around
 (18) the first of September correct
 (19) Q Right So that would have - the coho salmon taken there
 (20) in 1989 they would all come along after the oil spill
 (21) wouldn t they?
 (22) A Yes mainly streams and lake take
 (23) Q How did they get there?
 (24) A They swim upstream
 (25) Q But where did they come from? They re coho salmon where

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- (1) that?
 (2) A That s what it says correct
 (3) Q And they list the angler days spent - they break them down
 (4) by sockeye pink chum coho and dolly varden You see that?
 (5) A Yes uh huh
 (6) Q Then they go through if you ll look through over the next
 (7) - it goes from Pages 14 through 17 it does it year by year
 (8) for every year from 1980 through 1990 And to save some time
 (9) again let s just look at 88 89 and 90 See this is
 (10) again - for the jury the same format mail survey at the top
 (11) they break it down by year area angler days and they break
 (12) down the total angler days by which type fish they re fishing
 (13) for sockeye pink chum coho or dolly varden Down at the
 (14) bottom for 1988 year Again to save time let s just go
 (15) through the total all those locations there they re all along
 (16) the road system right?
 (17) A Yes uh huh
 (18) Q And the total for 1988 of angler days sport fishing angler
 (19) days along the Kodiak road system was according to the
 (20) Division of Sport Fish official records 45 692?
 (21) A Correct
 (22) Q And they break that down by how much of the angler days
 (23) were spent fishing for which kind of fish right?
 (24) A Correct uh huh
 (25) Q Let s go to the next year This was 88 by the way This

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- (1) do they come from? They come from the ocean
 (2) A Right
 (3) Q And obviously the people at least enough people to catch
 (4) 1 859 of them for subsistence purposes along the Kodiak road
 (5) system must have felt they were safe to eat
 (6) Got another report for you DX16256 Actually it s the
 (7) same darn report sorry Messed myself up I copied the cover
 (8) page twice It s a different page in it though Let s look
 (9) now sir on Page 14 Table 5
 (10) MR STOLL Just a minute what is it?
 (11) MR CLOUGH It s the same one we had I apologize,
 (12) Mr Stoll It s DX16256 and this is salmon harvest and
 (13) escapement
 (14) MR STOLL What s the page number?
 (15) MR CLOUGH Page 15 It s this one salmon harvest
 (16) and escapement data for the Chiniak Bay and Kodiak road
 system
 (17) by Mr Schwartz ADF&G
 (18) BY MR CLOUGH
 (19) Q Do you have Table 5 in front of you Page 14?
 (20) A Yes uh huh
 (21) Q Now this is table entitled Sport Fishing Effort and
 (22) Harvest Along the Kodiak Road System same road system
 1980 to
 (23) 1990 okay? And you know it was mentioned earlier and you
 had
 (24) no idea where the data came from You see here it s - at
 (25) least according to the document they do a mail survey see

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- (1) is the year before the oil spill, right?
 (2) A Correct uh-huh
 (3) Q Now let s go to 1989 sport fishing as measured in angler
 (4) days by the Alaska Department of Game - Fish and Game
 (5) Division of Sport Fishing 57 076 angler days spent sport
 (6) fishing along the Kodiak road system area in 1989 the year of
 (7) the spill isn t that what the statistics say?
 (8) A Correct
 (9) Q And 14 000 plus of the 15 000 people who live in Kodiak
 (10) live along that road system?
 (11) A Correct uh huh
 (12) Q And if you were to go back and compare it to 1988 we d see
 (13) that actually angler days jumped up by 12 000 in 1989 from the
 (14) year before
 (15) A That s what I would expect yes
 (16) Q And again there were no sport fishing closures of any
 (17) type
 (18) A That s correct
 (19) Q And what these people were fishing for was sockeyes pinks
 (20) chums cohos and dolly varden?
 (21) A And other fish
 (22) Q But according to these statistics - oh right and other
 (23) You caught me there s another category there for a couple of
 (24) them right?
 (25) A Correct uh huh

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- (1) Q And then by the way year 1990 51 000 angler days
 (2) 16267
 (3) Now you also testified that you thought in your opinion
 (4) hunting as a recreational use went down and as I recall you
 (5) listed among some of the things that are hunted in Kodiak area
 (6) certainly deer right?
 (7) A Correct
 (8) Q I think you mentioned elk
 (9) A Correct
 (10) Q And brown bear
 (11) A If you have a permit
 (12) Q If you have a permit that's right But Kodiak's famous
 (13) for brown bear?
 (14) A Correct uh huh
 (15) Q I've got a report here for you It is entitled - first of
 (16) all it's DX16267 It's called Alaska Wildlife Harvest
 (17) Summary 1989 to 1990 and I have here an affidavit executed
 (18) by
 (19) Carl Schneider (phonetic) of the Division of Fish and Game
 (20) saying that this is a true and correct copy of their records on
 (21) file
 (22) Now the first page - this is a statewide report that's
 (23) why it's so thick It's got a lot of information in it so I
 (24) want to make sure that there's no confusion about just what
 (25) data we're talking about
 (26) I'd like to - we're going to be talking about data for

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- (1) something called Unit 08 and I'd like to have you look at Page
 (2) 209 if you would sir which has a map showing us what Unit 08
 (3) is Do you have that in front of you?
 (4) A Yes uh huh
 (5) Q And Unit 08 as depicted in that map - I mean just so
 (6) there's no confusion this is Kodiak Island Raspberry Island
 (7) Afognak Island and Shuyak Island right?
 (8) A Correct uh huh
 (9) Q And all of the Kodiak Island Borough parcels at issue in
 (10) this case are within Unit 08?
 (11) A That's correct
 (12) Q I'd like to direct your attention sir to page 20 -
 (13) excuse me 215 What Fish and Game has done here is compile
 (14) information for the 1989 to 1990 hunter season hunter
 (15) information by unit and subunit for Unit 08 see that? Then
 (16) they've got a tremendous breakdown They've got - we'll just
 (17) look at the top here before we look down at the stuff for the
 (18) ones particularly They've broken down by hunt how much by
 (19) reds - how much by successful hunters versus unsuccessful
 (20) hunters how much by residents how much by state residents
 (21) how much by nonresidents how much by people - don't know
 (22) where they live - how successful people were how
 (23) unsuccessful
 (24) people were I'm not going to take you through each one
 (25) fortunately they have a totals column Do you see the total
 (26) column all the way there in the left that one there?

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- (1) A Yes uh huh
 (2) Q Okay Now brown bear hunting is by permit correct?
 (3) A Correct uh huh
 (4) Q Deer is not though right?
 (5) A No
 (6) Q Let's look at - look at deer And you testified about the
 (7) opening of the deer season by Alaska Department of Fish and
 (8) Game yesterday you mentioned that Didn't you?
 (9) A Yes I did
 (10) Q In fact Fish and Game did open deer season for hunting?
 (11) A Yes
 (12) Q And deer hunting was conducted wasn't it?
 (13) A Yes it was
 (14) Q And according to the official records kept by Fish and Game
 (15) in 1989 1990 the fall and winter after the oil spill for deer
 (16) - for deer I need to put up the next page No there it
 (17) is See deer got that? General season 3 560 right?
 (18) A Correct uh huh
 (19) Q And for brown bear they've got 150 right above it?
 (20) A This is just successful hunters though
 (21) Q Right That's all we're going to work off here We can
 (22) break it down
 (23) A It's not an actual total column
 (24) Q But it's the total - I see It's the total under the
 (25) successful hunter's column?

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- (1) A Right
 (2) Q And then under elk 206?
 (3) A Correct
 (4) Q DX16268 DX16268 counsel Sorry to give you these long
 (5) documents but that's what the Department puts together It
 (6) would be best if you could leave that one open to that page if
 (7) there's enough room up here, because I'm going to have you
 (8) compare a page from that to a page from this
 (9) This is also a certified copy same report prepared by the
 (10) Alaska Department of Fish and Game except for the following
 (11) hunting season the year after 90 91 And I've flagged the
 (12) page I'll ask you to look at there
 (13) It will be page 214 Do you have that in front of you now?
 (14) A Yes, I do
 (15) Q What I'm going to try and do First of all let's show the
 (16) - just the entirety of page 214 so we know what's going on
 (17) This is entitled 1990 1991 the year after the 89/90 season
 (18) same general statistics They have a totals column under
 (19) successful hunters right?
 (20) A Right
 (21) Q I'm going to try and see if I can get both of these on here
 (22) at the same time I may be unable to do that Well let's run
 (23) through them every one If the jury can't read them I think
 (24) they'll be able to hear the numbers Let's start with deer
 (25) under 89/90 it was 3 560?

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- (1) A Yes
 (2) Q That was the total number for the fall and winter right after the spill?
 (3) A Right
 (4) Q For 90 91 year and a half here 3 072 little bit less?
 (5) A That was due to a huge winter kill Had nothing to do with hunter effort
 (6) Q What s the number listed there is it 3 072?
 (7) A That s correct
 (8) Q Do I have to put another report in front of you to tell you that the number for the year after that was 3 378 for 91/ 92?
 (9) A That would seem logical since the deer were starting to recover from the huge death loss in the fall in the winter of 1989 and 90
 (10) Q And so all three years were consistently in the low three thousands according to the Fish and Game statistics?
 (11) A That s correct but the distribution was different as far as where they were killed
 (12) Q Elk - elk - 206 in 1989/90?
 (13) A Right
 (14) Q 201 in 1991?
 (15) A Correct
 (16) MR STOLL Can I ask a question? Excuse me Your Honor is this - is this elk or is this hunters? The reason I m having a problem is I notice that on the elk there s more

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- (1) unsuccessful hunters than there are successful hunters and I don t know how you d have -
 (2) MR CLOUGH Is there an objection Mr Stoll?
 (3) MR STOLL Yeah I just want to know the form of the question
 (4) MR CLOUGH The question is it s total hunters
 (5) We re talking about how many hunters were out there hunting that year
 (6) MR STOLL That s all I asked
 (7) BY MR CLOUGH
 (8) Q Elk 201 - excuse me 206 for 89/ 90 right?
 (9) A Correct
 (10) Q And 201 for 1991?
 (11) A Successful hunters
 (12) THE COURT Counsel we re going to take a break pretty soon You can pick the time
 (13) MR CLOUGH Five or ten minutes no more
 (14) THE COURT Okay
 (15) BY MR CLOUGH
 (16) Q I ll take those and the affidavits back before they get all confused
 (17) Now yesterday you also testified some - I think you were questioned about the subsistence the special subsistence fishery opening that was done down at Olga Moser do you recall
 (18) that?

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- (1) A Yes
 (2) Q And I believe you said it was conducted in sometime - when was it conducted?
 (3) A Mid September
 (4) Q Mid September And you had actually been - you and your office had been involved in requesting that Alaska Fish and Game make this superficial opening?
 (5) A That s correct through the Emergency Services Council
 (6) Q And you requested it be conducted at Olga Moser right?
 (7) A And Karluk Lagoon
 (8) Q And using - let s see here use this map Could you come down here for a second?
 (9) Now correct me if I m wrong but when you first requested - you dealt with Jim Fall or the Subsistence Division on this of ADF&G?
 (10) A Actually Larry Nicholson the director for the Kodiak region is the main person we dealt with
 (11) Q And he works for Jim Fall?
 (12) A I m not sure who he works for
 (13) Q But Larry Nicholson works for ADF&G?
 (14) A Right
 (15) Q What you wanted to do at the borough s request originally was it be conducted down here at Olga Bay?
 (16) A Correct
 (17) Q And the reason you wanted to do it down here was because

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- (1) as I hope the jury can see from the map Olga Bay is way - you have to go in through Airtak Bay through this passage here through this narrow passage all the way up here to Olga Bay?
 (2) A Correct
 (3) Q You testified at some length yesterday about that passage and all the fresh water running in here and how the fish could mill around in Olga Bay and essentially you thought that that would make them therefore safer or safe?
 (4) A Right
 (5) Q And in fact they tried to conduct the fishery down in Olga Bay didn t they?
 (6) A Yes uh huh
 (7) Q They didn t do it because there weren t enough fish isn t that right?
 (8) A They caught some but not an adequate number
 (9) Q Not nearly enough?
 (10) A Correct
 (11) Q So they switched over to Karluk right?
 (12) A To the lagoon yes
 (13) Q Could you show the jury where Karluk is on your map?
 (14) A This is the Karluk Lagoon right in here
 (15) Q So it s this - if you can see it it s this real little blue area right here that s it right?
 (16) A Yes the fish school up at the head of the lagoon here before they go up the Karluk River This doesn t show it but

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- (1) the Karluk Lake is probably one of the most productive salmon
(2) lakes on the islands
(3) Q There s like a little spit or reef across the entrance to
(4) that?
(5) A There s a spit across the entire entrance and there s no
(6) way for saltwater to penetrate it because the current s so
(7) strong from the river that it continues to blow out even with
(8) an incoming tide So the current of the river prevented any
(9) concern of any oil getting inside of the lagoon
(10) Q Well and yesterday I asked you who did the fishing
(11) actually who did the fishing You said something about ADF&G
(12) but wasn t in fact - Larsen Bay is located right over here
(13) isn t it?
(14) A Yes
(15) Q Weren t some villagers brought over from Larsen Bay and
(16) didn t they set traditional beach seine nets right at the
(17) location you just mentioned?
(18) A Actually the permit issued was a special commercial permit
(19) not a subsistence permit It was issued as a commercial
(20) fishery and all the regulations that applied to commercial
(21) fisheries had to apply and there was a representative from
(22) each of the villages that was brought down to participate in
(23) that fishery along with Fish and Game officials
(24) Q So they did set up their traditional beach seine nets here
(25) at the head of the lagoon right?

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- (1) A They - they caught them at the head of the lagoon that s
(2) correct
(3) Q But they didn t catch all the fish that were collected
(4) there There were some additional fish caught weren t there?
(5) A There were some caught at Olga Bay yes
(6) Q No no let s talk right at Karluk Isn t it true sir
(7) that they didn t catch enough fish through the traditional
(8) seine method either so they brought in two purse seiner
(9) fishing vessels under contract that same contract you just
(10) mentioned Isn t that correct?
(11) A Well, but I thought the whole thing was done with a purse
(12) seine as a commercial fishery permit so beach seining is -
(13) there may have been some people fiddling around on the
(14) beach
(15) but -
(16) Q So purse seiner these are fishing boats?
(17) A It was - again I believe it was conducted as a commercial
(18) fishery using the seine permits which is you know according
(19) to the Alaska Department of Fish and Game regulations
(20) Q They used commercial fishing boats commercial purse
(21) seiners?
(22) A That s correct
(23) Q And those commercial purse seiners didn t go into the
(24) lagoon because they couldn t There s a spit there isn t that
(25) true?
(26) A You can get a fishing vessel in there

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- (1) Q Isn t it true those commercial fishing vessels did the
(2) fishing outside of the lagoon as reported by Fish and Game?
(3) A Report we got says said the fish was caught inside the
(4) lagoon
(5) Q If Fish and Game would have a report to the contrary you
(6) would be incorrect wouldn t you?
(7) A That was the report Fish and Game gave to the Emergency
(8) Services Council That s what I know
(9) Q And do you know that they caught over 68 000 pounds of
(10) fish?
(11) A Again that s a much higher number than we were told
(12) Q So if it was 68 000 you d be wrong on that too wouldn t
(13) you?
(14) A I don t know if I m wrong or right It s just that that s
(15) not the figure that was reported to the Emergency Services
(16) Council at the meetings
(17) Q And those fish were distributed to the people of Kodiak
(18) after - first let s not - they were all tested by the FDA
(19) too weren t they?
(20) A That s correct
(21) Q Didn t want to take any chances FDA says number s up the
(22) fish is good
(23) A Correct
(24) Q They were given to people?
(25) A Yes they were distributed to the village people and to

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- (1) some in Kodiak
(2) Q And the people ate them?
(3) A Far as I know
(4) MR CLOUGH This would be a good time for a break
(5) Your Honor
(6) THE COURT Okay
(7) THE CLERK Please rise This court stands in
(8) recess
(9) (Jury out at 9 39 a m)
(10) (Recess from 9 39 a m to 9 57 a m)
(11) (Jury in at 9 57 a m)
(12) 9 57 a m
(13) THE CLERK Please rise This court now resumes its
(14) session Please be seated
(15) BY MR CLOUGH
(16) Q Hello again I d like to change topics a little bit if we
(17) could sir
(18) You testified some yesterday about the 1993 trip that you
(19) and your other representatives of the Arctic Power group went
(20) on to a couple of sites in Prince William Sound do you recall
(21) that?
(22) A Yes I do
(23) Q I want to show you a couple of the exhibits that you showed
(24) the jury yesterday from that This is - this is plaintiffs
(25) exhibit 1519-A and that s the Arctic Power logo over there by

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- (1) the way?
- (2) A Up at the top corner correct uh huh
- (3) Q And Debbie Reinwand is your lobbyist for Arctic Power?
- (4) A She s the executive director
- (5) Q And it s got 11 30 a m travel to Snug Harbor Now you -
- (6) Snug Harbor is the one you couldn t land because of the fog
- (7) right?
- (8) A Right
- (9) Q I notice it said Snug Harbor setaside site On that trip
- (10) they explained to you what a setaside site was didn t they?
- (11) A Yes they did
- (12) Q Isn t it true that a setaside site is a location an oiled
- (13) shoreline that all parties have agreed never ever to try and
- (14) clean up the oil so that they can study it over an extended
- (15) period of time to see what happens with Mother Nature all by
- (16) itself over time?
- (17) A That s the way it was described to us that s correct
- (18) Q And so that was a place you would expect to see some oil?
- (19) A Correct yeah
- (20) Q Because it had been set aside correct?
- (21) A That s what we were told yes
- (22) Q With the agreement of everyone including the landowner?
- (23) A I assume so I don t know that for a fact
- (24) Q And so it - that the scientists would have some sites to
- (25) study over time to see just what happened when we just set

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- (1) aside a site and didn t even touch the oil that was on it?
- (2) A That was the stated intent correct
- (3) Q So you weren t surprised to see oil there?
- (4) A I really wasn t surprised to see oil on any of those
- (5) beaches
- (6) Q Well okay let s bring up another one you had up there
- (7) yesterday This is plaintiffs exhibit 1519-G which Mr Stoll
- (8) put up there for you yesterday Do you remember this?
- (9) A Yes
- (10) Q And this is an excerpt from essentially a notebook of
- (11) materials that you and the other people from Arctic Power were
- (12) given for your trip right?
- (13) A Correct
- (14) Q And Mr Stoll had you read the top paragraph or so
- (15) including the part that said Prince William Sound and the
- (16) Western Gulf of Alaska portions of which were impacted by the
- (17) 1889 - 1989 Valdez spill are today essentially free from oil
- (18) remember that?
- (19) A Yes
- (20) Q You expressed your disagreement with that statement?
- (21) A Yes
- (22) Q But this was not the only information on oiling that Exxon
- (23) gave you in that tour was it this piece of paper?
- (24) A No This page? No
- (25) Q In fact they gave you a lot more information didn t they?

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- (1) A Correct
- (2) Q This is just one small excerpt from what they gave you
- (3) isn t that correct?
- (4) A Correct uh huh
- (5) Q I m going to give you something which has been given two
- (6) exhibit references I believe plaintiffs have designated it as
- (7) PX1519 We have also separately designated it as DX15488
- I d
- (8) like you the take a look at it if you could sir And I d
- (9) like to ask you if this is generally to the best of your
- (10) recollection the type of notebook that you were given that
- (11) you took those excerpts out to use as evidence for the jury?
- (12) A Appears to be about the same yes
- (13) Q It s got your itinerary for your trip up front right?
- (14) A Correct
- (15) Q And in fact the notebook contains extensive materials
- (16) including maps photographs and written descriptions of each
- (17) of the sites that you were going to go to?
- (18) A Correct uh huh
- (19) Q And the notebook right in it says there s going to be some
- (20) oil on some of these sites right?
- (21) A That s correct Although this isn t all the sites We
- (22) actually went to some different sites
- (23) Q You went to one different site didn t you?
- (24) A Right
- (25) Q Just one Eleanor?

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- (1) A Correct uh huh
- (2) Q And that - that was because when the weather was a little
- (3) squirrely that morning they said Is there any place you guys
- (4) would like to go? And you said How about taking us to
- (5) Eleanor? So they did
- (6) A Correct
- (7) Q And the places they took you were all locations that had
- (8) been very heavily oiled back in 1989 right?
- (9) A That s what we were told
- (10) Q No one tried to hide the ball on that?
- (11) A I ve never indicated they did
- (12) Q In fact what they were trying to show you is not that
- (13) there was absolutely no oil left on those particular parcels
- (14) but how well they had come back since 1989 wasn t that what
- (15) they were trying to show you?
- (16) A Well my impression was we were just going to go for an
- (17) informational tour and see how well the Pnnce William Sound
- (18) area had recovered and what had actually happened with a
- (19) number of those beaches that were heavily oiled or had been
- (20) oiled during the summer of 1989
- (21) Q And the particular excerpt that they gave you - and
- (22) there s some pocket parts in the back of your notebook Could
- (23) you take a minute and look at those?
- (24) A Yes uh huh
- (25) Q And in addition to all the written and photographic

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- (1) material in the first part in one of those pocket parts
 (2) they've got a booklet called - I believe it looks like this
 (3) called three years after
 (4) A Yes uh huh
 (5) Q Right? And then there's a second even longer book quite
 (6) lengthy book entitled Biological Conditions in Prince William
 (7) Sound Alaska about looks like over a hundred pages long
 (8) A Yes uh huh
 (9) Q And they gave you all of that information?
 (10) A Yes uh huh
 (11) Q And let's pull this one out first
 (12) A The biological one?
 (13) Q Right
 (14) A Okay
 (15) Q And the biological the one entitled biological conditions
 (16) in Prince William Sound Following the Exxon Valdez Oil Spill
 (17) 1989 to 1992 it contains chapters?
 (18) MR STOLL Your Honor I have an objection to this
 (19) propaganda piece that Exxon put out
 (20) THE COURT Counsel be careful with your arguments
 (21) all right? That's pure argument You know it's
 (22) inappropriate Now if you have an objection state the
 (23) objection
 (24) MR STOLL We have an objection to hearsay Your
 (25) Honor

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- (1) THE COURT The objection's overruled
 (2) BY MR CLOUGH
 (3) Q All I want to do on this is show you the types of
 (4) information that you were provided According to the table of
 (5) contents of this document they have chapters on spill history
 (6) and cleanup biological observations of spill effects and
 (7) recovery - you can follow along with your copy I want to
 (8) make sure this is the same as the one in yours is that
 (9) correct?
 (10) A Correct
 (11) Q It's got a discussions and conclusions section if the jury
 (12) can read this on intertidal ecology wildlife fish cleanup
 (13) bald eagles and fisheries 1992 update on shoreline oiling and
 (14) cleanup what's still going on out there Intertidal
 (15) organisms fish and wildlife Then it's got a number of
 (16) appendices as well correct?
 (17) A Correct
 (18) Q Then it's got a bibliography in the back page 107
 (19) correct?
 (20) A Yes Uh huh
 (21) Q And looking at the bibliography - I won't go through and
 (22) count them all here but it goes on for pages and pages of
 (23) additional source information references as to what's going on
 (24) out there in Prince William Sound They provided you all that
 (25) source information as well didn't they?

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- (1) A Yes uh huh
 (2) Q And no one was trying to hide the ball on anything during
 (3) this tour were they?
 (4) A I've never made that claim no
 (5) Q And the particular excerpt that you said you disagreed with
 (6) came out of three years ago the other the smaller volume
 (7) correct?
 (8) A Correct uh huh
 (9) Q And the excerpt that you disagreed with - put that back up
 (10) there - was the part that said today essentially free of
 (11) oil right?
 (12) A Uh huh
 (13) Q Now yesterday I asked you if Exxon had given you any
 (14) information about the shoreline surveys how many miles of the
 (15) shoreline on each of the years and what the results of that
 (16) had been and you said to the best of your recollection they
 (17) had not?
 (18) A I've never been given that personal that information
 (19) personally
 (20) Q Could you turn to Pages 10 and 11 of three years after
 (21) please?
 (22) First of all according to the caption this information
 (23) shows the number of - we'll focus in just on 89 here The
 (24) number of miles that were surveyed in 1989 survey then breaks
 (25) out how many of those were no oil Then it's got a legend down

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- (1) at the bottom here no oil very light narrow light medium
 (2) and wide so it gives you the numbers of miles surveyed and the
 (3) results of it for 89 correct?
 (4) A Correct
 (5) Q And it had 3400 miles surveyed in 1989 according to this
 (6) right?
 (7) A Correct uh huh
 (8) Q Okay And then it goes on and points out in the caption
 (9) that after 1989 all the surveys were done jointly by the U S
 (10) Coast Guard NOAA - the National Oceanic and Atmospheric
 (11) Administration - the Alaska Department of Environmental
 (12) Conservation landowners and representatives of Exxon
 (13) correct?
 (14) A Correct That's what it says yeah
 (15) Q Well but you knew that that was true because you told us
 (16) yesterday how you received - you talked to the Coast Guard
 (17) with your information about Kodiak and the other Kodiak village
 (18) mayors were contacted by the Coast Guard they were sent
 (19) letters by the Coast Guard just for your area asking them what
 (20) you wanted to have surveyed?
 (21) A Correct
 (22) Q And in fact in 1990 that joint survey went out and they
 (23) surveyed 1218 miles shows the breakdown of what they found
 (24) was
 (25) spilled out no oil 821 282 light 64 narrow - excuse me
 282 very light 264 light 36 miles of medium and 15 miles of

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- (1) wide as of 1990
 (2) And there was another joint survey and Exxon gave you this
 (3) information in 1991 and the 1991 survey it was again the
 (4) joint agencies the Coast Guard NOAA ADEC the landowners
 and
 (5) Exxon They decided what needed to be surveyed two years
 after
 (6) the spill right?
 (7) A Correct uh huh
 (8) Q And in 1991 they decided they needed to survey at that
 (9) point only 315 miles and they found of that 238 with no oil
 (10) 58 with very light 9 8 of light 8 0 of medium and only 1 1
 (11) of heavy And then in 1992 they did yet another joint survey
 (12) Okay?
 (13) And by 1992 the agencies the Coast Guard NOAA ADEC
 (14) Exxon and the landowners had decided there s only 21 45
 miles
 (15) that needed to be surveyed And of that they found no oil on
 (16) 14 4 they found very light on 6 0 they found light on 42
 (17) miles they found medium on about a half a mile 53 and heavy
 (18) on 09 of a mile of shoreline That s the information that you
 (19) were provided right?
 (20) A That s the information that s here that s correct
 (21) Q And so by that time under the joint surveys being
 (22) conducted by the Coast Guard NOAA ADEC the landowners
 and
 (23) Exxon jointly all working together as one team a partnership
 (24) on one survey out of all of those miles they started with 3400
 (25) miles they were only - by 1992 according to the caption

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- (1) here they found traces of the spill on only 7 miles of
 (2) shoreline in 1992 three years later?
 (3) A That s what this data indicates correct That ignores the
 (4) fact that the landowners got rolled, big time as far as the
 (5) number of miles of shoreline they had requested in 1990 to be
 (6) surveyed but that s correct What is here is what you said
 (7) Q This is the 1992 data done jointly by the Coast Guard the
 (8) Alaska Department of Environmental Conservation the other
 (9) agencies and the landowners and Exxon correct?
 (10) A The landowners got overrun
 (11) Q This is the 1992 data done jointly a joint survey done by
 (12) the United States Government the State of Alaska the
 (13) landowners and Exxon Isn t that correct sir? Yes or no?
 (14) A This data?
 (15) Q Yes
 (16) A What you ve read is correct off of this page as far as
 (17) what s presented
 (18) Q And this is the data that Exxon gave you on that tour to
 (19) demonstrate their statement that Prince William Sound and the
 (20) Western Gulf of Alaska portions of which were impacted by the
 (21) 1989 Valdez spill are today essentially free of oil correct?
 (22) A That s what -
 (23) Q That s the data right there in the same book?
 (24) A That s correct uh huh
 (25) Q Because by 1992 out of 3400 miles they could only find

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- (1) traces of oil - this is the government s - on seven miles?
 (2) A On the 3400 miles they looked at that s correct Doesn t
 (3) address all the miles they did not look at
 (4) Q They were the joint surveys by the Coast Guard?
 (5) THE COURT Counsel we ve been through this a couple
 (6) of times all right?
 (7) MR CLOUGH Thank you No further questions
 (8) REDIRECT EXAMINATION OF JEROME M SELBY
 (9) BY MR STOLL
 (10) Q Mr Selby why - why do you think that in this - well
 (11) let me ask this question Did the - did the surveys that were
 (12) done by Exxon and the Coast Guard did they go everywhere
 that
 (13) the landowners asked them to go or that the boroughs or the
 (14) local governmental officials asked them to go?
 (15) A No they did not
 (16) Q And would you tell the jury what - when this first came
 (17) up?
 (18) A Well it came up during the summer of 1989 and the problem
 (19) in summer of 1989 is the oil was moving around so much and
 (20) there was so much beach oiled and there was not enough staff
 (21) either in survey teams or cleanup teams to even come
 anywhere
 (22) close to going to all the beaches that had oil being reported
 (23) to us on a daily basis both in the morning meetings at 10 00
 (24) and again at the evening meetings at five o clock at the
 (25) Emergency Services Council meeting And so there were
 multiple

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- (1) requests that never got addressed by the landowners during
 the
 (2) summer of 1989 a huge number of miles of beach
 (3) In 1990 in the spring of 1990 the Coast Guard came up and
 (4) had requested as has been pointed out that candidate areas
 be
 (5) identified for survey during the spring of 1990 The
 (6) landowners those landowners in this case meaning people like
 (7) the federal parks folks over along the Katmai coast in
 (8) particular the federal Fish & Wildlife folks for the bear
 (9) refuge which is about two-thirds of Kodiak Island so a lot of
 (10) the coastline is obviously within the bear refuge The State
 (11) Parks for Alaska which were particularly up on Shuyak Island
 (12) the Kodiak Island Borough was included because we were a
 (13) landowner obviously of the beach properties that we ve
 (14) identified here Those are the kinds of people as well as
 (15) private parties The Native corporations have some beach who
 (16) were included and invited to submit candidate areas
 (17) We went through that process and when the Coast Guard
 came
 (18) back with their proposed beach survey sites they had severely
 (19) reduced the number of requested sites And the one that I
 (20) recall specifically and I know is documented in the minutes
 (21) from the Emergency Services Council because the federal
 parks
 (22) people went ballistic at the meeting in March When Admiral
 (23) Ciancaglini was explaining this it was all they were going to
 (24) survey and the parks fellow saying they submitted candidates
 (25) of 57 parcels they knew were heavily oiled that they needed to

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- (1) have attention and the original cut from Exxon and the Coast
 (2) Guard included 7 of those 57 parcels And they made enough
 (3) noise at that meeting that subsequently they came back and it
 (4) went up to I think about 30 or 31 of the 57 parcels that were
 (5) included finally in what was surveyed in 1990 That means
 (6) there was at least another 26 or 27 that the Park Service knew
 (7) were oiled that never even got looked at And that's probably
 (8) the most graphic example I could give you
 (9) Q And did the surveying in '91 or '92 did you get to decide
 (10) what was surveyed in those - in those years?
 (11) A No we did not.
 (12) Q And Mr Clough used the word partnership was this a
 (13) partnership this survey team between Kodiak Island Borough
 (14) or
 (15) these landowners and Exxon?
 (16) A Well it's - it's not what I would call a partnership It
 (17) certainly was not a kind of a partnership that folks willingly
 (18) form And basically it wasn't a partnership from the
 (19) perspective of - partners in my view would be equal
 (20) partners equal players at the table and that certainly was
 (21) not the case It was very clear that Exxon and the Coast Guard
 (22) were going the drive the ship and the rest of us could either
 (23) get on and/or get off as we chose in effect is what happened
 (24) at that point
 (25) Q You said Admiral Ciancaglini there had been a meeting
 before they presented this proposal to do 7 or 17 segments of

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- (1) the 57 that was requested That had come after a meeting
 (2) between Exxon and Admiral Ciancaglini in San Diego?
 (3) A Yes We were somewhat nonpulsed that the Coast Guard
 (4) and
 (5) Exxon went off to San Diego California early in 1990 to
 (6) determine which beaches should be surveyed We questioned
 (7) that
 (8) from the get-go We had requested the meeting be in
 (9) Anchorage
 (10) so that it would be easy for them to get to but also be
 (11) relatively easy for most of us in the spill area to get here
 (12) as well at a central location That was ignored and they went
 (13) charging off to San Diego and came back and gave us this great
 (14) list of 300 miles of shoreline that they were proposing to
 (15) survey
 (16) Q Now a lot of time was spent this morning going through
 (17) various statistics that the ADF&G had on angler effort and
 (18) successful unsuccessful hunters for wildlife and dolly
 (19) varden rainbows salmon halibut et cetera fishing
 (20) statistics sport fishing statistics
 (21) Now how do you - how do you explain sir that you said
 (22) that the subsistence usage went down in Kodiak in your view
 (23) in your observations and these statistics look like they're
 (24) going down miniscule or going up or staying the same or things
 (25) of that nature? How do you explain that?
 (26) A Well I think there's several things that - that need to
 (27) be understood with regard to those statistics First of all I
 (28) think the statistics themselves are fairly loose in that you

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- (1) know they send out a survey It's totally voluntary
 (2) information so if I wanted to convince the Fish and Game I'm a
 (3) great fisherman I can write down I caught 900 fish even
 (4) though I didn't catch any There's no accuracy test at all on
 (5) what people are reporting It's also then a very small survey
 (6) and they extrapolated out somehow to determine come up with
 (7) those total figures
 (8) So in my mind I think the survey figures themselves
 (9) would be highly suspect with a very high error factor But I
 (10) think more importantly if you had been at the meetings during
 (11) the summer of 1989 and had watched the people come into
 (12) those
 (13) meetings and try to get a straight answer about our are fish
 (14) safe to eat are clams safe to eat and the absolute
 (15) frustration of the people in the community trying to deal with
 (16) that there would be burned in your memory forever as is in my
 (17) memory the fact that people were not going to go out and eat
 (18) this food And so I - I don't really care what the statistics
 (19) say because it's real - it was real clear throughout the
 (20) summer of 1989
 (21) Now the other fact that needs to be put in here is the
 (22) fact that it was pretty noticeable to me in the salmon
 (23) statistics particularly that the catches were maybe a little
 (24) bit higher or a little bit lower for 1989 to 1990 and that's
 (25) real distressing when you consider the fact that there was no
 commercial fishery and there were approximately 26 million fish

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- (1) that went into those streams and those lakes and yet the catch
 (2) was basically the same as it had been the year before when
 (3) there was a commercial fishery that takes probably 75 to 80
 (4) percent of those fish out of the water before they get to the
 (5) streams and the lakes So you had a huge abundance of these
 (6) fish that went up into these lakes and streams I think it's
 (7) pretty interesting that folks only caught about the same amount
 (8) in 1989
 (9) Also when you figure that they couldn't fish commercially
 (10) so they were standing around you know what's something to
 (11) do
 (12) let's go catch some fish, at least let's go do something today
 (13) so for them to only have caught that amount with the huge
 (14) abundance of fish that was out there I find to be pretty
 (15) amazing quite frankly
 (16) Q What's the - what's the commercial fishery in - in
 (17) Kodiak? What does that normally run? I mean how many fish
 (18) are in the commercial fishery?
 (19) A The catch is usually somewhere in the range of 26 million
 (20) I believe the highest was 34 million fish caught in the
 (21) summertime
 (22) Q And with respect to these tourism figures -
 (23) Could I have the Elmo on please?
 (24) Now I notice interesting things here Mr Clough talked
 (25) about the tourism in the total years and this is 1988 1989
 and it's interesting - you can see it right there on your

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- (1) monitor there
 (2) A Yes yes uh huh
 (3) Q And the big months the summer months isn't that right?
 (4) A Yes uh huh
 (5) Q Now in 19 - actually this indicates going back to the -
 (6) these statistics have just started in 1986 isn't that -
 (7) A Correct uh huh
 (8) Q Just have a few - total for that year is only 201 just a
 (9) few -
 (10) A That's when the Convention Visitors Bureau got opened up
 (11) and first started to operate
 (12) Q Then I notice in 1987 they don't have - well let's
 (13) just - let's just go on down here We can see where they
 (14) don't have statistics but in 1988 and 89 in the summer
 (15) months if you look at July - June July August June - am I
 (16) reading this correctly that it went from 617 tourists down to
 (17) 278 and from 900 down to 499 and then from 1350 down to
 (18) 702
 (19) and from 600 in September 655 down to 74?
 (20) A Correct uh huh
 (21) Q Excuse me maybe I'm in the wrong - that's walk in I'm
 (22) sorry the total - I'm in the wrong column here It goes from
 (23) 1 001 down to 989 in June and then 1 062 down to 628 and
 (24) then
 (25) 1 662 down to - I can't make that out if that's 900 but it's
 (26) about half of the other number?
 (27) A Right

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- (1) Q And then down from 761 to 117?
 (2) A Correct uh huh
 (3) Q And 571 down to 88?
 (4) A Yes
 (5) Q And then 356 down to 66?
 (6) A Yes uh huh
 (7) Q Those are fairly dramatic changes in the tourism figures
 (8) A Well again it was very apparent and if you'd been at the
 (9) meetings again where the people who actually run tourism
 (10) activities such as charter boats and had lodges in the area
 (11) it was very apparent at the meetings that these folks
 (12) livelihood basically had been wiped out for that summer
 (13) Q Now Mr. Clough said yesterday that you had said something
 (14) about in your deposition the seventh day of your deposition
 (15) that you had said that the Coast Guard did an excellent job
 (16) and then there was some discussion about whether you were
 (17) talking about the local Coast Guard and the - or the - the
 (18) higher level of -
 (19) A Yes
 (20) Q - Coast Guard And he quoted from your deposition where
 (21) you said the Coast Guard people generally did an excellent
 (22) job Do you recall that that one line that he quoted from
 (23) your testimony?
 (24) A Yes I do Yes I do
 (25) Q Now actually the questions before that I didn't have a

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- (1) chance yesterday to read this when you were testifying but I
 (2) thought it was sort of interesting to see the context of
 (3) what - the question was not - here's Coast Guard generally
 (4) and that's the bottom line there line 10 at the bottom there
 (5) on page 4041?
 (6) A Yes uh huh
 (7) Q And the question is not - the questions that are going on
 (8) there are not addressed to how the Coast Guard is doing in
 (9) cleaning up are they?
 (10) A No sir It is not
 (11) Q In fact the questions are dealing with how people were
 (12) treating people and whether they were condescending On the
 (13) preceding page it starts off I think I'm right in reading
 (14) this Let's walk back through some of this now Who was
 (15) condescending from Exxon?
 (16) Answer Virtually every Exxon employee that we dealt with
 (17) Question So they -
 (18) Answer Monte Taylor in particular He's one of the
 (19) finance folks that I didn't think of to name earlier there when
 (20) you ran through that list of Exxon people
 (21) And you include in that the other individuals you mentioned
 (22) today John Peavey for example he was condescending?
 (23) Answer Yes He was - he was totally abusive of people
 (24) at public meetings as far as I'm concerned treating them
 (25) totally inappropriately -

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- (1) Were there any -
 (2) - as if they were stupid
 (3) - Exxon employees who were not condescending who you
 (4) encountered?
 (5) At some point in time no
 (6) Were the Veco people condescending?
 (7) Yes
 (8) How did the Coast Guard do on that score? Were they
 (9) condescending or not?
 (10) And then you make the comment about Coast Guard people
 (11) generally did an excellent job That's what you were talking
 (12) about?
 (13) A Yes
 (14) Q That's the question you were answering?
 (15) A That's the context yes
 (16) Q Then you were asked about four 100-yard sites that were
 (17) monitored during the wintertime?
 (18) A Yes
 (19) Q And last evening we had an opportunity to go through the
 (20) exhibit a little more didn't we?
 (21) A Yes uh-huh
 (22) Q And we noticed something about these sites didn't we
 (23) about the snow?
 (24) A Seemed to be a lot of snow on most of the sites Most of
 (25) the winter yes

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- (1) Q Well for instance on site number one we found did we
 (2) not that nine of eleven reports had snow on the site?
 (3) A Correct uh huh
 (4) Q And could we have the - is that on? And there s the
 (5) pictures that counsel didn t show you when you were on the
 (6) stand these pictures of the - this one next page and that
 (7) correct?
 (8) A Yes
 (9) Q And that was - that was true of the other three sites as
 (10) well?
 (11) A Correct uh huh
 (12) Q Now I have a question about the fishing in Karluk
 (13) MR CLOUGH I think you want to -
 (14) MR STOLL Okay
 (15) BY MR STOLL
 (16) Q Now this special catch of fish inside the lagoon at
 (17) Karluk?
 (18) A Yes
 (19) Q That occurred in two days?
 (20) A Correct
 (21) Q And Karluk is right here is that correct?
 (22) A Yes uh huh
 (23) Q And the river comes up from there this -
 (24) A Goes up to Karluk Lake yes
 (25) Q You described the strength of that flow of that water

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- (1) there?
 (2) A Yes the large lake system
 (3) Q And there s a bar that protects the lagoon from the ocean?
 (4) A Yes It used to be a complete spit clear across there and
 (5) then the river actually has washed through the spit but it s
 (6) just wide enough for the flow of the river to come through
 (7) Q So then you were told that they sent two seiner boats in
 (8) there to do the fishing?
 (9) A Yes
 (10) MR CLOUGH Objection hearsay Your Honor
 (11) MR STOLL He s already testified to it in your - in
 (12) your cross
 (13) THE COURT Well the objection s sustained
 (14) BY MR STOLL
 (15) Q Did the - let me ask you this question, Mr Mayor Did
 (16) the people of - that normally do subsistence fishing all over
 (17) Kodiak the 15 600 that live up - 14 000 live up here and live
 (18) in these other villages we ve heard testimony about did all
 (19) these people in these two days in September when they had
 (20) this
 (21) or did a lot of these people that do the subsistence fishing
 (22) did they all come over here to Karluk and have at it those two
 (23) days?
 (24) A No no It was - as you said the two vessels and then a
 (25) crew on the two vessels Again it was conducted as a
 commercial fishery under a special permit from the Fish and

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- (1) Game and so it wasn t subsistence people fishing at all it
 (2) was a commercial fishing operation
 (3) Q And there was a - there was a representative I think you
 (4) testified from each of the -
 (5) A Yes
 (6) Q Supposed to be anyhow a representative from each of the
 (7) villages?
 (8) A Right They had selected a representative and tried to
 (9) include them
 (10) Q And then after they d commercially fished this then they
 (11) took it to the processor and canned it or whatever and then
 (12) it went - was distributed?
 (13) A Yes
 (14) Q The fish of those two days?
 (15) A It was a commercial catch It also was taken to the
 (16) canneries and processed as a commercial catch and then it
 (17) was
 (18) distributed to the villages
 (19) Q Now I have - the jury s seen this before but I just want
 (20) to make sure that I m understanding this correctly Could we
 (21) have exhibit 16 - what is the number on this?
 (22) 13160-9 The jury s seen this before I just want to find
 (23) out if this is what you re - you re making a claim on behalf
 (24) of Kodiak Island Borough in this court?
 (25) A Correct
 Q And I want to - this is a photograph that the jury s seen

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- (1) before and I want to just find out Is this what you re
 (2) complaining about in this court? Could we get that?
 (3) MR CLOUGH Objection Your Honor the witness has
 (4) testified he never saw - you want me to approach the bench?
 (5) THE COURT Uh huh
 (6) (At side bar on the Record)
 (7) THE COURT What s the objection?
 (8) MR CLOUGH Mr Selby testified he never saw any oil
 (9) on any borough parcels He s not in a position to testify that
 (10) this is what - what the borough s complaining about
 (11) THE COURT Oh the objection s overruled
 (12) (Sidebar concluded)
 (13) BY MR STOLL
 (14) Q Now Is this what you re complaining about?
 (15) A Well that s a small piece of oil that has sunk into the
 (16) rock there obviously but we re complaining about much
 (17) heavier
 (18) oiling than that Instances of mousse 18 inches deep four
 (19) feet wide on the beach some of which was never picked up
 (20) Some of which was allowed to sit in the sun and sink down into
 (21) the beach not unlike what you see here into the rock and
 (22) cobble Some of that oil is still there today
 (23) Q And I have one last question That is when you called the
 (24) Coast Guard to pick up these - these - those bags at the end
 (25) of the season that Exxon wouldn t take because it had been
 done by the State?

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- (1) A From Port Williams?
 (2) Q Port Williams
 (3) A Yes
 (4) Q On Shuyak Island?
 (5) A Yes
 (6) Q You didn't just call the Coast Guard. Didn't you - wasn't
 (7) there some talk about arresting an Exxon ship?
 (8) A We had requested that
 (9) MR CLOUGH Objection relevance Your Honor
 (10) THE COURT Sustained Objection sustained
 (11) counsel
 (12) MR STOLL That's all
 (13) MR CLOUGH I can be very brief Your Honor
 (14) Joel we've seen this one so many times I'm tempted to
 (15) leave it up there but still I think we can dispense with it
 (16) RECROSS EXAMINATION OF JEROME M SELBY
 (17) BY MR CLOUGH
 (18) Q Mayor Selby you testified that on the 1991 joint survey
 (19) you weren't contacted for your input?
 (20) A We received a letter I didn't say we were not contacted
 (21) Q I thought I heard you say that your input wasn't
 (22) solicited
 (23) A No what I said was that our input was not welcome and that
 (24) we were not allowed to identify beach segments that were in
 (25) fact added to the survey

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- (1) Q Let's look at - let's look at the letters First is
 (2) DX3938 Now this is - before we publish it to the jury this
 (3) is a letter dated January 11th 1991 It's addressed to Mayor
 (4) Crystal of Valdez but I direct your attention to the last
 (5) page It's got a distribution list Do you see your name on
 (6) there as well?
 (7) A That's correct I got this letter
 (8) Q This is from Admiral Ciancaglini of the Coast Guard right?
 (9) A Right
 (10) Q They are the federal on scene coordinators in charge right?
 (11) A Yes sir
 (12) Q They sent these letters to Mayor Crystal of Valdez and to
 (13) you and to - let's look at the distribution list here a whole
 (14) slew of other people right?
 (15) A Correct
 (16) Q Including all of the other mayors in Kodiak Island right?
 (17) A Correct uh huh
 (18) Q And what he does - see if we can zoom it in so the jury
 (19) can read it He says they're planning for the 1991 Exxon
 (20) Valdez oil spill response planning is underway with joint
 (21) agency surveys of shoreline scheduled to commence on 28
 (22) April
 (23) 1991 Okay They said early last fall - by the way I'm
 (24) reading from the very first paragraph here Where's my
 (25) highlighter? Right in there
 (26) Early last fall when 1990 clean up operations were phasing

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- (1) down we advised land managers and others we would solicit
 (2) information concerning the shoreline subdivisions they desired
 (3) to be surveyed in the spring We are now at that juncture
 (4) He goes on to say as the federal on scene coordinator
 (5) FOSC I am taking every step to ensure that a comprehensive
 (6) shoreline list is developed
 (7) This is the letter you received right?
 (8) A Yes
 (9) Q The letter goes on essentially what he did is the FOSC
 (10) Admiral Ciancaglini developed a form I think you turn about
 (11) four pages into the letter he explains the form I won't take
 (12) everybody's time to read the entire letter but he develops a
 (13) form and he says you know if you have a candidate to put on
 (14) the proposed list of shoreline subdivisions to be surveyed in
 (15) the spring of 1991 here's a form fill it out fill out the
 (16) subdivision the date of the last visit and the nature of the
 (17) oil contamination observed And you were given a copy of that
 (18) form right?
 (19) A Correct uh huh
 (20) Q Did you send anything back to the federal on scene
 (21) coordinator?
 (22) A No I did not
 (23) Q To your knowledge did any of the Mayors from Kodiak send
 (24) anything back to the federal on scene coordinator?
 (25) A Probably not because at that point in time it was very

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- (1) apparent that getting oil off the beach was not Exxon's
 (2) priority We had spent two frustrating years trying to get the
 (3) oil spill addressed It was very apparent that that was low
 (4) priority from Exxon operation and basically we knew from the
 (5) 1990 exercise that the candidate beaches that we put up would
 (6) not get added to the list of any of them and it was a waste of
 (7) our time to respond to this ridiculous letter
 (8) Q This ridiculous letter did it come from Exxon or did it
 (9) come from Admiral Ciancaglini of the United States Coast
 (10) Guard?
 (11) A It came from the Coast Guard
 (12) Q Then what Admiral Ciancaglini did after sending out his
 (13) ridiculous letter they put together a work plan didn't they
 (14) sir?
 (15) A Yes they did
 (16) Q And they sent that to you as well?
 (17) A That's correct
 (18) Q And I need to show you excuse me it's defendants Exhibit
 (19) 3944 Now this is addressed to John Totemoff of Chenega
 (20) Bay
 (21) but again from the cc list you're listed on the cc's Is this
 (22) the letter you received in April 20th - approximately April
 (23) 1991?
 (24) A I believe I received this letter yes
 (25) Q This is from Admiral Ciancaglini at the Coast Guard right?
 (26) A Yes
 (27) Q He says the purpose of this letter is to update you on our

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- (1) plans for the 1991 Exxon Valdez oil spill operations It is
 (2) also to provide you the May Shoreline Assessment Program
 (3) MAYSAP 1991 plan in a report prepared by the National
 Oceanic
 (4) Atmospheric Administration NOAA which will influence this
 (5) summer s federal directed response Did they send you a
 (6) report too?
 (7) A I don t recall for sure but I assume if they said they
 (8) did We got it Got a lot of the reports
 (9) Q It goes on to say that the NOAA report finds that the
 (10) recovery process is well underway on the shorelines oiled by
 (11) the common Valdez oil spill and that the remaining oil proposes
 (12) little threat to the environment
 (13) A That s what it says yes sir
 (14) Q Did you think the NOAA report was ridiculous too?
 (15) A I think that there was enough of a credibility gap at this
 (16) point in time that for the people who lived in the spill area
 (17) we knew and understood very clearly that we had been part of a
 (18) PR program by Exxon Corporation that priority was not to get
 (19) oil off the beach and restore us to what we had been before the
 (20) oil spill
 (21) So there was a lot of suspect from the NOAA reports from
 (22) the federal government this is the same federal government
 (23) that injected people with radioactive materials without them
 (24) knowing about it for example so that s the kind of
 (25) perspective the folks had in the oil spill area at that point

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- (1) in time The Coast Guard operation basically had been
 (2) subsumed by Exxon from our perspective and this was not our
 (3) federal government taking care of us and doing something for
 (4) us
 (5) Q Looking down the letter about our federal government with
 (6) respect to this year s response to the Exxon Valdez spill the
 (7) 1991 MAYSAP plan has been completed and a copy provided
 for
 (8) your perusal I welcome your comments however urge you to
 (9) pass on your concerns to me as soon as possible No later than
 (10) 3 May 1991
 (11) Now you ve just stated your concerns very eloquently
 (12) Mr Mayor but did you pass on any of them in writing to
 (13) Admiral Ciancaglini in April 1991 when he asked you for your
 (14) comments and asked you for your concerns?
 (15) A I did not waste my time
 (16) MR CLOUGH No further questions
 (17) MR STOLL I just have one question
 (18) FURTHER REDIRECT EXAMINATION OF JEROME M SELBY
 (19) BY MR STOLL
 (20) Q In these Emergency Services Committee meetings and at
 other
 (21) meetings did you express and other Mayors express their
 (22) frustrations? They didn t write - take the time to write
 (23) letters in response to these?
 (24) A Yes we did We expressed a great deal of frustration and
 (25) dissatisfaction with the entire process and the fact that

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- (1) those beach segments were not being included
 (2) MR STOLL Thank you
 (3) THE COURT You can step down sir Thank you
 (4) Counsel who s your next witness?
 (5) MR STOLL Mr Pat Carlson
 (6) THE COURT How long do you think his testimony will
 (7) take?
 (8) MR STOLL It s going to be lengthy It ll be
 (9) lengthy Your Honor
 (10) THE COURT Okay I m going to take a short break
 (11) THE CLERK Please rise This court stands in
 (12) recess
 (13) (Jury out at 10 45 a m)
 (14) (Recess from 10 45 a m to 11 05 a m)
 (15) THE CLERK Please rise This court now resumes its
 (16) session
 (17) THE CLERK Please be seated
 (18) THE COURT Counsel you wanted to see me out of the
 (19) presence?
 (20) MR STOLL Yes Your Honor We have these Emergency
 (21) Service Council minutes and we have - I have not had the
 (22) time myself but some associates of ours have gone through
 and
 (23) have identified certain passages And Mr Clough and I to
 (24) save time on this what we propose to do is over the weekend
 (25) if not before then provide to him a copy of all the sections

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- (1) that we think are admissible and then he can object and maybe
 (2) we can resolve it If we can t resolve them we ll bring them
 (3) back to Your Honor and he can raise whatever objections he
 (4) wants and if he wants to cross-examine the Mayor on them we
 (5) can bring the Mayor back but I think we want to get on with
 (6) the case and not have - I want to get on with the case I
 (7) think the Court does
 (8) THE COURT Oh you don t know how much I want that
 (9) MR STOLL Anyway if that s okay with the Court so
 (10) we may have to bring these back in out of order at some other
 (11) time but I think just to get this thing rolling
 (12) MR CLOUGH That s obviously a fair representation of
 (13) what we discussed I just haven t seen any of these things
 (14) yet and I don t know how long it s going to take to go through
 (15) them and decide what s objectionable or what s not or what
 (16) needs briefing but as soon as we have them I ll review them
 (17) THE COURT Just as long as I don t have to look
 (18) through them with you counsel I ll agree with anything you
 (19) say
 (20) MR CLOUGH I have a brief list of exhibits from
 (21) Mr Selby s testimony Should we go through them now and
 get
 (22) them done?
 (23) THE COURT Yes
 (24) MR CLOUGH The two final ones DX3938 and DX3934
 (25) from the Coast Guard that he received The large map

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- (1) DX15606 The results of the winter monitoring program DX16245
- (2) and 16246 The sport fish reports DX16262 16255 16256 the
- (3) wildlife harvest summary reports DX16267 and 16268 and a
- (4) document which I think actually now has two exhibits number
- (5) both PX1519 and DX15488 The complete notebook provided to
- (6) Mr Selby for his tour
- (7) (Exhibits DX3938 DX3944 DX15606 DX16245 DX16246
- (8) DX16262 DX16255 DX16256 DX16267 DX16268 DX15488 and
- (9) PX1519 offered)
- (10) MR STOLL Your Honor I haven't had a chance to go
- (11) through all those documents I may not have an objection to
- (12) any of them with the exception of the so-called complete
- (13) notebook of the survey and we do object to that on the basis
- (14) of hearsay
- (15) THE COURT Well it's not - not submitted for
- (16) hearsay purpose counsel It's submitted to rebut your
- (17) witness testimony about what Exxon - what position Exxon was
- (18) taking as it took these so-called Oiled Mayors or whoever they
- (19) were around to the area You took one statement in that book
- (20) if I understand the testimony correctly and what counsel had
- (21) that book out here for was to show that there were lots of
- (22) other statements and lots of other information in the report
- (23) Now how can that - how can he show that unless he shows the
- (24) whole book?
- (25) MR STOLL Well the answer to that Your Honor is I

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- (1) think the Court is dealing with this in a vacuum and I'd
- (2) suggest that the Court look at the exhibits - the exhibit the
- (3) complete exhibit The complete exhibit is - reinforces - it
- (4) doesn't rebut that It reinforces the statement that the -
- (5) tries to reinforce that statement
- (6) THE COURT Tries to reinforce what statement?
- (7) MR STOLL That the Prince William Sound is clean
- (8) THE COURT Right
- (9) MR STOLL And I don't think that the hearsay
- (10) statements in there It's not - it's not inconsistent
- (11) with - it's not an inconsistent statement of what Mr Selby
- (12) said It's a hearsay statement by an out-of-court declarant as
- (13) to what their findings were All that I did was show that
- (14) Exxon tried to tell these people that everything was clean in
- (15) Prince William Sound
- (16) THE COURT And your testimony before the jury
- (17) counsel you called it a propaganda booklet right? Didn't
- (18) they have a right to look at the booklet to see what it was
- (19) and you're going to take that position in final argument too
- (20) aren't you?
- (21) MR STOLL No question about it
- (22) THE COURT They need to see the whole document don't
- (23) they?
- (24) MR STOLL No
- (25) THE COURT And maybe they'll go with your judgment

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- (1) MR STOLL Your Honor I don't - I still I think
- (2) it's objectionable I think the Court would be -
- (3) THE COURT In - it's definitely objectionable
- (4) counsel but it's also admissible The objection's overruled
- (5) MR CLOUGH That was my full list of exhibits and I
- (6) assume Mr Stoll will get back to me with the other - I think
- (7) the practice has been to admit them pending objection
- (8) THE COURT I'll admit them In view of this
- (9) argument I've ruled on the specific exhibit but if there are
- (10) other issues that this exhibit or any other exhibit raise and
- (11) Mr Stoll is entitled to make them and I'll determine whether I
- (12) take them out of the record
- (13) (Exhibits DX3938 DX3944 DX15606 DX16245 DX16246
- (14) DX16262 DX16255 DX16256 DX16267 DX16268 DX15488 and
- (15) PX1519 received)
- (16) MR STOLL Thank you Your Honor
- (17) MR CLOUGH Nothing further from me Your Honor
- (18) MR STOLL Your Honor I have one last thing and that
- (19) is on the matter we're going to argue this afternoon
- (20) THE COURT What's the number of the book? I need the
- (21) number of the book and the number of the minutes
- (22) MR CLOUGH I'm sorry Your Honor
- (23) THE COURT What's the number of the book?
- (24) MR CLOUGH DX15488
- (25) THE COURT 15488

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- (1) MR STOLL And the minutes are 915
- (2) THE COURT Okay 915
- (3) (Exhibit 915 received)
- (4) THE COURT Now where are we?
- (5) MR STOLL Your Honor I just have one other matter
- (6) We have a slight reply memorandum This is on the Katzke tape
- (7) we're going to argue after trial today
- (8) THE COURT Oh fine
- (9) MR STOLL This is on just one point that was
- (10) raised That's all I have
- (11) THE COURT Did you serve this memorandum counsel?
- (12) MR STOLL Yes I did
- (13) THE COURT I've got two copies of it here
- (14) MR DIAMOND I just received a copy so I do have a
- (15) copy Your Honor
- (16) THE COURT Okay stamp it in
- (17) THE COURT All right let's bring the jury in
- (18) MR DIAMOND Your Honor while the jury is being
- (19) brought in something I said yesterday - either I misspoke or
- (20) it was mistranscribed I assume I misspoke - but Page 49 of
- (21) the transcript exhibit I offered and was accepted into evidence
- (22) was wrongly identified as Exhibit 16193 It should have been
- (23) 16198
- (24) THE COURT So 16193 is not in evidence?
- (25) MR DIAMOND Correct

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- (1) THE COURT Shouldn't be and 16198 is admitted
- (2) (Exhibit 16198 received)
- (3) MR DIAMOND Correct
- (4) (Jury in at 11 11 a m)
- (5) THE COURT Who's going to be doing the examination
- (6) for the defendants?
- (7) MR OPPENHEIMER For the defense I am Your Honor
- (8) THE COURT Mr Oppenheimer would the two of you
- (9) approach the bench please?
- (10) MR OPPENHEIMER Yes
- (11) MR STOLL Your Honor we'll call Mr Pat Carlson
- (12) THE CLERK Sir please attach the microphone to your
- (13) tie and remain standing for the oath
- (14) Please raise your right hand
- (15) (The Witness is Sworn)
- (16) THE CLERK Please be seated
- (17) Sir for the record can you state your full name?
- (18) A My full name is Patrick Scott Carlson
- (19) THE CLERK And can you spell your last name please?
- (20) A C-a r l s-o-n
- (21) THE CLERK And your occupation?
- (22) A Kodiak Island Borough Assessor
- (23) THE CLERK Thank you
- (24) DIRECT EXAMINATION OF PATRICK S CARLSON
- (25) BY MR STOLL

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- (1) Q Mr Carlson where do you reside?
- (2) A I currently reside at 1417 Yanovsky Street in Kodiak
- (3) Alaska
- (4) Q And what is your profession?
- (5) A My profession is assessor for the Kodiak Island Borough
- (6) Q You're the assessor for Kodiak Island Borough?
- (7) A That is correct.
- (8) Q And prior to being the - when did you become the assessor
- (9) for Kodiak Island Borough first of all?
- (10) A February 15th of 1989
- (11) Q All right And prior to that had you been an assessor in
- (12) Fairbanks the North Star Borough?
- (13) A Prior to that, I held numerous positions with the Fairbanks
- (14) North Star Borough yes
- (15) Q Among these positions the last position you had there was
- (16) lead land and commercial property as appraiser?
- (17) A That's correct
- (18) Q And before that, you were the lead land appraiser there?
- (19) A That is correct
- (20) Q Before that you were a - called staff land appraiser for
- (21) Fairbanks the North Star Borough?
- (22) A Yes that's correct
- (23) Q And before that you worked at Coldwell Banker as a sales
- (24) associate?
- (25) A That's correct in Fairbanks

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- (1) Q In Fairbanks And then after you were the lead land and
- (2) commercial appraiser at Fairbanks North Star that's when you
- (3) became the assessor for Kodiak Island Borough?
- (4) A Yes
- (5) Q And you've been in Alaska for about 20 years in or around
- (6) Alaska?
- (7) A Yes that's correct
- (8) Q And as - as an assessor or as an appraiser are you a
- (9) member of the International Association of Assessing Officers?
- (10) A Yes I am
- (11) Q And would you tell the jury please what the International
- (12) Association of Assessing Officers is?
- (13) A The - we call it the IAAO is an international organization
- (14) that's comprised of people in the assessment field throughout
- (15) the United States and overseas and it's a member of the
- (16) Appraisal Foundation also
- (17) Q The Appraisal Foundation is the same organization - there
- (18) was some testimony oh gosh couple weeks ago by a Dr
- (19) Mundy
- (20) and a Dr Green members of the Appraisal Institute the
- (21) Appraisal Institute is also a member of the Appraisal
- (22) Foundation?
- (23) A That's correct yes
- (24) Q And both the Appraisal Institute the Appraisal Foundation
- (25) the IA -
- (25) MR OPPENHEIMER IAAO

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- (1) BY MR STOLL
- (2) Q Anyhow the International Association of Assessing
- (3) Officers they all follow the Uniform Standards of Professional
- (4) Appraisal Practice?
- (5) A That's correct
- (6) Q Also called USPAP I guess?
- (7) A That's correct
- (8) Q And in addition to that your organization has other
- (9) requirements as well isn't that - isn't that correct?
- (10) A That's correct We have our own standards of professional
- (11) practice and ethics that are in conjunction with the USPAP
- (12) requirements
- (13) Q But the USPAP are part of the standards of the
- (14) International Association of Assessing Officers?
- (15) A That's correct
- (16) Q You're presently a candidate for certified assessing
- (17) evaluator as well?
- (18) A That's correct
- (19) Q And you're also a member of the Alaska Association of
- (20) Assessing Officers am I correct?
- (21) A Yes sir
- (22) Q And you've taken - over the years you've taken a large
- (23) number of courses on appraisal appraisal techniques and that
- (24) sort of thing?
- (25) A Yes I have

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- (1) Q And have you taken courses in the USPAP and ethics related
 (2) courses to that?
 (3) A Yes I have
 (4) Q And courses in mass appraisal and statistics sales ratios?
 (5) A Yes
 (6) Q Courses in economic impact modeling?
 (7) A Yes
 (8) Q Courses in evaluation of polluted property and stigma?
 (9) A Yes I have
 (10) Q And valuation of wetlands?
 (11) A That s correct
 (12) Q And as the assessor of Kodiak Island Borough what - would
 (13) you tell the jury please what your responsibilities are?
 (14) A Well I - we re a small group there s four of us in my
 (15) department I m the department head so I obviously have the
 (16) administrative functions but our basic job is to carry out the
 (17) annual appraisal of all the taxable property within the whole
 (18) Kodiak Island Borough And we also have a number of
 (19) collateral
 (20) duties but generally that s the text of our job I of
 (21) course carry out numerous site specific appraisals as directed
 (22) by the Mayor for a variety of different things like
 (23) right of way acquisition and easements and properties that we
 (24) are either buying or selling and numerous other duties
 (25) Q And as the assessor for Kodiak Island Borough and before
 (26) that as the various positions you had as lead appraiser or

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- (1) performed then the reviewer he ll either carry out what we
 (2) call a desk review or sometimes a field review but he s
 (3) basically testing the analyses and conclusions of the report to
 (4) see that it conforms to the appraisal job in effect and
 (5) existing standards that we operate under
 (6) Q Now do you also - as the assessor for Kodiak Island
 (7) Borough you also provide technical research and analysis to
 (8) support other appraisal functions?
 (9) A That s correct Being a small community and somewhat
 (10) landlocked I find myself having to work with numerous
 (11) individuals that have need for various types of information
 (12) regarding real estate and I also do carry out analysis for
 (13) different departments in the borough and economic
 (14) development
 (15) and various requests that we get
 (16) Q Now the assessor s office has a large data base does it
 (17) not of transactions?
 (18) A That s correct We have a large file of all the historical
 (19) transactions We have a large comprehensive data base
 (20) includes all the titles and transfer documents Then we also
 (21) have property record cards for all of the various properties
 (22) that we work with and we also have computerized systems that
 (23) have all that information compiled in it also
 (24) Q Is there any one - any individual that has as much
 (25) information on all the parcels in Kodiak as the assessor s
 (26) office?

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- (1) other staff appraiser at Fairbanks North Star Borough do you
 (2) appraise land parcels unimproved land parcels?
 (3) A I ve appraised many thousands of either improved or
 (4) unimproved land parcels that s correct
 (5) Q And thousands of appraisals that you ve done some of these
 (6) are so-called using mass appraisal techniques?
 (7) A Yeah the majority of them being - using the mass
 (8) appraisal techniques
 (9) Q And you ve also done appraisals of site specific in other
 (10) words individual parcels sort of what we ll call 'one at a
 (11) time' kind of appraising?
 (12) A Yeah both in conjunction with our mass appraisal technique
 (13) and as assigned by my supervisors that s correct
 (14) Q And how many of those site - you know I ll call it site
 (15) specific appraisals - have you done over the years? Do you
 (16) have any idea?
 (17) A I ve never really computed them but it would be in the
 (18) hundreds I suppose it would be that
 (19) Q I m just watching because I have not been so successful
 (20) with pouring water and - sorry for the pause there
 (21) You also perform review appraisals In other words - do
 (22) you not?
 (23) A That s correct
 (24) Q And tell the jury what a review appraisal is
 (25) A Basically a review appraisal is if an appraisal is

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- (1) A Not that I m aware of no
 (2) Q Now would you tell the jury please what is meant by
 (3) assessed value?
 (4) A Assessed value is - depends on the state you re in but it
 (5) is the value assigned by the assessor in - like in the State
 (6) of Alaska it s equal to the market value minus any required
 (7) exemptions
 (8) Q And by exemptions ' what do you mean?
 (9) A Exemptions they take a variety of different forms We
 (10) have like a senior citizen exemption program we have farm use
 (11) exemptions we have home owned - home ownership
 (12) exemptions a
 (13) variety of them applied either at the state or local level and
 (14) we have to calculate and compute those and place them into
 (15) the value and make an adjudgment for them
 (16) Q Now Mr Carlson when you do - determine the assessed
 (17) value on a parcel of property of real property what - what
 (18) do you do? I mean are you determining - what are you
 (19) determining there?
 (20) A Well initially in the process in both form to equity and
 (21) state law the statute in the Alaska state law requires that we
 (22) assess at 100 percent of the market value of the property
 (23) Q And so that s - you re determining the fair market value
 (24) of the properties then?
 (25) A That s correct
 (26) Q And that s a regular function of your job?

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- (1) A Yes it is
 (2) Q Now with all this – providing this technical assistance
 (3) to other appraisers and other people that make requests – in
 (4) doing these appraisals and then doing this assessment
 function
 (5) this is what you do day in and day out?
 (6) A Yes it is
 (7) Q And you've been doing this for quite a few years now?
 (8) A That's correct
 (9) Q And so you pretty much live and breathe real estate in
 (10) Kodiak?
 (11) A That seems to be the case yes
 (12) Q Now did you – did there come to be a time when you did an
 (13) appraisal of the Kodiak Borough owned remote properties?
 (14) A Yes
 (15) Q And when did you do this?
 (16) A As I recall the transmittal was in March of '92 I
 (17) believe
 (18) Q And had you been asked by Mayor Selby to do it sometime
 (19) before that?
 (20) A Yes
 (21) Q Okay And you didn't – you didn't get to it until
 (22) sometime later – well when did you start work on it?
 (23) A As I recall the formal process began sometime in spring of
 (24) '91 completion would have been the spring of '92
 (25) Q Now I want to – we have here a map of the borough

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- (1) 1354-A little now This is a map of Kodiak and the borough
 (2) The borough actually extends over all this property and
 (3) actually little bit now a little bit onto the peninsula
 (4) Isn't that correct?
 (5) A Yeah we go up to the mountaintops on the peninsula
 (6) Q Okay And do you see – I think you've seen this document
 (7) before these green areas are the remote properties that you
 (8) appraised of Kodiak Island Borough?
 (9) A That's correct
 (10) Q And then now at the top of – I'll call it the top of the
 (11) borough the north end of the borough is Shuyak Island and
 (12) that's where – this has been admitted into evidence exhibit
 (13) 1521 – this green area that – that is the parcel that's the
 (14) largest parcel of remote property owned by Kodiak Island
 (15) Borough?
 (16) A That's correct
 (17) Q And you've visited this site?
 (18) A Yes I have
 (19) Q And this is one of the sites that you appraised?
 (20) A Yes it is
 (21) Q And could you describe this just briefly to the jury?
 (22) A Shuyak Island – of course I've been kind of all around
 (23) the state over the years – I personally believe it's probably
 (24) one of the prettiest places in the state of Alaska It's got
 (25) gorgeous little bays and inlets and a lot of kayaking and what

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- (1) have you in the quiet waters in between all those various
 (2) areas The topography of the island is – it rises slightly
 (3) from sea level to the west and then it moves up to the top of
 (4) the spine that runs down it It's about 500 feet of elevation
 (5) and there's large dense stands of spruce Sitka spruce on the
 (6) south end and then that moves out into more lighter spruce and
 (7) meadowy type country as you get to the north end of the
 (8) parcel It generally is considered to be one of the finest
 (9) recreational sites in the state in my opinion
 (10) Q And then I'll show you what is in evidence as exhibit 1525
 (11) and would you – this shows several parcels of borough
 (12) property?
 (13) A That's correct
 (14) Q And where is this area located?
 (15) A Well generally this is about 45 miles from the City of
 (16) Kodiak It would be to the west of the City of Kodiak
 (17) Q This is shown up here?
 (18) A That's the general area
 (19) Q Or this area right in here?
 (20) A Yes And it's – the very – Onion Bay of course is the
 (21) bay that you can see is very well protected the area of
 (22) Raspberry Straits and Muskomee Bay is also –
 (23) Q This area here is Onion Bay?
 (24) A That's correct
 (25) Q Raspberry Strait is up here?

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- (1) A That's correct And for purposes of the report the
 (2) parcels were broken into three We have the one large
 (3) Q Why don't you walk down You can pick this thing up
 (4) A There's basically three subject parcels here This large
 (5) one of 7600 acres this has – there's a mountain – not a
 (6) mountain but about a 700-foot hill on this side and then
 (7) there's a valley that runs through here and Raspberry Straits
 (8) An elk herd of course uses this area for grazing what have
 (9) you and moving back and forth through the valley this portion
 (10) of it and there's some dense stands of spruce in this area
 (11) running up the river into the lakes that sit up in the portion
 (12) of the property and there's also some spruce stands on this
 (13) side
 (14) This parcel here is quite a bit smaller It has a hill
 (15) here for probably five or 600 feet and this rises up to a
 (16) ridge that runs this way And this also has access up to Onion
 (17) Bay, which again is a well protected area for anchorage of
 (18) boats and what have you
 (19) This area here has intermittent spruce and cottonwood
 (20) vegetation It's generally level It follows a valley that
 (21) runs between two hills that are on both sides of the parcel
 (22) between Kupreanof Straits and Viekada Bay As noted these
 (23) areas are very close to the City of Kodiak accessed by small
 (24) boat and skiff from town via the Anton Larsen area And also
 (25) there's a cannery close to this parcel here that has daily mail

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- (1) flights and what have you And there s folks that live out
 (2) here too all year round
 (3) Q You can stay there for a minute
 (4) Now all these parcels these remote - what you ve called
 (5) remote parcels these are all accessible by - are any of these
 (6) accessible by the road system directly?
 (7) A Directly no
 (8) Q They re all - you have to get there by boat or sea plane?
 (9) A Right Some of them are accessible by skiff or you know
 (10) smaller boats because of the protected passages that may be in
 (11) between the areas of access by road and parcel which is the
 (12) case with these
 (13) Q Could you describe this parcel? This is exhibit - excuse
 (14) me - 1522
 (15) A Yeah this parcel here is as it says Sitkinak Island As
 (16) you can see the City of Kodiak is up here Village of Old
 (17) Harbor here about halfway down the island and village of
 (18) Akhiok and there s a Lazy Bay Cannery in this area here And
 (19) Sitkinak is basically two large mountains that sit on each side
 (20) here and this is a fairly level area running between those two
 (21) mountains The parcel has generally good topography
 (22) cottonwood type vegetation
 (23) With local knowledge you can access it through Sitkinak
 (24) Lagoon although that s uncharted if you look on the marine
 (25) chart but folks do know the way out there But there s an

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- (1) airport on the property from the former United States Coast
 (2) Guard Loran station that is no longer utilized but the
 (3) airstrip and some of those old facilities are still down
 (4) there
 (5) Q Then I have a map here which is in evidence as exhibit
 (6) 1526 and would you tell the jury what that is?
 (7) A This is our holdings on Shearwater Bay which is off of
 (8) Kiliuda And as you can see it s about - Kodiak again is
 (9) up here and Village of Old Harbor is right here so it s
 (10) basically two bays down from town
 (11) This area that s to the north of this is what we
 (12) generically call Gull Cape And as you can see by all the
 (13) little parcels here it s a very popular recreational area for
 (14) hunting and fishing and what have you This parcel is fairly
 (15) good topography has fairly level sites along the ocean front
 (16) It does have some slight - does rise up on both sides and
 (17) there is a creek that runs up through the middle of the
 (18) parcel And this parcel next to it is the former cannery at
 (19) Shearwater
 (20) Q Then we have this exhibit which is 1523 Could you
 (21) explain to the jury what this - what this is?
 (22) A This is our holdings in the Kizhuyak Bay And as you can
 (23) see it s back off the water This area here is a big alluvion
 (24) plane of outwash from these creeks that come down here and
 (25) it s generally flat And then the vegetation and the

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- (1) topography is substantially better beginning about oh
 (2) somewhere around the order of - oh maybe a quarter mile out
 (3) from our parcel and then this runs up the valley It s
 (4) generally good topography There s a slight hill ridge that
 (5) comes down on one corner of it This is the access road up to
 (6) the hydroelectric project We have a large one it s called
 (7) Terror Lake and this accesses the lake and the power house is
 (8) here and the road obviously goes down to Kizhuyak Bay
 (9) Q Is there fishing in those streams there?
 (10) A Yes
 (11) Q And then would you describe please for the jury the
 (12) property on exhibit 1524?
 (13) A This is the balance of our holdings in Ugak Bay And as
 (14) you can see again the City of Kodiak s here this bay is
 (15) accessed both by the Saltery Cove road we call it which comes
 (16) in here and there s another bay up behind this part that you
 (17) can t see called Pasagehak Those are both - the areas are
 (18) accessible by road These parcels here of course are all of
 (19) generally good topography nice beach areas in this whole
 (20) area
 (21) Hidden Basin is considered to be one of the prettiest spots
 (22) on the island I certainly agree with that It s a very well
 (23) protected harbor It has a mountain here on this one parcel
 (24) but these are real good topography and the vegetation is
 (25) typical for this portion of the island It s cottonwood

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- (1) stands some - and what have you and a few periodic spruces
 (2) that are showing up here and there
 (3) Q Now other than to get to Ugak Bay by road here the actual
 (4) parcels are accessible only by boat or some kind - or float
 (5) plane?
 (6) A That s correct These are by float plane by vessel around
 (7) the cape or by road access to it and then skiffing over to
 (8) those locations
 (9) Q You can regain the stand please
 (10) Now Mr Carlson I d like you to explain to the jury if
 (11) you would when you talk about the market value the fair
 (12) market value when you re doing an appraisal there is some -
 (13) there s a definition that s used for that and I don t want you
 (14) to give you know sort of textbook definition but there are
 (15) certain factors that are considered in that Is there not?
 (16) A Yes sir
 (17) Q Would you tell the jury what those factors are just
 (18) briefly?
 (19) A Well in its simplest form the market value should
 (20) represent that most reasonable value that two parties have
 (21) really - they re knowledgeable about the transaction they re
 (22) knowledgeable about the properties they re dealing with
 (23) there s been an adequate time that it s been exposed to the
 (24) market neither one has any gun to their head or whatever to
 (25) do the transaction but they want to go ahead and consummate

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- (1) the deal and there s the terms or the dollar or value of it is
 (2) a function of what s either normal in the market for terms or
 (3) in terms of cash
 (4) Q And by having no gun to the head you mean no duress
 (5) nobody having a liquidation for bankruptcy or something of that
 (6) nature?
 (7) A That s correct yes
 (8) Q And do you determine - when you re determining the fair
 (9) market value do you try to determine first of all what the
 (10) use of that property is going to be what the likely use of
 (11) that property will be?
 (12) A That s correct
 (13) Q Why do you do that?
 (14) A Well for two reasons Number one for purposes of
 (15) comparison to ensure that you re comparing apples and
 (16) apples
 (17) when you re using the different approaches to value But the
 (18) other more fundamental, one is part of the market study
 (19) concept the highest and best use And its simplest form is
 (20) that value that use that will give you the highest value that
 (21) is reasonable and practicable and legal feasible
 (22) Q And did you determine what the highest and best uses were
 (23) for the subject properties that you were appraising for Kodiak
 (24) Island Borough?
 (25) A Yes I did
 (26) Q And would you tell the jury please what those uses were?

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- (1) A As of the time of the appraisal I found that the highest
 (2) and best use was what we call a mixed use and when you re
 (3) dealing with large tracts of land that s quite common You
 (4) know as your parcel size decreases then you can - typically
 (5) you ll find there s just one use for that particular house lot
 (6) or whatever it is you re looking at but when you re dealing
 (7) with large tracts there tends to be a variety of highest and
 (8) best uses within that
 (9) What I found based on my review of the market was that
 (10) all of the properties as of the date of the appraisal had a
 (11) highest and best use of remote recreational fisheries and
 (12) residential - remote residential type use patterns
 (13) Q Okay That s true for all - all - I think there s 13
 (14) parcels isn t that correct?
 (15) A That was true as of the date of appraisal right.
 (16) Q And what was the date of the appraisal that you ve - that
 (17) you were asked to do?
 (18) A March 23rd 1989
 (19) Q That s the day before the Exxon Valdez oil spill?
 (20) A That is correct
 (21) Q And was there any problem with your records and so on
 (22) that you had from your own personal knowledge of the market
 (23) of
 (24) doing this appraisal in 1991 to - I guess you submitted your
 (25) report in March of 92 even though the date had passed in
 (26) other words the date of March 23 1989 was two years

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- (1) earlier?
 (2) A No there was no problem
 (3) Q Is that - is that commonly done in the appraisal
 (4) industry?
 (5) A It s not you know real common but there s - yeah
 (6) retroactive appraisals are done There s techniques and
 (7) processes that we follow to do that type of appraising
 (8) Q And when you talked about the uses or the highest and best
 (9) use for these parcels did you know what the actual uses of
 (10) these parcels in these areas was?
 (11) A Yes
 (12) Q And what was that?
 (13) A Generally they were all either subsistence resource
 (14) properties or recreational hiking I would say hunting and
 (15) fishing whether for sport or subsistence purposes largely
 (16) that s what was in place at the time
 (17) Q Basically the highest and best use was in fact how they
 (18) were being used?
 (19) A That s correct
 (20) Q Now when you do an appraisal am I correct there s sort of
 (21) three ways of - three approaches to determine what the
 (22) appraisal is?
 (23) A Yeah we have - or in the industry
 (24) Q Three methodologies I ll call them?
 (25) A Correct Within our industry we have three fundamental

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- (1) approaches to value They re the cost approach - the market
 (2) or sales comparison approach is probably a better name - and
 (3) then the income approach
 (4) Q And for raw land like we re talking about here what
 (5) approach is applicable?
 (6) A In my opinion you know except for cases of certain
 (7) special use properties that are vacant generally by far the
 (8) best approach is the sales comparison approach
 (9) Q Okay What is involved in the sales comparison approach?
 (10) A In its simplest form it s basically taking the subject
 (11) parcel the parcel that you re appraising and then finding
 (12) other properties that have historically sold and comparing them
 (13) to your subject property to make a determination of value
 (14) Q And that s what you did here when you were doing these
 (15) appraisals?
 (16) A That s correct
 (17) Q And first of all is there a - how do you - when you do
 (18) a comparison sale - in other words comparing getting
 (19) comparable sales or what you - what I think is called the
 (20) industry comparable sales is that a term that s used?
 (21) A Yes
 (22) Q Getting these comparable sales and comparing them to the
 (23) subject parcel do you - if they re - if they re different
 (24) sizes in other words one lot is five acres and another lot is
 (25) a hundred acres the price is usually going to be different if

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- (1) there s five acres versus a hundred acres How do you - how
 (2) do you compare that?
 (3) A Well again -
 (4) Q Everything else being the same I mean
 (5) A Yeah All things being equal - size obviously has an
 (6) impact on value - the trend is for the larger the parcel
 (7) typically the lower value you find Proper appraisal procedure
 (8) requires you to go to your market to find what the buyers and
 (9) the sellers are agreeing to for the variety of sizes of
 (10) parcels and that is in fact what I did
 (11) Q Is there - is there a method called the comparative unit
 (12) method?
 (13) A One of the - when you make your determination to use the
 (14) sales approach and then when you re dealing with vacant land
 (15) you really have two subapproaches to do that One s called the
 (16) base lot method One s called the comparative unit method
 (17) The name it sounds like something special but really all it
 (18) is is saying is the price or the value you find in your
 (19) marketplace is it dollars per acre or dollars per lot or
 (20) dollars per square foot Of course in the case of this
 (21) report I determined from the market that the comparative unit
 (22) should be dollars per acre
 (23) Q So you tried to - If you had a hundred acre lot versus a
 (24) five acre lot or something of that nature a thousand acre lot
 (25) versus a five acre lot you tried to break it down first of

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- (1) all into the - what the price was per lot - I mean per
 (2) acre excuse me
 (3) A That s correct You take your comparable sales you re
 (4) using and convert those to a per acre value for a unit for a
 (5) unit of comparison to compare
 (6) Q How would you do that?
 (7) A Simply by dividing the sales price of the property by the
 (8) acreage of the property
 (9) Q The number of acres?
 (10) A That s correct
 (11) Q Now did you find when you did this - when you did your
 (12) appraisals did you find certain factors or considerations
 (13) affected the price? In other words not - there s probably no
 (14) two pieces of property that are absolutely identical Maybe on
 (15) a desert or something but I mean there s - but is there
 (16) any - so since you have these unique - how do you how do
 (17) you - do you find that certain factors overall you had to
 (18) account for to compare one parcel to another parcel terms of
 (19) price?
 (20) A Yes I did Again I went back to the market to find what
 (21) buyers and sellers what things were affecting their decisions
 (22) to buy various parcels in the market and I found - one
 (23) effect of course that we typically see is time you know you
 (24) have to adjust for that kind of independent of what the buyers
 (25) and sellers are doing and that s taken into the market The

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- (1) size of the parcel bigger or smaller general location of the
 (2) parcel how does that location for the property that you re
 (3) looking at do people pay more or less to be in that location
 (4) The other one is the physical characteristics of the
 (5) property Is it phys cally appealing does it have you know
 (6) a nice anchorage out front is it in a pleasant setting
 (7) And the other one would be the topography And again I m
 (8) speaking in the remote market what I found to be the case and
 (9) the topography would be Is it steep Is it flat or rolling
 (10) what have you
 (11) Q And what consideration was given in terms of whether the
 (12) property was near the saltwater or further away from
 (13) saltwater?
 (14) A Well in my review process - and it s not probably any
 (15) great surprise - but it was found that obviously those
 (16) properties that were on the ocean front in the remote market
 (17) generated the highest sales price per acre And so I had to
 (18) determine what was the effect of being on the water versus not
 (19) on the water and at what point did that effect take place and
 (20) that was when I again went back to the market to find what
 (21) the buyers and sellers how they were dealing with that
 (22) Q And did you - what I ll call - draw a line between what
 (23) you called near or on ocean front and not -
 (24) A Yes I did
 (25) Q And what was that?

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- (1) A I found in the market that generally the influence from
 (2) being on the water effectively did not take place for
 (3) properties that were more than a quarter mile from the ocean
 (4) front
 (5) Q And then what did you do with the price per acre if
 (6) everything else was the same or accounted for what would the
 (7) price per acre be above that quarter mile versus coastal?
 (8) A Well my analysis indicated that for those properties that
 (9) are beyond a quarter of a mile from the ocean they would sell
 (10) on average in the remote sector in 89 for approximately 27
 (11) percent of what the ocean front properties were selling for in
 (12) that same location
 (13) Q And this is on Kodiak in Kodiak Island Borough?
 (14) A That s correct
 (15) Q Now what did you do when you were trying to determine the
 (16) comparable sales? I mean what kind of research where did
 (17) you
 (18) get the data what did you do there?
 (19) A Well I had somewhat of a difficulty because we have very
 (20) few large tracts that had sold I was dealing with what I
 (21) consider fairly small tracts to this obviously huge one on
 (22) Shuyak So I had to deal with size in that relationship
 (23) I also had to deal with the ocean value I did reflect on
 (24) other large transactions and found that generally the size
 (25) adjustment tended to have little or no effect on the per acre
 value once it got beyond 160 to 200 acres

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- (1) Q So explain that to the jury please
 (2) A Well again a lot of times you - you think if you have
 (3) let's say a five acre parcel sells for 25 - or 5 000 an acre
 (4) and then a ten sells for 4 000 and a 20 sells for 3 000 an
 (5) acre you would think that would just continue on And in
 (6) reality I found in our market generally it's influenced
 (7) statewide that that's not the case that at a point there no
 (8) longer is a size adjustment for these type properties
 (9) Q And what is that point?
 (10) A I determined it to be 160 to 200 acres
 (11) Q All right And then if you found a - I guess you call a
 (12) comparable sale that had an inferior let's say location same
 (13) area but you determined that it was inferior location or it
 (14) had an inferior topography it was steeper than let's say
 (15) than the parcel that you were evaluating for Kodiak Island
 (16) Borough or you were appraising how would you account for
 (17) that?
 (18) A If - if we found - if the property that I was placing the
 (19) value on was superior to the sale then I would add to the
 (20) value of the sale to make it comparable from that particular
 (21) item that I was adjusting for If it was - I'm sorry if it
 (22) was superior I would subtract If it was inferior I would
 (23) add And again just trying to bring it to a point where it's
 (24) more directly comparable to the property I'm looking at
 (25) Q I'm not going to go through all 13 parcels or we'll be here

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- (1) forever, but I'd like to go through just a couple to see if -
 (2) show the jury how you did this
 (3) Now I'm referring to Exhibit 906 and page 23 I'd like to
 (4) start off with the Shearwater Bay parcel just as an example
 (5) And that's shown on this board here That's right here?
 (6) A That's correct
 (7) Q That's this parcel right here?
 (8) A That would be the green area right
 (9) Q Okay I'm going to just put it down here And that looks
 (10) like it's a couple bays over from where Kodiak city is?
 (11) A That's correct
 (12) Q Okay So first of all - first of all you've got a legal
 (13) description of the property?
 (14) A That's correct
 (15) Q There's a lot of material in this report I'm just - this
 (16) is just the - this is sort of a summary sheet or summary
 (17) sheets dealing with the Shearwater Bay parcel is that a safe
 (18) statement?
 (19) A Yes that's correct That's what it's meant to be yeah
 (20) Q So first of all on the summary sheet you've got the
 (21) property description and you've got the section that's called
 (22) "access"?
 (23) A Correct
 (24) Q And then you've got the topography section?
 (25) A Correct

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- (1) Q That's this section - do this right - that section there?
 (2) A Right
 (3) Q Sort of tells the description of the property?
 (4) A Yeah It speaks to the good and the bad basically and a
 (5) short format about the subject
 (6) Q There's a lot more data that you have but this is sort of
 (7) a summary summary sheet again?
 (8) A That's correct
 (9) Q All right Now I'd like to go to the next page which is
 (10) page 24 and I'll call this the work - the summary worksheet
 (11) This is sort of a - am I correct this is sort of a summary
 (12) page of the data that you put together in doing your
 (13) comparable
 (14) A That's correct This depicts the sales I selected and the
 (15) process that I used to compare them to the subject and then my
 (16) determination of value
 (17) Q Now would you tell the jury please what the first column
 (18) is that says sale looks like a number sign there and it's got
 (19) E 1 E 2 E 3 et cetera I'll make a little - see if I can
 (20) do this here just a second
 (21) A Basic - this was runoff of the computer spread sheet and
 (22) it selected sales from the data base and the sales with the
 (23) first character mean - E meaning those were east side sales
 (24) and they're just numbered numerically from there
 (25) Q You had five comparable sales that you thought were the

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- (1) most relevant sales in your data base?
 (2) A That's correct
 (3) Q And how big was - did you have - you started out with a
 (4) data base that was more than five sales?
 (5) A Oh absolutely
 (6) Q Tell the jury about that
 (7) A Well I had to conduct a number of different studies again
 (8) when I spoke to going back to the market to find the effects of
 (9) size and time and what have you and those were conducted
 (10) islandwide using a quite a volume of sales
 (11) And then I allocated the sales based on the different
 (12) areas north south east and west. I had no subject
 (13) properties on the west side but I had a lot of sales there
 (14) that I used in order to make the determination as to what the
 (15) proper adjustments to use
 (16) Q So this particular parcel in Shearwater Bay you determined
 (17) that there were five of the sales of the many that you
 (18) reviewed that were most relevant?
 (19) A That's correct yes
 (20) Q Now what's the next column where it says "sale date"?
 (21) A That's the sale date the recording date of the
 (22) transaction
 (23) Q The recording date That's not necessarily the date that
 (24) the sale occurred but the one when it's - when they filed
 (25) the - recorded it at the - with the assessor's office or with

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- (1) the borough?
- (2) A Well with the state recorder's office
- (3) Q State recorder's office okay And then the next column
- (4) has a dollar sign per acre what does that mean?
- (5) A Again that was - my unit of comparison was dollars per
- (6) acre and so it was taking - by taking the cash equivalent
- (7) sales price of the parcel and dividing it by the acreage of the
- (8) parcel to get to the unit of comparison
- (9) Q All right Now this am I correct that this indicates that
- (10) the - for instance the first sale was apparently - the next
- (11) column is the size - size of the particular parcel that was
- (12) sold?
- (13) A It's the size of the subject that's the notation
- (14) Shearwater and then the balance are the sizes of each of those
- (15) comparables
- (16) Q So the first one E 1 which closed in 4/91 or was
- (17) recorded - recorded as 4/91 that was 4808 per acre and there
- (18) was four acres in that lot So if I wanted to get the total
- (19) purchase price I'd multiply four times 4808?
- (20) A That would get you close but a lot of these transactions
- (21) had terms and I did allow a reduction to the sales price for
- (22) owner terms on a number of the parcels but - so it may or may
- (23) not - the cash equivalent if it was a cash sale then yes
- (24) that would be correct If not then the value of the
- (25) subject - or the comparable could actually be somewhat
- higher

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- (1) Q I see you had to discount it because it was not for cash
- (2) A That's correct
- (3) Q All right But basically that's the idea there?
- (4) A Yes
- (5) Q All right And then what's the - you've got a next column
- (6) here that I'll call time - you call it I guess time - time
- (7) adjustment What does that mean?
- (8) A That's the - the adjustment that I found was the general
- (9) prevailing trend for the impact of time on real estate in the
- (10) Kodiak market
- (11) Q And then you made a - you got a column here something
- (12) about size Would you tell the jury what you mean by that?
- (13) A This is where you can see the impact of the smaller parcel
- (14) versus the larger subject parcel The factors that I'm
- (15) applying here these are ones I extracted from the market
- (16) Q For instance going back to E 1 the first one where it
- (17) says 45 what does that mean?
- (18) A That takes that dollars per acre the 4808 and then
- (19) reduces it by 55 percent because the four acre tract is so
- (20) much smaller than the subject parcel
- (21) Q In other words the four acres would sell - just if
- (22) everything else was equal would - in your review of the
- (23) market would sell for 55 percent more than the subject parcel
- (24) because the subject parcel was 139 acres?
- (25) A That's correct

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- (1) Q Price per acre?
- (2) A Per acre yes
- (3) Q And then what's the next column LOC ?
- (4) A That's location and it's location relative to the
- (5) subject As you can see sale one it's a decrement of one
- (6) sales two and three which were in Hidden Basin which was a
- (7) superior location were decrements of four and sale five
- (8) which was in the adjacent location had no adjustment for the
- (9) location
- (10) Q What does minus four mean?
- (11) A At this point the model moves to the decrements takes each
- (12) of those decrements in terms of two and a half percent So if
- (13) you had a positive one it would add two and a half percent to
- (14) the value of that acre if you had a minus one it would
- (15) subtract two and a half And it accumulates over to the right
- (16) where it says net adjustments and you can see in some cases
- (17) there's zero or no adjustment and other cases there's a large
- (18) one
- (19) Q What's the other one PHY ?
- (20) A That's the physical characteristics of the property That
- (21) speaks to just the general look and feel of it and it's
- (22) relative positive effects
- (23) Q You may - may make an adjudgment based upon that?
- (24) A That's correct E 2 and E 3 were physically superior to the
- (25) subject

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- (1) Q And so you - you lowered the - you indicated - started
- (2) out with E 2 a \$7200-per acre value and so you said if that
- (3) was - because the Shearwater site you thought was a little
- (4) less desirable than the E 2 you knocked that down - let's
- (5) see I can't remember if I'm talking about location or physical
- (6) here - but at any rate for either one of those you knocked
- (7) it down whatever those numbers are times two and a half
- (8) percent?
- (9) A That's correct
- (10) Q And then what's OF ?
- (11) A That's the ocean front whether the property is directly on
- (12) the ocean or not and there would be an adjudgment for that if
- (13) it was the case
- (14) Q These are all ocean front properties?
- (15) A That's correct
- (16) Q And what TPG ?
- (17) A That's topography again Is it fairly level or steep or
- (18) what have you
- (19) Q And what's the next one?
- (20) A The net adjustments that's where the total adjustments are
- (21) brought up If there's - you know it computes plus or minus
- (22) to get a net adjustment of either plus or minus or no change at
- (23) all
- (24) Q Okay Now you've got the net - you've got a column here
- (25) that you call net value

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- (1) A That s correct That s the net -
 (2) Q Except I didn t do that very well
 (3) A That would be the net price per acre after allowing for all
 (4) these adjustments
 (5) Q So the price per acre for each of these sites started out
 (6) at anywhere from \$3250 an acre on up to 88 - \$8 178 But
 (7) after you made these various adjustments to make them
 (8) comparable to the subject property then you got down to these
 (9) values that were about \$2 000 - 1988 to 2780 is that right?
 (10) A That s correct
 (11) Q And then what s this - what s this figure here that I m
 (12) circling this \$2300?
 (13) A That was my determination based on the sales that I was
 (14) looking at here my knowledge of them and the subject and
 (15) what have you That was my determination of what those sales
 (16) indicated a reasonable price per acre would be for the ocean
 (17) area of the subject parcel
 (18) Q All right Now down here on the - where it has the
 (19) section called conclusion you ve got ocean frontage of 2 091
 (20) feet And going back the area that you indicated I think
 (21) quarter of a mile there was 63 acres that were - what you
 (22) called ocean acres?
 (23) A That s correct
 (24) Q And so am I correct that if - to determine what the value
 (25) of that was based upon these comparables you d multiply
 those

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- (1) 63 acres times \$2300?
 (2) A That s correct
 (3) Q And then you ve got an item here called excess acres 76
 (4) acres and how would you value those acres?
 (5) A Well these are the acres then that do not have the
 (6) direct influence of the ocean under value and based on that
 (7) ratio that I d found in the market of 27 percent I took the
 (8) \$2300 which reflects the ocean acre values and times 27 to
 (9) yield non-ocean front value which is multiplied by the 76
 (10) acres
 (11) Q So this is rough and ready here - don t hold me to this
 (12) math - but 27 percent is a little over 25 percent so this
 (13) would be about for these - what you call the excess acres
 (14) this would be about - about \$800 an acre?
 (15) A That sounds about right
 (16) Q That s how you d value that?
 (17) A Correct
 (18) Q So then you would add these two you d do the two
 (19) computations and get the values?
 (20) A That and then I - the value as of is a rounding of the
 (21) total of those two
 (22) Q This here?
 (23) A To get the price right
 (24) Q So then you d - then this is the average value per acre of
 (25) all of the acreage in Shearwater?

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- (1) A That s correct That s the - again the total value
 (2) determination divided by the total acreage of the parcel to
 (3) generate the gross value per acre
 (4) Q Now I know the jury s writing - some of them are writing
 (5) all this down so this is going to be in the jury room so you
 (6) don t have to write this all down It s on the boards here
 (7) Anyhow so you started out with price per acre of the
 (8) comparables that ranged up from \$3200 up to \$8100 and you
 did
 (9) these adjustments You determined the ocean front value of
 (10) \$2300 then you reduced that down for - these non-ocean front
 (11) properties to around \$600 and you ended up with an average
 of
 (12) this whole area of all the way down to 1387?
 (13) A That s correct
 (14) Q And did you do this same format with the other parcels?
 (15) A Except for one
 (16) Q Now I d like to - I m not going to go through each of
 (17) those columns but I would like to indulge myself a little bit
 (18) maybe but take a little - just a couple minutes with the jury
 (19) on two of the parcels that I think are a little bit more
 (20) unusual and that is the - if I can find it here in just a
 (21) minute
 (22) THE COURT Counsel why don t we take a break?
 (23) MR STOLL Pardon me?
 (24) THE COURT Why don t we take a break?
 (25) MR STOLL I was just going to take five minutes

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- (1) Your Honor if I could
 (2) THE COURT All right then we ll take a break
 (3) MR STOLL That would be fine Sorry
 (4) BY MR STOLL
 (5) Q I d like to turn your attention to the Kizhuyak parcel
 (6) which is the only parcel that is not right on saltwater It
 (7) does have two streams running through it and it s - as you ve
 (8) indicated it s in this this little plane here between it and
 (9) the -
 (10) A Yeah out in front of it is the tide flats
 (11) Q Tide flats?
 (12) A Flood plane yeah
 (13) Q And I ll put this down over here This is on exhibit 1523
 (14) and I m just going to - here again you did the same thing
 (15) you did this little summary sheet? I mean there s a lot more
 (16) material in your report but I m just - and you have - I ve
 (17) loused this up but you ve got the legal description across
 (18) here and you ve got the access and again this area is by
 (19) float plane or vessel?
 (20) A That s correct
 (21) Q And then you ve got the topography?
 (22) A That s correct
 (23) Q Just like you have - and you have this reach parcel again?
 (24) A Yes
 (25) Q And then you ve got your summary sheet here and you ve
 got

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- (1) your various columns with the comparable sales sales date
 (2) price per acre the size of the acreage This one happens
 (3) -- your parcel here happens to be 1674 acres and it is
 (4) comparing these other smaller sizes so that there s a size
 (5) adjustment fairly significant size adjustment looks like And
 (6) then you have this -- this is your time adjustment column here?
 (7) A That s correct
 (8) Q And then you have these other -- I ll call them decrements
 (9) or well they re considerations?
 (10) A Adjustments
 (11) Q And you adjusted it and so you started out with these
 (12) values that were in the thousands of dollars quite a few of
 (13) them between 3200 and \$8200 and then you ended up with an
 (14) acre value here of \$2500?
 (15) A That s correct
 (16) Q Now that would be \$2500 if -- that s not for this parcel
 (17) though is it?
 (18) A No that value \$2500 would value property of like
 (19) topography and appeal in this location if it was on the
 (20) water
 (21) Q But this is not on the waterfront?
 (22) A That s correct
 (23) Q So by the time you made these adjustments then you ended
 (24) up with a value for this property of \$675?
 (25) A That s correct

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- (1) Q And so the total value as of May (sic) 23 for this entire
 (2) parcel of 1674 acres was \$1 130 000?
 (3) A That s correct
 (4) Q I got it then I just want to go to one more Oops I
 (5) went to the wrong one sorry
 (6) Shuyak and I d like to go to Shuyak because that is the
 (7) largest parcel that s owned by Kodiak Island Borough and
 (8) there s been a lot of testimony about the oiling on Shuyak and
 (9) it s up there on the north end and so on
 (10) Now this is a -- there is a summary sheet for the Shuyak
 (11) parcel?
 (12) A That s correct.
 (13) Q And again you ve got the legal description the access by
 (14) float plane or vessel and then you ve got a description of the
 (15) topography right?
 (16) A Right
 (17) Q Okay And then you ve got your worksheet go to that
 (18) Now Shuyak is at the north end of the -- of Kodiak?
 (19) A That s correct It s the northernmost island with the
 (20) exception of the Barren Islands which are to the north of
 (21) that in between Shuyak and the Kenai Peninsula
 (22) Q So in your comparisons here you had nine comparables is
 (23) that right?
 (24) A That s correct
 (25) Q And you -- you call these N* numbers because they re

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- (1) north?
 (2) A That s correct
 (3) Q And then in the next column you ve got the sale dates of
 (4) each of those or the recording dates I should say?
 (5) A That s correct
 (6) Q And then you ve got the price per acre for each of those
 (7) comparables?
 (8) A Correct
 (9) Q And those range from about \$3800 up to looks like \$8700?
 (10) A Yes
 (11) Q 8746 And then you ve got the size -- size of the acres?
 (12) A Yes
 (13) Q And then you ve got your adjustment the time adjustment
 (14) All these time adjustments are relatively minor is that
 (15) right?
 (16) A That s correct yes
 (17) Q And then you ve got the size adjustment?
 (18) A Yes
 (19) Q And incidentally on the size adjustment I notice that
 (20) now this one this first one there s no size adjustment up
 (21) here for this first one?
 (22) A That s correct
 (23) Q And that -- why is that?
 (24) A That parcel was 273 acres in size so it exceeded the point
 (25) where I found the size adjustment to effectively go away

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- (1) Q I see okay And then you made some relatively minor
 (2) adjustments for these other parcels?
 (3) A That s correct
 (4) Q And then you ended up with a net value over here?
 (5) A Yes
 (6) Q And -- something wrong here -- here we go And then you
 (7) got a value even though you started out with these prices of
 (8) 3831 up to 8746 7800 et cetera after you made all these
 (9) adjustments then you ended up with an ocean acre value of
 (10) \$3 000 for the Shuyak property?
 (11) A That would be the value of the property within a quarter
 (12) mile of the ocean on Shuyak
 (13) Q Okay And then for the -- now most of the acreage and
 (14) here s where the acreage is there s 158 000 ocean front feet
 (15) is that right?
 (16) A That s correct.
 (17) Q And but most of the acreage is actually not on the ocean?
 (18) A Is not within that quarter mile right
 (19) Q That s what I mean
 (20) A Yeah
 (21) Q And so you -- what did you value that at?
 (22) A That would have been the 27 percent factor applied to the
 (23) \$3 000 per acre
 (24) Q So that would be about \$800 an acre?
 (25) A That s 750 800 an acre correct

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- (1) Q So even though you started out with these higher figures up
 (2) here you ended up with an average for the whole parcel of only
 (3) about \$1200 an acre little over \$1200 an acre?
 (4) A That's correct.
 (5) Q And you did this same process for each of the parcels that
 (6) you appraised is that - am I correct?
 (7) A Fundamentally this process applied to all of them There
 (8) was one where I had to do some things different with the ocean
 (9) acre estimate
 (10) Q Okay we'll deal with that right after the break
 (11) THE COURT Okay
 (12) MR STOLL Thank you Your Honor
 (13) THE CLERK Please rise Court stands in recess
 (14) (Jury out at 12 18 p m)
 (15) (Recess from 12 18 p m to 12 34 p m)
 (16) (Jury in at 12 34 p m)
 (17) THE CLERK Please rise This court now resumes its
 (18) session Please be seated
 (19) BY MR STOLL.
 (20) Q Mr Carlson, I just have one last question with respect to
 (21) Shuyak Island and that is there's quite a bit of timber on
 (22) that property?
 (23) A Yes there is
 (24) Q And you didn't include anything for the timber value there?
 (25) A I did not value the property with highest and best use for

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- (1) or reasonable range of ocean front because I was dealing with
 (2) allocating this value of the ocean area so I didn't want to
 (3) overstate the area that was influenced by the ocean And I had
 (4) one parcel that had an excessive amount of ocean frontage
 (5) because it went out on a peninsula and around what was
 (6) basically an attached island right at the high - or you know
 (7) there's a beach in between them and if I'd applied the model
 (8) the way it was mathematically it would have overstated the
 (9) amount of acreage that had the ocean value and understated
 (10) the excess lands
 (11) Q What parcel is that?
 (12) A That's Hidden Basin Northwest is what I called it in the
 (13) report
 (14) Q All right Now that's on exhibit 1524 and could you
 (15) point out to the jury what you're talking about?
 (16) A You can - this is the parcel right here And as you can
 (17) see this peninsula of land sticks out so on a linear
 (18) measurement of the ocean frontage it would have said
 (19) basically the whole parcel had ocean influence It would not
 (20) have allowed for the fact that in reality the back corner of
 (21) the parcel did not
 (22) Q So what did you do to that value there? Just show the
 (23) jury
 (24) A I - by reviewing the standards I determined that
 (25) basically 25 percent of that ocean front lineal measurement was

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- (1) timberlands No I did not
 (2) Q You used it as recreational and remote residential?
 (3) A The context under which I looked at it was yes in that
 (4) format right
 (5) Q And why didn't you do it in the timber?
 (6) A I've done some analysis regarding timberlands on Afognak
 (7) Island as part of my assessment process and also reviewed
 (8) data
 (9) available to me for the Shuyak parcel And I determined that
 (10) at the time of the date of the appraisal it was very
 (11) questionable to whether or not the property would have
 (12) generated a higher value as timberlands than it would have in
 (13) this remote recreational or park lands type format.
 (14) Q Does that have to do anything with the access and the
 (15) amount of - or why is that?
 (16) A It largely has to do with the value of timber in our market
 (17) as of that date
 (18) Q As of March 23 1989?
 (19) A That's correct
 (20) Q Okay Now you said - and I didn't follow you at the time
 (21) - you said at the very end that you followed this format with
 (22) all of the parcels with the exception of one and I - I hadn't
 (23) heard that before so would you tell - tell the jury what
 (24) that - what was that one?
 (25) A Part of my study of course when we were dealing with the
 ocean front values was to determine you know what is a
 median

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- (1) overstated so I reduced the amount of acreage by 25 percent
 (2) that had ocean front value
 (3) Q So you cut the ocean frontage value by 25 percent?
 (4) A I cut the measurement but in effect that's what happened
 (5) right
 (6) Q And let me just show the jury - this will just take a
 (7) second Now this is - oops I did that wrong
 (8) This is the description of the property and you've made the
 (9) point here this is how you described - could you read that to
 (10) the jury?
 (11) A Yes States that this parcel is triangular in shape and
 (12) has an inordinate amount of ocean frontage due to the small
 (13) headland in the spit, which I pointed out so a 25 percent
 (14) reduction to the actual lineal footage of ocean front that was
 (15) computed was made to account for this area in the valuation
 (16) section So that in effect reduced the acreage of ocean
 (17) front value by 25 percent.
 (18) Q And then that was reflected in your valuation in the rest
 (19) of the format?
 (20) A That's correct
 (21) Q So it was more - if you had not done that 25 percent and
 (22) you'd just taken the total ocean frontage there and hadn't
 (23) reduced it by 25 percent then you would have had a - actually
 (24) even a higher value in your appraisal than you did?
 (25) A Oh yeah it would have been substantially higher yes

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- (1) Q Okay And could I have the Elmo on for just a minute?
- (2) Then in your report you've got - you have these - you
- (3) have maps of the various locations of the comparable sales?
- (4) A Yes I have maps of the subject properties and the
- (5) comparables that I used in there
- (6) Q So for instance - this is on Exhibit 906-M - one of the
- (7) comparables was located here and the subject property this
- (8) happens to be Shearwater was this parcel relatively nearby?
- (9) A That's correct
- (10) Q And then on Exhibit 906-J you've got several comparable
- (11) parcels here also?
- (12) A That's correct It's got two in the Hidden Basin area and
- (13) then two there at the head of Ugak Bay there
- (14) Q And - and then the Hidden Bay - excuse me Hidden Basin
- (15) is the one that we were just talking about that's up in this
- (16) area here?
- (17) A That's correct yes
- (18) Q I guess I could have done it on there Then you had
- (19) comparables for the Onion Bay parcel that's shown in
- (20) Exhibit 906-G?
- (21) A This shows the majority of them I had one other
- (22) transaction and again we're speaking of north sales I had
- (23) that large acreage transaction which is up the bay from Onion
- (24) Bay then I had one across the bay from Onion Bay
- (25) Q I see And then in Exhibit 906-E this shows a number of

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- (1) transactions comparables in Uyak Bay and near the Shelikof
- (2) Strait?
- (3) A Yes This is what I categorize as the west side sales and
- (4) this is where I had a large body of transactions in the same
- (5) relative time frame to draw from in order to make
- (6) determinations for those adjustments
- (7) Q And then you also had them in the south end you had these
- (8) other sites that were also marked in Exhibit 906?
- (9) A That's correct yes
- (10) Q Now after you did this for each of these in your
- (11) appraisal Exhibit 906 you did this for each of the parcels
- (12) just like we've described?
- (13) A That's correct
- (14) Q I show you what is Exhibit 907 and would you tell the
- (15) jury please what Exhibit 907 is?
- (16) A This was my determination of value for each of the various
- (17) parcels as of March 23rd 1989
- (18) Q And this is using the highest and best use that you
- (19) determined which was remote recreational property?
- (20) A Yes
- (21) Q And that was in fact the use that was - that property
- (22) was being used for on March 23 1989?
- (23) A That would be the case yes
- (24) MR STOLL Your Honor just so there's no question
- (25) we offer 907

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- (1) (Exhibit 907 offered)
- (2) MR OPPENHEIMER No objection
- (3) THE COURT It's admitted 907 is admitted
- (4) (Exhibit 907 received)
- (5) MR STOLL So you'll have this exhibit in the jury
- (6) room with you so you don't have to write all that
- (7) BY MR STOLL
- (8) Q Did you also do an analysis of the Kodiak Island Borough
- (9) remote property model?
- (10) A Yes I did
- (11) Q And would you tell the jury please the circumstances
- (12) under which you did that?
- (13) A I was directed to by the Mayor
- (14) Q And when did you do this?
- (15) A I believe I completed it in June of 93
- (16) Q Last - little over a year ago 14 months ago?
- (17) A That's correct
- (18) Q And tell the jury please what you did
- (19) A What - the request was that I make a determination as to
- (20) the amount of transactions that took place within the remote
- (21) market for Kodiak Island Archipelago and that was my
- (22) assignment and then of course I conducted that research
- (23) Q And tell the jury how you conducted the research What did
- (24) you do?
- (25) A I went through and I reviewed all of the parcels that are

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- (1) through - were throughout that remote area
- (2) Number one I categorized that area to be basically those
- (3) that were not on the road system adjacent to the City of
- (4) Kodiak obviously the urban areas and the villages and two
- (5) other small subsets So basically it covered all of what we
- (6) generally in the market call remote properties And I looked
- (7) at the frequency of transactions of market transactions and
- (8) transfers of property throughout that area over I believe it
- (9) was a ten year time frame
- (10) Q And did you have a - do you have files on all properties
- (11) in Kodiak?
- (12) A Yes
- (13) Q And you then tallied this?
- (14) A Well I loaded all transactions regardless of whether they
- (15) were going to be utilized in my report into a master database
- (16) and then from that I made determinations as to ones that were
- (17) direct transfers of the property and from that computed the
- (18) graph
- (19) Q All right And incidentally you have - I think you
- (20) testified to this when you did your appraisal report you have
- (21) a - a computer that you use there to keep track of all this
- (22) stuff and this isn't all just the four of you in your office
- (23) doing this all by hand?
- (24) A No we have a main frame computer system We have a
- (25) PC based local area network and we also have a digitized

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- (1) mapping system for the whole borough
 (2) Q And did you after you had assembled all this property and
 (3) you had all these - you assembled it You've got the data
 (4) already there I guess but after you reviewed this did you
 (5) then exclude certain parcels from your final compilation?
 (6) A I found that there was - during the time frame there was
 (7) 401 property recording documents
 (8) Q Transactions?
 (9) A In effect I mean if you just looked at it simply you
 (10) could make that assumption and from that I made a
 (11) determination as to ones that were in fact in my opinion
 (12) actual transactions of property
 (13) Q Now what do you mean? How did you determine that? Tell
 (14) the jury if you can the categories that you excluded from
 (15) that
 (16) A Well if you just simply looked at the volume of documents
 (17) then you would assume that there was 401 transfers but in
 (18) reality a lot of the properties were situations where maybe
 (19) there was a corporate name change maybe it was a gift maybe
 (20) it was divorce settlement A lot of cases there'd be four or
 (21) five parcels let's say that were purchased in effect in one
 (22) transaction so I had to go back through utilizing my local
 (23) knowledge my interviews with numerous folks in the market
 (24) and
 (25) all the information I had available to me to make
 (26) determinations as to the ones that fairly reflected an actual

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- (1) transaction of the property
 (2) Q And did you exclude patents and intergovernmental agency
 (3) transfers?
 (4) A I excluded from the analysis three basic types of
 (5) property One was patents or interim conveyances One was
 (6) what I call agency transfers and then the other one is what I
 (7) generically call OTE or Open To Entry lands
 (8) Q Let's take each one of those What is a patent first of
 (9) all?
 (10) A A patent - and it may come from the federal government or
 (11) from the state - is basically that initial transfer from that
 (12) government entity to basically out into the general market
 (13) Q So it's a governmental transfer or - not a governmental
 (14) transfer but a governmental - the government's transferring
 (15) it to some person or organization?
 (16) A That's correct A good example is the Old Homestead Act
 (17) the federal government would patent to that or the federal
 (18) government may patent to a city or to a Native corporation
 (19) or -
 (20) Q Why would you exclude those transfers?
 (21) A It was my opinion that those were not transactions that
 (22) they - you know did not reflect somebody coming into the
 (23) market with the intention of buying a piece of property and
 (24) then completing that transaction
 (25) Q Oh so your idea - the idea here was to report on whether

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- (1) it's actually a sale arm's length sale?
 (2) A Well it would still possibly qualify as a transaction you
 (3) know even though there may be a heavy discounted price if in
 (4) fact it represented two distinct parties purchasing a piece of
 (5) property
 (6) Q And why did you - why did you exclude the
 (7) intergovernmental - intergovernmental agency transfers?
 (8) A Again those are the - your swap in between the
 (9) department say the Bureau of Land Management to Fish &
 (10) Wildlife or those kind of transfers they do not demonstrate a
 (11) market transfer in my opinion
 (12) Q And why did you exclude the remote state land disposals?
 (13) A Well the state land disposal program the underlying
 (14) thrust of it is to get lands into the hands of individuals and
 (15) I thought it - in my opinion it better represented
 (16) effectively the patent situation Although there's numerous
 (17) restrictions the properties are typically purchased for half
 (18) or less of their market value and in some cases given to the
 (19) individuals So in that general context tended to reflect a
 (20) gift deed or a property that was gotten for little or no
 (21) outlay
 (22) Q And then why did you exclude the transfers that were gifts
 (23) or transfers where there was a name change of the corporation?
 (24) A Again those didn't demonstrate in my opinion a
 (25) transaction They just demonstrated the transfer of the

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- (1) property for bookkeeping or - or other considerations
 (2) Q And then there were two areas that under the definition of
 (3) remote you used you excluded Spruce Island and Anton
 (4) Larsen
 (5) Bay?
 (6) A That's correct
 (7) Q Why did you do that?
 (8) A It was my determination that - in a study of the remote
 (9) market that those two areas number one Anton Larsen Bay is
 (10) immediately adjacent to the road system and the City of Kodiak
 (11) and Sunny Cove is on Spruce Island which is also very close to
 (12) the City of Kodiak and right next to the village of Ouzinkie
 (13) So in my opinion those would have not reflected a true remote
 (14) market and/or frequency transactions because they tend to
 (15) have
 (16) different buyers and different uses
 (17) Q You weren't in the courtroom this morning Mr Clough
 (18) asked about the road system
 (19) Could I have the Elmo on please? Move this board
 (20) Now this is not the greatest probably in focus or anything
 (21) else but this area in red these little lines is that the
 (22) road system in Kodiak?
 (23) A Yes basically comes from the City of Kodiak and then runs
 (24) out along Chiniak Bay and runs over the hill to Anton Larsen
 (25) Bay and south to Ugak Bay
 (26) Q Up here?
 (27) A Just - yeah right That's correct

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- (1) Q Right up to there?
- (2) A Right
- (3) Q And Spruce Island is on this area right up here?
- (4) A That's the green area yes
- (5) Q So you excluded those two areas also because they were
- (6) urban - well Kodiak urban?
- (7) A It's a relative concept in Alaska but yeah they were -
- (8) they were more rural more village oriented
- (9) Q Than the remote properties?
- (10) A That's correct
- (11) Q And you - your job here was to do the number of transfers
- (12) of just the remote properties that were not on the road system?
- (13) A That's correct My report was to reflect the amount of
- (14) transfers in the remote property only sector
- (15) Q Okay And out of the 401 after you eliminated these
- (16) various categories how many did you end up with then?
- (17) A Well again you get through that analysis again of some
- (18) properties were combined because they were in a single
- (19) transaction what have you but I believe it was a hundred and
- (20) some odd parcels
- (21) Q Okay And you had all this database but beyond this -
- (22) this database that you have in the assessor's office how did
- (23) you determine when you know parties were related or whether
- (24) it was simply a corporate name change? I mean how did you
- (25) do
- (26) all this?

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- (1) A A lot of it was market research having talked to
- (2) individuals or parties to the transactions and just general
- (3) research that I'd done over the years
- (4) Q So you have a lot of personal knowledge yourself of the
- (5) market there?
- (6) A I -
- (7) Q It's not in any files or anything?
- (8) A I believe so yes
- (9) Q And could you explain what the lag is between a transaction
- (10) date and deed or recording date?
- (11) A Well a transaction date of course is where the parties
- (12) come to agreement I want to buy it you want to sell it let's
- (13) do the deal A lot of times there may be an earnest money or
- (14) some kind of formal agreement drawn up and then sometime
- (15) after
- (16) that you would have the actual closing and the recording of the
- (17) transfer of the property
- (18) Q So when you compiled your - you did a graph of this is
- (19) that correct?
- (20) A I did a graph of my work product yes
- (21) Q And when you did this did you use the transaction date?
- (22) In other words when the people had a meeting of the minds
- (23) and
- (24) entered into a binding agreement or did you use the recording
- (25) date which may be - which is obviously going to be later?
- (26) A In all cases but one I used the recording date
- (27) Q And what was that one?

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- (1) A That was what we call locally the Olinava (phonetic) sale
- (2) Q Why did you do that?
- (3) A That one was a rather protracted agreement that was
- (4) initiated in the winter of 1987 the earnest money was issued
- (5) in February of 1988 The transaction finally closed in the
- (6) fall I believe of 1989
- (7) Q Okay but there was actually an earnest money entered into
- (8) in 1988?
- (9) A In February of 88 there was earnest money agreement
- (10) substantial earnest money put down and did allow for a rather
- (11) lengthy time to complete the process of transferring the
- (12) property
- (13) Q And what did you do with that parcel?
- (14) A As I recall in the initial report I had it in the late
- (15) 88 sector and I corrected it to be February of 1988
- (16) Q But it was always in 1988?
- (17) A As I recall yes
- (18) Q And then did you put this - did you do a compilation of
- (19) this? It's Exhibit 2901 A is that your graph?
- (20) A Yes it is
- (21) Q Okay And what does this graph depict?
- (22) A This graph depicts both on a quarterly basis and then a
- (23) total by year of the amount of transactions of remote property
- (24) within the Kodiak Island Borough from 1980 to 1992
- (25) Q And could you come down off the witness stand there

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- (1) please Mr Carlson? You can just use the end of my pen here
- (2) What is the - first of all what is - the light purple or
- (3) blue what does that indicate?
- (4) A These are the actual quarters of transactions You can see
- (5) in - like in this year here there was only one transaction
- (6) and so one for the total And then the darker color of
- (7) course is the total for the whole year
- (8) Q Okay And then these are - and then - so these are the
- (9) darker columns here those are the annual ones?
- (10) A Yes sir
- (11) Q And these are the transactions the number of actual
- (12) transactions that - of these remote properties per - per
- (13) year?
- (14) A Correct
- (15) Q And then in 1988 that was when you got the high number
- (16) there?
- (17) A That's correct that was a record year
- (18) Q Okay And then you've got this little flag there looks
- (19) like a flag EVOS and what does that stand for?
- (20) A Well this depicts that at the end of this first quarter in
- (21) 1989 so it would be at the end after these sales had taken
- (22) place was the wreck and subsequent oil spill of the Exxon
- (23) Valdez
- (24) Q And then did you also do a depiction of a graph of what
- (25) happened with the sales of remote property by acreage in
- (26) other

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- (1) words not just the transactions but the number of acres that
 (2) were transferred?
 (3) A Yes I did
 (4) Q Okay is that shown on Exhibit 2903 A?
 (5) A Yes it is
 (6) Q And tell the jury please what that is
 (7) A Again this covers a time span of January 85 to the end of
 (8) the year 92 and it reflects the acreage of transaction the
 (9) surface estate and again this is not - this excludes
 (10) property - we have tide land surveys they call them that are
 (11) underwater This is dry land sales for each quarter and total
 (12) for the year
 (13) Q And the EVOS flag there is the same thing?
 (14) A This corresponds to the other graph yes
 (15) Q Okay Now in both of these graphs - whether it's by
 (16) acres or by transactions - then the sales have somewhat
 (17) dropped off since the oil spill?
 (18) A Yes that's correct.
 (19) Q Now was there any other event of any significance that you
 (20) recall that happened on Kodiak Island or affected Kodiak Island
 (21) other than the oiling from the Exxon Valdez - you know since
 (22) 1988 other than the oiling by the Exxon Valdez spill?
 (23) A The only significant market event in 1989 was the oil
 (24) spill and the closing of the commercial fishery
 (25) Q Now you can resume the witness stand please Thank you

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- (1) Now there was some statements by counsel about a - some
 (2) sales of some property in Onion Bay some suggestion that
 there
 (3) was no evidence of any market disruption after the oil spill
 (4) because of some sales of land in Onion Bay Was there at
 some
 (5) point in time a - was there a sale of - there was I think
 (6) some statement about there being a sale and the sale occurred
 (7) in five minutes and that all the property was sold This
 (8) would have been in 1990 Do you recall -
 (9) MR OPPENHEIMER Your Honor I have no desire to put
 (10) on any testimony but the leading questions I think are
 (11) getting a bit long I'm not sure that was actually the
 (12) testimony
 (13) THE COURT I understand the meaning of leading
 (14) questions counsel
 (15) MR STOLL Just a minute Your Honor I'll have the
 (16) document Here we go
 (17) BY MR STOLL
 (18) Q Was there a sale in 1990 of some property by Kodiak Island
 (19) Borough in Onion Bay?
 (20) A In November of 1990 correct.
 (21) Q And - and when was the sale - did this sale happen in
 (22) five minutes first of all?
 (23) A Well I - that - no I guess would be my answer
 (24) Q Tell the circumstances of the sale
 (25) A Well the - it was like our typical land sales that we

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- (1) carry out We conduct appraisal of the property those are
 (2) transferred to the resource manager he builds a packet a
 (3) sales packet -
 (4) Q Speak up a little bit
 (5) A I'm sorry And he goes through a rather lengthy marketing
 (6) period to go ahead and make sure that everybody's aware of
 the
 (7) fact that these properties are available and it depends on the
 (8) format that the governing body chooses In this particular
 (9) instance it's what we called a sealed bid So parties that are
 (10) interested in the property come in with a bid in an envelope
 (11) and a bid form submit that and then at some date they go
 (12) ahead and open the bids and see what people are wanting to
 pay
 (13) and then the highest bidder of course acquires the property
 (14) Q Now over the years Kodiak Island Borough has auctioned
 (15) off a number of its properties isn't that correct?
 (16) A That's correct yes
 (17) Q And prior to 1990 did - excuse me prior to 1988 did -
 (18) were they able to sell those properties? Did they have any
 (19) unusual difficulties in selling in reviewing the records
 (20) any - any unusual difficulties in selling the properties at
 (21) auction?
 (22) A Not that I recall or have observed no
 (23) Q And in fact in all cases when they have an auction would
 (24) they have a minimum price or did they ever have a minimum
 (25) price set?

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- (1) A Oh yeah We always as I recall have a minimum bid
 (2) price correct
 (3) Q And prior to 1989 did the properties sell for more than
 (4) the minimum price significantly more or do you have any feel
 (5) for that?
 (6) A Well the - the problem was the format changed over the
 (7) years and the - in the outcry auction especially in some of
 (8) the sales there was quite an outpouring and you know
 (9) obviously the price got increased
 (10) Q Driven up?
 (11) A You bet
 (12) Q So what happened with the price? Did the price go
 (13) significantly more than the minimum price?
 (14) A Yes as I recall that's the case
 (15) Q Now so these five parcels in 1990 that were sold at
 (16) auction I guess they opened the envelopes in five minutes but
 (17) the - when they opened these how many of these five parcels
 (18) how many had bids on them actually?
 (19) A Four
 (20) Q Four of the parcels And how many bids were there for the
 (21) four parcels?
 (22) A Five
 (23) Q And then do you recall if - how much - did the prices -
 (24) were the bids significantly over the minimum price?
 (25) A Not in my opinion no

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- (1) Q And did you have other or attempt to have other - let me
 (2) back up for a second Let s go over those first five
 (3) Was - were these - did the bidders on these parcels have
 (4) any particular interest in buying these parcels?
 (5) A Yes some of them did
 (6) Q Okay And would you tell the jury please what those
 (7) were?
 (8) A Two of the - or the buyers for three of the parcels were
 (9) parties that had setnet cabins and we call them squatter
 (10) cabins Basically they re under short term permit to use the
 (11) property and if they didn t purchase the property they were
 (12) going to have to leave The agreements were up the date of the
 (13) auction and they ended up buying three of the five total lots
 (14) Q So if they - those people hadn t bought it then they d
 (15) have to have the expense of removing those - or destroying
 (16) those improvements?
 (17) A That s correct
 (18) Q And did you also in 1990 try to sell some other parcels?
 (19) A That land sale was a fairly large one correct
 (20) Q Okay And in the course of that land sale were you able
 (21) to sell all of the parcels?
 (22) A No The whole land sale was somewhat lukewarm in my
 (23) opinion
 (24) Q And is that called Land Sale Number 11?
 (25) A Yes it is

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- (1) Q Could I have the Elmo please?
 (2) Is that shown - is that shown on this document which is
 (3) Exhibit DX15223?
 (4) A Yes it is This is the results
 (5) Q Before this sale occurred did you put out a brochure on
 (6) the sale on the various parcels?
 (7) A Yes We have a bid packet we call it which has all the
 (8) directions and maps and everything that somebody would need
 (9) to go ahead and look into purchasing one of these
 (10) Q Okay And of these - wrong button here - how many of
 (11) these parcels had no - no bids at all?
 (12) A At the opening of the auction?
 (13) Q Yes
 (14) A It would include all of the ones that says 'no bids' and
 (15) it would also include the parcels that have the subsequent
 (16) buyer s name in capital letters
 (17) Q Why does it say 'no bid' over on the other -
 (18) A It didn t get a bid at the auction and it didn t get a bid
 (19) or over the counter we call it after the auction
 (20) Q So it just went unsold altogether?
 (21) A Correct
 (22) Q Was that - comparing that to the pre-1989 period was that
 (23) unusual?
 (24) A Yes It was not a tremendous response in my opinion
 (25) based on what I d seen historically

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- (1) Q And in terms of the prices that were - these parcels sold
 (2) for did these - I guess it s indicated here these - the
 (3) range that these sold for versus the minimum acceptable bid in
 (4) other words whether they were at the bid price or much over
 (5) the bid price?
 (6) A Correct The price paid of course would be the highest
 (7) of any of the values that you d see here
 (8) Q With one exception were any of these significantly over
 (9) the bid price or at all over the bid price?
 (10) A None of the remote or Chiniak lots were and village lots
 (11) were really much if any more than the bid price
 (12) Q And there s one - there s one that was - is significant
 (13) you know look like a significant - significantly over the
 (14) minimum bid price What s the explanation of that one?
 (15) A That one in Miller Point was a residential property The
 (16) gentleman that bought it was the former owner that had been
 (17) foreclosed on for nonpayment and he did have the money for the
 (18) down payment We did subsequently have to foreclose on that
 (19) one again The balance of those bids were parties in the
 (20) market that were looking to buy it and they were fairly -
 (21) reasonably close to the bid price low bid price but in the
 (22) ballpark
 (23) Q On the one the foreclosed property was the minimum price
 (24) there just the balance of the mortgage?
 (25) A No we had - we had foreclosed on this property and the

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- (1) gentleman was trying to buy it - he bought it again
 (2) Q Oh I see okay
 (3) Now did you also do a study of prices comparison of
 (4) prices of some similar property before and after the Exxon
 (5) Valdez oil spill that - some property that was sold by
 (6) Trillium Ayakulik?
 (7) A Yes I conducted reviews in that regard
 (8) MR OPPENHEIMER Your Honor may we approach the
 (9) bench?
 (10) (At side bar on the Record)
 (11) MR OPPENHEIMER Your Honor I m not sure where this
 (12) is headed but we should bear in mind that this is not a
 (13) designated expert We have no opinion or report or anything by
 (14) his studies I m not sure whether counsel just misspoke Is
 (15) this the value work he did in his appraisal or is this a
 (16) separate study?
 (17) MR STOLL No this is not - this is not a study
 (18) This is simply a report of what some properties sold for that
 (19) were in - sold by the same partnership
 (20) THE COURT What same partnership? A private -
 (21) MR STOLL It was a private partnership just
 (22) reporting what the prices were for their properties Prices
 (23) went down
 (24) MR OPPENHEIMER Your Honor its seems to me what
 (25) we ve got is an expert report on the prices after the oil

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- (1) spill
 (2) THE COURT I can't hear you
 (3) MR OPPENHEIMER Seems what we have is an expert
 (4) report on price reductions after the oil spill He's not -
 (5) THE COURT With no opinion
 (6) MR OPPENHEIMER Yeah We haven't -
 (7) THE COURT That's what we have had all through this
 (8) MR OPPENHEIMER And I thought I have been very
 (9) patient
 (10) THE COURT You can be patient a little longer can't
 (11) you?
 (12) MR OPPENHEIMER I can if - unless in fact what
 (13) we're going to get is an expert opinion of price drop
 (14) MR STOLL Expert opinion? He's just going to say
 (15) what the price was
 (16) THE COURT He's going to say \$50 and next it was 25
 (17) right?
 (18) MR STOLL Right
 (19) THE COURT So that's acceptable right?
 (20) MR OPPENHEIMER Well except that he has
 (21) previously - he has previously been asked about any such work
 (22) and he hasn't done any I don't know what - it sounds to me
 (23) like there's a significant -
 (24) THE COURT What?
 (25) MR OPPENHEIMER - effort that was postponed till

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- (1) trial
 (2) THE COURT I knew that was going to arise sooner or
 (3) later Why did I know that this wasn't going to come as a
 (4) surprise to me?
 (5) MR OPPENHEIMER I didn't think it would surprise
 (6) you
 (7) THE COURT I think I'm going to allow it
 (8) MR STOLL I'm sorry what happened?
 (9) THE COURT Nothing never mind
 (10) (Sidebar concluded)
 (11) B MR STOLL
 (12) Q Okay we were - I'd just asked did you have - did you
 (13) value - did you review some sales by Trillium Ayakulik?
 (14) A Yeah Of course part of my appraisal process my
 (15) assessment function I've worked with all these sales in the
 (16) remote areas over the years
 (17) Q Okay And what - what did you find with respect to the
 (18) sales of - find with respect to the sales of the - where is a
 (19) Trillium Ayakulik properties pre-1989 sales?
 (20) A Well I mean generally their holdings are on the west side
 (21) and south end of Kodiak Island The four that are used in my
 (22) report are also the ones that generated this comparison
 (23) Q I see And what - what did you find with respect to these
 (24) sales?
 (25) A What I found was I have two transactions that they had at

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- (1) Deadman's Bay They're called - I believe this is the south
 (2) side transactions S 1 2 3 and 4 And two parcels that -
 (3) of generally light topography everything was pretty much the
 (4) same They were both being purchased by recreational users
 (5) and they sold in summer of '88 for \$6500 an acre on average
 (6) and yet the next day over Portage Bay which is basically the
 (7) same as far as physical and access and what have you I had
 (8) two sales one to the Park Service for inclusion back into the
 (9) refuge and the other one was to a private party for
 (10) recreational purposes and those both sold for virtually the
 (11) same price per acre or \$5 000 an acre which generated roughly
 (12) a 23 percent decrease in the per acre value of those properties
 (13) from the summer of '88 to the summer of '89
 (14) Q The latter sales were in the summer of '89?
 (15) A That's correct summer/fall
 (16) Q Now the last question I've got is After the oil spill you
 (17) did not decrease did you the assessed values of property on
 (18) Kodiak Island Borough?
 (19) A The assessed value in what category
 (20) Q I'm sorry of the remote properties?
 (21) A For remote no I did not
 (22) Q And would you tell the jury when there's a contamination or
 (23) something like that of oil can decrease it is theoretically
 (24) possible to decrease the assessed values Isn't that right?
 (25) A We - we can allow for environmental pollution site

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- (1) specific that's correct
 (2) Q Now why didn't you decrease the assessed values of remote
 (3) properties of Kodiak Island Borough?
 (4) A Well number one the - at the time of the spill the
 (5) assessment notices the assessment function was already
 (6) locked
 (7) down Valuation date of course is as of January 1st of that
 (8) year so it would not - spill impacts wouldn't be reflected
 (9) until the following year
 (10) Q As far as the assessments are concerned?
 (11) A Correct
 (12) Q Go ahead
 (13) A And the other issue was the fact that in general I found
 (14) the remote properties were assessed somewhere on the order
 (15) of
 (16) 50 percent of the market value
 (17) Q 50 percent?
 (18) A That's correct
 (19) Q And did you ever reassess or reappraise these properties?
 (20) A Yes I did
 (21) Q And when did you do that?
 (22) A Tax years '91 '2 and '3
 (23) Q And then did you bring those back into market value at that
 (24) time?
 (25) A As I recall yes that whole area showed approximately a
 (26) doubling of value during the reappraisal process
 (27) Q When was the last time - was the last time this had been

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- (1) appraised before you became assessor?
- (2) A Yes
- (3) Q Did you have any - in your records do you have any
- (4) indication when that had occurred?
- (5) A It - it seems there was some partial phased reappraisal
- (6) activities in 83 There may have been some physical reviews
- (7) in the late 70s speaking to the general full go out and
- (8) visit the property type reappraisal that I m conducted I m
- (9) really not certain when that was
- (10) MR STOLL That s all I have
- (11) THE COURT Okay I ll let the jury go for the day
- (12) all right? Actually what I d like to do counsel is send them
- (13) out for a minute and check with you see what remains of your
- (14) case counsel for the plaintiffs and try to get some estimate
- (15) because I m sure the jury is dying to know when this case will
- (16) be submitted to them So if you ll go out into the pit there
- (17) bring you right back in
- (18) (Jury out at 1 21 p m)
- (19) THE COURT How many more witnesses do we have for the
- (20) plaintiffs?
- (21) MR STOLL Your Honor we have one more witness for
- (22) Kodiak Island Borough after this after Mr Carlson and I
- (23) believe there s one other witness and then we - for all the
- (24) plaintiffs and then we have some admissions that we need to
- (25) read in I mean that s not going to take any time but we just

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- (1) have two more witnesses
- (2) THE COURT Tell me about the Kodiak Island Borough
- (3) witness How long will that witness take
- (4) MR STOLL The direct examination of that witness
- (5) will probably take between an hour and hour and a half
- (6) THE COURT And the - and the Native corporation
- (7) witness
- (8) MR FORTIER About an hour and a half Your Honor
- (9) MR STOLL It s not just a Native corporation
- (10) witness Your Honor
- (11) MR FORTIER It s everybody s
- (12) THE COURT Oh okay About how long?
- (13) MR FORTIER About an hour and a half
- (14) THE COURT So I should tell them probably that the
- (15) case will - that the plaintiffs case will rest on Monday
- (16) right?
- (17) MR STOLL I don t know how long they re going to
- (18) cross
- (19) THE COURT We know that this case is not - you re
- (20) not going to rest tomorrow don t we counsel? So I ll tell
- (21) them my estimate is that it will rest the plaintiffs case
- (22) will rest on Monday
- (23) I want to give them an estimate of the defense case
- (24) counsel Is it two to three weeks?
- (25) MR DIAMOND I think realistically you should tell

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- (1) them four weeks
- (2) THE COURT Well why should we - are you serious
- (3) counsel four weeks?
- (4) MR DIAMOND As I pencil it out we should be able to
- (5) do it in just under three weeks but things - things have not
- (6) moved as fast as anybody has anticipated and I m trying to be
- (7) realistic and if you - if you tell them three weeks I don t
- (8) know that we can deliver on that promise We certainly would
- (9) like to do it in that time frame
- (10) THE COURT All right I ll get them back in here
- (11) (Jury in at 1 23 p m)
- (12) THE COURT Let me tell you the estimate that I have
- (13) of this case This is not necessarily the estimate that the
- (14) parties have given me but it s an estimate based on what I
- (15) think this case - the remainder of the time this case should
- (16) take take up
- (17) First there are two more plaintiffs witnesses all the
- (18) plaintiffs - for all the plaintiffs so it s my expectation
- (19) that the plaintiffs case will rest meaning they ll - they ll
- (20) have concluded their evidence and their case-in-chief on
- (21) Monday I m hoping at that point that - that I will be able
- (22) to get through legal matters and - and that the defense case
- (23) will start the next day
- (24) The defense case it s hard for me to estimate it I know
- (25) what I think it should take and I know what - what the

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- (1) evidence so far has how much time the evidence so far has
- (2) consumed So if I were to estimate this case I would say it
- (3) should be another two maybe three weeks All right so now
- (4) we
- (5) put in the inflation factor because - because the parties
- (6) frequently have different expectations of what - what times
- (7) they need and their examinations take a lot longer than even
- (8) they think they re going to take so maybe this case will last
- (9) another four weeks
- (10) That puts us into September Some of you have some serious
- (11) problems here One of you has - has to go for at least a week
- (12) on the 16th I m going to have to read the situation as it
- (13) exists sometime around the 16th to determine whether or not
- (14) given the way the parties are presenting their cases either
- (15) take a recess for a week so that I can have all the jurors at
- (16) the end of this case or press on and let the - the one person
- (17) who has a definite appointment go for that week That s -
- (18) that s all dependent on whether or not I can get 12 jurors at
- (19) the end of this case
- (20) So my - this is - those are my estimates The worst case
- (21) scenario in terms of time is that this could take as much as a
- (22) month The best case scenario is sometime between two and
- (23) three weeks I m going to be doing everything I can to make
- (24) sure it s two to three weeks At least I can assure you of
- (25) that
- (26) So with that bad news and the good news I ll let you go

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- (1) for the day Remember don't talk to anybody about this case
 (2) and don't form or express any opinion on it until it's
 (3) submitted to you for deliberation We'll see you tomorrow
 (4) (Jury out at 1:27 p.m.)
 (5) THE COURT Okay counsel Now it's 1:30 Do you
 (6) have anything to take up on the record - not the legal matter
 (7) that we're - that is going to be argued this afternoon but
 (8) anything else?
 (9) MR FORTIER There's a couple of other matters Your
 (10) Honor
 (11) MR STOLL Excuse me Sam for just a second I want
 (12) to get my exhibits in if I can
 (13) THE COURT Yes go ahead
 (14) MR STOLL I'd like to offer 2902 A and 2903-A and
 (15) I'd like to offer - I already offered 907 - and I'd like to
 (16) offer his report 906 at least the worksheets from it
 (17) (Exhibits 2902 A 2903-A and 906 offered)
 (18) MR OPPENHEIMER I have no objection to those if we
 (19) limit 906 to the worksheets I would object, but I don't think
 (20) you're going to press it I don't think the whole appraiser
 (21) report is going back to the jury and I think there are good
 (22) grounds for not doing that And the worksheets themselves
 (23) are okay and we did it for Dr Mundy - Mr Mundy and Dr
 (24) Green If that's acceptable I have no problem with that
 (25) THE COURT Is that acceptable?

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- (1) MR STOLL That's fine And I'd like to - maps I
 (2) referred to on the Elmo
 (3) MR OPPENHEIMER I don't have any objection to that
 (4) MR STOLL We'll put a packet together
 (5) THE COURT Fine when you give it to the clerk that
 (6) will be the exhibit that's in If there's controversy you
 (7) have to bring it to my attention and otherwise I will submit
 (8) it as stated
 (9) (Exhibits 2902 A 2903-A and 906 received)
 (10) MR OPPENHEIMER We will join the submittal list
 (11) THE COURT Excuse me?
 (12) MR OPPENHEIMER We will join the submittal list
 (13) THE COURT Anything else about exhibits or anything
 (14) like that?
 (15) All right Mr Fortier
 (16) MR FORTIER Thank you, Your Honor There's a few
 (17) points I guess
 (18) One of them is on the archaeological exhibits There was
 (19) some discussion yesterday about some pictures 1296 I think
 (20) presented a problem exhibit 1296 questions whether or not the
 (21) matter had been discussed as part of the transcript I got a
 (22) partial transcript out Your Honor if I could show it to you
 (23) It's for July 27th of '94 and actually Your Honor it's on the
 (24) second page that there is a discussion concerning 1295 and
 (25) 1296 I'm sorry volume 24 pages 3708 and 3709

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- (1) 1296 was part of the record and the question presented in
 (2) 1296 was whether or not there'd been an adequate foundation
 (3) laid The only part of the transcript that I -
 (4) MR DIAMOND Where are you talking about?
 (5) MR FORTIER Right there 3709
 (6) MR DIAMOND These we discussed yesterday I showed
 (7) them to you and this was the molehill that we were not going to
 (8) make into a mountain so I think those are not in dispute
 (9) THE COURT Now that was a good note counsel I'm
 (10) optimistic for the future
 (11) MR FORTIER Your Honor I think inadvertently read
 (12) into the record there were some omissions when exhibit 1295
 (13) was read into the record as well We had introduced as part
 (14) of 1295 1295-2 which didn't make it into the record 1295-6
 (15) which didn't make it into the record and 1295-7 which didn't
 (16) make it into the record yesterday
 (17) (Exhibits 1295-2 1295-6 and 129507 offered)
 (18) THE COURT They're admitted
 (19) (Exhibit 1295-2 1295-6 and 1295-7 received)
 (20) MR DIAMOND May I take a look at those? I read from
 (21) Mr Fortier's list
 (22) THE COURT Sure that's fine
 (23) MR DIAMOND I will bring it to your attention
 (24) tomorrow if there's any problems with those three pages
 (25) MR FORTIER In addition to that Your Honor there

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- (1) was a question presented For the record yesterday were
 some
 (2) photographs 1288-57 58 and -59 Mr Diamond agreed that
 (3) those came in We had also presented as part of the record
 (4) 1288 in general I'd made a reference in the same excerpt that
 (5) I gave you at line - I'm sorry page 3707 line 19 and above
 (6) that at lines 13 to 16 to some of the 1288 exhibits -57 58
 (7) and -59 I - my point now is that I would like to move for
 (8) all of 1288 to be included It was discussed throughout
 (9) Dr Johnson's testimony Mr Diamond admitted that he may
 have
 (10) had his shortcoming during Dr Johnson's testimony in that he
 (11) may have not identified specifically all of the exhibits he
 (12) used and he applauded me for having done so Your Honor I
 (13) don't think that I did I think that there were some exhibits
 (14) in here that didn't - were not actually announced as exhibit
 (15) numbers when Dr Johnson was looking at them
 (16) (Exhibit 1288 offered)
 (17) MR DIAMOND I've - I've combed the record quite
 (18) carefully These are the only three that I believe were
 (19) identified either by number or by name The reason I'm sure
 (20) about that is because among the photographs that Mr Fortier
 (21) wants to get into evidence are the dem bones photographs
 (22) They are photographs of piles of remains which I would have at
 (23) least cross-examined over had they been identified because
 (24) they're not human remains
 (25) THE COURT All right So -

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- (1) MR DIAMOND There s no reference to any others
- (2) THE COURT 57 58 and 59 are the ones you say were
- (3) specifcally questioned about?
- (4) MR DIAMOND 57 58 59 I had no objection to
- (5) yesterday or today
- (6) THE COURT You have objection to the others?
- (7) MR DIAMOND Right
- (8) THE COURT The objection is sustained unless I see
- (9) some indication in the record that the others were discussed
- (10) MR FORTIER Okay Your Honor I thought I copied
- (11) the page but - there was at least a reference to 1288 2 by
- (12) Mr Diamond I'll bring that tomorrow 1288 2 the dem bones
- (13) ones but another matter I suppose Your Honor -
- (14) THE COURT What about 1296 counsel? What s the
- (15) status according to you?
- (16) MR FORTIER My understanding is it s admitted
- (17) THE COURT That s what I thought too
- (18) MR FORTIER The issue yesterday was for me to
- (19) overcome the molehill
- (20) THE COURT Yeah that s what I thought 1296 is
- (21) admitted
- (22) MR DIAMOND Is admitted
- (23) THE COURT Yeah that s what I thought too
- (24) MR FORTIER The next matter is Your Honor I guess
- (25) today you wanted to take up the summary charts again You
- were

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- (1) going to give us through today to file an opposition to
- (2) Mr Diamond s motion with regard to keeping them out We ve -
- (3) we can file the opposition today
- (4) THE COURT Fine
- (5) MR FORTIER Mr McCallion is here on the matter
- (6) THE COURT I m not going to hear it if you re going
- (7) to file something
- (8) MR FORTIER Oh okay
- (9) THE COURT Now anything else besides the legal issue
- (10) that I ve poured over in great detail
- (11) MR CLOUGH I have a technical issue you haven t
- (12) poured over at all but I ve been advised to clarify the status
- (13) of some exhibits and when Mr Stoll moved in the four Kodiak
- (14) photos yesterday I think everybody agrees he properly read
- (15) the
- (15) numbers but one number was mistranscribed and I ve been
- (16) told
- (16) it s best if it s corrected
- (17) He read in exhibit 1231 - excuse me he said I believe
- (18) exhibit 1031 which was the photographs City of Kodiak which
- (19) we had no objection to Somehow in the transcript it came out
- (20) 1231 and I ve been asked to make that correction on the
- (21) record if you have no objection
- (22) MR STOLL No objection
- (23) THE COURT Okay that s fine the correction is
- (24) made
- (25) Counsel on the legal issue unfortunately every once in a

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- (1) while personal considerations intrude and I d love to hear you
- (2) argue right now but I can t I have to take at least a half
- (3) an hour off today and then I have a calendar call at 2 00 and
- (4) a calendar call at 2 30 so I want you to come back here at
- (5) 3 30 and we ll discuss that issue
- (6) MR STOLL All right Thank you
- (7) THE CLERK Please rise This court stands in
- (8) recess
- (9) (Recessed at 1 35 p m)

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- (1) I N D E X
- (2) CROSS EXAMINATION OF JEROME M SELBY
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- (3) BY MR CLOUGH 4518
- (5) REDIRECT EXAMINATION OF JEROME M SELBY
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- (6) BY MR STOLL 4574
- (8) RECROSS-EXAMINATION OF JEROME M SELBY
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- (9) BY MR CLOUGH 4588
- (11) FURTHER REDIRECT EXAMINATION OF JEROME M
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- (12) BY MR STOLL 4593
- (14) DIRECT EXAMINATION OF PATRICK S CARLSON
4600
- (15) BY MR STOLL 4600

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- (1) EXHIBITS
- (2) DX3938 DX3944 DX15808 DX16245 DX16248 DX16262
- (3) DX16255 DX16256 DX16267 DX16268 DX15488 and PX1519
- (4) offered 4596
- (5) 907 offered 4646
- (6) 2902 A 2903-A and 906 offered 4672
- (7) 1295-2 1295-6 and 129507 offered 4674
- (8) 1288 offered 4675
- (10) DX3938 DX3944 DX15808 DX16245 DX16248 DX16262
- (11) DX16255 DX16256 DX16267 DX16268 DX15488 and PX1519
- (12) received 4598
- (13) 915 received 4599
- (14) 16198 received 4600
- (15) 907 received 4646
- (16) 2902 A 2903 A and 906 received 4673
- (17) 1295-2 1295-6 and 1295-7 received 4674

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- (1) STATE OF ALASKA)
- (2) Reporter's Certificate
- (3) DISTRICT OF ALASKA)
- (6) I Joy S Brauer RPR a Registered Professional
- (7) Reporter and Notary Public
- (8) DO HERBY CERTIFY
- (9) That the foregoing transcript contains a true and
- (10) accurate transcription of my shorthand notes of all requested
- (11) matters held in the foregoing captioned case
- (12) Further that the transcript was prepared by me
- (13) or under my direction
- (14) DATED this day
- (15) of 1994
- (21) JOY S BRAUER RPR
- Notary Public for Alaska
- (22) My Commission Expires 5-10-87

Look-See Concordance Report

UNIQUE WORDS 2,493
TOTAL OCCURRENCES
10,703
NOISE WORDS 385
TOTAL WORDS IN FILE
33,640

SINGLE FILE CONCORDANCE**CASE SENSITIVE****NOISE WORD LIST(S)
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- (1) IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (2) THIRD JUDICIAL DISTRICT
 (4) In re) Case No 3AN 89 2533 Civil
) Anchorage Alaska
 (5) The EXXON VALDEZ) Friday August 5 1994
) 8 52 a m
 (6))
 (8) VOLUME 30 Pages 4682 through 4851
 (10) TRANSCRIPT OF PROCEEDINGS (Continued)
 (11) TRIAL BY JURY
 (13) BEFORE THE HONORABLE BRIAN C. SHORTELL
 Superior Court Judge
 (16) APPEARANCES
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- (1) PROCEEDINGS
 (2) (Jury In at 8 52 a m)
 (3) (Call to Order of the Court)
 (4) THE COURT Where are we counsel?
 (5) MR. OPPENHEIMER I believe Mr. Carlson is about ready
 (6) to take the stand
 (7) THE COURT Go ahead
 (8) CROSS EXAMINATION OF PATRICK S. CARLSON
 (9) BY MR. OPPENHEIMER
 (10) Q Mr. Carlson good morning We've met before in Kodiak
 (11) have we not?
 (12) A Numerous times
 (13) Q Good to see you again We ended yesterday with a
 (14) discussion of the Onion Bay sale You recall that that's sale
 (15) Number 11?
 (16) A Yes I do
 (17) Q And that was a sale that took place in November of 1990 Is
 (18) that right?
 (19) A That is correct yes
 (20) Q Okay Now in fact you had a - you had a role to play in
 (21) having - in bringing that sale on Is that right?
 (22) A Yes I did
 (23) Q And in point of fact that sale and the results of that
 (24) sale tend to show that you're pretty good at appraising market
 (25) value doesn't it?

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- (1) A That may be the case yes
 (2) Q Let's talk about it Let's put up the sheet that Mr. Stoll
 (3) had up yesterday which is the results of the bid Now at the
 (4) moment I just want to have the jury get a view of that This
 (5) is Exhibit DX15223 And you can see that there on your screen?
 (6) A Yes I can
 (7) Q Now let's talk a little bit about this notion that the
 (8) purchase prices were a little bit above the minimum asking
 (9) price for the lots That's - that is certainly the case for
 (10) all of the Onion Bay lots, is that correct?
 (11) A No that's not
 (12) Q I'm sorry which one do you have in mind that's - is one
 (13) of them equal to the asking price?
 (14) A I believe - I can't see this very good If we could zoom
 (15) Onion Bay
 (16) Q Maybe I can do that
 (17) A Yeah If you note - thank you - lot five the appraisal
 (18) was 35 000 It sold for 35 000
 (19) Q And sold for 35 000 right Now let's - let's just talk a
 (20) little bit about how these sales work In fact let's let the
 (21) jury see where these sales took place Do you recognize this
 (22) as a map of Kodiak?
 (23) A Yes I do
 (24) Q Okay I'm a little out of practice with this
 (25) Mr. Carlson can you see that? Have I got it so you can see

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- (1) it?
- (2) A Yes I can
- (3) Q Now the Onion Bay sales - correct me if I'm wrong - they
- (4) took place up here is that correct?
- (5) A That's correct
- (6) Q And this is Raspberry Island?
- (7) A Yes it is
- (8) Q And I'm sorry what is the strait between Raspberry Island
- (9) and Kodiak Island?
- (10) A That would be Kupreanof
- (11) Q Okay this is Kupreanof okay Now the borough has had
- (12) land sales before land sale 11 - I assume land sale 11
- (13) followed one two three through ten?
- (14) A That's correct yeah
- (15) Q And you mentioned yesterday that your sense was that this
- (16) sale which occurred in November of '90 was a bit of a
- (17) lukewarm sale in your judgment?
- (18) A That's correct
- (19) Q You arrived at the borough on what February 15th '89?
- (20) A That's correct
- (21) Q So you weren't actually in the borough you didn't have the
- (22) function you have now for the earlier land sales?
- (23) A That's correct
- (24) Q And then land sale 11 was the first land sale you were
- (25) involved in?

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- (1) A For the borough that's correct
- (2) Q For the borough that's correct Previously you were in
- (3) Fairbanks but just for the Kodiak Island Borough, land sale 11
- (4) was the first one?
- (5) A Right
- (6) Q But you are aware that in prior sales the sales of land
- (7) were conducted through what was called an outcry auction at
- (8) least some of them were?
- (9) A That's correct
- (10) Q And those were at least discontinued, that process was
- (11) discontinued for land sale 11 is that correct?
- (12) A I'm not certain what - if there were sealed bids prior to
- (13) that but certainly that one was a sealed bid auction
- (14) Q And the difference between an outcry and a sealed bid is
- (15) that in a sealed bid auction people are required, once they
- (16) hear what the minimum is that they have to pay - they put in
- (17) whatever amount they're willing to bid for the property above
- (18) that amount and put it in a sealed envelope and that's
- (19) submitted to the proper authorities correct?
- (20) A That's correct
- (21) Q Whereas at the outcry people could stand up at a meeting
- (22) or in some environment and they could keep bidding against
- (23) each other?
- (24) A That's correct
- (25) Q And there was a concern on the part of the borough was

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- (1) there not on previous land sales that that was driving the
- (2) prices too high on this land?
- (3) A That was a concern of some yes
- (4) Q Right And you don't have that concern or at least as
- (5) much of a concern about the prices being driven higher when
- you
- (6) have a sealed bid as compared to an outcry bid is that right?
- (7) A I never really studied that to determine whether that's the
- (8) case or not
- (9) Q But you're aware that at least some people hold the view in
- (10) the borough that that was one of the reasons why they went to
- (11) the sealed bid as opposed to the outcry process?
- (12) A That was - I had heard that thought yes
- (13) Q Now why is it that the borough would not want an outcry
- (14) auction to get absolutely the most money it could for its lands
- (15) when it sold?
- (16) A I don't know
- (17) Q Let me just see if I can pursue that a little bit
- (18) MR STOLL Excuse me Your Honor I think the
- (19) question - it's a little late but this line is assuming that
- (20) which is not in evidence that the borough - the question
- (21) assumes that the borough didn't want to get the maximum
- price
- (22) THE COURT Yes that late objection is sustained
- (23) counsel
- (24) MR STOLL Thank you
- (25) BY MR OPPENHEIMER

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- (1) Q Do you have a view as to whether a sealed bidding process
- (2) tends to hold the price down as opposed to an outcry auction?
- (3) A I believe it depends on what the market is doing what the
- (4) demand is whether or not that would be the case
- (5) Q Let's assume the market and the demand are the same in
- case
- (6) A and B the only difference between case A and B is that in
- (7) case A there's an outcry auction and in case B there's a
- (8) sealed bid Would you think that the sealed bid in your
- (9) experience would tend to hold the price down over the outcry
- (10) auction?
- (11) A All things being equal?
- (12) Q Right
- (13) A And assuming that no party had any unnatural need to
- (14) purchase the property?
- (15) Q Right
- (16) A I don't believe that would be the case
- (17) Q Okay You don't think it would have an effect on the
- (18) price?
- (19) A It - overall?
- (20) Q Yes
- (21) A It may or may not I generally would think it probably
- (22) wouldn't
- (23) Q Now let's get back to your role in land sale 11 It was
- (24) your job was it not to set the fair market value for the
- (25) properties that were being put up for sale in land sale 11?

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- (1) A As I recall my direction was to set the minimum bid price
 (2) for the properties yes
 (3) Q Well you're aware are you not - and I believe we
 (4) discussed this at your deposition - that the requirement is
 (5) that the borough not sell land below the fair market value?
 (6) A That's correct
 (7) Q Okay So the minimum bid that we're talking about can't be
 (8) below the fair market value?
 (9) A You're assuming by that question that fair market value is
 (10) a discrete number and in reality it's actually a range of
 (11) value
 (12) Q Okay You can have a range of values for the fair market
 (13) value of a piece of property but your goal in land sale 11 was
 (14) to set a minimum bid that was within the range of fair market
 (15) values?
 (16) A It was at the low end of the range for fair market value
 (17) correct.
 (18) Q Okay Now you didn't intend to set the minimum bid
 (19) though below the range of fair market values right?
 (20) A No I did not
 (21) Q Okay so what we really are talking about in land sale 11
 (22) when we talk about a minimum bid was your best effort as an
 (23) assessor and responsible public official to set the price for
 (24) land at what you thought a willing buyer and seller would pay
 (25) perhaps at the low end of the value, but it certainly was not

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- (1) below the market price was it?
 (2) A In my estimation it was not
 (3) Q And frankly - I'll get back to my earlier point - you
 (4) did a pretty good job here because - let's move this for a
 (5) second if we look at what happened in Onion Bay at least lots
 (6) one two three and four each one sold for at least some
 (7) amount above the minimum asking price, which was in fact the
 (8) minimum fair market value price correct?
 (9) A That's correct.
 (10) Q Okay so - and in fact for lot one in Onion Bay we're
 (11) looking at about a - somebody willing to pay about \$5,000 more
 (12) than you thought the bottom of the fair market price was
 (13) right?
 (14) A Well that was one of the parties with a prior - with
 (15) their buildings on the lot.
 (16) Q Sure I understand But that is the way we ought to be
 (17) reading those numbers?
 (18) A Yes the numbers are there yes
 (19) Q Okay Now lot 5 which is in capital letters at the
 (20) bottom here this did not sell at the auction, right?
 (21) A That's correct
 (22) Q Okay It sold the next day or the day after?
 (23) A I don't recall exactly what day they went over the counter
 (24) Q But pretty quickly thereafter?
 (25) A All the properties went over the counter after the -

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- (1) sometime after the auction
 (2) Q Within about a week you'd say?
 (3) A Probably
 (4) Q Yeah And once again it was no lower than your estimate
 (5) of the bottom of the range of the fair market value?
 (6) A It was at my estimate
 (7) Q In fact it was at your estimate In fact you couldn't
 (8) have sold it if it had been below your estimate?
 (9) A I don't know procedurally how they deal with that
 (10) Q Okay I'd like to show you one of the plaintiffs' exhibits
 (11) here exhibit PX1525 and Mr Carlson do you recognize this
 (12) as a depiction of the borough property on Onion Bay on the
 (13) south side of Kupreanof Straits?
 (14) A Yes I do
 (15) Q Now this is a close-up view of the area where the Onion
 (16) Bay sales took place correct?
 (17) A That's correct.
 (18) Q And correct me if I'm wrong you can see where my finger
 (19) is the sale of those lots was in this area here is that
 (20) right?
 (21) A Yes
 (22) Q Would that be about right?
 (23) A Yes
 (24) Q Okay, and there were five lots?
 (25) A Yes

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- (1) Q Now I notice on this map that it's colored green which we
 (2) were told meant that it is a parcel for which damages are being
 (3) claimed in this lawsuit?
 (4) A That's correct
 (5) Q Okay
 (6) A Where I'm sorry the green depicts ownership
 (7) Q Ownership right So is it correct that in this court the
 (8) borough is suing for the five Onion Bay lots that got sold in
 (9) November of '90?
 (10) A I don't believe so no
 (11) Q But in any event you don't see a cutout for them They
 (12) would be - they're not to be confused with this They would
 (13) be over here if they were no longer being represented as part
 (14) of the borough property This shows those five lots as part
 (15) of the borough property correct?
 (16) A If - if I could maybe clarify that.
 (17) Q Please do
 (18) A That depicts the ownership of the Kodiak Island Borough as
 (19) of the appraisal date on March 23rd 1989
 (20) Q Right.
 (21) A But in the actual appraisal analysis as I recall we
 (22) deducted the acreage that was allocated to Onion Bay lots
 (23) Q Okay So it's your - your view that even though this
 (24) doesn't show the Onion Bay lots that they were taken out of
 (25) the appraisal?

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- (1) A As I recall the 802 acres reflects the deduction for the
 (2) roughly - whatever it is 25 acres for Onion Bay
 (3) Q Let's talk about the notion that this was a five-minute
 (4) sale. It may have taken that long to open the envelopes but
 (5) you and Bud Cassidy worked a lot longer on it than that. Is
 (6) that correct?
 (7) A That's correct yes.
 (8) Q Sure. Let's talk about the process here. One of the
 (9) things that had to be done is you had to set boundary lines for
 (10) those parcels. Is that right?
 (11) A I don't know that that - that would be Bud's venue.
 (12) Q Well, I don't want to go beyond what you actually know but
 (13) tell me if you do know in setting this sale up, weren't there
 (14) some appeals to the assembly with respect to how the parcels
 (15) were going to be drawn before they were put on the sale?
 (16) A One of the setnetters that - one of the parties that had
 (17) buildings on it as I recall was concerned about that.
 (18) Q Right. And, in fact didn't that process of setting the
 (19) boundaries and appealing where the boundary lines would go
 (20) didn't that take months?
 (21) A I don't recall the exact time frame. No.
 (22) Q Do you recall Bud working on that process in the summer of
 (23) 90?
 (24) A I recall when I first arrived in '89 that we were looking
 (25) at putting these properties on the market in the fall of '89.

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- (1) the oil spill.
 (2) Q You haven't done a study of the effect of the oil spill on
 (3) property prices have you?
 (4) A I've done - I've taken no effort to - I've never been
 (5) directed to attempt to quantify the dollar impact on real
 (6) estate that's correct.
 (7) Q Let me keep this up for just a second. You mentioned
 (8) Kupreanof. I'll pull out another chart - let's see we don't
 (9) have an exhibit number.
 (10) MR OPPENHEIMER Counsel do you know what exhibit
 (11) number this is?
 (12) MR STOLL It's on the back.
 (13) MR OPPENHEIMER On the back oh huge numbers.
 (14) okay.
 (15) BY MR OPPENHEIMER
 (16) Q I'm going to show you what's been marked as exhibit -
 (17) plaintiffs Exhibit 2901 A. Have you seen this chart before?
 (18) A Yes I have.
 (19) Q In fact this is your table. Is it not?
 (20) A That's correct.
 (21) Q Right okay. Now you mentioned yesterday that you weren't
 (22) aware of any market events in about this period of '89 in here
 (23) where you have the EVOS flag other than the oil spill itself.
 (24) Is that right?
 (25) A That's correct.

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- (1) and because of the oil spill and everything involved with that
 (2) we were not able to do so about a year and a half later and he
 (3) started the process I believe sometime - it was either in
 (4) the spring or summer of 1990.
 (5) Q Right and that's because you - you believe you were taken
 (6) off that task to do something else?
 (7) A I believe it was because everybody involved with the whole
 (8) process was taken off that to deal with the spill response.
 (9) Q Okay. You don't have an opinion do you, as to whether the
 (10) people who bought those lots in November of '90 would have
 (11) bought them earlier if they'd come on the market earlier?
 (12) A It's my opinion that the - basically two of the parties
 (13) were parties that had no prior interest in the property. The
 (14) three lots that did sell to those parties with interest most
 (15) likely would have purchased them in '89. The other parties
 (16) looking at the strength of the market in '88 I would have
 (17) expected a much stronger response to the auction in '89.
 (18) Q But you believe that at least three of the five parcels
 (19) would have sold within a year of the oil spill within that
 (20) year if just administratively the sale could have been brought
 (21) on earlier?
 (22) A Yes.
 (23) Q And none of those people who bought those lots told you
 (24) that they didn't want to buy them because of the oil spill?
 (25) A I don't recall speaking to any of these parties regarding

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- (1) Q Without quarrelling about what is a market event or not it
 (2) is true is it not that in this part of the island - well
 (3) I'm going to let you identify it for me. There was a land a
 (4) state land disposal program on Kupreanof was there not?
 (5) A Yes there was.
 (6) Q And can we see that on this map where that took place?
 (7) Does this show the area?
 (8) A Would you like me to come down?
 (9) Q I tell you what I'll bring it up and you can point it out
 (10) to me all these things that are marked there.
 (11) A Correct.
 (12) Q So these red boxes these red boxes here all of these -
 (13) show the jury - these boxes are part of the Kupreanof land
 (14) program, which took place in '88 and '89 is that correct?
 (15) A It took place in May of 1988.
 (16) Q And that's when the lottery - that was a lottery was it
 (17) not?
 (18) A Yes it was.
 (19) Q And in May of '88 the results of the lottery weren't out
 (20) so people learned whether they were going to have an
 (21) opportunity to go through a process to get title to some of
 (22) these lands?
 (23) A At some point it was a state homestead program to dispose
 (24) of lands into private ownership.
 (25) Q Quite a lot of land too wouldn't you say?

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- (1) A Not particularly no
 (2) Q How many acres?
 (3) A Well there was originally 34 lots of which 32 I think
 (4) actually went out for auctions to purchase
 (5) Q How much acreage?
 (6) A I've never computed it I don't know offhand
 (7) Q Estimating over 500 acres?
 (8) A Maybe four to five hundred something like that
 (9) Q Four or five hundred acres okay So one of the things -
 (10) and again I don't want to quarrel about what's a market event
 (11) or not but one of the things that happening in the 88 89
 (12) time frame was the State had just had a lottery where four or
 (13) five hundred acres of land had come onto the market and
 (14) people
 (15) could participate in getting that land by participating in the
 (16) lottery?
 (17) A I think that totally misrepresents what happened They did
 (18) not come onto the market They were properties that were
 (19) available for lottery and the lottery winners could if they
 (20) chose execute a lease option and at some subsequent date
 (21) purchase the property if they chose to or get it by what we
 (22) call sweat equity
 (23) Q What I want to do - I think you're perhaps thinking about
 (24) this from from an assessor point of view I'm not asking you
 (25) to agree with me that those transactions should or should not
 (26) be treated as market transactions for appraisal or assessment

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- (1) for the moment I don't mean that by my question so let me
 (2) try to rephrase it
 (3) You would agree with me that - whether we call it coming
 (4) onto the market or not - that 32 parcels of somewhere between
 (5) four and five hundred acres were made available - by whatever
 (6) terms and conditions were made available to the people who
 (7) won
 (8) the lottery?
 (9) A That's correct
 (10) Q Now have you conducted a study of the impact on the
 (11) demand
 (12) for property in the area that that event might have had?
 (13) A I've never conducted a study I have my own observation
 (14) Q But you haven't conducted a study?
 (15) A Well I'm somewhat confused why you - I mean how you
 (16) would study the context of that
 (17) Q Okay
 (18) A Without further thought on it
 (19) Q Do you know each of the individuals who acquired the land
 (20) through the state disposal program?
 (21) A I know a number of them yes
 (22) Q I'll put back on exhibit 2902-A7
 (23) MR DIAMOND Now the plaintiffs lawyers know how we
 (24) feel over at the defense table
 (25) MR OPPENHEIMER Now I forgot my question so I have
 (26) to put all this back - no
 (27) MR STOLL You accomplished the point though,

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- (1) right?
 (2) BY MR OPPENHEIMER
 (3) Q You - this is not entirely fair because you can't see your
 (4) chart but I think the questions I'm going to ask it won't
 (5) matter This is your chart of transactions I have over here
 (6) A Okay
 (7) MR STOLL That's true
 (8) A Is that true?
 (9) MR OPPENHEIMER Mr Stoll will keep me honest
 (10) BY MR OPPENHEIMER
 (11) Q I want to talk about what's not on the chart and to get a
 (12) bit of a sense for that let's start with Kupreanof the sale
 (13) we just - well I won't call it a sale the land disposal
 (14) program that we just spoke about
 (15) You mentioned yesterday that you had not included in the
 (16) table I think you called it OTE Open To Entry?
 (17) A Yes that's correct
 (18) Q Would you put Kupreanof in that category?
 (19) A It's fundamentally the same concept yes
 (20) Q So one of the things - I'll put down some stuff that's not
 (21) included - one is OTE and that would include Kupreanof You
 (22) mentioned patents patents are not included did I get that
 (23) right yesterday?
 (24) A That's correct
 (25) Q Now I was a little confused by that When you say that

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- (1) are you - are you saying that if somebody already has land and
 (2) that their ownership of that land goes from some sort of
 (3) conveyance other than a patent to a patent that you don't
 (4) count that, or are you saying that you don't count any
 (5) transactions on the chart if the government is the grantor?
 (6) A I don't recall saying that at all
 (7) Q If you would explain to me I don't want to put words in
 (8) your mouth What did you mean when you said you did not
 (9) include patents?
 (10) A Just that. A patent is a transfer from typically the State
 (11) or the federal government and it's to either a municipality or
 (12) an individual or an ANCSA corporation It's the original
 (13) transfer of the property and it's typically through either a
 (14) Homestead Act some act of law or some operation like this
 (15) Q I see So if in fact, there were individuals who had
 (16) never had land before, but got land as a result of the
 (17) government patent you would not include that in this chart
 (18) either?
 (19) A That's correct.
 (20) Q I believe there was a third major category that you did not
 (21) include in the chart Do you recall what that was?
 (22) A I - well depending what you want to call it IC -
 (23) Q The interim conveyances?
 (24) A The interim conveyances and interagency conveyances and
 (25) all
 (26) tenant conveyances would be in that category also

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- (1) Q The borough holds most of its land in TA?
- (2) A I've not reviewed it lately I know a lot of it's gone to
- (3) patent
- (4) Q Some of it as of the oil spill was TA?
- (5) A Yes
- (6) Q None of this is in the transaction chart this is OTE
- (7) patents ICs interagencies TA land?
- (8) A Correct because they're not transactions
- (9) Q You are going to have to come down
- (10) A Do I have enough rope here without hanging myself?
- (11) Q We refer to it as cord yes
- (12) MR PETUMENOS Judge can we have an award for the
- (13) lawyer who puts the most stuff up at once for the jury?
- (14) MR OPPENHEIMER If there is one I want it
- (15) BY MR OPPENHEIMER
- (16) Q I'm going to need your help to do something here We've
- (17) got something else that's not on here as well Put it over
- (18) here We don't have Kodiak City property here either do we?
- (19) A Yes this is - the whole study pertains strictly to remote
- (20) properties
- (21) Q So no Kodiak City and we don't have anything on the road
- (22) system?
- (23) A That's correct And no villages
- (24) Q And no villages Anything else you can think of that's not
- (25) on here?

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- (1) A Anton Larsen and Sunny Cove
- (2) Q Good thank you Sunny Cove all right Here we go
- (3) Before any of my colleagues pass out as I deface this we have
- (4) another copy of this but what I want to do is get a sense of
- (5) this
- (6) First of all Kodiak City is right here, correct? Do I
- (7) have that about right?
- (8) A Yes
- (9) Q I should ask you before I mark because this is not as
- (10) erasable as - all right This is Spruce Island where Ouzinkie
- (11) is?
- (12) A Correct
- (13) Q Sunny Cove up here?
- (14) A Sunny Cove is right there
- (15) Q Right there okay Anton Larsen?
- (16) A The Anton Larsen properties would be right there on that
- (17) island
- (18) Q Okay Let's see actually maybe you would do this for me
- (19) Could you mark on this generally we're not going to hold you
- (20) to anything mapmaking style but can you show me where the
- (21) basic road system is on this?
- (22) A The major road runs out and through the urban area of
- (23) Kodiak here and into Monashka Bay This is the urbanized area
- (24) around that and the road runs out here to Womens Bay which
- (25) is the community of Balls Flats and the United States Coast Guard

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- (1) base and the airport Runs out here through Middle Bay and
- (2) ultimately ends out here at Cape Chiniak
- (3) Q And there's another one that comes down here?
- (4) A With the alternate road to the Pasagshak and then it runs
- (5) around here up to Sacramento River and up past Narrow Cape
- (6) Q Okay now stand in front of this for just a second This
- (7) is Pasagshak do I have that right?
- (8) A That's correct Can you spell it?
- (9) Q You know I could have until you asked me that question
- (10) Okay I hope I get this right Do I have it right?
- (11) A Yeah that's pretty good
- (12) Q All right So that's Pasagshak Okay Now the villages
- (13) are already on the map are they not? We have Ouzinkie on
- (14) Spruce Island we have Port Lions we have Larsen Bay we
- (15) have
- (16) Old Harbor
- (17) A There's two others counsel
- (18) Q Well that's correct And I guess it's fair to say you
- (19) didn't take those - any transactions that might have been the
- (20) there into the chart either?
- (21) A I excluded the villages
- (22) Q Do me a favor If you could add the two other - they're
- (23) down in the south right?
- (24) A Yeah the village of Akhiok is right here
- (25) Q And the other one is Karluk?
- (26) A The other village is Karluk which is right here

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- (1) Q Thanks These - this is a little hard to see try to make
- (2) it as clear as we can but the land claim areas or the land
- (3) that you understand the borough owns that's in this lawsuit are
- (4) depicted in these gray areas here correct?
- (5) A That's correct
- (6) Q Okay And then we have one down here but any sales any
- (7) transactions that were in Pasagshak or along the road or in
- (8) Kodiak City or in Sunny Cove or Anton Larsen Port Lions or Old
- (9) Harbor or Larsen Bay or Karluk or Akhiok, I'm not quarreling I
- (10) just want to make sure I get my facts correct prior to the
- (11) spill are not on this chart?
- (12) A That's correct
- (13) MR OPPENHEIMER I'm going for the record
- (14) Mr Petumenos
- (15) MS SMITH We have another one do you want it?
- (16) MR OPPENHEIMER No this will be fine thanks
- (17) BY MR OPPENHEIMER
- (18) Q Now help me out here This exhibit plaintiffs 1524 is
- (19) the borough holdings in Ugak Bay and that is this bay
- (20) correct?
- (21) A That's correct.
- (22) Q Okay let me just write that in And you're aware are you
- (23) not that one of the claims that's being made in this case is
- (24) that these properties were unmarketable in the year after the
- (25) spill?

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- (1) A I m not very familiar with the damage issue
- (2) Q But you re at least aware that one of the claims is that
- (3) these properties were unmarketable in the year after the spill?
- (4) A As I recall that -
- (5) Q I don t want you to speculate If you don t know what the
- (6) claim is that s fine?
- (7) A I think it misrepresents the claim It s not unmarketable
- (8) it s not the marketability that was impacted
- (9) Q Okay in fact there were sales in this area the year
- (10) after the spill weren t there?
- (11) A That s correct
- (12) Q And in fact did some of those sales make it onto your
- (13) chart?
- (14) A Yes
- (15) Q Okay I don t want to be misleading Some of the sales
- (16) that occurred in Ugak show up as these transactions that occur
- (17) after the oil spill within the first year correct?
- (18) A I think all of the sales that occurred in that area are in
- (19) the chart
- (20) Q We have three or four sales do you recall?
- (21) A In that immediate area?
- (22) Q Yes
- (23) A In 89?
- (24) Q Yes
- (25) A There was four correct

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- (1) Q Four okay four Let me make a preliminary point first
- (2) Whatever your table tells us whatever it tells us It is not
- (3) telling us that there were no sales in the year after the
- (4) spill?
- (5) A That would be correct
- (6) Q And in fact you know that there were sales after the
- (7) spill?
- (8) A They re on the chart
- (9) Q Right And in fact your own work has disclosed to you
- (10) that there were agreements entered into in the year after the
- (11) spill in the remote land areas of Kodiak right?
- (12) A Well agreement is a sale I mean are you speaking -
- (13) Q I m actually just making a - maybe I m confusing what s
- (14) otherwise a simple point There were voluntary sales where
- (15) people got together and bought and sold remote property in
- (16) the year after the oil spill in Kodiak?
- (17) A That s correct
- (18) Q Okay Now you mentioned four of those sales are pretty
- (19) close to some of the damage parcels in this case aren t they?
- (20) A Yes
- (21) Q In fact you might say they re in a bread basket. Show us
- (22) where - are we talking about E-1 2 3 and -4 in your
- (23) study?
- (24) A Correct
- (25) Q Show us where E 1 2 3 and -4?

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- (1) A See as I recall two of the sales took place in Hidden
- (2) Basin One was here in these OTE lands on Ugak Bay and
- (3) then
- (4) the other one was - I think it was down here I d have to
- (5) double-check
- (6) Q Okay And those were all within the year after the spill?
- (7) A As I recall yes
- (8) Q So we have sales literally within the boundaries of these
- (9) properties after the oil spill within that year four sales?
- (10) A That s correct
- (11) Q Okay Those are in your table and I guess where would
- (12) they - they would be shown - well they d be one of these
- (13) bars if we got the deeds and found out exactly where but
- (14) these are by quarters so the first three months second three
- (15) months third three months fourth three months those sales
- (16) right in here here and here show up in these bars one of
- (17) these three bars right?
- (18) A As I recall they re yeah all within the last quarter of
- (19) 89
- (20) Q They re probably in this bar?
- (21) A One of them I believe was in the third quarter
- (22) Q Okay Now something that s not in this area - not because
- (23) it didn t happen then but because for reasons - I m not
- (24) quarreling about the reasons but for reasons you chose not to
- (25) put it on for are some more sales in Pasagshak isn t that

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- (1) A That s correct
- (2) Q Now Pasagshak is not shown on this chart here but it s
- (3) far away, is it?
- (4) A That s correct
- (5) Q In fact it s - you ve said in your appraisals of these
- (6) very properties that these properties here those are a pretty
- (7) reasonable skuff ride from the head of the Pasagshak road?
- (8) A They can be yes
- (9) Q And that s actually one of the things that makes these
- (10) properties - I mean that s a plus for these properties?
- (11) A Not necessarily no
- (12) Q Well let me not say it s a plus but we know you can
- (13) access these properties and you make mention of it in your
- (14) work
- (15) from Pasagshak right here right?
- (16) A There s no boat landing there but if you want to put your
- (17) boat onto the beach and into the water there you could access
- (18) it there
- (19) Q You actually mentioned that in your workups on these
- (20) properties in your report, right?
- (21) A That s correct
- (22) Q There were three sales were there not, in Pasagshak in
- (23) 89 in the year after the spill three sales in the year
- (24) after the spill here that didn t make it onto this chart?
- (25) A That s correct I m not certain about the three I d have

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- (1) Q Right. Three sales that would have been added onto these
 (2) bars if they d been included?
 (3) A If they d been remote correct
 (4) Q No I understand I m not quarrelling with your reasoning I
 (5) just want to get my facts down So they weren t - they
 (6) weren't on - let s take a little closer look at the table
 (7) These numbers that go up the left hand here are the number of
 (8) sales right?
 (9) A The number of transactions of remote property correct
 (10) Q So this first mark here just so we get a sense of the
 (11) perspective this is five sales so what we re really saying
 (12) here is that oh - what we re talking about is that the chart
 (13) shows we have what 12 sales in 89?
 (14) A Twelve transactions correct
 (15) Q And three - that s about right that s about three give
 (16) or take three sales?
 (17) A I don t know
 (18) Q Close?
 (19) A You keep moving your finger
 (20) Q I ve had a lot of coffee this morning but we would add
 (21) something like that onto this chart?
 (22) A I wouldn't no
 (23) Q No I know but if we were to include the three Pasagshak
 (24) sales?
 (25) A If you re going to include the Pasagshak sales it would

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- (1) impact the chart throughout
 (2) Q As to 89 that would also be the case right?
 (3) A If in fact they were transactions in 89 yes
 (4) Q Now whether they affect this chart or not just so people
 (5) get an understanding this bay that has the property or at
 (6) least some of the property that Kodiak is in this court
 (7) claiming damages for has by our current count that you and I
 (8) have worked out here four sales either adjacent to or within
 (9) their property boundaries and approximately three sales in
 (10) Pasagshak in the year after the oil spill?
 (11) A There was four non-road system sales and if in fact
 (12) you re correct three at Pasagehak on the road system
 (13) correct.
 (14) Q Now the - the demand, the market demand in Kodiak was
 (15) pretty strong the year after the spill wasn't it?
 (16) A For remote properties?
 (17) Q No, talking about the City of Kodiak
 (18) A It was rel - it was relatively strong in relationship to
 (19) when the market had fallen off and bottomed out in 87 - 86
 (20) 87 Could I add another road just so we're correct?
 (21) Q Sure absolutely Here
 (22) A (Witness indicating)
 (23) Q I m sorry where did you add the road?
 (24) A The Anton Larsen road that goes to this area
 (25) Q And you anticipated my next question which is that - are

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- (1) you aware of any sales in the year after the oil spill in Anton
 (2) Larsen?
 (3) A As I recall there might have been one
 (4) Q Let me just -
 (5) MR OPPENHEIMER Actually Your Honor I d like to
 (6) show the witness some deeds just so we don t get the wrong
 (7) number so perhaps this would be a good time for a break
 (8) THE COURT Sure
 (9) THE CLERK Please rise This court stands in
 (10) recess
 (11) (Jury out at 9 35 a m)
 (12) (Recess from 9 35 a m to 9 55 a m)
 (13) (Jury in at 9 55 a m)
 (14) THE CLERK. This court now resumes its session
 (15) Please be seated
 (16) BY MR OPPENHEIMER
 (17) Q Okay Pat let s see if we can put some of these sales on
 (18) Now what I m going to ask you to do with me here is to help me
 (19) identify and I ve made kind of a - well actually you ll be
 (20) able to do this off your sheet I m going to hand you
 (21) plaintiffs 908-J which - tell me if you recognize as a copy
 (22) of the page out of your appraisal of the Kodiak properties?
 (23) A Yes it is
 (24) Q Why don t you just take that there and what I d like to
 (25) have you help me do here I want to locate the approximate

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- (1) position real quick here on this map of the sales that took
 (2) place at the head of Ugak Bay in the year after the oil spill
 (3) So if I - I ll use a cheat sheet here and if I get it right
 (4) you can tell me and we ll put it in but I believe that we have
 (5) one sale right about here Haughey to Nicholson Does that
 (6) ring a bell? You know these pretty well?
 (7) A Haughey Al Haughey
 (8) Q Okay Haughey that s H a u-g h?
 (9) A E y
 (10) Q I looked at your report tell me if this sounds right
 (11) September 89?
 (12) A If I recall right, that s the closing date No I believe
 (13) Haughey closed 11 of 89
 (14) Q Okay And right about here just a little up from that we
 (15) have Still to Allen?
 (16) A Correct
 (17) Q And my workup shows that September of 89 does that
 (18) sound
 (19) A Yeah that s correct
 (20) Q And then you had mentioned that we ve got one on the south
 (21) point here on I believe that would be right in here and that
 (22) would be Kornmann to Finn?
 (23) A Kornmann to Finn is the one that s just right -
 (24) Q Right So if I put an arrow right about there that would
 (25) be okay?

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- (1) A Yeah
- (2) Q Two N s ?
- (3) A I believe so
- (4) Q And that s about August of 89?
- (5) A I thought it was later than that but -
- (6) Q If I can get this real quick I will but if not I'll pass
- (7) over it and come back Let s leave it for now - oh here it
- (8) is pardon me E 4?
- (9) A 8/89
- (10) Q So August of 89 so we'll leave that as it is
- (11) All right And then on Pasagshak we have three here?
- (12) At - should I just - would it be essentially correct for me
- (13) to just leave the arrow there and just put three in there in
- (14) this area?
- (15) A No
- (16) Q With - where should we put them?
- (17) A I don't know that there were three transactions
- (18) Q You don't know that there were three?
- (19) A That s what you re representing
- (20) Q Well let s not do that I already had the list There it
- (21) is
- (22) I'm going to show you Pat exhibits - defendants 15250
- (23) 15249 15245 and if you could just take a look at those and I
- (24) believe those are the Pasagshak transactions
- (25) A Yes it is

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- (1) Q So we'll put three over there
- (2) A You want me to just put where they are?
- (3) Q Sure yeah That would be terrific
- (4) A One of the parcels is on the road there s a river that
- (5) runs out from Pasagshak to Lake Rose Tead One of them
- (6) would
- (7) be on the road and river the other one was between the river
- (8) and the ocean and the other one was a landlocked parcel back
- (9) in the back of the property
- (10) Q You do live and breathe real estate in Kodiak okay Why
- (11) don't I circle that those three dots you've got there and
- (12) just to make this simpler do you recall from looking at those
- (13) what the date ranges we're talking about are or time of year
- (14) even?
- (15) A One s 9/89 one s 8/89 and I believe 7/89
- (16) Q Okay Now let s jump - just to make sure I have - okay
- (17) let s jump north a little bit here In the year after the oil
- (18) spill do you know how many sales there were in Sunny Cove?
- (19) Sunny Cove is up here on Spruce Island Do you have a
- (20) recollection of that?
- (21) A I don't recall offhand no
- (22) Q I'm sorry I thought I had my list a little more available
- (23) here Give me one second Oh okay Out of nowhere comes
- (24) help If this rings a bell Allen to Filiautraut?
- (25) A Yes
- (26) Q That s a Sunny Cove sale?

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- (1) A Correct
- (2) Q And again we can go back and check the deed if you want
- (3) My record indicates to me executed and recorded in June of
- (4) 89 Sound about right?
- (5) A Okay
- (6) Q For purposes of the arrow do you know exactly where it is
- (7) or should we just draw it on Sunny Cove?
- (8) A Sunny Cove is a portion of the Opheim homestead properties
- (9) and it s right in here in what s called Pleasant Harbor this
- (10) was part of the Opheim homestead
- (11) Q Okay So this is Allen and that s June of 89 Right up
- (12) there in Sunny Cove
- (13) Now we have another one in Sunny Cove Putney to Muhl
- (14) deed July of 89 recorded August of 89 Was that the other
- (15) half of this or was that someplace else on Sunny Cove?
- (16) A No Sunny Cove is the name of the subdivision and they re
- (17) all lots within that
- (18) Q All in the same area?
- (19) A Yes
- (20) Q Okay So why don't we put Putney and that is 7/89
- (21) Pat let me ask you about a few others and I'm frankly
- (22) not - I don't believe I have as good an idea exactly where
- (23) these are but let me give you the names and because of your
- (24) knowledge you may be able to identify them right away but I've
- (25) got three that are on the road system that weren't included on

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- (1) the chart Norman to Sweeney do you know which one that is?
- (2) A That wouldn't be a transaction
- (3) Q You would not consider that a transaction?
- (4) A That s correct
- (5) Q And Banach to Hicks?
- (6) A That would not be a transaction
- (7) Q And Shoemaker and Davis?
- (8) A Jerry Davis?
- (9) Q Uh huh
- (10) A Betty Shoemaker?
- (11) Q I don't know
- (12) A Yes that s located in the village - or community of
- (13) Chiniak
- (14) Q And Chiniak is out here in this area? I'm sorry I'm
- (15) standing in the way but out here in this area?
- (16) A Correct It s where they roughly call Winter Wonderland
- (17) roughly about there
- (18) Q Would you consider that a transaction?
- (19) A Yes I would
- (20) Q Again It s not in your chart because it s not on the road
- (21) system I understand we're not debating about that I just
- (22) want to get that deed executed in May and recorded in May
- (23) Sound right?
- (24) A That s correct
- (25) Q So this is - put it right in there this is Shoemaker

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- (1) 5/89
- (2) Now I want to touch base with you on just a few other
- (3) transactions and then we'll be through with the map
- (4) These I believe were included in your chart but the
- (5) Ayakulik Associates to Meir or Merr (clarifying pronunciation)
- (6) M-e-i-r?
- (7) A Meir Well it's actually quite a few people
- (8) Q Okay but that's a June of 89?
- (9) A That's Burn-Meir right?
- (10) Q I believe so?
- (11) A And Allen and -
- (12) Q Where would that be?
- (13) A As I recall, Allen had all of his in Portage Bay right
- (14) about here If I recall I thought it closed in about August
- (15) Q Well let's put -
- (16) A 6/89
- (17) Q Huckins to Ben Hancock?
- (18) A Ben's lot is right there
- (19) Q Oh it's on the other side from Onion Bay then?
- (20) A That's correct
- (21) Q And my record here shows September 89?
- (22) A That's correct.
- (23) Q We've got I guess some transfers to the U S Fish &
- (24) Wildlife Service from Ayakulik
- (25) A They purchased three parcels

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- (1) Q In September of 89?
- (2) A I think they closed in October according to me
- (3) Q Let's call it October Where would those be?
- (4) A One of them was right next to the Meir lot as I recall
- (5) The other two were in Sulua so back in here I think one was
- (6) there but I'm not exactly certain And that was basically
- (7) purchased three lots
- (8) Q You treated that as one transaction?
- (9) A That's correct
- (10) Q So we'll call that U S Fish & Wildlife And that is -
- (11) I'm sorry did you say you felt October was better better than
- (12) September?
- (13) A It was October November, I thought
- (14) Q Zachar Bay Fisheries to Eaton does that ring a bell?
- (15) A Yes
- (16) Q Where was that?
- (17) A Maybe I should correct Larsen Bay
- (18) Q Yes during the break we learned the villages -
- (19) A And Ouzinkie
- (20) Q Yeah the villages are in the right place the map is
- (21) wrong?
- (22) A Right They're where they were the last time
- (23) Q Now we're putting down Zachar Bay Fisheries?
- (24) A That is the old herring cannery right there
- (25) Q And our records again show October?

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- (1) A I believe that's right
- (2) Q And Ayakulik to Edwards and Adams in November?
- (3) A Let's see I believe Edwards is right here and heading into
- (4) Portage Bay
- (5) Q And November sounds right?
- (6) A Yeah that's - yes
- (7) Q Now of these these are all within a year after the
- (8) spill?
- (9) A That's correct
- (10) Q And do me a favor last thing on this chart could you just
- (11) circle the ones only the ones that you put in this table?
- (12) A (Witness complies)
- (13) Q Good okay
- (14) A This is something in 72 this parcel is actually very close
- (15) to there
- (16) Q It's about a mile away about one - on the chart it shows
- (17) about one section a section on a map is 640 acres typically a
- (18) square mile?
- (19) A Well the Tide Flats and the river mouth run back up in
- (20) there I think it's probably more on the area of mile and a
- (21) half
- (22) Q Does saltwater get to that parcel?
- (23) A I never measured it
- (24) Q It's got a stream and Terror Lake is up in here?
- (25) A Right

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- (1) Q Road they can't use to access the property?
- (2) A They can use it if they enter into an agreement They just
- (3) haven't bothered to do it. There's also another access
- (4) Q There's no shoreline as best you know the map is accurate
- (5) to that?
- (6) A Yes it just sets it back in another mile is all
- (7) Q Another mile okay Another plaintiff's exhibit this is
- (8) plaintiff's 1354-A which is a - described as a composite
- (9) oiling map and what - actually I could probably hold this up
- (10) for you What I want to observe here Pat - have you seen
- (11) this map before?
- (12) A Yes I have
- (13) Q And you're aware that where there's a mark, there's a -
- (14) this map is depicting oiling?
- (15) A Right.
- (16) Q And that where there's a little dot or pyramid or delta or
- (17) whatever you want to call it there's oiling according to the
- (18) map?
- (19) A Yeah it shows the oiling
- (20) Q I'm not asking you about anything other than that It's
- (21) correct is it not If we go to a place like Ugak Bay where we
- (22) have the transactions in 89 that that shows up as having oil
- (23) in it?
- (24) A None of the subject parcels have oil on them
- (25) Q There's oil at the head of the bay right?

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- (1) A There was some in there yes
- (2) Q And we have a dot right off the - right off here some
- (3) sort of oiling dot right off there do I have that right?
- (4) A Well it's about two miles east of it
- (5) Q Based on the map?
- (6) A That's correct
- (7) Q Let's see down here toward the end we've got - looks to
- (8) me we have some triangles there where we've got these
- (9) transactions
- (10) A That's correct but they're not on the properties
- (11) Q All right Now we've also got some oil lines and some
- (12) dots up here in Spruce Island Sunny Cove?
- (13) A I don't recall it getting in the cove at all
- (14) Q But it's -
- (15) A It hammered the village of Ouzinkie pretty good
- (16) Q Now Ouzinkie's right over here?
- (17) A Correct
- (18) Q Okay thank you Pat
- (19) A You owe me now
- (20) Q Okay no further questions
- (21) A Okay You keep saying that though
- (22) Q All right this is a version of your chart here trend
- (23) chart This is plaintiffs -
- (24) A 2903 A
- (25) Q 2903 A thanks Again this is a chart you helped make?

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- (1) A That is my work product yes
- (2) Q And this is like the transaction chart except it does it
- (3) in terms of acreage instead of the number of transactions
- (4) right?
- (5) A Correct
- (6) Q So if I get this right in '85 we're talking - I don't
- (7) know how would you estimate that bar total acreage sold in
- (8) '85?
- (9) A Something on the order of 60 acres
- (10) Q Sixty acres okay So before we talk about how the - and
- (11) by the way the acreages that we're talking about here
- (12) everything we said about the transaction in the table applies
- (13) to this too in other words the transactions you did not take
- (14) into account for the other chart we had up here you also
- (15) didn't take into account for this right?
- (16) A The other adjustment is for - this represents basically
- (17) surface estate dry land Now some of the transactions take
- (18) place in our area include submerged lands
- (19) Q Right I didn't ask the question very clearly All I'm
- (20) really saying is that this is basically the acreage from that?
- (21) A That's correct yes
- (22) Q And where you did not include something on this chart that
- (23) acreage doesn't show up here either?
- (24) A That's correct
- (25) Q And where you did include something, then this acreage

pops

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- (1) up on this?
- (2) A Correct
- (3) Q Now let's just - one of the things this seems to be
- (4) telling us Pat is that we've got more acreage moving in '89
- (5) than '85?
- (6) A That's correct
- (7) Q And what would your estimate be how much less acreage do
- (8) we have moving in '89 than say '86?
- (9) A Thirty percent
- (10) Q Well how many acres the difference between this bar and
- (11) this bar?
- (12) A 180 and 130 I compute that something on the order of 30
- (13) percent
- (14) Q Now you said yesterday you thought sales were going up
- (15) and
- (16) then the spill happened and it dropped off?
- (17) A I don't recall saying - I thought I said sales were
- (18) increasing both in terms of acreage and frequency prior to the
- (19) sale - or the spill
- (20) Q Now you haven't actually made a study to determine
- (21) whether
- (22) that was a result of the oil spill is that correct? I mean
- (23) you're giving us what your observation is of the transactions?
- (24) A The only significant event that I can ascertain that
- (25) happened in the market to cause this type of disruption was the

spill

(25) Q Without quarreling with you let me just think through a

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- (1) few things here Kupreanof would have been in the what
- (2) second quarter of '88?
- (3) A Well Kupreanof nobody purchased anything
- (4) Q I know I'm just - feel free to come over I was not
- (5) waving you back - but if we included those transactions they
- (6) go in here?
- (7) A No
- (8) Q Where would they go?
- (9) A They would start with one transaction in '91 I believe
- (10) five or six in '92, and then they would parcel out from there
- (11) Q I see what you're saying Let me rephrase my question a
- (12) little If we were to look at the part of this graph where the
- (13) lottery results were announced and people were told you can
- (14) go
- (15) out and you're going to be able to access something between
- (16) three and five hundred acres when would that have occurred?
- (17) May of '88 I think you said
- (18) A They executed the options to buy at the lottery The
- (19) commitment to the parcels and the parties was in May of '88
- (20) Q That would be the second quarter of '88?
- (21) A That's correct
- (22) Q Now let me just ask you not from the point of view of
- (23) looking at that event as if it had anything to do with fixing a
- (24) market price for land but just on the question of how people
- (25) buy and sell land that's something you know something about

(25) If you have a group of people who are interested in buying

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- (1) land say of ten people and you give two of them land under
 (2) any conditions if it's free if they pay for it doesn't
 (3) matter does that do you think have an equity on just the
 (4) number of people who might be interested in buying land?
 (5) A It may or it may not
 (6) Q But it may?
 (7) A It may not
 (8) Q And it may but it -
 (9) A And it may not
 (10) Q If we do this one more time we'll have it right
 (11) MR PETUMENOS Otherwise we'll be here to December
 (12) BY MR OPPENHEIMER
 (13) Q So what do we have between three and five hundred acres
 in
 (14) the Kupreanof land transaction - I won't call it transaction
 (15) the land program?
 (16) A In the auctions
 (17) Q Right
 (18) A If that's what you represent it doesn't sound out of line
 (19) Q Doesn't sound out of line?
 (20) A No
 (21) Q I'm giving a wide range
 (22) A Sure
 (23) Q On this graph let's use the low number that's three of
 (24) these blocks correct?
 (25) A Right

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- (1) Q So that would bring us - that would be quite a lot if
 (2) we're looking at just the supply of land out there that's
 (3) quite a lot of new supply?
 (4) A It's not supply at that point
 (5) Q Once they take it it isn't but just before that lottery
 (6) there was 300 acres just waiting for somebody to do something
 (7) with it whether they give it away or sell it it's supply at
 (8) that time instant before people sign up for it then it
 (9) becomes theirs right?
 (10) A No not at all That misrepresents this process
 (11) Q Let's talk about the process for just a second There's a
 (12) lottery People are allowed to go out and basically stake out
 (13) land?
 (14) A No that's what's different about this property
 (15) Q Tell me how this project worked
 (16) A This project was an outgrowth for the agreement of the
 (17) Shuyak Park bill that was in the early '80s that required the
 (18) State to disburse at least 500 acres in the Kodiak area They
 (19) selected the Kupreanof area as the area selected sometime in
 (20) '85 '86 They executed the lottery in early '88 and they
 (21) had to have preselected parcels that were described for the
 (22) parties to go ahead and if you selected your number - you got
 (23) lot 22 wherever that might be - then you had after the
 (24) appraisal was completed by the State in 1990 or '91 you had
 (25) the option to go ahead and purchase the property So at that

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- (1) point in '88 you basically just had a right to buy this
 (2) property should you choose to or you could live on it and
 (3) acquire title that way and some parties have done that and
 (4) after you get title or patent to the property which
 (5) wouldn't - we first saw the first one come through in 1991
 (6) then there's a restriction that you cannot market the property
 (7) for five years or subdivide it for ten years so it wouldn't
 (8) represent an increase in supply until five years from the date
 (9) of patent which would be - the earliest would be 1996
 (10) Q Useful clarification Let me see if I can pose my
 (11) question my hypothetical a little simpler
 (12) With all you said I defer to your knowledge I'm sure what
 (13) you've said about that is correct let's just assume that you
 (14) have a market where ten people are interested in property and
 (15) one of them has just won the lottery for one of these lots Do
 (16) you think that might have an effect on the number of people
 (17) still remaining in the market who might want to buy property?
 (18) A My review of the market during this time frame indicates
 (19) that that - that is not the case at all
 (20) Q Okay Let me ask you another question about this chart
 (21) The acreages in 1988 the transactions that sold there was one
 (22) pretty big transaction in '88 was there not?
 (23) A In terms of acreage?
 (24) Q Yes
 (25) A Yes that's correct

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- (1) Q Tell the jury what the - first of all very briefly who
 (2) the Old Believers are and what their transactions are?
 (3) A The Old Believers are a religious group They are largely
 (4) in the Homer area and they made a decision back in '87 that
 (5) they wanted to relocate to Kodiak They selected Afognak
 (6) Island as the area they wanted to move to and then in late '87
 (7) they approached the holders of the property that had a - what
 (8) we call a 14C claim but at any rate they approached them and
 (9) because their ownership was held by the federal government in
 (10) trust they had to go ahead and execute a earnest money
 (11) agreement in February of '88 that allowed for a year and a half
 (12) to purchase the property once there was a swap and it was a
 (13) very long protracted agreement They understood it was going
 (14) to take a very long time so for purposes of my report the
 (15) transaction took place at the date of the agreement everyone
 (16) though the actual formal transfer of the property took place
 (17) after the trade in late '89
 (18) Q Late '89?
 (19) A That's correct
 (20) Q You've got - again I'm not quarreling I just want to
 (21) make sure - you've got the transaction - let's - you've got
 (22) the transaction currently in the first quarter of 1988 because
 (23) there's a February '88 document that you used to make that
 (24) determination
 (25) A There's about a 20-page earnest money in February of '88

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- (1) with nonrefundable earnest money
- (2) Q For \$20 000?
- (3) A \$40 000 that was held by the federal government right
- (4) Q Forty the property ultimately sold for over a million?
- (5) A That's correct
- (6) Q So there's an earnest money commitment in 1988 What
- (7) quarter of 89 does the sale close in?
- (8) A The contract or the deed - actually it wasn't a deed it
- (9) was a contract for purchase so it's a land sale contract was
- (10) executed in late 88 I believe November or December - 89 I'm
- (11) sorry
- (12) Q When did the Old Believers finally get their - it's about
- (13) 273 acres?
- (14) A That's correct
- (15) Q When did they get their 273 acres?
- (16) A It was sometime in 89
- (17) Q Right Was it the fourth quarter of 89? Was it November
- (18) of 89?
- (19) A It was somewhere in there yes
- (20) Q When you first did this chart you didn't have that
- (21) transaction - let's - actually let me do something I've
- (22) made my own version of this chart because I was afraid I
- (23) wouldn't have enough charts
- (24) Okay now these move because I want to move them in a
- (25) minute But you recognize this as a copy of your - your

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- (1) Q I believe it was in the fourth quarter based on a December
- (2) date but the chart depicted it in the fourth quarter
- (3) A Right I believe that that was the point of transfer -
- (4) this is somewhat of a complex deal Would you want me to go
- (5) into it more to clarify that?
- (6) Q Let me show you your - well actually what you've got is
- (7) correct Now we'll get it in a minute but when you - when
- (8) you - did you include this transaction in your appraisal
- (9) work?
- (10) A Yes
- (11) Q And when you first included the transaction in your
- (12) appraisal work you -
- (13) A 5 of 89
- (14) Q Right May right?
- (15) A If I could clarify
- (16) Q I'm going to invite you to do that But just so we get a
- (17) sense for this that would have been in the second quarter -
- (18) this is where it was initially right? And this is your N 1
- (19) you probably know this by heart, but - so that's where it was
- (20) initially Now go ahead
- (21) A Basically the parties that were selling the property in
- (22) 88 didn't own it The property that the Old Believers wanted
- (23) to buy was just a large tract of land around where they had a
- (24) small fish - or basically a recreational cabin site They did
- (25) own two Native allotments They were over in the old village

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- (1) chart this is a copy of Exhibit 2903-A right?
- (2) A Correct
- (3) Q Okay Now the - to get a sense for the size of this
- (4) transaction the transaction we're talking about is big
- (5) right? If we took it off let's assume it never happened the
- (6) chart would change?
- (7) A That's correct
- (8) Q And it'd change about like that?
- (9) A That's correct
- (10) Q Okay Now this is always - the first time you did your
- (11) chart though you - unlike now where this is in the second
- (12) quarter - first quarter pardon me first quarter February?
- (13) A Right
- (14) Q You had it in a different - you had that transaction in a
- (15) different time right you had it in the fourth quarter?
- (16) A As I recall yes
- (17) Q Why did you change it from December of 88 to February of
- (18) 88?
- (19) A The owner the earnest money or the commitment to
- (20) purchase
- (21) was executed in February of 88
- (22) Q And had you been looking at a different document when you
- (23) first put the bar in December of 88?
- (24) A I don't recall It was - let's see Trying to remember
- (25) where it - was it in December of 88 or was it the fourth

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- (1) of Afognak in this area
- (2) Now - I'm sorry the old village of Afognak is right here
- (3) the subject parcels are here So the guy said well I can
- (4) get - I can trade probably my property over in the old village
- (5) to the Native corporation and they're going to swap and give me
- (6) the land around here that you want to buy
- (7) Q That was the Afognak Native Corporation?
- (8) A That's correct. Now that was in the original agreement
- (9) Now in late 89 or late 88 Afognak basically committed and
- (10) they started the deal and then the actual transfer documents to
- (11) give the parcel back over to the Mullins or the trade took
- (12) place in the summer of 89 which then facilitated the ultimate
- (13) closing of the transaction but the transaction and the formal
- (14) agreement and the whole process was agreed to in early 88
- (15) Q Now the people who sold the land to the Old Believers
- (16) they're the Mullins?
- (17) A It was actually the federal government the Bureau of
- (18) Indian Affairs on behalf of the Mullins
- (19) Q It doesn't matter but the Mullins two owners executed
- (20) two deeds for the transaction?
- (21) A They're husband and wife
- (22) Q Husband and wife right?
- (23) A That's correct
- (24) Q And basically a swap They needed to get certain land from
- (25) Afognak that the Old Believers wanted so they could sell it

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- (1) they could make a transfer to the Old Believers correct?
- (2) A Correct.
- (3) Q They didn't get that land till the summer of 89, did they?
- (4) A That whole transaction the commitment to Afognak and -
- (5) okay we're going to do this - and everything took place in
- (6) 88 and then the appraisals and all the other items took a
- (7) lot of time because BIA performs appraisals on these
- (8) properties and then subsequent to that they actually formally
- (9) transferred it.
- (10) Q But the Mullins didn't get the land that they ultimately
- (11) transferred to the Old Believers until the summer of 89?
- (12) A That's not entirely correct They had an ANCSA 14C claim
- (13) for a portion of the property
- (14) Q I won't push it the last question the deed the deed was
- (15) in June of 89 wasn't it from Afognak to the Mullins?
- (16) A That was the date I used that's correct
- (17) Q Of June of 89?
- (18) A The transfer from Afognak to the government on behalf of
- (19) the Mullins
- (20) Q This transaction, this big transaction is the only one on
- (21) the table this table - and of course both tables because
- (22) they're the same it's the only one where you didn't use the
- (23) recording date but used a different date right?
- (24) A It's the only one that fell substantially outside of what
- (25) we found to be the normal transaction time frame which was

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- (1) something on the order of 90 days after executing the earnest
- (2) money and then a subsequent closing
- (3) Q Okay If you had used the recording date it would have
- (4) been November right?
- (5) A Yes
- (6) Q Okay Now the document you used to move the sale from
- (7) the
- (8) recording date in November back into 88 was a receipt and
- (9) option to purchase?
- (10) A I don't recall the exact term Real estate purchase
- (11) agreement I believe is the title
- (12) Q Let me show you what is defendants exhibit 16253 and ask
- (13) if that's the document that you had
- (14) A Yes it is
- (15) Q And I guess we'll - thanks Let me have you look at this
- (16) for just one more second If you turn to Page 2 you'll see
- (17) there where there's a heading -
- (18) MR STOLL. Excuse me is it 253? My copy of 253
- (19) is -
- (20) MR OPPENHEIMER 16253 I believe it's 16253
- (21) MR STOLL This is 15 defense
- (22) BY MR OPPENHEIMER
- (23) Q If you turn to - do you have Page 2 there?
- (24) A Yes
- (25) MR OPPENHEIMER Do you want me to wait?
- (26) MR STOLL No that's okay I was just a thousand

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- (1) documents off
- (2) BY MR OPPENHEIMER
- (3) Q There's a heading there that says seller agrees Pat
- (4) A Yes
- (5) Q Do you see that? And point two says Purchaser offers to
- (6) purchase the property in its present condition on terms noted
- (7) do you see that?
- (8) A That's correct
- (9) Q Now 1988 no oil spill right?
- (10) A That's right
- (11) Q So whatever else was going on that property wasn't oiled
- (12) in 88 correct?
- (13) A Or in 89
- (14) Q All right Are you - Ignaty/Z Kuzmin are you familiar
- (15) with Ignaty/Z Kuzmin?
- (16) A There's numerous families involved in this joint venture
- (17) Q Are you aware that he's testified the land was oiled?
- (18) A No I'm not Was Kuzmin there in the summer of 89?
- (19) Q I believe he was But in any event whether it was oiled
- (20) or not its condition in 88 was that it wasn't in an area that
- (21) was in an oil spill impact area right?
- (22) A That's correct.
- (23) Q And then February, that agreement signed Then in
- (24) December that document you looked at people are still
- (25) working
- (26) the deal that was a document that set up the joint venture

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- (1) wasn't it that was ultimately going to hold the deal The
- (2) Olinava (ph) joint venture?
- (3) A That was to set up the joint venture
- (4) Q They're setting up the joint deal they're working that
- (5) in June of 89 they're setting up the property they're going to
- (6) swap?
- (7) A Right
- (8) Q They have a closing all the conditions are supposedly met
- (9) and they finally record on November?
- (10) A That's correct.
- (11) Q And no one said we shouldn't do this deal because of the
- (12) oil spill is that right, as far as you know?
- (13) A That's not correct.
- (14) Q Oh, someone said they shouldn't do the deal because of the
- (15) oil spill?
- (16) A I remember interviewing the real estate agent that handled
- (17) the transfer and she didn't recall specifics other than to say
- (18) that the general feeling was it wasn't worth starting all over
- (19) again with another two-year process and it was the largest
- (20) most desirable tract for their purposes and basically they
- (21) were going to go ahead with the deal
- (22) Q Decided to go ahead and do it?
- (23) A That's correct.
- (24) Q Okay terrific Why not - believe it or not I think I
- (25) can have you take your seat now

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- (1) MR STOLL Are these all going to come down? Can I
 (2) go back to my seat?
 (3) MR OPPENHEIMER Oh you may yes
 (4) MR STOLL Do you mind if I move this?
 (5) MR OPPENHEIMER Feel free I m sorry
 (6) BY MR OPPENHEIMER
 (7) Q Pat this will come up on your screen I m going to show
 (8) you - and if you have any doubt about it I ll give you the
 (9) whole document - but I m showing you a page out of your
 (10) appraisal and frankly I just picked one but there is part of
 (11) your property description Do you recognize that for one of
 (12) the pieces that you appraised?
 (13) A Correct
 (14) Q And then this is the following page - and you went over
 (15) this yesterday and I m not going to go through it all again
 (16) today - but this was where you showed people that when you re
 (17) valuing property you go look at similar property try to get a
 (18) sense of what it sold for you make some adjustments you re
 (19) comparing apples to apples you come up with a price right?
 (20) A Correct
 (21) Q Okay I want to focus on this column again which says
 (22) time adjustment Do you see that there?
 (23) A Yes
 (24) Q I ll try to be as straightforward as I can I think it s
 (25) pretty clear but when - markets go up and down right?

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- (1) A Correct
 (2) Q They go up and down for a lot of reasons Sometimes
 (3) there s a hot market sometimes It s cold correct?
 (4) A Correct
 (5) Q And as an assessor and as an appraiser when you re
 looking
 (6) back in time trying to figure out - you have a sale maybe -
 (7) let me say you re looking back in time and you find a piece of
 (8) property that has similar characteristics to the property you
 (9) want to value today but maybe you ve got a problem because
 (10) that property that you re looking at got bought and sold when
 (11) the market was down say right? You as an appraiser have to
 (12) make an adjustment for that do you not?
 (13) A Well the effect of time correct.
 (14) Q And by the *effect of time - this is what I m trying to
 (15) get at - one of the things we re talking about here is that if
 (16) you have a sale of two identical houses but one of them s at
 (17) the top of a really hot market and you re evaluating a house
 (18) in a really down market and you were to take that really hot
 (19) high sales price and apply it to the house today you re valuing
 (20) in the cold market you re going to overvalue that house you re
 (21) looking at today you ve got to adjust for that?
 (22) A That s correct
 (23) Q That s what that means right the time adjustment?
 (24) A Well this is taken from a trended time analysis which was
 (25) meant to gauge just the general effects of time throughout the

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- (1) Kodiak market
 (2) Q This is a blowup of that trend line?
 (3) A Yes
 (4) Q Okay Pat before we do this I need to ask you one other
 (5) question This is your - your acreage table I forgot to ask
 (6) you something
 (7) A Yes
 (8) Q Pat does that table tell you how many acres would have
 (9) been sold in Kodiak but for the oil spill?
 (10) A I m not sure I understand
 (11) Q Can I tell by this work that s reflected on this table how
 (12) many acres would have sold on Kodiak if the oil spill hadn t
 (13) happened?
 (14) A Well I think that brings up the problem with using this
 (15) graph in isolation that one large transaction regardless of
 (16) placement can pollute it so that needs to be looked at in the
 (17) context of frequency of transactions the compared sales
 (18) analysis which shows direct loss or addition in value You
 (19) have to use it in the general context but to solely look at
 (20) purely acreage you would not get a good depiction of any kind
 (21) of effect necessarily
 (22) Q So do that for me if you would take into account the
 (23) acreage take into account the transactions take into account
 (24) your general knowledge can you tell me how many acres
 would
 (25) have sold in Kodiak in 1989 if the oil spill hadn t occurred?

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- (1) A Based on the strength of the market and the continuing
 (2) increase in - both in terms of frequency and dollar volume of
 (3) sales in remote sector in 89 had it not been for the oil
 (4) spill I would have expected the sales to be something on the
 (5) order of what they were in 88 or maybe between 87 and 88
 (6) Q So some -
 (7) A The other issue that comes to mind is the oil spill has
 (8) been stated to inject numerous - or a high dollar volume into
 (9) the economy so because of the oil spill I again would have
 (10) expected an increase both in terms of dollar volume and
 (11) frequency of transactions because of the spill and in neither
 (12) case did we have that We had a direct tangible and large
 (13) decrease both in terms of volume acreage and dollar price
 (14) after the spill
 (15) Q We ll get back to price in a minute but the point I
 (16) thought I heard you make you think if everything went the way
 (17) the data showed that you d get between 200 and 600 acres
 sold
 (18) in 89 if the oil spill hadn t happened?
 (19) A No Again I think the best evidence of what is going on
 (20) in the market is not acreage because one large transaction -
 (21) Q No no I m asking you to take into -
 (22) A - can destroy that.
 (23) Q - account all of your data and the charts you ve shown us
 (24) and all your knowledge and I m asking can you tell us how
 (25) many acres would have sold in 1989 but for the oil spill?

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- (1) A No I can't
- (2) Q Do you know of another year where you had 600 acres sell in one year?
- (3) A Using your hypothetical with the OTEs or -
- (4) Q No just using your -
- (5) A Just analysis?
- (6) Q Using your analysis
- (7) A In the remote market?
- (8) Q Uh huh
- (9) A You're strictly speaking of remote market?
- (10) Q Right
- (11) A 84?
- (12) Q And that was with the Alaska Packers transaction?
- (13) A That's correct
- (14) Q And Alaska Packers were - those were properties that the canneries had owned at the turn of the century and they -
- (15) there came a time when they transferred those properties to what was a subsidiary of Del Monte Corporation?
- (16) A Well there was actually two transactions Alaska Packers
- (17) sold to Del Monte and Del Monte shortly couple years after that sold to Ayakulik or Trillium
- (18) Q Columbia Ward Fisheries involved?
- (19) A Columbia Ward Fisheries was a separate entity that came
- (20) together under the Ayakulik umbrella They purchased their
- (21) large volume of properties in the 70s

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- (1) Q And Lynn Canal was involved in that?
- (2) A Lynn Canal was just kind of an amalgam of various partners
- (3) involved in that
- (4) Q Sometimes these companies were referred to as Trillium or
- (5) Ayakulik?
- (6) A Generically
- (7) Q Generically?
- (8) A Yes
- (9) Q Isn't it the case that they started to put their properties
- (10) on the market in about what - tell me when did they start
- (11) putting their properties on the market?
- (12) A I believe some of them started to come on after they got
- (13) things straightened out in about 88
- (14) Q Right in this area where we see more transactions, right?
- (15) A That's correct
- (16) Q And then they're selling those properties that had not
- (17) previously been on the market from 88 and certainly through
- (18) 88 right?
- (19) A Certainly in 88
- (20) Q Right And they sold off to people some of their
- (21) inventory right?
- (22) A Correct
- (23) Q Right And in fact in 88 does it sound right that over
- (24) 150 acres was Trillium Ayakulik transactions?
- (25) A I wouldn't know without computing it

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- (1) Q Sounds about right?
- (2) A Sure
- (3) Q So if we - just again I just - if we were to take those
- (4) out of the chart - have you ever expressed the view that those
- (5) sales skewed the market?
- (6) A I - in a certain context I have but not in terms of
- (7) affecting the market just to show that when a large volume of
- (8) properties came on the market the market responded by
- (9) picking - buying them picking them up
- (10) Q Kind of an unusual situation those kinds of - they were
- (11) good properties many of them right by and large good
- (12) inventory?
- (13) A We've had our market skewed by large volumes of property
- (14) both in the residential sector or -
- (15) Q Sure it happens right?
- (16) A Sure
- (17) Q Things happen by skew it's an event - it's a different
- (18) than normal market, it skews the market?
- (19) A Increases the supply correct
- (20) Q Okay And again 150 if we use our chart here would take
- (21) off about - if we just decided to take off this - the
- (22) transactions that skewed the market in 88 we'd be taking
- (23) about that much of the bar off?
- (24) A Just forget about half of them
- (25) Q Just forget about half of them?

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- (1) A Like it didn't happen
- (2) Q Like it didn't happen?
- (3) A I guess you could do that.
- (4) Q Okay That, by the way in addition to the Kupreanof sale
- (5) is another - we're estimating 160 acres that people bought -
- (6) I don't mean to say that that would change your testimony
- (7) it's another 160 acres that went to somebody who ultimately
- (8) ended up buying it?
- (9) A Again, if I could clarify it, the Kupreanof -
- (10) Q Sure
- (11) A - was where somebody gained the right to buy a piece of
- (12) land someday, should they choose to it was not a sale it
- (13) was not a transaction it was just -
- (14) Q I'll withdraw the question because I don't - I don't mean
- (15) to argue with you about it and I understand your point
- (16) Back to the price trend though I'm sorry for the detour
- (17) but I want to get back to the Trillium Ayakulik deal This was
- (18) a - you did this?
- (19) A That's correct.
- (20) Q And what this represents this is right - this is a blowup
- (21) out of your report, your appraisal?
- (22) A Correct.
- (23) Q And what we're looking at here - I apologize, it's not
- (24) that easy to read to see - it's a good table it's not that
- (25) easy to see it's time trends of real property We have dates

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- (1) along the bottom months and years starting in January of 85
 (2) and going to January of 82 and then Pat we have these
 (3) percentages that go up the left-hand side there Tell the
 (4) jury what are those percentages?
 (5) A I don't know
 (6) Q I'm sorry I don't blame you
 (7) A Got me pinned in here
 (8) Q I'll let you out
 (9) A Basically these percentages represent if you had - it is
 (10) the effect of time so it shows that the market was up here at
 (11) ten or about 18 percent over the baseline and the baseline for
 (12) the report was March of 89 you can see everything's at a
 (13) hundred percent so this is in effect saying the market was 12
 (14) percent higher or 13 or whatever that works out to at that
 (15) point or conversely in January of 87 substantially lower
 (16) So it's to relate the effect of time on the value of real
 (17) property in the borough
 (18) Q So what we're saying here is that where you're below 100
 (19) percent the values were lower than they were in March of 89
 (20) the month of the oil spill?
 (21) A That's correct.
 (22) Q And where they're above 100 percent the values are higher
 (23) than they were the month of the oil spill correct?
 (24) A That's correct
 (25) Q And that - I hate to do this because it seems a pity to

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- (1) Q Right The appraisal that forms a part of the testimony
 (2) about damages in this lawsuit? It's what you used in your
 (3) appraisal and when Mr Shorett comes up we'll talk about
 (4) that okay
 (5) And what you're saying here let's take an example down in
 (6) January of 87 this was obviously a cold market?
 (7) A Yes
 (8) Q Okay low prices so January of 87 the weighted trend is
 (9) below - do I have the right one right bar - is below 100
 (10) percent so the prices would have been lower than at the time
 (11) of the oil spill correct?
 (12) A Correct
 (13) Q And then if I go to January 90 they're above the value of
 (14) land remote land at the time of the oil spill?
 (15) A That's not correct
 (16) Q Why is that?
 (17) A Number one this was a weighted trend so it's influenced
 (18) by the residential urban market I attempted to calibrate it
 (19) to the remote market but in any given case and I made an
 (20) observation yesterday obviously that from the summer of 88
 (21) to the summer of 89 we saw something on the order of 20
 (22) percent decrease in a set of sales but this was an attempt
 (23) using the whole market to try and say okay for basis of this
 (24) appraisal what was the general influence of time
 (25) You can see the market beginning to cap here in the vacant

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- (1) mark on this otherwise - this is put EVOS here There are
 (2) three bars for each month and they're - they're down here
 (3) They're described There's a bar for residential trend a bar
 (4) for vacant trend and a bar for weighted trend Would you tell
 (5) the jury what those are each of those bars and they repeat
 (6) themselves each month's same set of three?
 (7) A Each quarter
 (8) Q Pardon me each quarter
 (9) A Problem in the market you have a very limited amount of
 (10) data so we couldn't find - I couldn't find on a monthly basis
 (11) the impact of time whereas I could in a much larger market
 (12) but I did determine on a quarterly basis that the residential
 (13) trend reflects the movement of value of residential properties
 (14) in and around the market. The vacant trend reflects the value
 (15) of vacant land in and around the urban market system And the
 (16) weighted trend was an attempt to calibrate to the remote
 (17) market because after the spill I had very little sales to deal
 (18) with and I had a limited amount of data basically to use as a
 (19) basis of comparison so I just weighted it based on the little
 (20) bit of evidence I had to generate an adjustment to place into
 (21) the appraisal
 (22) Q Okay So the weighted trend is the trend line you used for
 (23) the remote property which is the kind of property that's at
 (24) issue in this lawsuit?
 (25) A It is the trend I used in the appraisal that's correct

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- (1) sector immediately after the spill but the residential trend
 (2) because of momentum what we call market momentum
 continued to
 (3) increase and then fell off and the weighted trend because
 (4) it's a mixture of these two and also uses what we call a moving
 (5) average it also ended up more in terms of the residential
 (6) average
 (7) Q Let me make sure I'm clear about one thing You used the
 (8) trend here to adjust the comps that gave you the appraisal in
 (9) this case right?
 (10) A That's correct
 (11) Q You relied on this chart?
 (12) A I used this chart for the purposes of adjusting for the
 (13) impact of time
 (14) Q Right for the numbers this jury is going to be asked to
 (15) have Exxon pay?
 (16) A It is a small component of that
 (17) Q Yeah it's a small component Pat isn't it? Because it
 (18) doesn't show any price drop so if you look at a - if you look
 (19) at the piece of property that you're adjusting based on that
 (20) table which you relied upon and you happen to be looking at
 (21) something that's after the spill it is going to tell you that
 (22) the trend line's going up not down correct?
 (23) A That's incorrect Here it's below a hundred
 (24) Q Well it's not quite below a hundred until what is that
 (25) September of 80?

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- (1) A No The vacant trend again that's what I'm saying this
 (2) is tailored to the residential market Okay this is not
 (3) evidence of what the impact of time was directly on the remote
 (4) market This weighted trend is a mixture of the weighted
 (5) residential urban and vacant lands houses and vacant lots
 (6) Q I understand I understand
 (7) A Okay
 (8) Q But you used it to adjust remote comps right?
 (9) A That's correct
 (10) Q You used it to come up with the number that we're talking
 (11) about in this trial?
 (12) A It was a part of that process
 (13) Q And you mentioned that there were some sales that you saw
 (14) a dropoff in price yesterday and some sales in '88 and some sales
 (15) in '89?
 (16) A All the work that I've done comparing the relatively strong
 (17) and healthy market that we saw in '88 versus the subsequent
 (18) time frame have generally showed a decrease in the value in the
 (19) remote sector
 (20) Q Yesterday you gave us an example of some sales that took
 (21) place that you said showed a loss in value These were -
 (22) these were sales S-1 S-2 S-3 S-4?
 (23) A Correct
 (24) Q And those very same sales were in the very same report
 (25) where this shows up right?

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- (1) A That's correct
 (2) Q And so you - you had this information when you were
 (3) relying on this table you had the information you said
 (4) yesterday showed this price drop when you were using this
 (5) table?
 (6) A That's correct
 (7) Q Okay thank you
 (8) A Can I go sit down now?
 (9) Q Yes, yes
 (10) Last two questions I think you mentioned this yesterday
 (11) but I just - just wanted to come back to it briefly You are
 (12) - in fact you help set taxes in Kodiak right? You work on
 (13) the assessments of property?
 (14) A Yeah I always resist to say "taxes" I determine the
 (15) assessed value for the property within the borough
 (16) Q Okay And to cut to the chase there's never been a
 (17) reduction in any of the assessments you've never made a
 (18) reduction in any of the assessments of borough property
 (19) because
 (20) of the oil spill?
 (21) A That's not necessarily correct
 (22) Q You have never made a downward adjustment because of
 (23) the
 (24) Exxon Valdez oil spill isn't that correct?
 (25) A I've - again I mean within the market context the
 (26) influences of the spill are in the market so if in fact, the
 (27) market falls off and I adjust accordingly then I guess I've

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- (1) made an adjustment but I've never knowingly said here's my
 (2) oil spill deduction
 (3) Q You don't know whether it's happening or not?
 (4) A I'm sorry?
 (5) Q You've never knowingly done it?
 (6) A That's correct
 (7) Q Okay And the assessed value of the property of the
 (8) borough has gone up every year since the oil spill right?
 (9) A The total value has been adjusted upward correct
 (10) Q Let me be careful because you taught us yesterday you
 (11) assess both personal property things like this whatever not
 (12) real property and real property right?
 (13) A That's correct
 (14) Q So I want to be careful here The real property on the
 (15) borough the assessed value has gone up every year since the
 (16) oil spill correct?
 (17) A That's incorrect
 (18) Q That's incorrect? Which year did it go down?
 (19) A I've made negative adjustments in the remote sector for tax
 (20) years '92 '93 and '94
 (21) Q Wait wait wait I'm talking now about the total assessed
 (22) borough property
 (23) A So you're just talking -
 (24) Q Real property
 (25) A Total value for real property within the borough?

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- (1) Q Correct.
 (2) A Overall, yeah I believe that's the case yes
 (3) Q Okay Now that hasn't always been the case has it? That
 (4) is to say that this isn't automatic, the assessed value of
 (5) property in the borough doesn't always go up right? It's gone
 (6) down over the years too?
 (7) A I've made both upward and downward adjustments over the
 (8) years correct
 (9) Q And the total assessed value of real property in the
 (10) borough has in the past gone down as well as up The point I'm
 (11) trying to make it's not automatic It doesn't just go up every
 (12) year because it's a new year?
 (13) A No Like in '88 it went down as I recall even though the
 (14) values were going in a different direction
 (15) Q And there are a couple of different ways that taxpayers can
 (16) appeal their tax assessments is that right? They can go to
 (17) the Board of Equalization or they can have an administrative
 (18) process which is basically to come to you?
 (19) A Well the most obvious initial point in the process is
 (20) contact me and say where'd you get this number, or whatever
 (21) Q And there's never been a - an administrative request from
 (22) anyone to lower the value of their property because of the oil
 (23) spill has there?
 (24) A Not that I recall no
 (25) Q And there's never been such an appeal to the board is that

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- (1) right?
- (2) A I haven't - I don't have very many appeals
- (3) Q Well you're - I understand you're an assessor. People
- (4) do however make complaints periodically, right?
- (5) A It depends
- (6) Q People have complained about junk yards next to them?
- (7) A Well, this is Alaska, people are a little more flexible
- (8) about that, but -
- (9) Q But - okay, fair enough. But with that point aside, it's
- (10) true, isn't it, Pat, that there are times when you've got to
- (11) deal with people complaining that their assessments are too
- (12) high?
- (13) A Usually only when it - when the assessments reach the
- (14) market
- (15) Q Oh, okay. But the fact is, it's not as if this never
- (16) happens. People do complain about their assessments?
- (17) A Sure
- (18) Q But no one complained about the oil spill?
- (19) A I don't recall that specifically
- (20) Q Okay. And by -
- (21) A You're speaking in context of an appeal?
- (22) Q Or administrative application to you
- (23) A I don't know
- (24) Q You don't remember any?
- (25) A Again, the time of the spill, I was busy doing other things

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- (1) and that was handled by staff, two of which are no longer
- (2) there
- (3) Q But you're not - you recall in deposition you couldn't
- (4) identify anybody who filed an administrative appeal of your
- (5) assessment because of the oil spill
- (6) A I think I testified, and I don't recall which year
- (7) deposition it would have been, the '92-'93 or - was it '93?
- (8) Q Let me just - I'll bring it to a close. Sitting here
- (9) today, you can't remember anyone having filed an
- (10) administrative
- (11) appeal to lower their taxes because of the oil spill, can you?
- (12) A There is no filing of administrative appeal. The
- (13) administrative appeal is basically contact of the assessor and
- (14) say, I want you to take another look at my property, this is
- (15) the issue, whatever
- (16) Q With that in mind, today you can't tell us that that
- (17) happened, correct?
- (18) A No, I think I testified, if I recall -
- (19) Q You testified you had one conversation, are you including
- (20) the conversation?
- (21) A I recall I had one, and then there's also three other
- (22) people that we - that I work with, and they - two of which
- (23) are gone, and I never bothered to ask them whether they'd had
- (24) any contacts, because I was busy dealing with the oil spill
- (25) response
- (26) Q So that would have been within the period of time in the

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- (1) summer of '89?
- (2) A That would have been the appeal period of '89 and on into
- (3) the summer, obviously
- (4) Q You never had an adjustment in response to any of that?
- (5) A No
- (6) Q When you came on February 15th, '89, you already had - the
- (7) tax roll had already been set for January 1 by your
- (8) predecessor, correct?
- (9) A Largely
- (10) Q Wayne Haerer?
- (11) A That's correct
- (12) Q Who is now the assessor for the Kenai Borough, is that
- (13) correct?
- (14) A That's correct
- (15) Q Do you - are you critical of Mr. Haerer's work?
- (16) A I'm not taking a position one way or another
- (17) Q Do you have any reason to believe that he was not a good
- (18) assessor?
- (19) MR. STOLL: Your Honor, I don't think it's appropriate
- (20) for him to comment on that
- (21) THE COURT: That's sustained, objection's sustained
- (22) MR. OPPENHEIMER: No further questions, Your Honor
- (23) MR. STOLL: I have a few questions
- (24) THE COURT: No, don't leave
- (25) MR. OPPENHEIMER: It only seems like it's over

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- (1) MR. STOLL: I'm going to be brief
- (2) MR. PETUMENOS: Could I - just a moment.
- (3) REDIRECT EXAMINATION OF PATRICK S. CARLSON
- (4) BY MR. STOLL
- (5) Q Let me ask you this question, just - I was going to ask
- (6) you the question anyhow, but Mr. Petumenos -
- (7) MR. PETUMENOS: I just wanted to make sure
- (8) BY MR. STOLL
- (9) Q He wanted to make sure I asked the question
- (10) Now, the fact that there was not a - an appeal or an
- (11) administrative - or you don't recall more than one or maybe
- (12) these other people had some, but there weren't administrative
- (13) appeals or other appeals relative - or lots of them - as to
- (14) the assessed values as a result of the oil spill, does that
- (15) change in any way your opinion as to the adverse effects of
- (16) property values coming from the oil spill?
- (17) A No, it does not
- (18) Q Why not?
- (19) A Well, there's a couple issues that need to be dealt with
- (20) Number one, the remote area, which I feel is - is the area of
- (21) the most impact was assessed on average about half of what
- (22) the properties were worth
- (23) Q That was the assessments by Mr. Haerer before?
- (24) A I believe, I don't know what - where he -
- (25) Q Before you came?

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- (1) A Prior to my tenure correct
 (2) Q Okay
 (3) A The other issue is we have an extremely low tax rate the
 (4) lowest tax rate in the borough is in the - in the spill area
 (5) I'll call it and that effective rate it was about - it was
 (6) 4 5 mills at the time so if the property owner had - I think
 (7) the assessed value today is 30 000 so I suspect on the average
 (8) it was fifteen or 20 000 if they felt they had a 20 percent
 (9) impact hypothetically they would really be only talking about
 (10) ten or twelve dollars on the tax bill so it doesn't surprise
 (11) me
 (12) Q In other words to go through the appeal process they may
 (13) have saved ten or twelve dollars a year?
 (14) A If in fact the board found it was there yes
 (15) Q So you don't think that's surprising you don't think -
 (16) A My experience in Fairbanks where we had increasing tax
 (17) rates that seemed to have more impact on the appeals and the
 (18) level of complaints than the actual assessments
 (19) Q All right Now with respect to - let's take this first
 (20) of all With respect to this board that Mr. Oppenheimer
 (21) designed if you move this one transaction from 87 that was
 (22) entered into in 87 and you moved it from then - there - from
 (23) 87 to 89 that has the effect of what he's indicated here?
 (24) A That's correct yes
 (25) Q Now this is in acres?

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- (1) lessees another one including my assumptions and in all
 cases
 (2) the frequency of transactions in the remote market regardless
 (3) of these assumptions showed the same dramatic decrease in
 89
 (4) over 88
 (5) Q So in other words if you add all these other sales in or
 (6) any group of them they all go up for each each year is that
 (7) right?
 (8) A Relatively the whole thing just moves proportionately up or
 (9) down There's minor fluctuations but the one item that stays
 (10) the same is the amount of sales in 88 versus a much smaller
 (11) amount of sales in 89
 (12) Q And incidentally, back here in 85 and 86, those were
 (13) years of - some of the worse years for Alaska in terms of the
 (14) overall economy isn't that correct?
 (15) A Our market the urban residential market was in very tough
 (16) shape in 86/87 that's correct
 (17) Q And the thing you were using here was you were trying to
 (18) just relate to the properties that you used as comparables the
 (19) type of property the remote property in Kodiak Island Borough
 (20) is that what you used in this graph?
 (21) A Yeah what I - what I utilized in this graph was my
 (22) interpretation of what the market felt was the remote
 (23) categories of property
 (24) Q Now for instance you've got values in your appraisal
 (25) where the - because it's this remote property that is in the

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- (1) A Correct
 (2) Q And you did - the first chart you did I believe was a
 (3) chart of sales just transactions?
 (4) A Validated transactions
 (5) Q Validated transactions And if you moved that one
 (6) transaction - I don't have the magnetic board and everything
 (7) - but if you moved the one transaction from 88 over to 89
 (8) or moved it back to 87 or did one of those things would that
 (9) have any material effect on your graph here?
 (10) A No
 (11) Q And the other questions I've got relative to this there
 (12) was about an hour of cross-examination or so about these -
 (13) having taken transaction - this - this is a history of sales
 (14) of remote property is that correct?
 (15) A That's correct
 (16) Q And you didn't include for any of these years sales on
 (17) the road system?
 (18) A That's correct
 (19) Q And so if you had sales on the road system or sales in the
 (20) villages or sales in the City of Kodiak would that change any
 (21) of these other years also?
 (22) A Yes As I recall I reviewed - I reviewed the number of
 (23) different scenarios one including the villages Anton Larsen
 (24) Sunny Cove and Pasagshak and Chiniak Another one
 including
 (25) all sales to lessees another one excluding all sales to

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- (1) hundreds of dollars per acre I think the average is probably
 (2) around \$1200 per acre for all this whether it's on the
 (3) shoreline or et cetera isn't that right?
 (4) A That's correct.
 (5) Q And if you included in this graph and started mixing in the
 (6) urban properties like there is in - or I use the word urban
 (7) advisedly By that I mean by that let's take a village like
 (8) Ouzinkie you know 200 people even in a small - smaller
 (9) urban area like that the land there shore front land there
 (10) sold for - what kind of per acre what would it sell for?
 (11) A Well Ouzinkie Port Lions they're probably in the 75 to
 (12) dollar ten for ocean front lots with utilities
 (13) Q So that's around 30, \$40 000 an acre?
 (14) A Yeah I think the range - of course those values have
 (15) fallen off since the spill but at that time I suspect that
 (16) might be true
 (17) Q So you didn't think that those were comparables for trying
 (18) to you know do your appraisal of this remote property I
 (19) mean you didn't do any of your appraisals at 30 \$40 000 a
 (20) lot did you?
 (21) A Correct
 (22) Q And you didn't - likewise you didn't include them in
 (23) this - in this - in this graph of what happened? This is
 (24) just again to the remote properties?
 (25) A That's correct

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- (1) Q And Pasagshak I don't want to pull up - I don't want to
 (2) take time to pull up that map the Pasagshak property that's
 (3) on the road system am I correct?
 (4) A Yes it is
 (5) Q And why did you leave that off of here?
 (6) A Well Pasagshak is -
 (7) Q Just as an example
 (8) A Although it has recreational aspects to it it also has
 (9) residential it's on the road system it's got phone and power
 (10) to it and it was generally not a remote property in the same
 (11) context as what I was dealing with
 (12) Q I see And is that true of the other properties that you
 (13) excluded from the - from your analysis?
 (14) A What I - the reason I excluded those is because they had
 (15) influences from either the village or the urban areas that set
 (16) them apart from what we found in the true remote market
 (17) Q Now Mr Oppenheimer said something about affecting
 (18) supply
 (19) and demand you know if you take one of these people taking
 (20) an
 (21) option of some property off the market or I guess that was his
 (22) argument If you take a buyer out of the market you're also
 (23) taking the land out of the market isn't that right? So you're
 (24) eliminating both supply and - excuse me you're eliminating -
 (25) if you are eliminating some demand you're also eliminating
 (26) some of the supply isn't that correct?
 (27) A Well theoretically I guess if I could expand on that

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- (1) maybe clarify the issue?
 (2) Q Yeah
 (3) A In 1987 we had another OTE transfer in Ugak Bay area that
 (4) was a couple hundred lots down there that were over the
 (5) counter
 (6) or basically in the same process the State used for
 (7) Kupreanof As you can see, it did not have any negative impact
 (8) on the frequency of sales Much like the Kupreanof things
 (9) they were lease options you're going to get it someday when
 (10) you get it you can't sell it for ten years on and on and on
 (11) So down the road those may factor into the market but the
 (12) question remains did that in fact take buyers off the
 (13) market? My argument would be no you can see by the
 (14) increase
 (15) in frequency of sales after that project in Ugak the market
 (16) continued to absorb lots at an increasing rate
 (17) Q Now the last question I've got is about these Onion Bay -
 (18) maybe the last question - the Onion Bay lot sales
 (19) A Yes
 (20) Q You established the - when that auction occurred in 1990
 (21) you - you were the one that established the minimum price
 (22) isn't that right?
 (23) A That's correct
 (24) Q Okay And did you when you were setting that price did
 (25) you look at the action in the market between the prices in 88
 (26) and 89 for the same - essentially similar property?
 (27) A Yes I did

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- (1) Q And did you notice any decrease or increase or what
 (2) happened? Could you just tell the jury please what you
 (3) observed in terms of price?
 (4) A Well in order to deal with the issue I looked at the
 (5) sales in 88 and then the sales in 89 based on comparables I
 (6) used and I found generally that there was a decrease in value
 (7) in 89 over 88 so I put the greatest amount of weight for
 (8) valuing the Onion Bay parcels on those 89 sales since they
 (9) were lower in 88 and that then generated my price
 (10) Q You said lower in 88 You mean lower in 89?
 (11) A 89 was lower than 88 so I placed the greatest amount of
 (12) weight on the 89 transactions lowering my value and then I
 (13) ended up with a range which was on the order of I believe
 (14) thirty to 35 000 for the average lot in that subdivision and I
 (15) went to the low end of that range which was thirty 32 000 for
 (16) the average lot and that's about what they sold for with the
 (17) exception of the parties that had prior interests in the
 (18) properties
 (19) MR STOLL That's all I have Your Honor
 (20) RECROSS-EXAMINATION OF PATRICK S CARLSON
 (21) BY MR OPPENHEIMER
 (22) Q At some point, if we keep giving land away to the people in
 (23) Kodiak we will run out of buyers agreed?
 (24) A I'm not sure I understand
 (25) Q If we have hundreds of acres in Ugak and we have hundreds

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- (1) of acres in Kupreanof eventually we're going to give
 (2) everybody land and they won't want to buy any more land is
 (3) that correct?
 (4) A You're assuming nobody would move in
 (5) Q Isn't it true that you've just agreed really that at some
 (6) point, and you can't tell us when you're going to affect the
 (7) number of people who want to buy property if you keep giving
 (8) them property?
 (9) A I think the issue deals with when the supply comes on the
 (10) market in order that it can compete The 87 transactions I
 (11) talked about are just now going to patent and they've got -
 (12) they have to wait ten years after patent before they can sell
 (13) the property so sometime in the - after the year 2 000 they
 (14) may have some impact on the market. Kupreanof sometime in
 (15) the
 (16) later part of this decade they may have some impact
 (17) The question remains though the community - the island
 (18) you have growth if you start giving away lots I'll guarantee
 (19) you're going to get some off island influence so it may or may
 (20) not be the case
 (21) Q But you've never conducted a study of when the number of
 (22) people who would be interested in buying would be affected by
 (23) any of this right?
 (24) A Generally my review and my knowledge of all the parties in
 (25) these transactions largely they're ones that typically would
 (26) not be buying that remote market

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- (1) Q Okay On you cross you were asked by Mr Stoll about
 (2) whether if we made the adjustments -
 (3) MR STOLL No I did direct.
 (4) MR OPPENHEIMER Direct pardon me Excuse me I'll
 (5) get this right.
 (6) BY MR OPPENHEIMER
 (7) Q If you'd made the adjustments I made with my magnets it
 (8) wouldn't have any - much effect on this chart because this is
 (9) a transaction chart right?
 (10) A Correct.
 (11) Q Okay How many of these 28 transactions were Trillium in
 (12) 1988?
 (13) A In '88?
 (14) Q Right.
 (15) A Oh I don't know probably maybe half
 (16) Q Fourteen right?
 (17) A Okay
 (18) Q Last question You mentioned that a lot of these patents
 (19) come with restrictions on marketability?
 (20) A Only in the state lands
 (21) Q State land right. This is not something that you
 (22) encounter every day, but you've encountered both in your
 (23) capacity as an assessor in Fairbanks and in your capacity -
 (24) well I don't know Have you also encountered it in Kodiak
 (25) where you've had to assess the value of property that had a

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- (1) market restriction on it?
 (2) A Are you talking about these particular type of items or
 (3) items - are you talking about remote lands OTEs or are you
 (4) talking -
 (5) Q Well remote lands?
 (6) A I've done - I've assessed the interests in the OTE lands
 (7) both municipalities
 (8) Q In both Fairbanks and in Kodiak?
 (9) A That's correct
 (10) Q And that's a situation where you get remote land but you
 (11) can't sell it for some period of time?
 (12) A They may or may not They vary A lot of them don't have
 (13) restrictions
 (14) Q You've encountered situations where you've had to do an
 (15) assessment where the ability to sell the land was restricted
 (16) because of the program that gave the land out right? You've
 (17) had to assess land that had a marketing restriction?
 (18) A It had a time frame where they could not market the
 (19) property
 (20) Q Couldn't sell for X* number of years?
 (21) A That's correct
 (22) Q And as a tax assessor trying to be fair to people you
 (23) don't want to necessarily assess their property if it has all
 (24) the same characteristics of some other property if that other
 (25) property in your tax area has no marketing restrictions person

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- (1) could sell it for you would want to adjust for that somehow?
 (2) A Again you may be confusing that I mean we have
 numerous
 (3) instances where people have mortgages in excess of what their
 (4) property's worth and they in effect can't sell it but that
 (5) doesn't mean it doesn't have assessed value
 (6) Q Haven't you used a formula where you've encountered
 (7) properties that couldn't be marketed for a period of years
 (8) where you have adjusted the assessed value by a percentage?
 (9) A Well we use - we're required under state law to assess
 (10) the interests in exempt properties and so when somebody
 (11) becomes a lessee or has a right in state federal or
 (12) municipally-owned lands they're under state law taxable to the
 (13) full extent of that interest and we use a method called the
 (14) possessory interest valuation to determine what their fair
 (15) share of the tax load should be and how that would involve the
 (16) assessment
 (17) Q Have you ever used a methodology where you assigned a 25
 (18) reduction in value for a ten-year period in which marketing was
 (19) prohibited?
 (20) A When I was in Fairbanks we did a lot of - part of my
 (21) process was to go ahead and straighten out the possessory
 (22) interest valuation on these OTE properties and in that
 (23) municipality when they went to patent then I allowed a 25
 (24) percent decrement for the ten year no-sale clause that's
 (25) correct

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- (1) Q And then as I understand it that as each two-year period
 (2) passed you dropped the reduction by five percent?
 (3) A That's my methodology correct
 (4) Q So that with two years left of restriction at the end the
 (5) property was valued at 95 percent of its full value?
 (6) A That's correct.
 (7) Q So for the last two years you get a two and a half percent
 (8) a year reduction?
 (9) A That's correct
 (10) MR OPPENHEIMER Thanks No further questions Your
 (11) Honor
 (12) THE COURT We're going to take a break counsel
 (13) MR STOLL Your Honor could I just ask him one
 (14) question? I forgot to ask this one question
 (15) FURTHER REDIRECT EXAMINATION OF PATRICK S
 CARLSON
 (16) BY MR STOLL
 (17) Q In your time trend thing that involves the urban
 (18) residential isn't that right?
 (19) A The weighted trend is a mix of the vacant urban and
 (20) residential urban markets correct
 (21) MR STOLL That's all
 (22) MR OPPENHEIMER Your Honor may we have just one
 (23) minute?
 (24) MR STOLL Sorry
 (25) MR OPPENHEIMER I realize the time is ticking

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- (1) FURTHER CROSS-EXAMINATION OF PATRICK S. CARLSON
- (2) BY MR. OPPENHEIMER
- (3) Q You had your deposition taken in this case Pat right?
- (4) A For years
- (5) Q It was fun visiting with you in Kodiak And with counsel's
- (6) permission I'm just going to read a Q and A in
- (7) MR. STOLL Which page are we talking about?
- (8) MR. OPPENHEIMER Page 275 I enjoyed all my visits
- (9) to Kodiak Were you asked -
- (10) MR. STOLL Just a minute
- (11) MR. OPPENHEIMER Page 275
- (12) MR. STOLL Just a minute
- (13) MR. OPPENHEIMER Lines 19 through 24
- (14) BY MR. OPPENHEIMER
- (15) Q Pat I'm going to hand you - this was in August of '93
- (16) I'm going to hand you a page of your deposition page 275 and
- (17) ask you to look at lines 19 through 24 If I could
- (18) A This is volume two? I thought one and two were back in
- (19) '92
- (20) Q You recall when you and I were in the Westmark doing this
- (21) they started renumbering the volumes
- (22) A Oh okay
- (23) Q Pat were you asked It's been my determination that the
- (24) weighted trend reflected in the graph in my report best
- (25) reflects the effect of time in the remote category

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- (1) And both - and question And both as to remote unimproved
- (2) and remote improved properties
- (3) Correct.
- (4) Remember giving that answer?
- (5) A What am I correcting here? Am I correcting your statement
- (6) as to both remote unimproved and remote -
- (7) Q Correct
- (8) A I read this as I'm saying you're correct - okay I'll buy
- (9) that That's what I said
- (10) MR. OPPENHEIMER No further questions Your Honor
- (11) A I'm confused
- (12) THE COURT Counsel are you sure you don't want to
- (13) ask anymore questions?
- (14) MR. STOLL I'm absolutely positive I don't want to
- (15) ask anymore questions
- (16) THE COURT Thank you We'll take a break
- (17) THE CLERK Please rise This court stands in
- (18) recess
- (19) (Jury out at 11:26 a.m.)
- (20) (Recess from 11:26 a.m. to 11:40 a.m.)
- (21) (Jury in at 11:40 a.m.)
- (22) THE CLERK Please rise This court now resumes its
- (23) session
- (24) Please be seated
- (25) MR. STOLL Call Larry Shorett Your Honor

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- (1) THE CLERK Sir could you attach the microphone to
- (2) your tie and remain standing for the oath Please raise your
- (3) right hand
- (4) (The Witness is Sworn)
- (5) THE CLERK Please be seated
- (6) Sir for the record can you please state your full name?
- (7) A It's Larry K. Shorett spelled S-h-o-r-e-t-t
- (8) THE CLERK And your occupation?
- (9) A I'm a real estate appraiser and consultant
- (10) THE CLERK Thank you
- (11) DIRECT EXAMINATION OF LARRY K. SHORETT
- (12) BY MR. STOLL
- (13) Q Mr. Shorett where do you reside?
- (14) A In Friday Harbor Washington
- (15) Q And your occupation again?
- (16) A I'm a real estate appraiser and consultant.
- (17) Q And did you - where did you go to university?
- (18) A I graduated from the University of Washington in 1953 with
- (19) a degree in business administration
- (20) Q And following your obtaining that did you go to work as an
- (21) appraiser?
- (22) A Not for three years After graduation I worked for three
- (23) years with a residential mortgage company in Seattle and then
- (24) subsequent to that I worked for - for eight years for the
- (25) Equitable Life Insurance Society of the United States I

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- (1) started in 1956 and at that point, I went into an appraisal
- (2) training program
- (3) Q All right And then after you - did you work for the
- (4) Equitable Insurance for eight years as an appraiser?
- (5) A As a mortgage loan officer and as an appraiser
- (6) Q Okay And then after that did you go into the private
- (7) appraisal business?
- (8) A Well I received my MAI designation as a member of the
- (9) Appraisal Institute in 1963, and then I left the Equitable in
- (10) 1964 to go into private appraisal practice
- (11) Q And have you been continuously in the private appraisal
- (12) business since - profession since that time?
- (13) A Yes I have I started out as an independent and then two
- (14) years later a partner joined me and we still have a - we
- (15) still have the same partnership called Shorett and Riely and
- (16) that's been going on now for 30 years
- (17) Q All right How many people are in the firm of Shorett and
- (18) Riely?
- (19) A We have a total of 30 including the partner - including
- (20) the partners There are two of us that are primary partners
- (21) and of those 25 are located in our Seattle office and then
- (22) we have five in our office here in Anchorage
- (23) Q And your office in Anchorage is right across the street
- (24) from this courthouse isn't that right?
- (25) A In the Carr-Gottstein Building yes

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- (1) Q And how long have you had a office in Anchorage?
 (2) A The office was opened - I don't recall the exact date it
 (3) was in the early 1970s
 (4) Q All right So approximately 20 years or thereabouts?
 (5) A Yes about that
 (6) Q And have you- prior to that time had you done work in
 (7) Alaska in the appraisal industry?
 (8) A Prior to opening the office?
 (9) Q Yes
 (10) A Yes I had
 (11) Q And would you tell the jury when the first - just tell
 (12) when the first time you did an appraisal
 (13) A Well the first -
 (14) Q In Alaska
 (15) A Well the first appraisal in Alaska was when I was with
 (16) Equitable in about 1980
 (17) Q All right And then did you do a large number of
 (18) appraisals following the earthquake and tidal waves in 1984?
 (19) A Well as an independent fee appraiser I did a damage
 (20) estimate on a number of properties located in - both here in
 (21) Anchorage and then also in Kodiak City
 (22) Q And that was for the - you did that work for the federal
 (23) government?
 (24) A Yes
 (25) Q On a fee basis?

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- (1) A Yes that's correct
 (2) Q And in addition to that work have you done work for the
 (3) Federal Housing Administration?
 (4) A Yes I have
 (5) Q And the Federal Deposit Insurance Corporation?
 (6) A Yes
 (7) Q And other government - federal government agencies?
 (8) A Yes I have
 (9) Q And have you done appraisal work for the State of
 (10) Washington?
 (11) A That's correct
 (12) Q And a number of cities in Washington as well as in
 (13) Alaska?
 (14) A Yes
 (15) Q And you've done appraisal work for large number of banks
 (16) isn't that correct?
 (17) A That's correct
 (18) Q Including the National Bank of Alaska and Key Bank of
 (19) Alaska?
 (20) A Yes
 (21) Q And banks of the Lower 48 so to speak?
 (22) A Yes
 (23) Q And I believe you've published some articles on
 (24) appraising
 (25) A On -

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- (1) Q Or related to appraising
 (2) A Principally on the computer computer applications or
 (3) global positions applications to appraising
 (4) Q And you've spoken to seminars on appraising isn't that
 (5) correct?
 (6) A Yes
 (7) Q And it's my understanding that - am I correct that you
 (8) have completed appraisal assignments about market studies on
 (9) properties located in the states of Washington Oregon Idaho
 (10) Montana California Wisconsin Arizona New Mexico
 (11) Pennsylvania Hawaii Alaska the provinces of British Columbia
 (12) and Alberta?
 (13) A Yes
 (14) Q And are you licensed to make appraisals?
 (15) A Yes I am
 (16) Q And what states?
 (17) A I'm licensed in - I'm a licensed general appraiser here in
 (18) the state of Alaska and also in Washington state
 (19) Q And are you a member of the Appraisal Institute?
 (20) A I'm a member of the Appraisal Institute yes
 (21) Q And that's what's called - the result of that you have
 (22) this MAI designation?
 (23) A That's correct
 (24) Q And that you've had I think you testified for about 30
 (25) years now 31 years?

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- (1) A Yes
 (2) Q And the Appraisal Institute is part of the Appraisal
 (3) Foundation is that correct?
 (4) A That's correct.
 (5) Q There was some testimony - were you present when
 (6) Mr. Carlson testified?
 (7) A I believe I heard his testimony regarding the foundation
 (8) yes
 (9) Q And he was a member of this other - the International
 (10) Association of Assessing Officers?
 (11) A Assessors I don't recall the acronym for it.
 (12) Q But at any rate that's part of the Appraisal Foundation
 (13) also?
 (14) A Yes
 (15) Q And in fact you served as President of the Washington
 (16) State and British Columbia Chapter of the Appraisal Institute
 (17) isn't that correct?
 (18) A Yes I did
 (19) Q You're also a member of the American Society of Real Estate
 (20) Counselors?
 (21) A That's correct
 (22) Q And in addition to the other appraisal work have you done
 (23) appraisals in - in Anchorage and Ketchikan, Sitka Seward
 (24) Fairbanks Kodiak?
 (25) A Yes I have

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- (1) Q In fact you did the appraisal on the Captain Cook Hotel
 (2) across the street?
 (3) A Yes that's right
 (4) Q Have you been qualified in a number of state and federal
 (5) courts as an expert in real estate?
 (6) A Yes I have
 (7) Q And have you done relevant estate damage analyses as well
 (8) as real estate appraisals?
 (9) A That's correct yes
 (10) MR STOLL Your Honor I offer Mr Shorett be
 (11) designated as an expert in real estate appraisal and real
 (12) estate damage analysis
 (13) MR OPPENHEIMER No objection Your Honor
 (14) THE COURT All right he's qualified Go ahead
 (15) BY MR STOLL
 (16) Q Now Mr Shorett when did I first - do you recall what
 (17) year I first contacted you with respect to doing some damage
 (18) analysis work as a result of the Exxon Valdez oil spill?
 (19) A Yes I - it was in the spring of 1991
 (20) Q All right And did you subsequently do some appraisals and
 (21) damage analyses for a number of properties in the oil spill
 (22) affected areas?
 (23) A That's correct
 (24) Q And among those areas were included the Kodiak Island is
 (25) that correct?

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- (1) A Yes
 (2) Q And you did - did you do those - would you tell the jury
 (3) did you do those on a - what's called a mass appraisal basis
 (4) or on an individual parcel basis or both?
 (5) A Well those properties were valued on a type of a mass
 (6) appraisal because of the fact that there were approximately
 (7) 1600 individual properties involved scattered over a very wide
 (8) area and it was just not possible to do what I would call a
 (9) conventional appraisal on each and every one of them
 (10) Q Okay And now did you subsequently do some appraisals
 (11) with
 (12) Mr Roberts and - some other appraisals of individual parcels?
 (13) A Yes I have
 (14) Q And during the last three and a half years as well as
 (15) before you were retained to do some work in this case before
 (16) the Exxon Valdez even occurred you'd been to Kodiak on a
 (17) number of - you'd been to Kodiak on a number of occasions
 (18) isn't that correct?
 (19) A I'm sorry I didn't lose - I lost track of the time
 (20) Q Okay Prior to there ever being an Exxon Valdez oil spill,
 (21) you'd been to Kodiak Island isn't that correct?
 (22) A I had been there in 1984 yes
 (23) Q And you'd done - since that time and up to the present
 (24) you'd done appraisal work in Alaska on a number of occasions
 (25) isn't that correct?
 (26) A Yes including Kodiak Island

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- (1) Q And following the Exxon Valdez oil spill and after we
 (2) retained you you made several more trips to Kodiak am I
 (3) correct there?
 (4) A Yes that's correct
 (5) Q There's a photo - there's a little photo of you in
 (6) Kodiak What's the Exhibit Number of that? I couldn't resist
 (7) that
 (8) A I'm not sure where that one came from but yes I think
 (9) that's me
 (10) Q We had you there in the wintertime as well as the
 (11) summertime isn't that right?
 (12) A That's on the beach in Old Harbor yes Zero degrees
 (13) Q That's Exhibit 1044 I was saving that
 (14) Now with respect to the - you can take the picture down
 (15) please
 (16) With respect to these various matters that you were doing
 (17) involved in the Exxon Valdez oil spill were you asked to
 (18) calculate damages resulting from the Exxon Valdez oil spill?
 (19) A Yes I was In connection with the assignment that we
 (20) discussed earlier that you had originally contacted me about in
 (21) 1991
 (22) Q And when you were - when you were determining this or
 (23) looking into this did you find that there were certain factors
 (24) that you thought were relevant to the calculation - well
 (25) first of all determining whether there was any damage and then

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- (1) calculating the damage?
 (2) A Yes I did We - I had worked on the project - and I
 (3) might say "we" from time to time because of the fact that I
 (4) had two people from my firm that assisted me for a good part of
 (5) the time - and we had gone over an awful lot of information
 (6) and compiled a lot of - great deal of information, and so
 (7) sometimes I say we determined or we found out, and that's what
 (8) I mean We had in fact, attempted to isolate those items
 (9) which appeared to be the most critical in dealing with a damage
 (10) estimate of this particular type It's a checklist. It's
 (11) not - doesn't necessarily mean that every one of those items
 (12) has to - that particular thing had to happen but it's
 (13) something that - that I felt very strongly should be looked at
 (14) carefully
 (15) Q And because you've had this office up here for the last 20
 (16) years or whatever, you've - you have a lot of information up
 (17) here in the local - as to the local market, am I correct
 (18) there?
 (19) A I had - I do have access to a great deal of - of Alaska
 (20) area and other information through our Anchorage office yes
 (21) Q All right Now did - was the - these factors that you
 (22) utilized in determining damages were those - those were made
 (23) into a chart, isn't that right? Exhibit 1049 is this -
 (24) A Yes
 (25) MR OPPENHEIMER Just protecting my record

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- (1) MR STOLL You can stand there or I can give you a
 (2) small copy You want a small copy?
 (3) MR OPPENHEIMER Sure Thank you
 (4) MR STOLL You re welcome
 (5) BY MR STOLL
 (6) Q Now these are the factors that you determined?
 (7) A Yes they are
 (8) Q And would you tell the jury please what you mean by
 (9) clean up costs and persistence of oil?
 (10) A Those are actually two separate items Cleanup cost is the
 (11) cost of actually cleaning the contamination and returning the
 (12) site to its original precontaminated state And persistence is
 (13) an indication of how long the contamination will remain on the
 (14) property before - like in the case of oil before natural
 (15) wearing and so forth will ultimately cause its removal
 (16) Q Now with respect to clean-up costs for the Kodiak Island
 (17) Borough properties did you make any assumption or did you
 (18) calculate that there were any - that there would be incurred
 (19) any clean-up costs in calculating the damages?
 (20) A Well first of all I did not have any definitive
 (21) information that - that I could rely on that would tell me
 (22) what if any clean-up costs would be for each one of the
 (23) individual sites My concern here was the fact that in some
 (24) instances clean-up costs exceed the value of the property
 (25) And a property that has contamination in which cleanup is

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- (1) required can be sort of a hot potato if you re not careful and
 (2) so within the appraisal industry we have to be very careful to
 (3) spell out the fact that we re not capable of making this
 (4) determination and make the assumption that the site is in
 (5) fact clean
 (6) In this particular instance I - as far as Kodiak is
 (7) concerned, they re two different areas we re talking about on
 (8) Kodiak
 (9) Q Let me ask this one question In terms of calculation of
 (10) damages though did you make any assumption that there
 (11) would
 (12) be incurred by the plaintiff any clean-up costs?
 (13) A No I assumed that there would be no clean-up costs
 (14) Q All right Now with respect to the calculation of damage
 (15) for the Kodiak Island Borough property did you make any
 (16) assumption as to the length of time for persistence of oil?
 (17) A Yes I did
 (18) Q And what was that assumption?
 (19) A One year
 (20) Q You only took one year?
 (21) A That s correct
 (22) Q And so if you assumed that oil was still there for two or
 (23) three years after it would be a larger damage calculation?
 (24) A Yes
 (25) Q Okay Now would you tell the jury what your - what you
 mean by item number 2?

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- (1) A Loss of use of the property either full or partial number
 (2) 2 and number 3 the loss of marketability generally go
 (3) together in a - in the concept of real estate ownership When
 (4) you own real estate or when you buy real estate you are
 (5) acquiring certain rights and these rights are protected by the
 (6) constitution and when you have fee title to a property you
 (7) can occupy the property you can lease it you can sell it you
 (8) can give it away or you can do nothing with it These are all
 (9) rights that are - that run with property
 (10) And damage to real estate is generally reflected in some
 (11) kind of a - an effect on - on these rights and the two
 (12) rights that as I say that are the most predominant that are
 (13) typically affected by damage is use and marketability and so
 (14) these were two areas that - that I felt we should give very
 (15) careful consideration to
 (16) Q Okay And so did you by loss of use there s been some
 (17) testimony of - of not being able to recreate on the property
 (18) or not be able to fish from the property things of that
 (19) nature is that what you mean by loss of use?
 (20) A That s correct
 (21) Q Okay And then what do you mean by loss of marketability?
 (22) A Well the inability to market the property either in a
 (23) timely fashion in a manner that normally would have occurred
 (24) without - without the damage or at a lesser price than you
 (25) could normally get for the property

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- (1) Q What about if the person didn t actually have the property
 (2) on the market at the time? What difference does that - does
 (3) that make?
 (4) A Well I believe that we re dealing with the underlying
 (5) rights and I don t believe it s necessary to actually have
 (6) wanted to sell the property or to have had it on the market to
 (7) have the lack of marketability or have the event cause the lack
 (8) of marketability not impact the - the owner s position
 (9) Q This bundle of rights or these rights sometimes are called
 (10) the bundle of rights is that right?
 (11) A Yes
 (12) Q And that s cited sometimes - in fact the Appraisal
 (13) Institute has a book called the Appraisal of Real Estate?
 (14) A Yes That s correct.
 (15) Q What do you mean by the damage to natural resources?
 (16) How
 (17) does that come in?
 (18) A Well this area is directed mainly to the nature of the
 (19) property within the spill area and that s including Kodiak
 (20) Island where a lot of the land is used for subsistence or some
 (21) activity, mainly fishing that s - that relies upon natural
 (22) resources and there are a lot of properties being used
 (23) throughout the whole spill area today that would not be used if
 (24) fishing did not exist. So anything that damages some of these
 (25) underlying resources can have a - have an effect on again
 the actual use of the property

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- (1) Q And what do you mean by adverse economic trends created
 (2) affecting marketability?
 (3) A This is more in the area of a trend that's developed
 (4) because the event whatever that happened to have been
 (5) caused
 (6) an industry or an activity to be curtailed less employment
 (7) less income flowing into the market less money available for
 (8) the acquisition of real estate and less demand for real estate
 (9) to support that activity
 (10) Q And what do you mean by the last item you've got there
 (11) stigma fear and uncertainty?
 (12) A Well stigma is - as I would interpret it in this case is
 (13) that a blemish or a stain It's - if a property is
 (14) contaminated it's generally known or it - actually it has
 (15) to be divulged by the seller in any event It's just a black
 (16) mark against the property And fear and uncertainty can be
 (17) created by dealing with property that has some level of
 (18) contamination or some level of damage
 (19) Q And when you considered all these factors do you then
 (20) develop a - a damage model or formula?
 (21) A Well I - I think that it would be more appropriate to
 (22) call it a - just a damage concept
 (23) Q Okay And would you explain that to the jury please?
 (24) A Well there are - there are different ways that you can
 (25) measure damage to - to real estate It's quite simple in the
 (26) case of income properties that have a defined income stream in

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- (1) for a year
 (2) So there's a real common technique that appraisers use and
 (3) it's called the reversion or discounting which is a method
 (4) that you use to measure that - that time span or that - or
 (5) that so-called discount between one point and the other
 (6) And the two things you have to know in order to do that -
 (7) or three things actually is the value of the property at the
 (8) end of say the year and we said like it was \$10,000 and the
 (9) next thing would be what - or pardon me how long it would be
 (10) which is one year So we know it's \$10,000 We know it's one
 (11) year
 (12) And then the last question is what kind of a - of a
 (13) discount rate or reversionary rate do you want to apply So I
 (14) looked at a number of different things and came up with a
 (15) conclusion that 14 percent discount rate would be appropriate
 (16) That was based upon looking at the prime rate - incidentally
 (17) rates in 1989 were substantially higher than they are today
 (18) and that's the date that I am making this estimate The
 (19) inflation rate was 4 percent Prime mortgage rates were at
 (20) least 10 percent 9 to 10 percent Bond rates were very close
 (21) to that
 (22) So it appeared to me that a 14 percent rate which I think
 (23) reflects a real short-term nature of the - of this whole thing
 (24) that we're dealing with and the risk associated with it was
 (25) appropriate

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- (1) which something happens to them and you can tell what
 (2) happened
 (3) to the - to the bottom line income or the cash flow It's
 (4) pretty easy to do that Properties in this area have rental
 (5) characteristics There is a defined rental market state
 (6) agencies the Alaska Railroad a number of different agencies
 (7) and in a lot of cases individuals will lease and rent land
 (8) And I gave very careful consideration to that and I'll come
 (9) back to that in a minute
 (10) What it appeared to me to be more appropriate here is the
 (11) fact that the ownership with these associated rights or the
 (12) associated rights with the ownership had in fact been
 (13) suspended for a period of time because of the oil spill
 (14) because of the loss of use the loss of marketability so
 (15) forth
 (16) So it's like you have a lot that's worth \$10,000 and say
 (17) that it's worth \$10,000 today and there's something that causes
 (18) you to really not be able to use that lot either fully or
 (19) whatever and yet you know that a year later you can have that
 (20) same lot back exactly as it was fully usable and assuming that
 (21) it's at that point worth \$10,000 the question is How much
 (22) would you pay today for the right to have that - to receive
 (23) that future benefit? And it's common economics that you don't
 (24) pay the same price today for something - you don't pay the
 (25) future value for a present benefit In other words you're not
 (26) going to pay \$10,000 a year later because you've lost the use

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- (1) So the next step after we know these factors - I hope I'm
 (2) not getting too off in the theoretical world here but once
 (3) these factors are known then to determine the factor from the
 (4) 14 percent rate is done quite simply You can look it up in a
 (5) book you can do it on a hand calculator whatever but
 (6) nonetheless that factor is applied And as an example of what
 (7) I did a \$10,000 lot that you would get a year later today
 (8) would pay about \$7,700 or \$8,800 for that In order to get your
 (9) year
 (10) Q So let me interrupt for a minute Mr Shorett
 (11) First of all is a 14 percent discount rate is that
 (12) essentially - what kind of a - if you were going to call that
 (13) an interest rate what kind of an interest rate is that? How
 (14) does that equate?
 (15) A Well the effective rate from that calculation is
 (16) approximately 12 percent so if you had \$10,000 and multiplied
 (17) it by 88 percent or if you're figuring the damages by 12
 (18) percent then that would be roughly \$12,000 so that - the
 (19) actual rate is 12 percent and that's the rate I looked at to
 (20) go back and compare it with what rental rates would be as I've
 (21) already said were available in the market and the rate I -
 (22) the 12 percent rental rate would be a little bit higher than
 (23) the prevailing rental rate at that point which I think is
 (24) appropriate because we're talking about a very short-term
 (25) rental of 12 months

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- (1) Q And was the discount rate of 14 percent was that the -
 (2) how did that compare to the discount rate that was commonly
 (3) being used in the real estate industry at that time? Did you
 (4) review your records in your offices in Anchorage and Seattle on
 (5) that?
 (6) A I looked back to see what we had been doing and what rates
 (7) we had been using as of 1989 or mid 1989 and 14 percent was
 (8) a very common rate That was generally on a - on something that
 (9) I consider to be less risky than remote Alaska property and
 (10) normally the higher the risk the higher the rate So
 (11) probably if anything my - from that part of a research the
 (12) rate was substantiated and probably if anything a little bit
 (13) on the conservative side
 (14) Q Again in utilizing this you've referred to this one-year
 (15) period For the purposes of doing this damage calculation
 (16) you've just assumed a one-year length of time isn't that -
 (17) isn't that correct?
 (18) A Yes that's right
 (19) Q And if the - if the damage persisted after that one year
 (20) then the damage calculation would be greater than that?
 (21) A That's correct
 (22) Q Now with respect to the parcels that are owned by Kodiak
 (23) Island Borough you yourself did not do an appraisal of those
 (24) parcels am I correct there?
 (25) A I did not appraise those parcels no

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- (1) Q You are familiar with the appraisal or appraisals I should
 (2) say that were done by Mr Carlson, the assessor of the Kodiak
 (3) Island Borough?
 (4) A That's correct
 (5) Q And could you tell the jury if you've had - and if so how
 (6) many times you've talked to Mr Carlson about both his
 (7) appraisals and the real estate market in Kodiak
 (8) A Well I've talked to Mr Carlson extensively because of the
 (9) amount of work that - that I had been doing and am continuing
 (10) to do on Kodiak Island I discussed his appraisal with him I
 (11) did not do a formal review of his appraisal I looked through
 (12) his appraisal and I generally discussed his methodology and
 (13) how he went about it
 (14) Q And are you familiar with the property that he appraised?
 (15) A I have seen the property from the air I videotaped the
 (16) property at one time I have never - I have not set foot on
 (17) the property
 (18) Q These particular parcels?
 (19) A The parcels that Mr Carlson appraised?
 (20) Q Right.
 (21) A That's correct.
 (22) Q And you have been in the vicinity on the ground in these
 (23) various areas though?
 (24) A I've been in the general areas yes
 (25) Q And was there - is there any reason why you think your

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- (1) damage formula or methodology whatever you - I can't
 (2) remember
 (3) the word you used - you applied that to the appraisal of
 (4) Mr Carlson?
 (5) A I - that's correct
 (6) Q And based upon your - your familiarity with his appraisal
 (7) and based upon your several conver- - numerous
 (8) conversations
 (9) I guess with Mr Carlson do you have an opinion as to whether
 (10) or not Mr Carlson is knowledgeable about the Kodiak real
 (11) estate market?
 (12) A Yes I do
 (13) Q What's that opinion?
 (14) A Well I think Mr Carlson is extremely knowledgeable He
 (15) is sitting in the - in the center or the hub of all - what I
 (16) would consider to be all real estate knowledge within the
 (17) Kodiak Borough The borough is where all of the assessments
 (18) are made the - the assessor has access to all of the
 (19) instruments involved any recordings and even more important
 (20) the assessor has a structured process where they talk or
 (21) correspond with the people that are buying or selling property
 (22) so that they can verify the price There's no other way of
 (23) knowing there are no stamps that you can count with taxes like
 (24) we can in Washington state There's no dollar amount
 (25) generally
 (26) shown in an instrument, and therefore each individual buyer
 (27) and/or seller has to be contacted to determine what the
 (28) price - what price was paid

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- (1) Q And you know from talking to Mr Carlson he did that?
 (2) A Mr Carlson as a matter of course the Assessor's Office
 (3) in Alaska generally do that He also has a - a very complete
 (4) supply of maps of assessor's plats They now have an
 (5) electronic mapping system that - a large AutoCad system going
 (6) with all the properties plotted on it, and I feel that
 (7) Mr Carlson is the authority on - on property in Kodiak
 (8) Q Do you - do you have an opinion as to whether Mr Carlson
 (9) is a competent appraiser?
 (10) A The - I believe Mr Carlson is a competent appraiser I
 (11) say that based upon reading the appraisal that he did in - in
 (12) developing these valuations
 (13) Q And is the methodology that Mr Carlson used is that one
 (14) that's typically used in the real estate industry?
 (15) A Yes it is
 (16) Q And do you have an opinion as to whether or not his
 (17) methodology was reasonable?
 (18) A I believe it's reasonable
 (19) Q And did Mr Carlson's analysis appear in doing this
 (20) appraisal appear to you to be thorough?
 (21) A Yes it did
 (22) Q All right. Now did you then utilizing your damage model
 (23) did you then apply that to the appraisal of Mr Carlson?
 (24) A Yes
 (25) Q And is that shown - here's the - this is the summary

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- (1) Exhibit 907 is the summary of the appraisal of - appraisals I
- (2) should say of Mr Carlson And did you in Exhibit 1041 is
- (3) this the calculation using your 14 percent discount factor?
- (4) A That's correct
- (5) Q So utilizing - applying the discount factor that you
- (6) utilized that results in the damages for one year using
- (7) Mr Carlson's appraisal of \$8 818 000?
- (8) A The damages are 6 800 000 and - I can't see it on this
- (9) angle here what was that again?
- (10) Q 6 818 000?
- (11) A 6 818 000 damages yes
- (12) Q And again if the persistence or the other damages caused
- (13) by the oil spill had continued past one year the damages would
- (14) be greater utilizing this?
- (15) MR OPPENHEIMER Your Honor objection May we
- (16) approach the bench?
- (17) THE COURT Sure
- (18) (At side bar on the Record)
- (19) THE COURT Is it objection to land cost.
- (20) MR OPPENHEIMER Yes
- (21) THE COURT Asked and answered
- (22) MR OPPENHEIMER What he's going to do is now - what
- (23) he's going to do is ask him how to compute that
- (24) MR STOLL I can't hear you
- (25) THE COURT Are you going to ask him to compute -

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- (1) MR STOLL No, no
- (2) MR OPPENHEIMER Because if I fail all to show -
- (3) THE COURT Sustained
- (4) MR OPPENHEIMER Your Honor objection sustained?
- (5) THE COURT Yes because he's not going to go any
- (6) further
- (7) MR OPPENHEIMER This is it?
- (8) THE COURT Yes
- (9) MR OPPENHEIMER He's not going to argue -
- (10) THE COURT That's what he said
- (11) MR OPPENHEIMER I haven't heard Mr Stoll say it's
- (12) not going to be more than a year that's the objection
- (13) THE COURT There's no other issue than this right?
- (14) You're not going to go on to suggest that they might want more
- (15) damages right?
- (16) MR STOLL I'm going to ask them for more damages
- (17) THE COURT You are? At the end of the case?
- (18) MR STOLL Oh yeah
- (19) THE COURT With this witness you're going to ask the
- (20) questions?
- (21) MR STOLL Not with this witness I've said that
- (22) THE COURT Objection's sustained
- (23) (Sidebar concluded)
- (24) BY MR STOLL
- (25) Q So this is your calculation one year?

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- (1) A Yes
- (2) MR STOLL That's all I have
- (3) MR OPPENHEIMER Mr Shorett how are you?
- (4) A Fine
- (5) CROSS EXAMINATION OF LARRY K SHORETT
- (6) BY MR OPPENHEIMER
- (7) Q Does this number - I'm referring to the damage number on
- (8) Exhibit 1041 - does this number quantify use impairment?
- (9) A I'm sorry I didn't get the last - quantify what?
- (10) Q I'm sorry I was turning away from you Exhibit 1041 the
- (11) bottom number \$6 818 000 does that number quantify use
- (12) impairment?
- (13) THE COURT Counsel by quantify do you mean set a
- (14) specific number for that?
- (15) MR OPPENHEIMER Yes
- (16) A I still - I'm sorry I - use in term or what is your -
- (17) BY MR OPPENHEIMER
- (18) Q Well let's back up
- (19) MR STOLL I think the problem is you were turning
- (20) away from him when you asked the question couldn't hear the
- (21) word impairment.
- (22) MR OPPENHEIMER I'm sorry just the word It's late
- (23) and we've all been running along
- (24) BY MR OPPENHEIMER
- (25) Q Let me ask you a more general question to begin

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- (1) Mr Shorett
- (2) What does the \$6 818 000 represent with respect to lost use
- (3) of the KIB properties If it represents anything about that?
- (4) A It's not directed specifically at lost use
- (5) Q If I were to ask you to assume that there was no lost use
- (6) to these properties would it have any effect on that number?
- (7) A Under the damage analysis that I made originally and which
- (8) I applied here no
- (9) Q If I were to ask you to assume hypothetically that there
- (10) were no - there was no suspension of marketability would it
- (11) have any effect on that number?
- (12) A No
- (13) Q You've already told us that there were no clean-up costs
- (14) so I assume that that number does not represent any sort of
- (15) clean-up costs
- (16) A That's correct.
- (17) Q If I were to tell you that there were no damage to natural
- (18) resources would it affect that number?
- (19) A No
- (20) Q If I were to tell you to assume - well haven't you taken
- (21) into account any adverse economic trends created or affecting
- (22) marketability with respect to Kodak in this case?
- (23) A I had looked into that yes
- (24) Q Okay If I were to ask you to assume that there were no
- (25) such trends would it affect your - that damage number there

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- (1) or \$6 818 000?
 (2) A No
 (3) Q If I were to ask you to assume that there were no stigma or
 (4) fear of uncertainty would it affect this \$6 818 000 figure?
 (5) A No
 (6) Q So early on when Mr. Stoll identified - or actually you
 (7) identified with him on an exhibit six factors in determining
 (8) land damages and then you concluded that there was a way
 that
 (9) you could arrive at a damage figure of \$6 818 000 my question
 (10) is Which of these six things is the \$6 818 000 measuring?
 (11) A I don't know which It's a composite of any one of them
 (12) one or more of them
 (13) Q If I - if the loss of use of the property - by the way
 (14) we're referring here to temporary loss of use?
 (15) A That's correct yes
 (16) Q If I - if I were to give you evidence hypothetically -
 (17) I'm sorry let me rephrase I apologize it is late and I'm
 (18) trying to get you home
 (19) Assume in my hypothetical that all of the information which
 (20) you used to come up with a damage figure of \$6 818 000 is the
 (21) same I only ask you to change in my hypothetical that
 (22) there's no loss of marketability, assume if you will that in
 (23) fact there is unimpaired marketability okay? If I were to ask
 (24) you to make that assumption would the \$6 818 000 dollar figure
 (25) change?

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- (1) A No
 (2) Q Well you would you give me the same answer if I asked you
 (3) to hold all the other variables constant but I asked you to
 (4) assume that in fact there was complete and full use of the
 (5) property during the year would you still have a damage figure
 (6) of \$6,818,000?
 (7) A Yes
 (8) Q It sounds as if it's irrelevant to the \$6 818 000 dollar
 (9) figure whether anybody could sell or use their property is
 (10) that correct?
 (11) A If they could - no that's not correct. That's not
 (12) correct You are asking me specific items such as
 (13) marketability everything else being the same If you have
 (14) marketability if the property could be marketed but you can't
 (15) use it as far as I'm concerned - again going back to the
 (16) original rights that all property owners have - I believe that
 (17) it's damaged equally to - to the same property that maybe you
 (18) could use but could not market It's not cumulative We're
 (19) not adding them together but either one of those contribute to
 (20) that damage item
 (21) Q What if you assume hypothetically that you have half the
 (22) use of your property and half its marketability, would that
 (23) make a difference?
 (24) A I don't understand the question Could that do what?
 (25) Q Let's assume that you have no clean up costs you have no

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- (1) reason to believe there's a loss of marketability you have no
 (2) reason to believe there's damage to natural resources you
 have
 (3) not done a study and do not know if there are adverse economic
 (4) trends you are not aware of any stigma but there is an
 (5) impairment of say access to one canyon on your property you
 (6) can't get to the canyon and use it - otherwise the property's
 (7) fine - and I've asked you to assume that there's nothing in
 (8) any of the other variables that would hurt the property does
 (9) the \$6 818 000 dollar number change?
 (10) A Now we're talking about a hypothetical not what I've
 (11) actually done So if I'm getting into the detail I'd like to
 (12) know what the rest of the site is like You say if you could
 (13) use half and not the other half what's the half like that you
 (14) could use
 (15) Q If you would just bear with me It is a hypothetical I
 (16) appreciate you haven't done this but with my hypothetical no
 (17) clean up cost no loss of marketability no damage to natural
 (18) resources no adverse economic trends no stigma you're
 aware
 (19) of but assume hypothetically that half of the property you
 (20) can't access and use Would that change the damage number?
 (21) A That would have to be analyzed on an individual site basis
 (22) because it very well could It could totally remove the
 (23) utility of the property for a year or it could not We'd have
 (24) to know what the property is like for using as a hypothetical
 (25) Q You were in court I believe earlier this morning when

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- (1) Mr. Carlson was testifying is that right?
 (2) A Yes sir
 (3) Q And you watched us put some sales transactions on a map of
 (4) Kodiak although you probably were looking at it from behind
 (5) it but you were aware that we were putting transactions on a
 (6) map of Kodiak during the year after the spill?
 (7) A I heard the conversations
 (8) Q And you're aware that - you're aware of that anyway from
 (9) your own work are you not? That there were transactions in
 (10) the market in the year after the spill?
 (11) A I am yes
 (12) Q Now, have you taken that into account in your analysis?
 (13) A Yes, I have
 (14) Q Let me ask you something about your analysis You agree
 (15) that there were transactions in the year after the spill?
 (16) A Yes I do
 (17) Q Have you ever considered the issue about what marketability
 (18) damages would be appropriate if in fact the market was not
 (19) suspended but rather the spill had caused a marginal impact
 on
 (20) demand?
 (21) A A marginal impact?
 (22) Q Yes Have you ever considered the issue about what
 (23) marketability damages would be appropriate if in fact the
 (24) market was not suspended but rather the spill had caused a
 (25) marginal impact on demand?

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- (1) A I might have I can't answer that at this point
- (2) MR OPPENHEIMER Counsel deposition 1322 23
- (3) MR STOLL Which day was this?
- (4) MR OPPENHEIMER Lines 14 through 25
- (5) MR STOLL I've got a problem When we got to volume
- (6) nine the copy I've got doesn't have page numbers
- (7) MR OPPENHEIMER We'll give you the pages Here
- (8) read mine
- (9) MR STOLL Is this the ninth day of the deposition?
- (10) THE COURT While this is happening counsel you can
- (11) at least refresh his recollection by showing him
- (12) MR OPPENHEIMER I'll show mine Your Honor if
- (13) counsel has no objection
- (14) THE COURT That'll give Mr Stoll time to find his
- (15) copy
- (16) MR STOLL I got it They said volume 19 It was
- (17) volume 8
- (18) THE COURT Oh
- (19) MR OPPENHEIMER Fatigued and not a plan I assure
- (20) you
- (21) THE COURT So long as it isn't volume 30
- (22) MR STOLL Well we've got that too I'm sure
- (23) What line number?
- (24) MR OPPENHEIMER 14 through 25
- (25) And Mr Shorett If you would take a look here I'm giving

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- (1) you 1323 lines 14 through 25
- (2) THE COURT He's looked at it counsel
- (3) MR OPPENHEIMER Pardon me I apologize
- (4) BY MR OPPENHEIMER
- (5) Q Were you asked Had you ever considered the issue about
- (6) what marketability damages would be appropriate if in fact
- (7) the market was not suspended but rather the spill had caused a
- (8) marginal impact on demands?
- (9) And you answered I have not conducted such an analysis
- (10) Question And sitting here today you can't tell me how the
- (11) results would change at all?
- (12) Answer I can't tell you
- (13) A Yes
- (14) Q Now we looked at a chart earlier Do you - I'm putting
- (15) up exhibit plaintiffs 1524 Mr Shorett have you seen this
- (16) exhibit previously?
- (17) A Yes I have
- (18) Q Okay And you're aware are you not that this is a
- (19) closeup of some of the properties that the borough is suing
- (20) over at the head of Ugak Bay?
- (21) A In Ugak yes
- (22) Q Right. Now did you take into account when you
- (23) determined - well have you determined that there are damages
- (24) for these parcels?
- (25) A The damage - yes I have They're in the total there

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- (1) that's on the bottom of the exhibit In other words the
- (2) damage figure is the sum total of all of the parcels added
- (3) together
- (4) Q Okay Do you know offhand which of those - of these
- (5) numbers correspond with those parcels?
- (6) A No
- (7) Q Okay But there's a damage number for those you're
- (8) comfortable with that?
- (9) A Yes
- (10) Q And when - when you developed that damage number did
- (11) you
- (12) take into account that there had been sales within the year
- (13) after the spill in locations right in the property and adjacent
- (14) to the property?
- (15) A I was aware that there had been small parcel sales in Ugak
- (16) Bay in 1989 yes
- (17) Q Did you hear us talk about the sales at the end of the road
- (18) in Pasagshak?
- (19) A Yes
- (20) Q And did you take those into account?
- (21) A I was aware of those I can't - I can't tell you exactly
- (22) how I took them into account I was aware of them
- (23) Q And the sales in Sunny Cove on Spruce Island?
- (24) A Yes
- (25) Q Is it your opinion that there was a lot of market activity
- (26) in the cities of Seward Cordova Whittier Kodiak?

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- (1) A I believe -
- (2) Q - In 89?
- (3) A Within - within the city boundaries themselves yes
- (4) Q You have some associates Mr Robinson and a Mr Davis?
- (5) A Yes
- (6) Q Right And they undertook some interviews with bankers
- (7) lenders that sort of thing?
- (8) A That's correct
- (9) Q And they reported back to you did they not that they had
- (10) spoken with real estate brokers, bankers and property owners
- (11) who confirmed for them that the spill did not create a market
- (12) disruption?
- (13) A They had talked to people of that category that informed
- (14) them that the spill had not caused a market interruption and I
- (15) don't know what that document is you're looking at there but I
- (16) know that a good number of those people were located within
- (17) the
- (18) cities you just mentioned Homer and Cordova and the other
- (19) areas and that's the principal reason why in the appraisal
- (20) that we did earlier we took those - or did not include those
- (21) properties within the area of our damage survey We excluded
- (22) them
- (23) Q We're racing through these Mr Shorett, I show you -
- (24) A They're getting worn out
- (25) Q They are getting worn out
- (26) I show you plaintiffs exhibit 1354-A which is a map

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- (1) depicting some oiling Have you seen that before?
 (2) A Yes I have
 (3) Q Okay Did you analyze the implications for your study the
 (4) fact that there were sales in areas that show oiling during the
 (5) year after the spill?
 (6) A At the time that I did the study - and I'm a little
 (7) confused by which study you're referring to but the - I had
 (8) the - the appraisal report that I did and then also this
 (9) analysis I did in conjunction with Mr. Carlson's work and they
 (10) were both completed at about the same time I believe in
 (11) somewhere around January or February of 1993 At the time
 (12) that
 (13) I had done that work this map did not exist
 (14) Q So you didn't take it into account at the time that you
 (15) came up with the number?
 (16) A I could not take this map into account at that time because
 (17) it didn't exist
 (18) Q There will be an injury before this is over
 (19) A Excuse me are we through with the - with this?
 (20) Q I'll take it back You're talking to us about a damage
 (21) concept is that correct?
 (22) A Yes
 (23) Q When Mr. Stoll contacted you in April of '91, he didn't
 (24) contact you to do this study did he?
 (25) A No
 (26) Q He contacted you to do a study about some other places

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- (1) You've never been asked to do an appraisal of the Kodiak
 (2) properties is that correct?
 (3) A That's correct
 (4) Q Were you aware -
 (5) MR STOLL You mean the Kodiak Island Borough
 (6) counsel?
 (7) MR OPPENHEIMER Yes
 (8) BY MR OPPENHEIMER
 (9) Q I need to ask you a question about the process that's used
 (10) here There's a damage number here of \$6,818,000 Now this
 (11) number \$56,343,000 is Pat Carlson's appraisal of the 13
 (12) borough parcels that are being sued over in this case is that
 (13) correct?
 (14) A That is correct yes
 (15) Q And it's true is it not, that you get the damage figure of
 (16) \$6,818,000 by taking this number right and applying what you
 (17) called a discount factor and getting a smaller number than \$56
 (18) million and then subtracting that smaller number from this to
 (19) give you this right?
 (20) A Yes that's correct
 (21) Q And if we did that what that would mean - I'd like to put
 (22) something up on the Elmo This is plaintiff's Exhibit 1043
 (23) Now Mr. Shorett this was provided my office as - in
 (24) anticipation of your testimony probably just the shortness of
 (25) time that kept it from being used but is that what's on

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- (1) the - on the Elmo there pardon me on the Barco it's also on
 (2) your screen sir I'm sorry we're very high tech Is that an
 (3) accurate statement of how you computed damages here?
 (4) THE COURT Which counsel the one on the screen?
 (5) MR OPPENHEIMER Yes yes
 (6) BY MR OPPENHEIMER
 (7) Q You take the value of the property without EVOS which is
 (8) the \$6,343,000 then you subtract the value with EVOS and that
 (9) gives you damage is that what you did here?
 (10) A That was the way that the damage was done in the - damage
 (11) estimate was done in my report that I - I guess I would call
 (12) it the large report the 1600 parcel or so appraisal With
 (13) regard to the borough property I expressed my opinion of
 (14) damages in a letter which explained I believe quite thoroughly
 (15) how I - how I went about doing my analysis So I frankly have
 (16) not - I don't know where this came from but it is a - it is
 (17) the basic methodology
 (18) Q But it's not actually the methodology you used with respect
 (19) to Kodiak is that correct?
 (20) A For what?
 (21) Q That's not the methodology you used with respect to Kodiak
 (22) or is it?
 (23) MR STOLL Kodiak Island Borough
 (24) MR OPPENHEIMER Kodiak Island Borough
 (25) A Well the - if I had been writing that I would have said

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- (1) the value of the property without EVOS as computed by Patrick
 (2) Carlson Kodiak Borough appraisal and then a value of the
 (3) property -
 (4) BY MR OPPENHEIMER
 (5) Q Excuse me excuse me Pat's never done it has he? Pat has
 (6) never given you a number for the value of Kodiak Island
 (7) Borough
 (8) property - I'm sorry saying without EVOS?
 (9) A That's correct
 (10) Q Pardon me I apologize
 (11) A And then minus the value of the property - or I should say
 (12) minus the value of the Kodiak Borough property as valued by
 (13) Mr. Carlson after deducting my estimate of damage equals
 (14) damage
 (15) Q No one including yourself neither you or Mr. Carlson I
 (16) should say has given us an evaluation an appraisal of the
 (17) value of Kodiak Island Borough property with EVOS isn't that
 (18) correct?
 (19) A That's true
 (20) Q Let me show you defendant's exhibit 15617 which I
 (21) believe - this is a letter on your stationery dated
 (22) February 22, 1993 to Mr. Jamin who is an attorney
 (23) representing Kodiak, I believe Kodiak Island Borough and ask
 (24) you if this is the letter you were referring to which expressed
 (25) your approach in this case
 (26) A Yes it is

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- (1) MR STOLL Are you offering this? We'll - you
- (2) offering this?
- (3) BY MR OPPENHEIMER
- (4) Q Let me ask you a question here put this board back up
- (5) MR STOLL Excuse me Your Honor if this letter's
- (6) going to be published to the jury as it is being then I think
- (7) it should go into evidence
- (8) THE COURT It doesn't have to go into evidence right
- (9) now all it has to be is identified counsel This is your
- (10) letter sir? This is a letter you wrote?
- (11) A Yes I've said this is my letter
- (12) THE COURT I'll consider whether it goes into
- (13) evidence after I hear the testimony
- (14) BY MR OPPENHEIMER
- (15) Q Now Mr Shorett if this is the value of the land that
- (16) Mr Carlson computed and if he computed that value
- (17) accurately
- (18) and we subtract the damages away is the value of those
- (19) properties after the spill \$49 125 000? Which would be the
- (20) amount you get from subtracting the damages from the
- (21) undamaged
- (22) number?
- (23) A Yes
- (24) Q Now weren't you asked that identical question at your
- (25) deposition and didn't you refuse to answer?
- (26) A You'll have to show me the deposition If you would please
- (27) where I -

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- (1) Q I will Let me ask you one follow up question
- (2) Do you believe that if Mr Carlson's value of these
- (3) properties is accurate that the damages suffered by the
- (4) properties from the spill would be \$6 818 000?
- (5) A Yes
- (6) Q Do you remember being asked that question at your
- (7) deposition and saying I don't know one way or the other?
- (8) A I'd like to see the deposition because I think as I
- (9) recall those questions came up at the - toward the end of my
- (10) fifth straight day of depositions and there was a lot of
- (11) controversy going on between the speculative attorneys and a
- (12) great deal of confusion so I'd be happy to look at it
- (13) MR OPPENHEIMER Counsel pages 909 and 910
- (14) MR STOLL Of which - this is September 3rd?
- (15) MR OPPENHEIMER You have it?
- (16) MR STOLL 913 did you say? I'm sorry what page
- (17) did you say?
- (18) MR OPPENHEIMER 909 and 910
- (19) (Videotape Played)
- (20) VIDEO EXAMINER
- (21) Q Do you believe that if Mr Carlson's appraisal is an
- (22) accurate valuation of the KIB properties before the spill that
- (23) the value after the spill will be approximately \$49 125 000?
- (24) UNIDENTIFIED SPEAKER You are asking him to express
- (25) an opinion of value right now?

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- (1) VIDEO WITNESS That's what he's doing yes and I'm
- (2) not going to do that
- (3) UNIDENTIFIED SPEAKER Object to the question
- (4) VIDEO WITNESS Wow nice try
- (5) BY VIDEO EXAMINER
- (6) Q Is the answer no?
- (7) A I'm not even going to - give me the question again
- (8) Q Yes Would you read it back please?
- (9) (Reader of question Do you believe that if Mr Carlson's
- (10) appraisal is an accurate valuation of the KIB properties before
- (11) the spill that the value after the spill would be approximately
- (12) \$49 125 000)
- (13) VIDEO WITNESS I have no comment regarding that one
- (14) way or the other
- (15) BY VIDEO EXAMINER
- (16) Q Do you believe that if Mr Carlson's value of these
- (17) properties is accurate that the damages suffered by the
- (18) properties from the spill would be \$6 818 000?
- (19) UNIDENTIFIED SPEAKER I object the question's been
- (20) asked and answered You're just trying to reorder the
- (21) elements that's all
- (22) VIDEO WITNESS I have no comment on that. I don't
- (23) know
- (24) BY VIDEO EXAMINER
- (25) Q You don't know one way or the other? You have to answer

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- (1) audibly Mr Shorett
- (2) A I don't know one way or the other
- (3) (Videotape concluded)
- (4) BY MR OPPENHEIMER
- (5) Q Do you think that the use of KIB's properties were impaired
- (6) during the year after the spill?
- (7) A Yes, I do
- (8) Q Do you have any information - are you familiar with Shuyak
- (9) Island?
- (10) A Yes
- (11) Q Ever been there? I'm sorry Mr Shorett, have you ever
- (12) been there?
- (13) A I'm sorry Yes Yes, I have
- (14) Q And what uses were made of this before the spill?
- (15) A First, let me say that when - in answering your last
- (16) question from the information that I heard in this courtroom
- (17) and elsewhere I suspect that the use was interfered with in
- (18) these properties I did not on the other hand, in connection
- (19) with this document, or with the analysis that we're discussing
- (20) today do a site-by-site use analysis or lack of use analysis
- (21) on the properties So I can't say on any of these sites
- (22) categorically that I know whether or not the use and/or the
- (23) marketability was impeded
- (24) Q You mentioned that you were in the courtroom the other day
- (25) when there was various testimony about activities in Kodiak.

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- (1) There were some - some reports - I'm sorry I keep turning
 (2) away from you I apologize There were some reports on fishing
 (3) and recreational activities angler days that sort of thing
 (4) Did you take any of that into account in doing your work?
 (5) A The information that I heard in the courtroom came from
 (6) reports that I was not aware of and that - and that were not
 (7) available at the time that I had done my work but we did give
 (8) consideration on an overall basis to that sort of thing yes
 (9) Q Do you know if fishing on Shuyak was actually interrupted
 (10) in the summer of '89?
 (11) A I don't know that
 (12) Q Do you know if recreational use of Shuyak Island was
 (13) actually interrupted in the summer of 1989?
 (14) A Not other than the - the general comments that I've heard
 (15) from Mr. Carlson and from Mayor Selby regarding the fact that
 (16) the borough owned property is used by the people in the
 (17) borough
 (18) and that as of the - after the oil spill that that was - it
 (19) did have some effect on that use but specifically -
 (20) Q Are you referring to their testimony yesterday and the day
 (21) before?
 (22) A Conversations with them I think I might have heard
 (23) something in the testimony also I'm not sure
 (24) Q Are you aware of any leasing activities that were
 (25) interfered with in the summer of '90 - pardon me '89 after
 (26) the oil spill?

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- (1) A For the borough?
 (2) Q Sure
 (3) A No I'm not
 (4) Q Are you aware of any reduction in any sort of revenues to
 (5) the borough as a result of any impairment to the use of any of
 (6) its properties?
 (7) A No I don't Not aware of that
 (8) Q Are you aware of any parcels that people couldn't actually
 (9) get to because of access problems associated with the oil spill
 (10) in the year after the oil spill?
 (11) A I am not no
 (12) Q Do you know whether any part of Shuyak was oiled?
 (13) A I believe that there was oil on parts of Shuyak yes I
 (14) don't have the specific oiling maps to know precisely where it
 (15) was
 (16) Q Do you think if it could be demonstrated that there were
 (17) in fact some ongoing uses that the damages should be
 (18) reduced
 (19) in any way?
 (20) A If there was some ongoing uses and everything else was
 (21) back
 (22) to normal except for the ongoing uses yes Otherwise no
 (23) Q What these damages do in effect is it not the case
 (24) they - they are a payment assuming that you couldn't sell or
 (25) use your property is that correct?
 (26) A Well it's not necessarily a payment It doesn't - it
 (27) doesn't have to be a payment It's an expression of an amount

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- (1) of money
 (2) Q Well but you're not asking the jury to have Exxon send a
 (3) card to Kodiak saying -
 (4) A No that's true
 (5) Q - it's real money and it's a lot of money and the
 (6) question is if there were ongoing uses shouldn't that number
 (7) come down?
 (8) A No I don't believe so
 (9) Q Let's take a look at your letter of February 22 '93
 (10) the - let's put this back up actually
 (11) Now is this the extent of your written work on damages in
 (12) Kodiak as far as reports are concerned?
 (13) A As far as the Kodiak Borough property is concerned yes
 (14) Q You make a good point By the way at the time that you -
 (15) you wrote this your last - your last - well your last
 (16) appraisal on Kodiak if I understand correctly before this
 (17) case was in '84 after the earthquake?
 (18) A That's correct yes
 (19) Q I'm sorry I'm looking for one reference here that - I've
 (20) taken things out of order here to try to shorten up and I
 (21) apologize There's one reference I need to find
 (22) Your February 22 '93 letter is not an appraisal is that
 (23) correct?
 (24) A That's correct
 (25) Q Does it qualify as a study under USPAP?

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- (1) A Well I think it's clearly stated in the body of the letter
 (2) precisely what it is
 (3) Q Well I know but my question is - and I defer to your
 (4) expertise in this - does your February 22 1993 letter qualify
 (5) as a study under USPAP?
 (6) A As a study? I'm not sure I can't answer that
 (7) Q And to remind the jury USPAP are the professional
 (8) standards you operate under as an appraiser?
 (9) A Yes that's correct.
 (10) Q Was it your intention in writing your February 22nd 1993
 (11) letter to imply that you did have an opinion about either the
 (12) value of the properties with the spill or the damages resulting
 (13) from the spill?
 (14) A The purpose of the letter was to express an opinion
 (15) regarding the damages to the property based upon an
 (16) appraisal
 (17) prepared by Mr. Carlson explaining that the written document
 (18) or understanding that the written document for the support and
 (19) all of the documentation for that which would be required in a
 (20) normal report was contained in the original appraisal And the
 (21) letter starts out on the top by saying Reference is made to
 (22) my appraisal report of January 20th 1993, involving an
 (23) estimate of real property damage caused by the Exxon Valdez
 (24) oil
 (25) spill So -
 (26) Q But that's not the appraisal for this case Mr. Shorett
 (27) correct?

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- (1) A It's not an appraisal for this case. It's a reference to
 (2) work that I had done involving a damage estimate.
 (3) Q Let me ask my question again. Was it your intention in
 (4) writing your February 22, 1993 letter to imply that you did
 (5) have an opinion about either the value of the properties with
 (6) the spill or the damages resulting from the spill?
 (7) A The damages resulting - yes, the damages resulting from
 (8) the spill as qualified in the letter and as documented in
 (9) the - in the appraisal mentioned in the first sentence.
 (10) MR OPPENHEIMER: Counsel volume 5 page 914 lines 5
 (11) through -
 (12) MR STOLL: Page 914?
 (13) BY MR OPPENHEIMER:
 (14) Q Mr. Shorett, it's on your screen. Weren't you asked
 (15) Wasn't it your intention in writing the February 22nd, 1993
 (16) letter to imply that you did have an opinion about either the
 (17) value of the properties with the spill or the damages resulting
 (18) from the spill?
 (19) A And you told us no?
 (20) A That's absolutely right, and I wanted to make very clear
 (21) that I had no opinion regarding the value of the property.
 (22) Q Or the damages resulting from the spill?
 (23) A Well, if I answered the question yes, then I'm saying that
 (24) I've got a - I'm valuing the property before the spill.
 (25) Q You had conversations with property owners, brokers,

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- (1) lenders and others in doing your work in connection with your
 (2) other appraisals, did you not?
 (3) A That's correct.
 (4) Q And you conducted a review of market activity in connection
 (5) with your other appraisals, did you not?
 (6) A Yes.
 (7) Q And you concluded that in some locations within the spill
 (8) impact area that values actually increased?
 (9) A Well, I think we said that the - or from my recollection
 (10) I don't remember the exact words, but we found that market
 (11) activity had, in fact, increased. I believe that property
 (12) values in some instances had increased also. Sorry about
 (13) the long way around. Yes is the answer.
 (14) Q Did you conclude that clean-up activity resulted in an
 (15) infusion of money into the cities and also caused an increase
 (16) in demand for housing and support facilities?
 (17) A Yes.
 (18) Q And did you conclude, therefore, for these reasons:
 (19) Cordova, Valdez, Whittier, Seward, Homer, Seldovia and
 (20) Kodiak
 (21) cities all experienced an increase in demand for real estate in
 (22) 1989?
 (23) A Yes.
 (24) Q Did you do damage analysis for the Cook Inlet Regional
 (25) Corporation?
 (26) A Yes.

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- (1) Q Did you come up with a damage figure for them based on the
 (2) methodology that you've been talking about here today?
 (3) A Yes.
 (4) Q Came up with a damage figure for them of \$18 million?
 (5) A I don't recall what that was. I don't remember what the
 (6) number was.
 (7) Q Does that sound about right?
 (8) A No, I'd have to look.
 (9) Q I'd like to hand you what's been marked defendants' exhibit
 (10) 15615 and have you just identify that for the record, if you
 (11) would?
 (12) A I see here volume 2 of our appraisal report of
 (13) February 20th, 1993.
 (14) Q Okay. Now, I'd like to draw your attention - the pages
 (15) aren't numbered, but let's see if we can do this. I'd like to
 (16) draw your attention to the worksheet you have for Cook Inlet.
 (17) You're probably more familiar with that report than anybody
 (18) else, and you're looking for Cook Inlet 2/15/93, Native
 (19) corporation property. Actually, do you recognize this as a
 (20) page from the report?
 (21) A Yeah.
 (22) Q Okay, and what is the damage figure that this methodology
 (23) provides for the Cook Inlet Regional Corporation?
 (24) MR STOLL: What page are we on?
 (25) MR OPPENHEIMER: I can't give you a page.

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- (1) A This shows a damage of 18,304,009. You're right on.
 (2) BY MR OPPENHEIMER:
 (3) Q Did you ever have occasion to discuss - that's damages you
 (4) say that somebody owes the Cook Inlet Regional Corporation
 (5) right?
 (6) A Yes.
 (7) Q Did you ever have occasion to discuss your view of damages
 (8) with Cook Inlet Regional Corporation people that actually own
 (9) the land?
 (10) A No.
 (11) Q Counsel, exhibit 15609.
 (12) Mr. Shorett, I'm going to show you what is exhibit 15609
 (13) and ask if you've seen this before.
 (14) A I don't know whether I've seen this or not. I can't -
 (15) Q I can't that -
 (16) MR STOLL: Your Honor, I object to this document.
 (17) THE COURT: Come up here, please.
 (18) (At side bar on the Record)
 (19) THE COURT: The objection?
 (20) MR STOLL: Relevancy.
 (21) THE COURT: Counsel, it's a relevance objection.
 (22) counsel.
 (23) MR OPPENHEIMER: I'm sorry, pardon me.
 (24) THE COURT: Relevance objection.
 (25) MR STOLL: Hearsay also.

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- (1) MR OPPENHEIMER He has a purely theoretical problem
 (2) by the people who own any lands
 (3) THE COURT Can't use this You can ask him that
 (4) question but you cannot use this.
 (5) MR OPPENHEIMER I will not use it
 (6) (Sidebar concluded)
 (7) BY MR OPPENHEIMER
 (8) Q Mr Shorett are you aware that the Cook Inlet Regional
 (9) Corporation elected not to participate in the lawsuit because
 (10) it did not believe its property was damaged notwithstanding
 (11) the fact that you found \$18 million worth of damage on it?
 (12) A I m not aware of first of all this letter that you have
 (13) shown me
 (14) Q But put aside the letter I m just asking whether you have
 (15) that information
 (16) THE COURT Don't answer
 (17) A Thank you
 (18) MR STOLL Can we approach Your Honor?
 (19) THE COURT Yes again
 (20) (At side bar on the Record)
 (21) THE COURT The question was whether this was purely a
 (22) theoretical model I was not intending you to get into the
 (23) question of what Cook Inlet did because it's totally
 (24) irrelevant I m going to tell them the question is stricken
 (25) disregard it You can ask him about the theoretical makeup of

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- (1) the model, but do not go into it you understand?
 (2) (Sidebar concluded)
 (3) THE COURT There's an objection to the last
 (4) question The last question is stricken You're to disregard
 (5) it totally
 (6) Go ahead
 (7) BY MR OPPENHEIMER
 (8) Q Have you had occasion Mr Shorett to discuss the land
 (9) damage theories with the property owners for whom you were
 (10) producing these damage theories?
 (11) MR STOLL I m going to object again
 (12) THE COURT Sorry I was thinking about the last
 (13) question counsel So give me the question again
 (14) MR OPPENHEIMER Maybe the hour Your Honor but I
 (15) think I've actually lost that one
 (16) THE COURT One gets tired after five hours
 (17) MR OPPENHEIMER Your Honor, let me leave this line
 (18) I'll leave this line I won't pursue this line
 (19) THE COURT All right, fine
 (20) BY MR OPPENHEIMER
 (21) Q Are you aware of any sales that were actually - that
 (22) people couldn't close - the borough couldn't close with
 (23) respect to the property during the year after the spill?
 (24) A Now are you referring to the - to the borough properties
 (25) here that are on the list?

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- (1) Q Yes
 (2) A So the question was Am I aware of any properties that the
 (3) borough actually couldn't sell or close during the year of the
 (4) spill? No I m not
 (5) Q Are you aware of any in 1990?
 (6) A No I m not
 (7) Q 91?
 (8) A No
 (9) Q Do you know whether - well the parcel with the largest
 (10) damage amount I assume is Shuyak is that correct?
 (11) A Yes
 (12) Q And Shuyak this represents the before spill value for
 (13) Shuyak is that correct? Number 13 \$32 229 300?
 (14) A Yes
 (15) Q Are you aware of any plans to sell all or part of Shuyak in
 (16) 1989?
 (17) A Plans to - in 1989? No
 (18) Q Same question with respect to 1990
 (19) A No
 (20) Q So would it be a fair generalization for me to say that you
 (21) were unaware of any sales that could not be made of the
 (22) borough
 (23) property for which claims are being made in this lawsuit that
 (24) were interfered with by the oil spill?
 (25) A That's correct
 (26) Q Other than your - your reference to Mr Selby and Pat

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- (1) Carlson's testimony in court do you - do you have any
 (2) instances of interference with the use of any of the properties
 (3) that the borough is suing for in this case?
 (4) A I'm sorry I didn't hear the whole question
 (5) Q I apologize Do you have any information with respect to
 (6) any actual interference of use of any of the borough property
 (7) that's being sued on in this case?
 (8) A No
 (9) Q Do - do you share - are you familiar with - well do you
 (10) believe that the government constitutes one of the major if
 (11) not the major purchasers for remote lands in Alaska?
 (12) A The federal government is certainly a major purchaser of
 (13) lands yes
 (14) Q Would you consider them to be one of if not the only
 (15) entity that could buy Shuyak island from Kodiak?
 (16) A I wouldn't say the only I would say that they would be
 (17) one of the main
 (18) Q Have you done any investigation to determine what their
 (19) attitude about the oil spill is with respect to the land
 (20) purchases?
 (21) A The federal government?
 (22) Q Federal or state government
 (23) A Any particular branch or -
 (24) Q No Have you conducted some research in that regard in
 (25) connection with this assignment?

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- (1) A We ve discussed land acquisition policies with the State
 (2) DNR I didn t do that Mr Robinson in our office did I
 (3) can t recall any other conversations at the moment
 (4) MR OPPENHEIMER I think I ve come to the end here
 (5) If you don t mind I apologize but because we reordered it
 (6) I d like to take a quick look at my notes
 (7) (Pause)
 (8) No further questions
 (9) MR STOLL Mr Shorett I just have a few questions
 (10) REDIRECT EXAMINATION OF LARRY K SHORETT
 (11) BY MR STOLL
 (12) Q As I understand it what you did is you did an appraisal of
 (13) a large number of properties in the area impacted by the oil
 (14) spill am I correct there?
 (15) A Yes
 (16) Q And you did a damage analysis with respect to those
 (17) properties?
 (18) A Yes
 (19) Q And those properties included a large number of properties
 (20) in Kodiak Island?
 (21) A That s correct
 (22) Q And then utilizing the appraisal of Mr Carlson you
 (23) applied the site specific appraisal that Mr Carlson did of
 (24) these properties as of March 23 1989 you applied that same
 (25) calculation 14 percent discount factor to the Kodiak Island

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- (1) Borough properties to arrive at a damage figure for the Kodiak
 (2) Island Borough parcels?
 (3) A To the total Not to the individual parcels but to the
 (4) total yes
 (5) Q That s right is that correct?
 (6) A Yes
 (7) Q And the reason that there s all this business in your
 (8) deposition - there was some controversy in your deposition
 (9) wasn t there in the last day I think it was the ninth day or
 (10) fifth day or I can t remember what day it was but it went on
 (11) for many days am I correct there?
 (12) A Yes
 (13) Q There was some controversy among the lawyers one of the
 (14) lawyers sitting over here with Mr Oppenheimer and Mr
 (15) Prongay
 (16) another lawyer
 (17) MR OPPENHEIMER Your Honor, I actually wasn't there
 (18) but I would object to the question
 (19) THE COURT I think the person sitting here now
 (20) counsel sitting next to you now -
 (21) MR OPPENHEIMER Pardon me my objection still
 (22) stands
 (23) MR STOLL Doesn t matter I ll withdraw that part of
 (24) the question
 (25) THE COURT Okay
 (26) BY MR STOLL

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- (1) Q Was there a lot of controversy going on at that point in
 (2) time in your deposition?
 (3) A An extreme amount of controversy
 (4) Q And that involves some of the requirements that you have as
 (5) a member of the Appraisal Institute and the requirements of
 (6) what was called USPAP isn t that right?
 (7) A Yes that s correct
 (8) Q And would you tell the jury please what the problem is
 (9) why you can t express an opinion as to the pre-spill value
 (10) under - under the requirements the ethical standards of your
 (11) profession?
 (12) A Well In order to express an opinion of value under the
 (13) USPAP requirements I have to either prepare a fully written
 (14) appraisal report and in conformance with USPAP standards
 (15) which
 (16) would include all the supporting data analysis and conclusions
 (17) that s required by USPAP as I had done to the best of my
 (18) ability to the earlier or the large appraisal we re talking
 (19) about with the 1500 parcels or to express an opinion of value
 (20) I would have to do a review appraisal In a review appraisal
 (21) there s a complete analysis There is no such thing as a
 (22) partial review or a limited review or anything like that I
 (23) would have to do a complete analysis of Mr Carlson s
 (24) appraisal a complete review including again comments on his
 (25) methodology the adequacy and completeness of his data a
 (26) number of other factors

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- (1) I was not asked to do either one of those and therefore I
 (2) made a very strong effort in this letter to make it extremely
 (3) clear that I was not expressing an opinion of fair market
 (4) value
 (5) Q So you did calculate damages utilizing the appraisal that
 (6) Mr Carlson did?
 (7) A That s correct.
 (8) Q And under the organization that he s a member of which
 (9) is - I can't remember all the letters to it now but anyhow
 (10) that s part of the Appraisal Foundation also?
 (11) A That s correct yes
 (12) Q And that follows USPAP I think Mr Carlson testified
 (13) You re aware that they follow USPAP?
 (14) A Yes
 (15) Q So all that happened here was that to calculate the
 (16) damages you used his appraisal and you did not - you did not
 (17) do any appraisal yourself?
 (18) A That s correct. I used his appraisal and stated the fact
 (19) that I was - had not done an appraisal on my own and that I
 (20) was not by the letter I was writing subscribing to his value
 (21) Q Now you explained that to Mr Oppenheimer s associate
 (22) who s sitting here in the courtroom that it would be unethical
 (23) for you to do that, isn't that correct?
 (24) A I tried to
 (25) Q And do you have an opinion as to whether or not there was a

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- (1) loss of marketability of this property following the Exxon
 (2) Valdez oil spill?
 (3) A Yes I do
 (4) Q What is that opinion?
 (5) A I believe that the marketability was interfered with I
 (6) think that the information compiled by Mr Carlson clearly
 (7) indicates that the remote property market in the Kodiak
 Borough
 (8) suffered a - an adverse trend particularly in view of the two
 (9) prior years and the trend line that has been established
 (10) there I m aware of the fact that sales occurred in 1989 I
 (11) accept that I think it would be a very strange market if
 (12) everybody in the entire real estate market reacted and agreed
 (13) the same way
 (14) I did a damage analysis one time on a 40-unit apartment
 (15) house which was located near an area of Mount Rainier or on
 the
 (16) way to Mount Rainier and the city built a sewer treatment
 (17) plant immediately windward of this building and 75 percent of
 (18) the wind comes from the sewer treatment plant to the building
 (19) and I did a survey of all the tenants in the building The
 (20) owner said everybody s moving out nobody will pay her any
 (21) rent I went through the whole building and I found that out
 (22) of 40 people in that building - and they all returned at
 (23) least the ones that were left returned the questionnaires -
 (24) and several people said the smell did not bother them and it
 (25) was terrible and that was a good lesson to me because I

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- (1) realized in a case of damages people have different opinions
 (2) and different feelings and different reactions It s a market
 (3) perception It s how people deal with something that s out
 (4) there
 (5) I know that a couple of these sales at least in Hidden
 (6) Basin one I believe was to a fellow that works for the U S
 (7) Fish & Wildlife Service He had as far as I could see some
 (8) way to determine what was going on as far as where the oil was
 (9) and what the extent of the oil was I think he had an
 (10) advantage
 (11) Q By that you mean that Fish & Wildlife one of the sales
 (12) that Mr Oppenheimer was talking about they conducted an
 (13) environmental audit of the property?
 (14) A Well I don t - I don t recall whether it s the - I know
 (15) that the group of three properties sold to Fish & Wildlife in
 (16) 1989 they did have an environmental audit. I don t know
 (17) whether this individual had had an environmental audit or not.
 (18) I ran into another situation where I had written to a
 (19) person that had purchased a lot that had been recorded right
 (20) after the oil spill or at least the deed had been recorded
 (21) and actually I guess I talked to that one on the telephone and
 (22) asked them why they bought the lot or did they consider the oil
 (23) spill And the fellow said well no this was a state - one
 (24) of the state lease things and he said here I ve been on the
 (25) property for seven years and about four days after the oil

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- (1) spill I get a deed He said I had nothing to do with creating
 (2) that deed That was not a transaction that took place in
 (3) 1989
 (4) And so I m aware of the fact that these things exist and I
 (5) accept that I m looking at the - the overall market what
 (6) the trends really are in its total
 (7) Q What did you find with the overall market?
 (8) A That the overall market fell off substantially in 1989
 (9) Q All right Now let me ask you another question There
 (10) was some reference to the increase that demand in the cities of
 (11) Homer and Soldotna and Kodiak City with the - well of
 (12) Kodiak - in the case of Kodiak City with the influx of spill
 (13) workers for housing that occurred?
 (14) A Yes that s right
 (15) Q But did that change the marketability of remote properties
 (16) in Kodiak?
 (17) A No From the best we could see the spill money seemed to
 (18) go into the - into the cities including the money that the
 (19) fishermen were being paid rather than in the remote property
 (20) MR STOLL That s all
 (21) RECROSS-EXAMINATION OF LARRY K SHORETT
 (22) BY MR OPPENHEIMER
 (23) Q Did you study any of the individual sales that occurred in
 (24) Kodiak the year after the spill?
 (25) A Yes I did

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- (1) Q Other than the one you mentioned with respect to the Forest
 (2) Service?
 (3) A We have studied some spills - yes - or I m sorry some
 (4) sales yes
 (5) Q Talk to anybody who bought in Pasagshak?
 (6) A I don t recall at Pasagshak
 (7) Q Sunny Cove?
 (8) A I don t think Sunny Cove
 (9) MR OPPENHEIMER I have no further questions
 (10) MR STOLL I have one question I know I made this
 (11) mistake one time before maybe
 (12) FURTHER REDIRECT EXAMINATION OF LARRY K. SHORETT
 (13) BY MR STOLL
 (14) Q You re familiar with this land sale 11 in 1990?
 (15) A I ve heard of it I m not aware of it
 (16) Q Can I approach the witness Your Honor?
 (17) MR OPPENHEIMER Your Honor I think this is well
 (18) beyond
 (19) THE COURT So do I so do I
 (20) MR STOLL Okay that s fine I ll withdraw it
 (21) That s fine
 (22) THE COURT All right. It s 1 25 and you can step
 (23) down sir And you can step down too also and we ll see you
 (24) on Monday at 8 30 Don t talk to anybody about this case
 (25) Don t form or express any opinion on it until it s submitted to

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- (1) you for deliberation See you Monday
 (2) (Jury out at 1 25 p m)
 (3) THE COURT Is there anything to take up on the record
 (4) today?
 (5) MR STOLL 35 minutes Your Honor get a cold start
 (6) THE COURT Yes you both did very well thank you
 (7) Might as well give a compliment where a compliment s due
 (8) Mr Oppenheimer I d give you a compliment but I can t see
 (9) you
 (10) MR OPPENHEIMER Thank you Your Honor
 (11) MR PETUMENOS That s not fair to be nice to
 (12) Mr Oppenheimer because you ve seen so little of him today
 (13) THE COURT Nobody has anything
 (14) MR PETUMENOS I may have Your Honor
 (15) THE COURT I m going to learn to ask you a question
 (16) and then wait five minutes and then get the response
 (17) MR OPPENHEIMER Your Honor I would respectfully
 (18) recommend that the Court heed its own admonishment that
 (19) sometimes if you ask you get
 (20) MR STOLL Your Honor we would like to offer some
 (21) exhibits into evidence And those are 1041 1049 I think 907
 (22) is already in evidence 15617 -
 (23) THE COURT It s got to be PX or DX counsel There s
 (24) some confusion
 (25) MR STOLL Excuse me DX15617 and the others are

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- (1) PX1041, 1049 and I think 907 is already in but if it s not
 (2) then it s PX
 (3) MS SMITH Your Honor Mr Oppenheimer is not if the
 (4) room and so -
 (5) THE COURT I can see that
 (6) MS SMITH I have no - we don t know yet whether he
 (7) has any objections to this Could we do this Monday morning
 (8) first thing?
 (9) THE COURT Yes
 (10) MS SMITH Thank you very much
 (11) MR STOLL That s fine I didn t see that he had
 (12) left
 (13) THE COURT I guess I feel sort of like the last
 (14) witness did at the end of his deposition I know my face looks
 (15) somewhat the same the eyes are drooping the eyelids are
 (16) drooping I just am very tired So maybe it was the wrong
 (17) question to ask There aren t any motions legal motions
 (18) pending that we need to have argued are there?
 (19) MR PETUMENOS I don t think so Judge We re
 (20) getting near to resting our case and there are some matters on
 (21) judicial notice that we really need to get resolved They
 (22) were I think fully briefed and just awaiting decision and
 (23) that was one thing
 (24) THE COURT Judicial notice of what?
 (25) MR PETUMENOS That was the OPA 90 issue and the

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- (1) issue regarding archaeology in the state statute We wanted
 (2) some kind of instruction judicial notice of law on that And
 (3) then I have some matters that I need to schedule with the
 (4) Court but I don t need to address them this afternoon
 (5) One is relating to the offers of proof on certain
 (6) experts/lay witnesses that you ordered be presented to the
 (7) plaintiffs and which we ve now received and which we believe
 (8) we
 (9) need a hearing on at some point before they testify
 (10) I have received communication from Exxon that they want to
 (11) know from me when we are going to rest and we have some
 (12) admissions of Exxon to put in new evidence on Monday which
 (13) will be very short and one witness that I think would take
 (14) most of the morning but probably not all and then I expect
 (15) that we ll rest The rest of the week would be theirs
 (16) THE COURT So there s one witness
 (17) MR PETUMENOS One live witness remaining for the
 (18) plaintiffs
 (19) THE COURT One live witness possible short
 (20) videotape
 (21) MR PETUMENOS And some written admissions
 (22) THE COURT Some written admissions?
 (23) MR STOLL That s it, Your Honor
 (24) MR PETUMENOS I think we want to put in evidence by
 (25) stipulation the Alyeska contingency plan and that will not be
 (26) live testimony just by stipulation and we re prepared to rest

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- (1) and then they have the balance of the week.
 (2) I don t know when Exxon is planning on putting on their
 (3) first witness which is the subject of this controversy
 (4) regarding whether the witnesses are giving expert opinion or
 (5) whether - as allowed and so forth after we ve seen the offers
 (6) of proof and perhaps they can best address that but it would
 (7) need to be scheduled I would think at some point depending
 (8) upon when they testify
 (9) MR DIAMOND Your Honor it was my understanding we
 (10) laid that one to rest. We complied with the agreement that
 (11) Mr Stoll and I reached with you Mr Petumenos was not
 (12) present but remember we agreed that we would treat them as
 (13) experts, we d furnish the expert narrative I ve given that to
 (14) Mr Petumenos, so we ve covered our bases either way It s
 (15) not - there s no preclusion motion there nor is there any
 (16) basis for that
 (17) MR STOLL I don t agree with that.
 (18) THE COURT Find the transcript.
 (19) MR DIAMOND It s on the transcript and I would
 (20) invite plaintiffs counsel to -
 (21) MR PETUMENOS I would like go back and look If
 (22) that s the case I would like to be heard because I ve read the
 (23) transcript and I m not sure as to whether the Court is
 (24) completely advised as to what happened there
 (25) THE COURT I tell you what - something counsel

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- (1) The Court is not going to go back over in detail everything
 (2) that happened I give you an opportunity to resolve these
 (3) questions and I tell you what to do and if the transcript is
 (4) clear you don't get revisitation on it
 (5) MR PETUMENOS Well for the record so that you
 (6) know I was unaware that the merits of that was going to be
 (7) argued that afternoon
 (8) THE COURT I'm sorry counsel but there's lots of
 (9) lawyers in this courtroom at all times I can't keep tabs on
 (10) you at all times If it's on the record and I've made a
 (11) decision you've got to live with it
 (12) Now on the other hand if it's equivocal or it's unfair
 (13) then I can - I can - I can revisit the issue
 (14) MR STOLL This is not a problem
 (15) THE COURT Believe me I'm not going to have a lawyer
 (16) who wasn't here open up the argument again
 (17) MR STOLL Your Honor I don't think this is a
 (18) problem I don't think the transcript says what Mr Diamond
 (19) says it says
 (20) THE COURT It may not So you - I tell you what
 (21) I'll use you a little bit Find the transcript now Don't
 (22) leave this building until you find it and then - then either
 (23) resolve it among yourselves or tell me you can't and then I'll
 (24) resolve it today
 (25) MR PETUMENOS That's fine

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- (1) THE COURT Okay
 (2) MR PETUMENOS That's fine That's a matter that
 (3) I -
 (4) MR STOLL That's fine
 (5) MR PETUMENOS That I think needed to be scheduled
 (6) one way or another before the witnesses took the stand
 (7) MR STOLL Your Honor I'm not sure we have the
 (8) transcripts in the courtroom right now Can we go back to the
 (9) office -
 (10) THE COURT We have the transcripts in the courtroom
 (11) We have them right here and right there
 (12) MR STOLL Fine
 (13) THE COURT We do, don't we? I hate to make those
 (14) categorical statements and be wrong Now, tell me - you're
 (15) saying to me this witness will take the better part of the
 (16) trial day right?
 (17) MR PETUMENOS My direct is probably about an hour
 (18) and a half maybe an hour and I had - I think some of the
 (19) issues that we're raising in that direct are somewhat
 (20) controversial so I was expecting to be the usual cross so -
 (21) MR DIAMOND That's Mr Piper There's a pending
 (22) motion with respect to the scope of Mr Piper's testimony that
 (23) has been filed with you A written motion
 (24) THE COURT What's the title of the motion?
 (25) MR CLOUGH I have it in a box over here It's

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- (1) called Motion in Limine Regarding Scope of Opinioned
 Evidence
 (2) To Be Offered By -
 (3) THE COURT I haven't seen it
 (4) MR CLOUGH - Mr Petumenos and I discussed it on
 (5) yesterday I'll make sure you get a courtesy copy of this this
 (6) afternoon Mr Petumenos said he wasn't going to respond in
 (7) writing Basically we resolved some if not all of the
 (8) issues If we still have an open issue we can address it
 (9) Monday morning
 (10) THE COURT That's why I haven't seen it It wasn't
 (11) something I ignored
 (12) MR CLOUGH No it has been filed Your Honor
 (13) THE COURT Filed with no response correct?
 (14) MR PETUMENOS My view of the -
 (15) THE COURT Filed with no response correct?
 (16) MR CLOUGH No response as far as I know Your Honor
 (17) THE COURT So it's not unusual that I wouldn't have
 (18) read it
 (19) MR PETUMENOS My reason for not responding Judge
 (20) is I looked at the motion I don't see how it can be resolved
 (21) except on a question by question, as we do it on a record
 (22) basis
 (23) THE COURT Mr Clough wants an opportunity to try and
 (24) resolve it with you and that's only fair
 (25) MR PETUMENOS I'll talk to him

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- (1) MR DIAMOND The only other matter that's now fully
 (2) briefed is - concerns Mr Fortier and me the objections to
 (3) the written summaries of disturbances and oilings on sites that
 (4) are not a part of the case I don't want to go back to the
 (5) history of this but this is collateral proof that there -
 (6) through field notes and written summaries that there were
 (7) disturbances on sites that are not being claimed in the case
 (8) You remember they came in now not to prove the truth of the
 (9) matter - at least testimony came in not to prove the truth of
 (10) the matter asserted but to support Dr Johnson's opinions with
 (11) respect to what happened on sites for which claims are being
 (12) made
 (13) THE COURT Yes
 (14) MR DIAMOND You allowed the testimony We are
 (15) objecting to collateral proof of that. We've cited two cases
 (16) which Mr Fortier believes are wholly inapposite We believe
 (17) they're right on the money which suggests that collateral
 (18) written documentation of the facts that otherwise would be
 (19) inadmissible should not be received Just the testimony which
 (20) has already been received But that - that's been fully
 (21) briefed I don't know that either of us wants argument
 (22) THE COURT It's a purely discretionary matter
 (23) right? That's the law It's within my discretion
 (24) MR FORTIER That's correct
 (25) MR DIAMOND It is within your discretion

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- (1) THE COURT I won't admit them
 (2) MR DIAMOND You asked me to furnish copies of the
 (3) attachments to two of the contracts concerning the Mrs. Katzke
 (4) motion
 (5) THE COURT Yes I did yes
 (6) MR DIAMOND We have managed to come up with one I
 (7) don't know yet that the other one does not exist All I know
 (8) is we haven't been able to put hands on it I will get that
 (9) the one we do have to Mr. Stoll this afternoon I will
 (10) continue looking this afternoon and I will try to find
 (11) somebody to tell me that the Dames and Moore attachment
 does
 (12) not exist not that we just can't find it
 (13) THE COURT The Dames and Moore is the scope of work
 (14) right?
 (15) MR DIAMOND I think I may have them reversed -
 (16) I have the Dames and Moore - no I don't have the Dames and
 (17) Moore I do have the Arthur D. Little
 (18) THE COURT The protocol
 (19) MR DIAMOND Yes I also have a case that I didn't
 (20) know about until yesterday on all fours submit that both to
 (21) you and to Mr. Stoll
 (22) THE COURT On all fours without an explanation?
 (23) MR PETUMENOS Is that Mr. Diamond on all fours?
 (24) MR STOLL Who's on all fours?
 (25) MR DIAMOND It's a crawling case

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- (1) THE COURT All of us So let me set your mind at
 (2) ease If the testimony were to end, for instance at 10:30 on
 (3) Monday no way the defense case has to go on at that time I'm
 (4) simply going to recess at the end of the live testimony or deal
 (5) with procedural matters at that time so the defense does not
 (6) have to worry about putting its first witnesses on that day
 (7) We'll talk about when the first defense witness goes on at the
 (8) end of the session tomorrow Okay?
 (9) MR DIAMOND Fine At the end of the session on
 (10) Monday?
 (11) THE COURT I mean Monday
 (12) MR STOLL You mean they will put a witness on on
 (13) Tuesday?
 (14) THE COURT I don't know We'll talk about it I
 (15) mean I'm assuming that there's going to be motion practice,
 (16) why should I not assume that? You filed ten pages on things
 (17) that could be decided in an instant, so I'm assuming there will
 (18) be a motion filed and I'll have to consider it. You being the
 (19) collective you not you particularly Mr. Stoll
 (20) MR DIAMOND We're prepared to start our first
 (21) witness -
 (22) MR STOLL We don't think it's appropriate to file a
 (23) motion for directed verdict at the end of our case Your Honor
 (24) THE COURT Yes I know you don't. I know you don't
 (25) That's subject to some controversy in the legal area

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- (1) MR DIAMOND The one implication that timing has in
 (2) all of this is when we will begin receiving cross-examination
 (3) materials from the plaintiffs concerning our witnesses We had
 (4) originally designated David Page to begin testifying
 (5) yesterday -
 (6) MS SMITH Thursday
 (7) MR DIAMOND Which was yesterday I know I did
 (8) something right We had expected the cross-examination
 (9) materials on Wednesday when he got pushed off the
 (10) cross-examination materials didn't arrive Mr. Petumenos took
 (11) the position that he didn't have to deliver them until 24 hours
 (12) before when the witness was actually going to testify not when
 (13) he was scheduled to testify
 (14) We do need some certainty at least 24 hours in advance so
 (15) that we can get cross-examination materials
 (16) THE COURT You can assume even if he doesn't go on
 (17) that the time designated for his testimony is 8:30 on
 (18) Tuesday
 (19) MR DIAMOND That's it
 (20) MR PETUMENOS All right
 (21) THE COURT Anything else?
 (22) MR FORTIER Your Honor just a couple other
 (23) matters One is a point of agreement I understand that we
 (24) talked about an exhibit 1288 there's a 1288-2 that I
 (25) understand Mr. Diamond has conceded that indeed he'd allow
 in

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- (1) too
 (2) MR DIAMOND I offered that one into evidence
 (3) myself It's already been admitted
 (4) THE COURT That's probably - now let it in
 (5) 1288-2 It's admitted
 (6) (Exhibit 1288-2 received)
 (7) MR FORTIER Your Honor if we could make an
 (8) application with regard to the summaries
 (9) THE COURT Counsel I know the issue I've decided
 (10) the issue You're not asking for reconsideration are you?
 (11) MR FORTIER I am making an application
 (12) THE COURT I've decided the issue I've decided the
 (13) issue They will not be admitted It's in the testimony
 (14) MR McCALLION Your Honor -
 (15) THE COURT Yes give us the number please
 (16) MR McCALLION I don't mean to test the Court.
 (17) THE COURT Give us the number please You're
 (18) testing it You're going to test it if you try to argue it.
 (19) I've decided the issue
 (20) MR McCALLION I was just going to note a procedural
 (21) point Your Honor
 (22) THE COURT You were just going to test it. Go ahead
 (23) counsel Go ahead
 (24) MR McCALLION I'll be silent, Your Honor
 (25) THE COURT What?

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- (1) MR McCALLION During the trial proceeding the
 (2) exhibits were admitted The nature of Mr Diamond s motion
 was
 (3) for a motion for reconsideration of Your Honor s ruling during
 (4) the trial proceeding
 (5) THE COURT Were you here when we discussed this the
 (6) last time we discussed it here in court?
 (7) MR McCALLION Yes Your Honor
 (8) THE COURT Okay Whatever the procedural status of
 (9) the motion the - they will not be admitted So if they are
 (10) admitted they are now taken out of evidence The examination
 (11) is sufficient Now do not ask me again
 (12) MR McCALLION Okay Thank you Your Honor
 (13) MR PETUMENOS Judge I would like to know how you
 (14) would like us to proceed after we reviewed this transcript
 (15) Would you like us to inform the Court if we still have a
 (16) controversy
 (17) THE COURT I want to know whether there is
 (18) controversy or not I ll resolve it if there is today
 (19) MR PETUMENOS Should we schedule a time later in the
 (20) afternoon?
 (21) THE COURT I ve got a 2 30 summary judgment
 (22) argument If you want - if you do it before 2 30 just come
 (23) in and report in chambers and then if there s controversy I ll
 (24) get you on record
 (25) MR PETUMENOS Good thanks

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- (1) MR STOLL Your Honor I was just handed a note that
 (2) there s this issue about these which we ll resolve from the
 (3) transcript and then take up with the Court The experts that
 (4) are not designated as experts that s one issue about some
 (5) witnesses of theirs
 (6) There s another issue there s a separate motion that we ve
 (7) filed with respect to witnesses that they did not - we contend
 (8) did not - they did not timely designate There s a motion to
 (9) exclude certain witnesses that they didn't designate
 (10) THE COURT Yes but what do you want me to do now?
 (11) MR STOLL Well we just need to schedule a hearing
 (12) for it and I don't know when they re going to call any of those
 (13) people
 (14) THE COURT We can handle that on Monday, can't we?
 (15) I m assuming we ll have time to deal with a number of these
 (16) procedures maybe in the morning
 (17) MR DIAMOND It s been fully briefed
 (18) THE COURT What s the number of the - of the exhibit
 (19) that I do not want to have argued again the one that I've
 (20) indicated that the summaries will not be admitted?
 (21) MR STOLL This was when I was out of town Your
 (22) Honor
 (23) THE COURT You re very lucky counsel
 (24) MR STOLL I m not in the cross-hairs here
 (25) THE COURT Somebody give me the number so that I can

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- (1) either take it out of evidence or keep it out of evidence
 (2) MR DIAMOND Your Honor can I give that to your
 (3) clerk? I have the papers here but it s amongst other -
 (4) MS SMITH We got it
 (5) MR DIAMOND 1289A 1290A 1291A 1315A and 1317A
 (6) THE COURT Are they admitted?
 (7) THE CLERK They weren t technically an offer I
 (8) mean they argued about them but they were never offered
 (9) THE COURT They were never offered?
 (10) THE CLERK No not technically on the record A
 (11) procedural point that we should note They are not admitted
 (12) they will not be admitted
 (13) THE CLERK Please rise This court stands in
 (14) recess
 (15) (Recess at 1 43 p m)

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- (1) STATE OF ALASKA)
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA)
- (6) I Joy S Brauer RPR a Registered Professional
- (7) Reporter and Notary Public
- (8) DO HERBY CERTIFY
- (9) That the foregoing transcript contains a true and
- (10) accurate transcription of my shorthand notes of all requested
- (11) matters held in the foregoing captioned case
- (12) Further that the transcript was prepared by me
- (13) or under my direction
- (14) DATED this day
- (15) of , 1994
- (21) JOY S BRAUER RPR
- Notary Public for Alaska
- (22) My Commission Expires 5-10-97

Look-See Concordance
Report

UNIQUE WORDS 2,340
TOTAL OCCURRENCES
10,637
NOISE WORDS 385
TOTAL WORDS IN FILE
34,651

SINGLE FILE CONCORDANCE

CASE SENSITIVE

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(1) IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (2) THIRD JUDICIAL DISTRICT
 (4) In re) Case No 3AN 89 2533 Civil
) Anchorage Alaska
 () The LXXON VALDEZ) Monday August 8 1994
) 8 40 a m
 (6))
 (8) VOLUME 31 Pages 4852 through 4975
 (10) TRANSCRIPT OF PROCEEDINGS (Continued)
 (11) TRIAL BY JURY
 (13) BEFORE THE HONORABLE BRIAN C SHORTELL
 Superior Court Judge
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(1) PROCEEDINGS
 (2) THE COURT Counsel we re on the record without the
 (3) jury Was there some reason why I should come in here without
 (4) the jury?
 (5) MR CLOUGH Yes Your Honor I think there were
 (6) several reasons some of which Mr Diamond is prepared to
 (7) argue some of which I m prepared to argue
 (8) THE COURT Go ahead
 (9) MR CLOUGH I did have a chance to talk to
 (10) Mr Petumenos and we were able to resolve some things
 regarding
 (11) Mr Piper s testimony - he s not in the courtroom Is he?
 (12) MR PETUMENOS He s not
 (13) MR CLOUGH We had a few outstanding evidentiary
 (14) issues which I felt was best to bring up
 (15) THE COURT I m glad they re outstanding counsel as
 (16) opposed to last Friday
 (17) Go ahead
 (18) MR CLOUGH First there is a - we filed a
 (19) memorandum which I believe the Court has seen on this We
 (20) filed it last week and plaintiffs indicated they weren t going
 (21) to file a written response There was a report prepared by
 (22) Mr Piper after - in 1993 well after the conclusion of his
 (23) tenure as SOSC the state on scene coordinator It was on a
 (24) contract with the Department of Environmental Conservation
 (25) purports to set forth a history of the entire oil spill event

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(1) In great detail from the perspective of the State of Alaska and
 (2) particularly the Department of Environmental Conservation
 (3) Mr Petumenos has indicated he doesn t intend to try to
 (4) introduce the entire report he s designated as an exhibit He
 (5) may want to introduce particular pages or materials from the
 (6) report We would object to those under Rule 803(B)(b)(4) that
 (7) this is a special investigation report prepared well after the
 (8) event It s actually - in fact we briefed this in our
 (9) memorandum - Mr Piper has even testified he prepared it from
 (10) a journalistic not a historical or a scholarly perspective
 (11) We have no objection to Mr Piper testifying about events
 (12) that occurred during his tenure as SOSC I know he wants to
 (13) introduce the 1991 state plan which was generated at that
 (14) time I have no objection to that but for a journalistic type
 (15) effort a history written two years after the fact I think
 (16) that s clearly not admissible as hearsay
 (17) THE COURT That may be so counsel but I d have to
 (18) see the specific pages first wouldn t I?
 (19) MR CLOUGH I ve asked for those references haven t
 (20) been provided with them
 (21) MR PETUMENOS I have them Judge
 (22) THE COURT By the way Is the witness going to
 (23) testify about these things?
 (24) MR PETUMENOS Yes
 (25) THE COURT So it s firsthand testimony right? Why

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- (1) does the report have to come in?
 (2) MR PETUMENOS I wasn't going to put in the entire
 (3) report. Some of the things are just simply going to be harder
 (4) for the jury to remember. If I can show you the pages perhaps
 (5) it will be clearer and I think the particular - there are
 (6) matters in here that I think would be - the Court might have
 (7) some difficulty with of a journalistic nature but those aren't
 (8) the areas that I have tried to point out and just by way of
 (9) background Exxon has made an issue in this trial about the
 (10) coordinated nature of the response the fact that everyone was
 (11) working together the federal and state governments so forth
 (12) We saw the chart in the beginning with the federal seal and
 (13) so forth. The nature of this testimony is that many of the
 (14) decisions that were made in the course of this process were in
 (15) fact being made by policy makers and they were political
 (16) decisions of which Mr Piper was one. He is was in fact the
 (17) highest authority for the state as the state on scene
 (18) coordinator will describe how decisions were made and will
 (19) talk about the role that the various players - Exxon the
 (20) federal on scene coordinator and the state - played in the
 (21) course of evaluating where the oil was and dealing with it
 (22) That's important to us because the - some of the same
 (23) issues are what the Exxon appraiser relies upon in determining
 (24) that in fact the oil doesn't exist in certain locations and so
 (25) forth

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- (1) So as ancillary to that - do you have your copy of the
 (2) report counsel so I can show the Judge this one?
 (3) MR CLOUGH Can you give me a page?
 (4) MR PETUMENOS Yes I can. Pages 135 there's a
 (5) table and page 145 there's a table that I want to admit as
 (6) part of this document.
 (7) THE COURT Well I see them.
 (8) MR CLOUGH Your Honor I have the two of them in
 (9) front of me. The first - well first of all I would object
 (10) to both of them on the same basis. I don't see how either one
 (11) of them would fall within a recognized exception of the rule.
 (12) The second one there's been no foundation and there are
 (13) certainly other documents contemporaneous documents or
 (14) other witnesses that they could try to put in mileages of surface
 (15) oiling including all ranges rather than going to this
 (16) after the fact hearsay report prepared on basically a
 (17) journalistic contract by Mr Piper.
 (18) And the other the first one page 135 areas of
 (19) disagreement over 1990 cleanup plan. I'm not sure there's a
 (20) particular relevance to it but even if it met the relevance
 (21) standard - I mean the relevance as to the issues whether
 (22) it's discord among the policy makers even met the relevance
 (23) standards still has the same hearsay objection applicable. If
 (24) it meets the relevance standard I would assume the Court
 (25) would let him testify to it.

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- (1) THE COURT I think you're right about page 135. I'm
 (2) more concerned about page 145.
 (3) MR PETUMENOS Judge if I can address the hearsay
 (4) concern I haven't addressed that yet.
 (5) THE COURT Sure Go ahead.
 (6) MR PETUMENOS First of all no foundation because
 (7) the witness hasn't testified yet. When he testifies what he
 (8) will tell the Court is this report was the final report to the
 (9) people of the state of Alaska. It is a part of the role and
 (10) function of the State to report to the - to the public about
 (11) what its final position and what had happened in the spill. I
 (12) don't see that this is a special investigation. It was not
 (13) part of the State litigation. It was not prepared for purposes
 (14) of the litigation. It was not prepared for any specific
 (15) investigation or result. It was part of the state's function
 (16) in providing to the public a final informational filing that
 (17) anyone could get in a library or anywhere else. It was part of
 (18) his duties to perform it and the fact that - that he gathered
 (19) together information from a number of other sources as a writer
 (20) does not mean that the document does not - not the sort of
 (21) public document under 803 that's not prepared for purposes of
 (22) a particular litigation result which is the reason why special
 (23) investigations are accepted. They're accepted when the state
 (24) itself is attempting to influence a result in a court or in a
 (25) proceeding such that the usual indicia of reliability from a

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- (1) public report is not present.
 (2) This is not such a document. There is no - there can be
 (3) no showing that it was done under the supervision of attorneys
 (4) that I know of and this was a document prepared for public
 (5) consumption and well within the purview of the department that
 (6) issued it to do so.
 (7) In view of that and in view of the fact that Exxon has made
 (8) much of the fact in their cross-examination of Mayor Selby that
 (9) he doesn't have the shorelines right the thousands of
 (10) shoreline - miles of shoreline were surveyed when in fact the
 (11) testimony will be otherwise would leave an unfair impression
 (12) in front of this jury which is why we're attempting to correct
 (13) it.
 (14) THE COURT Go ahead.
 (15) MR CLOUGH Speaking just to the chart here I think
 (16) this is precisely the type of concern that the rule is intended
 (17) to keep materials out. He was asked at his deposition - we
 (18) cited this Your Honor in memoranda pages 37 and 38 -
 (19) whether
 (20) in preparing his report he made any efforts to verify the facts
 (21) that were contained in these files documents contained in
 (22) these files were accurate. And Mr Piper responded The
 (23) approach I took to the report was that of a journalist writing
 (24) for a general readership as opposed to a historian writing for
 (25) a scholarly publication. Then was asked What's the answer to
 my question? He said Well where I cited something as a fact

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- (1) I tied it to a research paper or document or something that a
 (2) official agency had produced I can't attest to the -
 (3) independently attest to the veracity of every government
 (4) agency He said he didn't make an effort to backtrack his
 (5) sources He came right out and said that in the course of his
 (6) thing
 (7) I think that would qualify also under five as to matters to
 (8) which the sources of information indicate a lack of
 (9) trustworthiness He was not doing a peer reviewed publication
 (10) we had a lot of peer reviewed publications discussed in this
 (11) case This isn't that type of a situation and there are other
 (12) ways if the plaintiffs had wanted to get this type of
 (13) information I assume they could have tried to put it in with a
 (14) proper foundation if indeed it's accurate This isn't the
 (15) right way to do it Your Honor
 (16) THE COURT Tell me something This chart on page 145
 (17) comes from other reports doesn't it?
 (18) MR PETUMENOS There's lots of material in it
 (19) compilation of other material and that's why I think until we
 (20) hear the testimony lay the foundation from the witness as to
 (21) where this particular aspect of the report comes from it's
 (22) premature to rule on the objection
 (23) And what I had said to Mr. Clough was that I thought it
 (24) would be difficult for the Court in a hearing prior to the
 (25) testimony although I was willing to try to come upon a

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- (1) definitive ruling And that's why I didn't respond in writing
 (2) because I just simply think this is one of these things that as
 (3) the testimony is received by the Court it will be a simple
 (4) matter and really a simple matter particularly since the
 (5) Court's aware of the issues to rule as the testimony comes
 (6) in
 (7) THE COURT Well we can stop the discussion now
 (8) This - as I understand what the plaintiffs are saying they're
 (9) not trying to get the whole report in the most they're try to
 (10) get in two pages at least of the dispute you have to
 (11) resolve
 (12) I'll listen to the testimony and decide at that time
 (13) MR CLOUGH And finally Your Honor - and I
 (14) definitely wanted to bring this one up outside the presence of
 (15) the jury - the plaintiffs have designated a trustee's project
 (16) report that Mr. Piper worked on in 1993 as the project manager
 (17) for a shoreline survey assessment conducted with spill
 (18) settlement funds after the settlement of the Exxon Valdez
 (19) litigation
 (20) That report is also appended as one of the exhibits to our
 (21) motion We believe that if the plaintiffs open the door by
 (22) asking Mr. Piper to talk about that report in the work done
 (23) under it that report specifically includes a recommendation at
 (24) the end of it that certain additional remedial work be done and
 (25) that remedial work is to be done with that \$900 million fund

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- (1) If they're going to get into this - the report is very clear
 (2) on its face that this is not a clean up report this is to do
 (3) remedial work for the trustees with the trustees' money If in
 (4) fact the plaintiffs want to open the door and get into that
 (5) report we think that we should be entitled to bring up the
 (6) fact that in fact this is being done through the trustees
 (7) through independent funding that is available for precisely
 (8) this type of work
 (9) THE COURT Okay
 (10) MR PETUMENOS I guess this is - we talked about oil
 (11) persistence this is legal persistence We've had trustees
 (12) testifying in this courtroom since the beginning of the trial
 (13) Mr. Peterson was a trustee scientist who testified to studies
 (14) that were funded by the trustees because they have
 (15) information
 (16) that he can impart and the information is going on
 (17) I don't seek to introduce the report itself I have no
 (18) intention of introducing the report itself I do however and
 (19) am entitled however without opening - what they would call
 (20) opening the door to a \$900 million fund - to talk about the
 (21) facts that are known out there to talk about the fact that in
 (22) connection with the trustee work that he has done - I guess we
 (23) ought to not jump ahead
 (24) Mr. Piper served for a period of time for the Trustee
 (25) Council after he served as the state on scene coordinator
 (26) When he wore that hat he did things like visit the beaches

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- (1) He did things like actually see some of the beaches that were
 (2) signed off on as requiring no further treatment or not - not
 (3) containing oil
 (4) It is no different to have Mr. Piper talk about those
 (5) experiences than it was for Dr. Peterson to come in and talk
 (6) about the food chain or the other thing other studies that
 (7) have been cited throughout this trial some of which were
 (8) funded by the trustees which doesn't mean that Exxon gets to
 (9) take unfair advantage by attempting to argue to the jury You
 (10) don't have to award these claimants damages because we've
 (11) already paid for it
 (12) What we're calling Mr. Piper for is for - to discuss
 (13) the - the surveys the information and whether or not the
 (14) information which was designed to perform triage for a cleanup
 (15) operation is indication of whether or not there is persistent
 (16) oil and some of that information and knowledge is due to the
 (17) fact that he's been out there in 1993 you know with his
 (18) trustees hat That doesn't open the door to a \$900 million
 (19) order in limine that we've had now throughout the entire trial
 (20) and we're on the last witness It's no different than
 (21) Dr. Peterson or anyone else testifying to their observations
 (22) MR CLOUGH There's one important piece of the puzzle
 (23) missing if I may briefly add it Your Honor The report we're
 (24) talking about includes the recommendation of 10 to 12 sites on
 (25) Chenega Corporation property sites which are at issue in this

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- (1) litigation be considered for remedial action with trustee s
 (2) funding The trustees have in fact -
 (3) THE COURT What kind of remedial action?
 (4) MR CLOUGH They re going to send some crews out
 (5) there later this month They re going to walk around they re
 (6) going to break up some patches of asphalt on the beach I ve
 (7) got the schedule it s scheduled to start about ten days from
 (8) now They re going to five or six sites which are at issue in
 (9) this case and they will be expending Trustees funds to do
 (10) this and this is pursuant to recommendation of this particular
 (11) report
 (12) THE COURT Well just tell me what your argument is
 (13) Suppose you get it in there was an independent source of
 (14) funds what funds? What does it do?
 (15) MR CLOUGH Your Honor we think it s relevant to the
 (16) issue of what damages these plaintiffs may be entitled to The
 (17) sites at issue - in fact Mr Petumenos has introduced some
 (18) specific documents from the shoreline survey conducted in 93
 (19) on these particular sites of the assessment forms and they
 (20) are certainly in this case trying to seek damages based on
 (21) among other things oiling to the property
 (22) This particular instance I think what s very relevant to
 (23) show that the United States Government in conjunction
 through
 (24) the trustees organization has very extensive funding
 (25) available has reviewed these particular claims of this

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- (1) the damages that we re claiming will be addressed at all by
 (2) those funds
 (3) So the area that he s embarking on is I think very
 (4) problematic To avoid this issue I will not introduce into
 (5) evidence the recommendations whatever it is that he s
 (6) concerned about with respect to the report but I do intend to
 (7) talk to Mr Piper about his observations and his comparison of
 (8) those observations to what the survey report showed in 1989
 (9) 90 and 91 But I thought that you -
 (10) THE COURT All right It s the same the same
 (11) problem that I have Until I hear the testimony I don t know
 (12) whether the door is opened or not So thank you very much for
 (13) letting me know
 (14) Don t say a word about the source of funds or anything like
 (15) that anything that you think is the door opening you must
 (16) approach the bench and tell me that you think it s time and
 (17) then I ll rule on it All right?
 (18) MR CLOUGH That s fine with us Your Honor I m
 (19) doing this out of an abundance of caution
 (20) THE COURT Sure appreciate it
 (21) MR CLOUGH I believe that concluded the issues that
 (22) were outstanding between Mr Petumenos and I
 (23) THE COURT Well we might differ on that term
 (24) counsel
 (25) MR DIAMOND Good morning Your Honor Two matters

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- (1) particular plaintiff has determined after reviewing them that
 (2) there s only a very few sites which need under any
 (3) circumstances only a very limited amount of work and there is
 (4) already funding available for that
 (5) THE COURT Except for the last part all of that
 (6) probably is legitimate cross-examination
 (7) MR PETUMENOS I think there s a problem here and
 (8) that is that there was a substantial amount of litigation - I
 (9) don t know whether the Court is familiar with it or not -
 (10) surrounding the injunction against the federal state settlement
 (11) that was filed in federal court in Washington D C later was
 (12) a part - became part of a class action approval process in
 (13) front of Judge Holland in which the - it was made clear that
 (14) no settlement between Exxon and the federal state - federal
 (15) and state governments would impinge on or effect the claims of
 (16) private landowners one whit and that settlement was
 (17) conditioned upon the Court s ordering that - the fact that all
 (18) of the Native corporations who walked into the courtroom would
 (19) leave the courtroom with the same claims that they had when
 (20) they left
 (21) Mr Clough I don t think is correct on his facts in that
 (22) the Native corporation have - Native corporations have no
 (23) control over what the trustees do or don t do on the land and
 (24) the issue of what will be done and what won t be done will
 (25) continue for years and it is speculative as to whether or not

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- (1) that are outstanding for resolution although you don t need to
 (2) deal with them at this very moment
 (3) I understand plaintiffs are going to proffer certain
 (4) responses to requests for admissions to which we have
 (5) objections We can deal with that now or we can deal with it
 (6) later
 (7) THE COURT I ll deal with it later I want to get
 (8) the first witness on
 (9) MR DIAMOND We also filed with you this morning and
 (10) I have a courtesy copy -
 (11) THE COURT I have it here
 (12) MR DIAMOND - on the Katzke videotape
 (13) THE COURT Oh no I didn t see that
 (14) MR DIAMOND Just a courtesy copy
 (15) MR PETUMENOS Judge our chosen order of proof - I
 (16) understand you can change it for us - for efficiency was to
 (17) introduce the admissions now
 (18) THE COURT Oh I thought they were coming after the
 (19) first live witness
 (20) MR PETUMENOS No Mr Piper is hopefully our last
 (21) hurrah
 (22) THE COURT I ll do the objections then Tell me
 (23) what the objections are
 (24) MR DIAMOND The objections really are in three
 (25) categories Number one for the most part all of these

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- (1) responses deal with foreseeability issues which we resolved by
- (2) way of stipulation and a jury instruction
- (3) THE COURT Okay I see that
- (4) MR McCALLION Your Honor if I may I thought we had
- (5) an agreement on these but Mr Diamond has indicated an
- (6) objection Just this morning I've gone over and further pared
- (7) down objections
- (8) THE COURT Maybe that'll change his presentation
- (9) MR McCALLION What I've done - and I have two
- (10) copies - I can go over one with Mr Diamond
- (11) THE COURT Mr Diamond isn't listening
- (12) MR McCALLION Sorry
- (13) THE COURT You have to listen to this Apparently
- (14) the proffer has changed
- (15) MR McCALLION Since Mr Diamond and I discussed this
- (16) this morning I went through the admissions again In the
- (17) interest of resolving the issue I have pared it down further
- (18) and tabbed the ones which we feel should properly be
- (19) published
- (20) to the jury if I may tender to the Court one copy
- (21) THE COURT I'd like to see it
- (22) MR McCALLION It's the yellow tabbed portion
- (23) THE COURT Okay
- (24) THE COURT Only the yellow tabbed?
- (25) MR McCALLION Yes Your Honor We had originally
- (26) attempted to publish all of the highlighted versions

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- (1) MR DIAMOND Your Honor I don't know whether this
- (2) changes anything Number one deal with contingency plan
- (3) secondly that's 114 The next is 264 -
- (4) THE COURT Hold on You object to 114?
- (5) MR DIAMOND What - I've asked Mr McCallion this
- (6) question and I haven't gotten a satisfactory answer What do
- (7) oil spill contingency plans have to do with damages?
- (8) THE COURT That's true That's the one that I was
- (9) questioning
- (10) MR DIAMOND In addition they're offering the
- (11) Alyeska Oil Spill Contingency Plans to which we register the
- (12) same objection I don't know what they have to do with
- (13) damages
- (14) MR McCALLION Yes Your Honor we have previously
- (15) offered and listed from the beginning of the case two oil spill
- (16) contingency plans one for 1980 which is Plaintiffs Exhibit
- (17) 741 and the other is the contingency plan for January 1987
- (18) which is Plaintiffs Exhibit Number 3
- (19) What we have offered - these are fairly large documents
- (20) What we have offered is the specific portion of that which
- (21) relates to maps which are known as sensitivity areas or
- (22) exclusion areas and they indicate the sensitive areas known to
- (23) the companies at the time in 1980 and 1987 throughout the
- (24) Prince William Sound area
- (25) THE COURT Sensitive in what sense?

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- (1) MR McCALLION In need of exclusion or
- (2) environmentally sensitive areas which should be protected in
- (3) the event of an oil spill We would seek to offer those
- (4) limited portions of the contingency plan with regard to the map
- (5) and site location of these environmentally sensitive areas
- (6) which were known to the companies
- (7) THE COURT That's a separate question counsel it's
- (8) a larger question that's raised here I'm not going to deal
- (9) with it right now I'll deal with it later but you can't deal
- (10) with it now Let's talk about the other admissions
- (11) MR DIAMOND The others Your Honor scanning the
- (12) tabs are either in our view cumulative or -
- (13) THE COURT Self evident
- (14) MR DIAMOND Well we've heard from lots of
- (15) witnesses 11 million gallons of oil that we've mapped it and
- (16) that's what 404 405 The only thing they can get in is our
- (17) response here and all we say in 404 and 406 and 413 is that
- (18) oil contacted the shoreline as indicated on our SCAT2 maps
- (19) The SCAT2 maps are already in evidence I don't know what
- (20) that
- (21) adds
- (22) 40 - 264 Exxon admits that oil from the spill was
- (23) distributed over portions of Prince William Sound to the Gulf
- (24) of Alaska Is that seriously in controversy?
- (25) THE COURT Every one of these admissions is - is
- (26) that admission Right? Every one of them

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- (1) MR DIAMOND Every one either says - yes oil was
- (2) distributed and it's shown on our maps
- (3) THE COURT So it's things you admit right now
- (4) right?
- (5) MR DIAMOND We've already introduced our maps
- (6) which - which -
- (7) THE COURT Let's - just to the extent there might be
- (8) any confusion and believe me there might be - we'll just
- (9) make sure that the jury knows what your position is And your
- (10) position is that the areas that were oiled were at least these
- (11) areas that are shown on the SCAT2 oiling data maps are places
- (12) that were oiled
- (13) MR DIAMOND It's my understanding from the rules
- (14) that they get to read in our admissions they don't get to read
- (15) in their requests and our denials
- (16) THE COURT Unless the request is necessary to
- (17) understand the admission I'm not sure that it is on any of
- (18) these
- (19) MR DIAMOND I don't think it is
- (20) That leaves 114 concerning Exxon Shipping Company's Oil
- (21) Spill Contingency Plan
- (22) THE COURT Yeah I said I'm not going to rule on
- (23) that
- (24) MR DIAMOND All right And then the final one is a
- (25) lengthy statement from Frank Iarossi

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- (1) THE COURT Is this on 206 and 205?
- (2) MR DIAMOND Correct
- (3) THE COURT They re not seeking admission
- (4) MR DIAMOND I have a tab on mine
- (5) THE COURT Oh I don t
- (6) MR McCALLION The tabbed must have escaped and
- (7) actually that s the most significant one from our
- (8) perspective
- (9) As you may recall Mr -- we -- I believe prior to the
- (10) opening statements indicated to opposing counsel --
- (11) THE COURT Isn t this in evidence already?
- (12) MR McCALLION Mr Petumenos referred to this in his
- (13) opening statement We merely through this admission seek to
- (14) admit the underlying foundation for the statement from which
- (15) Mr Petumenos was quoting from
- (16) MR PETUMENOS And Judge I do have to say that I
- (17) went over those exhibits for opening statement with opposing
- (18) counsel for objections and now have read it to the jury and
- (19) I m a little taken back by an objection now after we ve been
- (20) over it so painstakingly before we did the openings
- (21) MR DIAMOND Your Honor if this was a fault case --
- (22) and maybe Mr Jarossi s statements would have some bearing
- (23) what facts does this make more probable than not that bear on
- (24) the quantum of damages?
- (25) THE COURT That s that the oil spill was much more

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- (1) widespread than you say it was
- (2) MR DIAMOND I don t know that anything in here
- (3) suggests that the oil spill is more widespread than we say it
- (4) is or maps suggest --
- (5) THE COURT If it was a single puddle of oil on the
- (6) water it probably wouldn t have the potential to develop into
- (7) something that was oiled to the extent these plaintiffs say it
- (8) was If it was moving on a super highway and it was the long
- (9) slick out of control then maybe it would right?
- (10) MR DIAMOND I think that -- that s certainly one
- (11) view that might be taken I would disagree with it
- (12) THE COURT You what say that again?
- (13) MR DIAMOND I say that s certainly one view I -- one
- (14) might take I personally would disagree with it What he s
- (15) talking about is --
- (16) THE COURT Something you admitted isn t it?
- (17) MR DIAMOND Something we admitted
- (18) THE COURT You admitted he had said that during the
- (19) developing part of the spill when the storms came up right?
- (20) MR DIAMOND Right
- (21) THE COURT So how can you pull back on that admission
- (22) now?
- (23) MR DIAMOND I don t know that we are We re just
- (24) saying in terms of reading a response for request for admission
- (25) to the jury there ought to be some -- some level of relevance

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- (1) to the disputed issues in the case
- (2) THE COURT It s definitely relevant counsel If the
- (3) only issue is relevance then the objection s overruled
- (4) MR McCALLION Your Honor could I just review the
- (5) numbers which we may publish?
- (6) THE COURT Yeah sure
- (7) MR McCALLION 114 is on hold for further
- (8) consideration That would be 264 on page 154 number 404 on
- (9) page 235 number 406 on page 235 and 236
- (10) MR DIAMOND Those are the same responses
- (11) THE COURT There are a number of them that are sort
- (12) of duplicates
- (13) MR McCALLION And 413 on page 245
- (14) MR DIAMOND That s identical to 404 and 406
- (15) MR McCALLION Well that relates to our brethren
- (16) the municipal corporations
- (17) MR DIAMOND I think they re only entitled to get in
- (18) our admission what we admitted They re not entitled to get
- (19) into what we didn t admit unless necessary to understand what
- (20) we did admit
- (21) THE COURT Exactly And if the question deals with
- (22) one plaintiff s land as opposed to the other plaintiff s land
- (23) why shouldn t the question and answer be read?
- (24) MR DIAMOND Because the answer is self explanatory
- (25) and pertains to all lands

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- (1) THE COURT That s all right Duplication isn t going
- (2) to stop them from going in counsel Not these anyway Don t
- (3) think that s a general rule I m going to apply
- (4) MR DIAMOND What s that?
- (5) THE COURT I said don t think that s a general rule
- (6) I m going to apply It s only with regard to these admissions
- (7) these particular admissions
- (8) MR DIAMOND 413 also applies to state lands
- (9) MR McCALLION We can redact that Your Honor
- (10) THE COURT Fine So when are you going to read
- (11) these right now?
- (12) MR McCALLION With the Court s permission
- (13) MR PETUMENOS Yeah That s what s next I think
- (14) MR McCALLION And there are two short videotapes as
- (15) well
- (16) THE COURT To which there s no objection
- (17) MR McCALLION That s correct I went over that with
- (18) Mr Clough earlier Those are not the disputed ones on
- (19) Kodiak These are Mr Otto Harrison and Dr Paul Boehm
- (20) THE COURT As long as there s no objection
- (21) MR DIAMOND To the video tape
- (22) MR CLOUGH No The only tricky part is they don t
- (23) have it edited out so the -- Joel has some stop and go
- (24) instructions but if those can be followed we don t have an
- (25) objection

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- (1) THE COURT All right Now counsel I'm in a good
 (2) mood because I've had a weekend all right and I was tired at
 (3) the end of - on Friday But it's 9:15 and this is just the
 (4) reason I asked the question much to my chagrin on Friday Do
 (5) you have anything else to bring up Now I've spent a half an
 (6) hour at least a half an hour on these things that could have
 (7) been resolved on Friday Don't do this to me again
 (8) MR DIAMOND Very well Your Honor I'm sorry
 (9) THE COURT Let's go
 (10) MR STOLL Your Honor I just have one matter and
 (11) that is I just received this morning a letter from an - and a
 (12) supplemental memorandum from the defendants on the
 (13) tape of the scientists of the film that was taken -
 (14) THE COURT Oh yes uh huh
 (15) MR STOLL And I haven't had a chance yet - I can
 (16) read it during the testimony and we can resolve it during a
 (17) break or something
 (18) THE COURT Sure Yeah I wasn't planning on doing it
 (19) right now
 (20) MR STOLL Okay I guess he got it to me yesterday
 (21) but I didn't get it till this morning
 (22) THE COURT Well counsel I tell you you're going to
 (23) get your time earlier than you thought Apparently your
 (24) excellent presentations this morning have broken our recording
 (25) machine So now we're going to have to fix it It'll take ten

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- (1) minutes we'll all get a break
 (2) THE CLERK Please rise This court stands in
 (3) recess
 (4) (Recess from 9:15 a.m. to 9:30 a.m.)
 (5) (Jury in at 9:30 a.m.)
 (6) THE CLERK Please rise This court now resumes its
 (7) session
 (8) Please be seated
 (9) THE COURT Good morning
 (10) MR PETUMENOS Good morning Judge To begin with
 (11) this morning I'd like to introduce to - the Court already
 (12) knows Mr McCallion - but to the jury Mr Ken McCallion who's
 (13) working with Mr Fortier's firm He has a presentation to
 (14) make without a witness
 (15) THE COURT All right
 (16) MR McCALLION Thank you Judge With the Court's
 (17) permission we're going to play two short videotapes The
 (18) first one is of Mr Otto Harrison on behalf of Exxon
 (19) Corporation and this tape was taken in 1990
 (20) (Videotape Played)
 (21) VIDEO QUESTION What is the - is it cleanup or treatment?
 (22) VIDEO ANSWER Cleanup and treatment And I'm not sure
 (23) what those words mean to everybody but let me tell you what
 (24) the intent was last year and what the intent was this year
 (25) The intent is to restore the shorelines to their normal usage

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- (1) VIDEO QUESTION Let's say for argument sake that cleanup
 (2) means there's no oil on the islands and treatment means there
 (3) might be some subsurface oil What then is the intent
 (4) VIDEO QUESTION Well the answer to the question is Do
 (5) you want to leave it in the shape so that you have achieved a
 (6) maximum net environmental benefit There is no use going out
 (7) there and killing a lot of wildlife to remove some small amount
 (8) of oil that's not damaging the environment
 (9) (End of videotape)
 (10) MR McCALLION The second segment is also by Mr Otto
 (11) Harrison who has been with us in the courtroom I believe
 (12) this is back in 1990 as well And this particular segment
 (13) deals with the issue of bioremediation use of certain
 (14) applicants on the shoreline during the cleanup period If we
 (15) could go ahead with that? Thank you
 (16) (Videotape Played)
 (17) VIDEO QUESTION That isn't completely harmless
 (18) VIDEO ANSWER We're not saying it's completely harmless
 (19) No different than your yard fertilizer if you were to go out
 (20) and leave your yard fertilizer on your hand for days on end
 (21) without cleaning up your hands and fortunately the tides
 (22) tend to clean up this area pretty fast Your yard fertilizer
 (23) upon contact with water tends to release a little ammonia
 (24) This stuff does the same thing
 (25) (End of tape)

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- (1) MR McCALLION And the last tape which is another
 (2) short segment is of Dr Paul Boehm a scientist and consultant
 (3) for Exxon during certain periods of time following the Exxon
 (4) Valdez oil spill Dr Boehm is on the following segments
 (5) (Videotape Played)
 (6) VIDEO SPEAKER Cleaning the environment removing all
 (7) of the oil is - is impossible in this type of environment
 (8) The way you clean up remove all the oil is to physically
 (9) remove the substrate If it were on a sandy beach you could
 (10) scrape the beach and remove it It's physically impossible in
 (11) this environment due to the remoteness the logistics and the
 (12) nature of the rocks the boulders the beaches to physically
 (13) remove the oil
 (14) (End of tape)
 (15) MR McCALLION That's it for the videotapes for now
 (16) anyway
 (17) Lastly we'd like to show you certain portions of answers
 (18) by Exxon Corporation and Exxon Shipping corporation to
 (19) requests for admission as they're called by the plaintiffs in
 (20) the litigation If I could just have the Elmo please
 (21) The first one that we're going to read is number 264
 (22) Thank you so we can read a little better
 (23) Exxon admits that oil from the spill was distributed over
 (24) portions of Prince William Sound and the Gulf of Alaska
 (25) The next is number 404 Exxon admits that oil from the

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- (1) Exxon Valdez contacted shoreline in Prince William Sound and
- (2) the Gulf of Alaska as indicated on the maps titled SMAD SCAT2
- (3) oiling data I believe that there were maps previously
- (4) identified as SCAT maps
- (5) THE COURT The next thing is the request counsel
- (6) not the admission
- (7) MR McCALLION Yes Your Honor Well Your Honor I
- (8) believe with this one It identifies the plaintiffs in the case
- (9) and would be necessary -
- (10) THE COURT All right go ahead
- (11) MR McCALLION - would be necessary for an
- (12) explanation of the response
- (13) Request number 406 the shoreline parcels and land area
- (14) adversely impacted by oil from the Exxon Valdez oil spill
- (15) included certain Native lands in or near Prince William Sound
- (16) including English Bay Port Graham Chugach Chenega Eyak
- (17) Tatitlek
- (18) And Exxon s response is as follows Exxon admits that oil
- (19) from the Exxon Valdez contacted shoreline in Prince William
- (20) Sound and the Gulf of Alaska as indicated on the maps entitled
- (21) SMAD SCAT2 oiling data
- (22) And 413 is similar relating to the municipalities in this
- (23) case The request is as follows Certain municipal lands were
- (24) oiled as a result of the Exxon Valdez oil spill
- (25) Exxon s response is Exxon admits that oil from the Exxon

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- (1) Valdez contacted shoreline in the Prince William Sound and the
- (2) Gulf of Alaska as indicated on the maps titled SMAD SCAT2
- (3) oiling data
- (4) And finally - those prior admissions are from plaintiffs
- (5) exhibit 17 for the record And the last admission is from
- (6) Plaintiffs Exhibit 18 relating to the Exxon Shipping Company
- (7) and it reads as follows ESC which is Exxon Shipping
- (8) Company
- (9) admits that on March 27 and 28 1989 Mr Iarossi who is
- (10) previously identified as the president of the company made the
- (11) following statements I ve got to be honest with you there
- (12) is no way I can keep the oil from impacting more beach area
- (13) This wind is really working against us in that respect What
- (14) happened was our worst fears and that was very high winds
- (15) last
- (16) night We had gusts up to - to 73 miles an hour which
- (17) essentially stamped the slick out of the center of Prince
- (18) William Sound over to the western edge and down in an
- (19) essentially southwesterly direction It s unbelievable That
- (20) slick is moving like it s on a super highway The Coast Guard
- (21) estimates that sometime Sunday or perhaps it wasn t until the
- (22) middle of the afternoon overflight that slick had moved three
- (23) miles
- (24) We are planning to conduct burning on the permit we have
- (25) in some of the most threatened areas I spent two hours in the
- (26) Coast Guard helicopter with Admiral Nelson and a
- (27) representative of the Department of Environmental
- (28) Conservation

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- (1) and also the - I believe that represents - inaudible I was
- (2) very silent for two hours because we got a mess on our hands
- (3) Down the westernmost edge of Prince William Sound we have a
- (4) lot
- (5) of - the slick has turned into what we call chocolate mousse
- (6) The rest of it is spread out and in sort of stampede
- (7) fashion but it s all moving now in a - let me say rectangle
- (8) which is relatively narrow but very long and essentially a
- (9) southwesterly direction
- (10) So the tools at hand to us right now are principally
- (11) burning We are attempting to redeploy all of our booms The
- (12) problem is we ve got to go approximately 40 miles In fact we
- (13) need to chase the spill as it runs down a super highway
- (14) And that is the last admission which will be read at this
- (15) time Your Honor Thank you
- (16) MR PETUMENOS Your Honor the plaintiffs call as
- (17) their next witness Mr Ernie Piper
- (18) THE CLERK Sir can you attach the microphone and
- (19) remain standing for the oath - to your tie there?
- (20) Please raise your right hand
- (21) (The Witness Is Sworn)
- (22) THE CLERK Please be seated
- (23) Sir for the record can you please state your full name
- (24) A Earnest Whitman Piper III
- (25) THE CLERK And please spell your last name?
- (26) A Piper P i p e-r

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- (1) THE CLERK And your occupation?
- (2) A I m a writer and administrator
- (3) THE CLERK Thank you
- (4) DIRECT EXAMINATION OF ERNEST W PIPER
- (5) BY MR PETUMENOS
- (6) Q Mr Piper I understand you re not feeling too well today
- (7) but there s water up there if you need it and I hope your voice
- (8) holds up
- (9) Could you introduce yourself to the jury please and tell
- (10) the jury a little bit about yourself?
- (11) A My name s Ernie Piper I ve lived in the state for 13
- (12) years and worked as a Journalist here worked as an
- (13) administrator in state government and I m a carpenter by
- (14) trade
- (15) Q When you first came to the state of Alaska did you ever
- (16) work for any governors?
- (17) A I ve worked for Governor Sheffield and Governor Cowper and
- (18) Governor Hickel
- (19) Q You managed to make it through three somewhat different
- (20) administrations?
- (21) A Off and on There was some breaks in there
- (22) Q What did you do for Governor Sheffield?
- (23) A I did a lot of research for the governor I traveled with
- (24) him I think the best description would be sort of like
- (25) traveling secretary I kept track of what was going on who

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- (1) had spoken to him who needed to get replies to questions and
 (2) so on
 (3) Q And Governor Cowper?
 (4) A Governor Cowper hired me more for troubleshooting because
 (5) of the fact that I'd been around quite a bit in the state and
 (6) knew a lot of people and I worked on a variety of community
 and
 (7) resource politics problems
 (8) Q And in 1989 you were working for Governor Cowper Were
 (9) you assigned to the governor's office itself?
 (10) A I was
 (11) Q On March 23rd 1989 March 24th the early morning hours
 (12) the Exxon Valdez oil spill happened Did you - were you at
 (13) some point assigned to work for Governor Cowper on the Exxon
 (14) Valdez oil spill in 1989?
 (15) A Yes
 (16) Q Tell the jury
 (17) A The - I had - I was with my family it was Easter weekend
 (18) and I was with my family visiting friends in California When
 (19) I came back at the end of the - of the weekend I was assigned
 (20) to go to Kodiak and the intent - after about ten days of
 (21) handling stuff in the office I was assigned to go to Kodiak
 (22) and the intent was to organize the community response there so
 (23) that the local government knew what the state government
 would
 (24) and would not be doing finding odd dams we could break to
 make
 (25) things move more quickly and so on

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- (1) Q And then if you wouldn't mind to keep time going here and
 (2) not making your direct overly long could you describe to the
 (3) jury how your duties changed from that first assignment in
 (4) Kodiak through to the end of your tenure with the state?
 (5) A In Kodiak actually had a very good community response
 (6) organization set up and quite frankly having somebody from
 (7) the governor's office there all the time was going to cause
 (8) more problems than it was going to solve The local people
 (9) were doing a pretty good job of dealing with their
 (10) organizational problems so in part because of my familiarity
 (11) with resource issues and part because of my friendship with the
 (12) DEC commissioner at the time the governor asked me to be
 (13) troubleshooter on community issues throughout that summer
 and
 (14) to meet with different mayors and city council people and
 (15) special interest groups fishing organizations and so on and
 (16) just make sure that the information flow was going properly and
 (17) that if they had any special problems that we could deal with
 (18) them
 (19) Q When you were doing that job did it take you throughout
 (20) the oil spill area? Did you get to visit locations and things
 (21) like that?
 (22) A Yes Throughout 1989 and 90 and then on through the end
 (23) of my time at DEC I was in all of the spill communities I
 (24) think three - at least two or three times each including
 (25) some of the smaller villages but certainly the main stops of

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- (1) Valdez and Cordova Kodiak Homer and so on I think -
 (2) Seward I was in there quite a bit
 (3) Q Any of the villages?
 (4) A Yes Port Graham Tatitlek and Chenega Bay quite a bit
 (5) Q Why don't you continue with your - your experience and
 (6) history with the state and the oil spill?
 (7) A Later in the - into June I began to work a great deal
 (8) on - on congressional testimony and other contacts because
 (9) there was quite a bit of requests coming in nationally about
 (10) it
 (11) I also was instructed by the governor to be the chief
 (12) policy spokesman other than the governor and Commissioner
 (13) Kelso on all issues in the oil spill that related to policy as
 (14) opposed to those that were science or technical And the
 (15) reason we did that is because we wanted to keep DEC's duties
 as
 (16) a technical agency separate from big public policy issues that
 (17) were more the domain of the governor
 (18) And I did that most of the rest of that summer including
 (19) working as community leaders on
 (20) In 1990 I continued that role At the end of the 1990
 (21) field season I was appointed the on scene coordinator which
 (22) is a technical name for the person who's really the director of
 (23) the state's operations for the oil spill
 (24) And I did that through March of 1992 when it was a
 (25) temporary position and I thought it was a good idea to turn

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- (1) over the spill at that point to the technical management and
 (2) DEC
 (3) Q Could I see Exhibit Number 51 - DX5127 please?
 (4) Recognize this exhibit Mr Piper?
 (5) A I do
 (6) Q How many times do you think you've seen it?
 (7) A The first time I saw it was right before the cleanup season
 (8) in 1991 and it was one of the - the charts that Admiral
 (9) Ciancaglini who is the federal on scene coordinator used at
 (10) what were called the OPS meetings were the big planning
 (11) meetings and public meetings where we'd discuss with the
 public
 (12) what we were going to do and how we were going to do it
 (13) Q When you said you were the state on scene coordinator you
 (14) got that appointment did that make you the highest authority
 (15) for the state agency that we see in the left hand block the
 (16) chart?
 (17) A Yes the on scene coordinator on a big spill like that is
 (18) responsible for making sure not only that DEC's pollution
 (19) control regulations are taken care of but also that other
 (20) state agencies like the other resource agencies that their
 (21) interests are properly represented
 (22) Q When you worked as the state on scene coordinator
 (23) certainly you were involved in the decision making for the
 (24) state of Alaska at the highest levels?
 (25) A I was

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- (1) Q With respect to the spill?
- (2) A Yes
- (3) Q Prior to your becoming on scene coordinator were you
- (4) personally involved in the decision making on behalf of the
- (5) state of Alaska related to the spill in your prior capacity?
- (6) A Yes
- (7) Q Did you consult with the governor frequently?
- (8) A Yes
- (9) Q Did you have regular contact with Exxon?
- (10) A Yes
- (11) Q Did you have regular contact with the federal agencies and
- (12) with the federal on scene coordinator and the admirals that
- (13) were involved over time?
- (14) A Yes my involvement with federal agencies was somewhat
- (15) less
- (16) direct Sometimes it was with the agencies themselves Most
- (17) frequently with the Coast Guard
- (18) Q Who were the admirals that became the federal on scene
- (19) coordinator over the course of the spill?
- (20) A I couldn't give you the complete progression because they
- (21) were - there was a lot of interchange in the first few months
- (22) but Admiral Clyde Robbins came on and was the first real
- (23) long term federal on scene coordinator And Admiral Robbins
- (24) left and then Admiral Ciancaglini took his place and Admiral
- (25) Ciancaglini carried on through the end of the response phase
- (26) Q Did you have contact with Admiral Ciancaglini from time to

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- (1) time?
- (2) A Yes
- (3) Q Conversations with him about decisions to be made?
- (4) A Yes
- (5) Q Who were the people at Exxon with whom you had decision
- (6) making type of conversations and consultations?
- (7) A Otto Harrison who was the counterpart I think of the
- (8) on scene coordinator at that point Chipper Loggie Andy Teal
- (9) John Wilkinson Bob Mastracchio probably several others but
- (10) the names don't all come to mind right away
- (11) Q Could you describe for the jury how these various
- (12) parties - the federal agencies the state agencies and
- (13) Exxon - related to one another from the standpoint of
- (14) jurisdiction?
- (15) A The bureaucratic term for it is multijurisdictional
- (16) setting The reality of it was that you had a lot of agencies
- (17) and public interest groups and there were a lot of things at
- (18) play The idea was really to make sure that you got a result
- (19) and the result was to make sure that the cleanup went
- (20) smoothly
- (21) that everybody's concerns were addressed in a legitimate way
- (22) and that involved a lot of negotiation that's really outside
- (23) of - of bureaucratic processes and regulation
- (24) Q Who was - when you were the on scene coordinator who
- (25) was
- (26) running the spill?
- (27) A Technical terms the federal on scene coordinator was the

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- (1) highest ranking government official and was coordinating all
- (2) the actions In terms of the - the day to-day preparation of
- (3) materials many of the maps that were jointly used the forms
- (4) that were produced to look at what was going to be done and
- (5) those kinds of things Exxon did most of that work
- (6) Q As a practical matter Mr Piper were the governments
- (7) leading Exxon in the spill and telling them where to go and
- (8) what to do on a day to day basis?
- (9) A It depended on the issue The state didn't have quite as
- (10) much influence over Exxon as we would have liked and had
- (11) very
- (12) difficulty - had a lot of difficulty leading Exxon I would
- (13) say that we did not do that
- (14) The federal government which ultimately had overall
- (15) control of it worked on more - I would not say that there was
- (16) a commander in the spill I think it was more a cooperative
- (17) management effort primarily with the federal government and
- (18) Exxon with the state's input
- (19) Q What were the differences in mandate or in goals if there
- (20) were any between the federal government Exxon and the state
- (21) government?
- (22) A I can't really - I can only give you my impression of what
- (23) I think the federal government's mandate was and I don't think
- (24) that I could really properly represent it. I'll tell you what
- (25) the state's goal was
- (26) The state's goal was to make sure that all of the full

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- (1) range of state interests were taken care of in this really
- (2) complex situation It wasn't just a matter of picking up oil
- (3) or cleaning up oil it also involved making sure that community
- (4) concerns were taken care of There were big public safety
- (5) issues particularly in the first two years of the spill when
- (6) there were a lot of people coming in There were Fish and
- (7) Game
- (8) management issues at stake There were tourism issues about
- (9) marketing and about the state's impression in those world
- (10) markets There were issues about community finances about
- (11) waste disposal about state parks - all those kinds of things
- (12) have almost nothing to do with pollution control
- (13) And the federal government at least from my perspective
- (14) had a very - had a more direct pollution control mandate and
- (15) I was trying to make sure that the state's wider range of
- (16) issues were properly represented
- (17) Q All right Can I see Exhibit 1556 please?
- (18) Show you what has been marked as 1556 Could you take a
- (19) look at 1556 and tell me if you recognize it?
- (20) A I do
- (21) Q What is it?
- (22) A It's the state's response plan that we prepared in the fall
- (23) of 1990 as a way to provide a guide in a more direct and
- (24) comprehensive way about what the state's interests were that
- (25) whole group of things that I just talked about in the previous
- (26) question and we wanted to make sure that the federal

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- (1) government understood what our concerns were that Exxon
 (2) understood fully what our concerns were and that when the
 (3) cleanup went back into the field in 1991 that the state had
 (4) all its options to make sure that its interests were taken care
 (5) of
 (6) Q Now there may have been a number of people who put -
 had
 (7) input into this report but were you the principal writer of
 (8) this report?
 (9) A Yes
 (10) Q I should say response plan
 (11) Your Honor I move its admission
 (12) (Exhibit 1556 offered)
 (13) THE COURT It's admitted
 (14) MR CLOUGH No objection Your Honor
 (15) (Exhibit 1556 received)
 (16) BY MR PETUMENOS
 (17) Q Does the state of Alaska normally create a response plan
 (18) like this for a similar kind of event?
 (19) A Not as such Any time there's a cleanup there is a plan
 (20) prepared about how it's going to be done but that's largely a
 (21) technical or an engineering kind of document
 (22) Q Okay I need to get that back from you so I can display
 (23) portions of it on the stand
 (24) Were you concerned about the administrative record that was
 (25) being created as of the time that you wrote this document?

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- (1) A Very much so
 (2) Q Tell the jury
 (3) A The - the underlying principal behind the clean up effort
 (4) was that it was a cooperative effort and the major decisions
 (5) were reached by consensus As a practical matter I didn't
 (6) think that that was really happening or that the state was -
 (7) that many federal decisions were being presented as state
 (8) decisions or that the state concurred with those decisions and
 (9) the fact that we really didn't was not being properly
 (10) reflected and that really wasn't a matter of turf What I was
 (11) concerned about principally was that there was this record
 (12) being built up in which the federal government's decisions
 (13) about how much cleanup to do and what why to do it were
 going
 (14) to be represented as the state's as well
 (15) And what I was concerned about was that at some future
 (16) time in some future spill that a spiller would go back and
 (17) look and say Well gosh you only made Exxon go this far in
 (18) 1989 why are you ordering us to do more?
 (19) And I wanted to make sure that the administrative record
 (20) reflected the fact that the state had different interests and
 (21) different regulations that the decisions that were being made
 (22) under the federal command really belonged to the federal
 (23) government and that our participation in that was saying that
 (24) we don't have any objection to them proceeding with that but
 (25) we were reserving our own options under our own authority to
 do

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- (1) more if we had to
 (2) Q One of the things you just mentioned to me - you'll see
 (3) that on your screen there Mr Piper - is the differences in
 (4) regulations that you talked about between the federal
 (5) government and the state Section 3.1 of the 1991 state
 (6) response plan discusses some of those doesn't it?
 (7) A It does
 (8) Q Explain to the jury what the state concern was that you
 (9) wanted to make sure was of record and how it differed from
 your
 (10) understanding of the federal concern
 (11) A I think the best way to do it would be to give an example
 (12) If we have a state park out in the sound the park exists for a
 (13) variety of reasons One is so the people could enjoy the park
 (14) in its natural or close to natural state as you can get it and
 (15) if there's - if there's asphalt left on beaches in a state
 (16) park and it can be removed we'd like it out because it really
 (17) damages what the state park is all about
 (18) That's fine except the federal government has no
 (19) responsibility to take care of that That's our
 (20) responsibility It's not the federal government's
 (21) responsibility and what I was concerned about was that the
 (22) federal government may say We don't believe that that asphalt
 (23) is creating much of a hazard or a problem on the shorelines in
 (24) terms of pollution we're going to leave it there Whereas we
 (25) wanted to reserve our ability to go back and remove it if we

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- (1) had to to maintain the value of that park It's a publicly
 (2) owned resource
 (3) And so what I wanted to make sure is that we reserved those
 (4) options and they weren't cut off by the consensus process with
 (5) the federal government
 (6) Q And the state law that you were thinking of with respect to
 (7) this response plan were the regulations from the Alaska
 (8) Department of Environmental Conservation that we see here?
 (9) A Yeah that's a paraphrase of the state regulation
 (10) Q Now to whom was this document delivered?
 (11) A It was - we put it out for public comment and of course
 (12) gave it to the federal government and Exxon as well
 (13) Q State regulations require that the state on scene
 (14) coordinator - that's you - continue cleanup of a contaminated
 (15) polluted site until he or she determines that A available
 (16) technology has reached the practical limit or B extracting
 (17) the pollution will cause greater harm than leaving the
 (18) pollution in place
 (19) Was that your concern?
 (20) A Yes And that's - that's the - that's the overarching
 (21) authority The idea is that you continue to clean up until you
 (22) can't do it anymore or until it's going to cause a major
 (23) problem to continue doing it
 (24) Q Did you have some concern about the surveys that had been
 (25) conducted up until that time and how they were being used
 when

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- (1) you wrote this report?
- (2) A Yes
- (3) Q What were they?
- (4) A There were a lot of - the basic issue in the surveys were
- (5) that they were designed primarily not to find all the oil that
- (6) was out there and map it and describe it. They were designed
- (7) to locate and describe areas that were good candidates for
- (8) cleanup. And there's a real difference there because there
- (9) were a number of places in the Sound that didn't qualify
- (10) anymore as good candidates for cleanup and therefore
- (11) weren't
- (12) resurveyed but they still had some kind of oil in place
- (13) Q So a shoreline that says that it was unsurveyed in a given
- (14) year does that mean that there's no oil on it?
- (15) A It would not mean that no
- (16) Q The surveys - as I understand it the first one was
- (17) something called SCAT?
- (18) A There was a real spill of acronyms during the spill too
- (19) so I'm - there was - describing when they happened is
- (20) probably better than the acronyms
- (21) Q My understanding is that SCAT and SCAT2 were a single
- (22) survey done in 1989 the first survey done?
- (23) A Spring and summer surveys in '89
- (24) Q Right Now did you have problems with the spring/summer
- (25) survey of 1989 when you wrote this report?
- (26) A Those surveys were done under - under real war conditions

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- (1) and they were done with limited resources in a short period of
- (2) time and we weren't fully convinced that it was an exhaustive
- (3) or comprehensive look at all the places that were oiled. It
- (4) was designed to find as much as we could in a short period of
- (5) time and try to do something about it
- (6) Q Were some portions of that survey done by air?
- (7) A Yes
- (8) Q Explain that to the jury
- (9) A Some - some areas of the shorelines were not accessible by
- (10) walking or by skiff or just because of the sheer distance
- (11) involved. Every area every shoreline in that - in that first
- (12) spring and summer didn't necessarily get a personal visit
- (13) Sometimes it was done by helicopter
- (14) Q Now as the shoreline surveys went on did they - was
- (15) there a narrowing process that was in effect?
- (16) A Yes
- (17) Q I'm going to give you some of the other surveys
- (18) There was an ADEC walk a thon in 1989?
- (19) A Yes but that was not a narrow one. That was our attempt -
- (20) because of our original concerns about the original survey the
- (21) fall and the early part of the winter in 1989 - we tried as
- (22) best we could is to literally walk every shoreline that we
- (23) thought may have been oiled. Some places you couldn't do it
- (24) and you had to do it by skiff but the intent was to get to as
- (25) many places as we could and document the oiling conditions

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- (1) there
- (2) Q But then when we got to something called the spring
- (3) shoreline assessment S SAT was that - how was that
- (4) conducted?
- (5) A That was - again the intent behind the joint surveys the
- (6) fall walk a thon was something that the state did on its own
- (7) without the other agencies. The spring surveys before the
- (8) cleanup were done with the federal government and with Exxon
- (9) -
- (10) and again their purpose was not to find all possible oiled
- (11) shorelines and describe the oiling at all those places it was
- (12) to find the candidates that were most likely to get effective
- (13) cleanup and then deploy clean up crews
- (14) Q Would those spring surveys be any indication of where the
- (15) oil was within Prince William Sound and the Kenai Fjords and
- (16) Kodiak?
- (17) A Repeat the question?
- (18) Q Would those spring surveys give you any indication of where
- (19) the oil remained in those areas?
- (20) A They would tell you where probably - well again there
- (21) was no guarantee that those surveys would tell you all the
- (22) places that oil existed. They would - they would tell you the
- (23) places where there had been oil before where there had been
- (24) work done and you were going back to look at it again to see
- (25) how much more work would be needed
- (26) Q The point is there were many places where oil had been

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- (1) found before that were not revisited in those spring surveys
- (2) is that right?
- (3) A I couldn't personally testify as to how many
- (4) Q Right?
- (5) A But there were certainly some
- (6) Q MAYSAP describe MAYSAP for the jury. That was the May
- (7) shoreline assessment shoreline in '91 -
- (8) A 1991
- (9) Q 1991?
- (10) A Spring '91
- (11) Q In May 1991 were all of the surveys up to this point in
- (12) time limited to looking for surface oil?
- (13) A There was some - the techniques for finding subsurface oil
- (14) evolved over time and at different times in the spill it was
- (15) of greater or lesser concern. What our - in the fall of 1990
- (16) we wrote the response plan and part of that response plan was
- (17) a list of all the shorelines that we wanted to as the state
- (18) wanted to survey. And that we intended to look for oil
- (19) And our goal was not just to find those shorelines that
- (20) were good candidates for cleanup it was also to map or locate
- (21) as best we could as much oil as we could and the theory
- (22) behind that is that we're - we the state are managing this
- (23) public resource it's the public lands and we thought the
- (24) public would want to know how much oil may or may not have
- (25) been
- (26) out there. The federal government's interest was more making

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- (1) sure that they knew where they could go to clean up
 (2) So we prepared our list in the fall of 1990 with an eye
 (3) towards going as many places as we thought oil might exist in
 (4) an attempt to map that oil
 (5) Q Well tell me Mr Piper Were there some disagreements
 (6) and some controversies and debates over where you would go
 and
 (7) what you would do there for that MAYSAP study?
 (8) A There were long discussions over the course of several
 (9) months about what that final list would be And generally the
 (10) state wanted to go to more sites the federal government and
 (11) Exxon argued for fewer sites
 (12) Q And was there controversy and discussion about whether or
 (13) not subsurface oil surveys would be done?
 (14) A Yes
 (15) Q Tell the jury what that controversy was
 (16) A The state was very much interested to find out the extent
 (17) of subsurface oiling because it was becoming apparent in
 1990
 (18) at least from our field monitors that they were finding areas
 (19) of subsurface oil that were not properly mapped or described
 (20) and they had some real questions about how much more might
 be
 (21) there
 (22) One of the things we wanted to do in the MAYSAP that
 (23) spring 1991 survey was find as many of these subsurface oil
 (24) sites as we could dig pits in the beach - almost like oil
 (25) wells - to delineate how big the area was and then write it

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- (1) down so people knew
 (2) The Coast Guard was somewhat less interested in doing that
 (3) primarily because they didn't think that there was going to be
 (4) clean - a lot of subsurface oil cleanup done and as it was
 (5) expressed to me We're not going to spend a lot of time looking
 (6) for subsurface oil if in fact we're not going to be doing a
 (7) cleanup we have limited resources and we need to do cleanup
 (8) And that was the Coast Guard's position
 (9) Q So the Coast Guard wanted the survey restricted only to
 (10) what cleanup was going to be done next year?
 (11) A Yes and they assumed there wouldn't be subsurface oil
 (12) cleanup This is a really important point because the state
 (13) was not ready to concede that there was no reason to clean up
 (14) subsurface oil and we didn't want the - the consensus
 (15) decision so to speak about what to do for cleanup goals to
 (16) reflect that because we thought it was going to make it a lot
 (17) more difficult for us to ever go back and do subsurface cleanup
 (18) if we had appeared to have agreed to a scheme of no
 subsurface
 (19) mapping So we were pretty insistent on doing some kind of
 (20) subsurface mapping even if the federal government didn't
 (21) Q Was the government pretty - federal government pretty
 (22) insistent about not doing subsurface mapping?
 (23) A Sure And I understood their reasons And the Coast Guard
 (24) is primarily in that role pollution control agency and that's
 (25) what they were going to do

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- (1) Q Not about the politics Mr Piper just asking you for the
 (2) answer to the question Were they pretty insistent that they
 (3) didn't want to do it?
 (4) A Yes
 (5) Q What happened with MAYSAP?
 (6) A There was - I would say a - somewhat of a truce on some
 (7) points there and at certain sites there was more subsurface
 (8) mapping done than others but the people that worked for me
 (9) directly in the field weren't satisfied with - with how those
 (10) subsurface surveys were being done They reported that to me
 (11) consistently and we then decided to do the state's own
 program
 (12) of subsurface mapping that summer because we just wanted to
 (13) know more about it
 (14) Q After the state decided it was going to conduct its own
 (15) program now on its own outside of this process -
 (16) A Yes
 (17) Q - then did Exxon do it?
 (18) A Eventually Exxon did some on its own and gave us the data
 (19) and then at some of the sites if I remember it correctly I
 (20) think they went with us and eventually Exxon joined at least a
 (21) part of that subsurface survey
 (22) Q Is the way that this happened was first proposal of the
 (23) state was you wanted to do a joint survey you wanted to be
 (24) part of the joint survey that subsurface - a subsurface plan
 (25) of survey would take place?

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- (1) A Yes
 (2) Q And then it ended up that the state said Well we'll do it
 (3) on our own?
 (4) A Yes It appeared - it looked like it was going to - if
 (5) they weren't going to do it and it was a big issue with them
 (6) then we were going to do it ourselves
 (7) Q And then did you communicate that to Exxon?
 (8) A Yes
 (9) Q And then did they do it?
 (10) A They did pieces of it but they didn't do it with us
 (11) Q Now one final survey that I want to ask you about
 (12) There was a survey called FINSAP What was FINSAP?
 (13) A The first three letters of every - if you assume that SAP
 (14) means Shoreline Assessment Project the first three letters of
 (15) each of those normally said what it was And MAYSAP was
 (16) because we did it May of 1991 FINSAP was designated
 because
 (17) it was to be the final shoreline assessment process and
 (18) response
 (19) Q Now tell the jury when FINSAP as the final shoreline
 (20) assessment program was named FINSAP?
 (21) A Sometime in the winter probably in January before the -
 (22) all the details of the survey were put together
 (23) Q Before all the details of the survey were put together and
 (24) before the survey was actually conducted it was called the
 (25) final survey?

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- (1) A Yes
 (2) Q Did you have a problem with that?
 (3) A I thought it was - I had a logical problem with it I
 (4) didn't have a political problem with it no
 (5) Q Okay let's discuss the difference between logic and
 (6) politics because sometimes they diverge
 (7) A Well if you're - if you assume you're going out to do a
 (8) survey to decide whether you need to do anymore work it
 seems
 (9) rather odd logically to call it the final survey before you
 (10) do it
 (11) So that was the logical problem but there was a political
 (12) reason for not having a problem with that which was that the
 (13) goal was to - the goal was to bring an end to this joint
 (14) response because it really wasn't serving the state's interests
 (15) very well and the sooner that the joint response was ended
 (16) the state could do what it needed to do on its own whether it
 (17) was cleanup or whether it was restoration we just didn't have
 (18) to deal with the political questions anymore We could just do
 (19) it if we had to
 (20) Q In the course of this organization with all the blocks
 (21) that we just saw lots of negotiation about where and what to
 (22) do different points in time -
 (23) A Yes
 (24) Q - some of this was costly?
 (25) A I don't understand

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- (1) Q Some of this response was costly some of the responses
 (2) that were made to certain segments cost a lot of money to
 (3) respond?
 (4) A Oh yes
 (5) Q Was that a consideration from time to time?
 (6) A Oh yes
 (7) Q Cost was a factor when you decided what to do?
 (8) A Definitely
 (9) Q The decision makers were they generally scientists or were
 (10) they people from the governments that had public policy
 (11) authority?
 (12) A The way the state structure was made up the decision
 (13) makers were the public policy makers with support from the
 (14) science and technical staff
 (15) Q What about Admiral Ciancaglini was he a scientist?
 (16) MR CLOUGH Objection Your Honor foundation
 (17) THE COURT Sustained
 (18) BY MR PETUMENOS
 (19) Q You had a number of conversations with Admiral
 Ciancaglini?
 (20) A Yes
 (21) Q Did you talk to him about what his background was?
 (22) A In a limited way
 (23) Q Do you know what his experience was in the Coast Guard?
 (24) A He had been an officer for a long time He'd done a lot of
 (25) things He'd done some pollution control He was a helicopter

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- (1) pilot very accomplished one from what I understood
 (2) Q You're not aware of him having any advanced science
 (3) degrees?
 (4) A I don't know
 (5) Q Going back to your report - excuse me your response
 (6) plan -
 (7) MR CLOUGH What page number?
 (8) MR PETUMENOS 352 I'm not sure they're numbered
 (9) but I have them by the section which is the easiest way to find
 (10) them counsel
 (11) BY MR PETUMENOS
 (12) Q 352 you wrote a plan for subsurface oiling Why did you
 (13) do that?
 (14) A Because as I said before it didn't appear that subsurface
 (15) oiling was going to be a significant part of the federal plan
 (16) for cleanup in 1991 And quite frankly we didn't know if it
 (17) was going to be a big part of ours either because we hadn't
 (18) looked but we wanted to make sure that we retained the option
 (19) to do subsurface cleanup and that it wasn't preempted by a
 (20) federal decision
 (21) Q You just said something about it which I think reminds me
 (22) I'm not sure you answered the question I asked earlier
 (23) MAYSAP took place in the year in the field year that you
 (24) wrote this plan for am I right?
 (25) A Yes This was written for the 1991 field season but it

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- (1) was produced before the field season
 (2) Q Right And the surveys that we've talked about up until
 (3) May of 1991 none of them had as their goal systematically
 (4) mapping or locating subsurface oil am I right?
 (5) A None that were done jointly with the ones that I had a part
 (6) of dealing with the Coast Guard or that the state dealt with
 (7) the Coast Guard and Exxon no they were not designed to do
 (8) that
 (9) Q They were all looking for surface oil only?
 (10) A Sometimes subsurface oil but - but not - not as a
 (11) primary goal of mapping or delineating all areas
 (12) Q So if we were to look at SCAT2 as a place to go - SCAT2
 (13) being - if I'm losing you the 89 survey - as a place to go
 (14) look for where the subsurface oil might be would that be a
 (15) good source?
 (16) A I wouldn't think so And that was one of the concerns
 (17) that our - our geomorphologist had our science guy had a
 (18) concern with
 (19) Q Why did you put 354 in there? Were you concerned that
 (20) there was going to be unrecovered oil in Prince William Sound
 (21) the Kenai Fjords and Kodiak?
 (22) A Yeah I knew that there would be unrecovered oil to tell
 (23) you the truth
 (24) Q All right
 (25) What was the Technical Advisory Group or TAG?

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- (1) A The stated purpose for the TAG was that it would be a
 (2) technical advisory group that each of the parties - state
 (3) federal Exxon - would bring together their technical people
 (4) to make recommendations to the admiral about what cleanup if
 (5) any should take place at a given site And that was the stated
 (6) purpose of it
 (7) Q Were there limitations or drawbacks to the TAG process
 (8) that you were aware of?
 (9) A From the state's perspective there were very significant
 (10) drawbacks and limitations
 (11) Q Tell the jury
 (12) A The - it was essentially - I mean it was billed as a
 (13) consensus operation but in reality it was a consensus
 (14) operation in which if the state disagreed with what was
 (15) happening they could be easily overruled by the federal
 (16) government because the federal government had the final
 (17) authority I mean it doesn't operate as a consensus basis
 (18) The second thing and I think the most significant problem
 (19) with it from our perspective was that the TAG was not making
 (20) strictly technical decisions and by technical I mean it
 (21) wasn't making a decision that said a backhoe can move so
 (22) much
 (23) of this oiled gravel at this rate and is likely to produce this
 (24) result It was questions about whether it was worth doing
 (25) cleanup at a shoreline and from the state's perspective
 (26) that's a public policy question because it's not just a

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- (1) technical concern It has to do with things like the
 (2) commercial fisheries state park just the value of the state
 (3) land As a landowner public landowner I would prefer to have
 (4) as little pollution on those public lands as possible and
 (5) that's not a technical pollution question That's a question
 (6) of ownership and public interest And we didn't believe that
 (7) the TAG really reflected that and so it had a real limitation
 (8) in that regard
 (9) Q Was the federal government and Exxon getting along pretty
 (10) well at this point in time with respect to what they wanted to
 (11) do how much to get done?
 (12) A From my - from my observation -
 (13) MR CLOUGH Objection What was the period of time
 (14) we're talking about? I'm sorry
 (15) MR PETUMENOS During the period of time he was state
 (16) on scene coordinator
 (17) THE COURT The whole time?
 (18) MR PETUMENOS Yes
 (19) THE WITNESS I think it appeared to me the admiral
 (20) had a very good working relationship with Exxon
 (21) BY MR PETUMENOS
 (22) Q You prepared this document the back of that 1991 response
 (23) plan It's called a fact sheet and it says Prince William
 (24) Sound and Kenal Shoreline Status Report Summary Why did
 (25) you
 (26) want to attach this to the report and what was the issue that

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- (1) you were attempting to address? I notice you have segments to
 (2) reassess and no further segments (sic) required and based
 (3) upon
 (4) earlier surveys - do I need to widen that back up for you?
 (5) A No I can see it I just - I don't remember seeing this
 (6) particular chart to tell you the truth
 (7) Q Let me ask you more generically
 (8) 48 percent or so of shoreline segments are shown as having
 (9) no further reassessment required What did that designation
 (10) mean to you?
 (11) MR CLOUGH Objection Excuse me I'm sorry
 (12) Mr Piper Give me a chance
 (13) Objection foundation The witness has already testified
 (14) he doesn't basically remember this document He's now being
 (15) asked percentages off of it
 (16) MR PETUMENOS I'm trying to refresh his recollection
 (17) just a bit Judge I think he understands
 (18) THE COURT Rephrase the question then counsel
 (19) BY MR PETUMENOS
 (20) Q I'll put a new one up
 (21) What was - did you have any concern about the notion
 (22) based upon the surveys at that point that some 48 percent of
 (23) the shoreline segments were designated as requiring no further
 (24) reassessment?
 (25) MR CLOUGH Same objection Your Honor Counsel is
 (26) making calculations off the document The witness has said he

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- (1) doesn't recall it
 (2) THE COURT Overruled The objection's overruled
 (3) Go ahead
 (4) A The - the point behind the no further reassessment
 (5) required to be perfectly honest was one of those political
 (6) points more than it was a technical point We went in with our
 (7) list and it was a pretty extensive list of sites that we wanted
 (8) to reassess in 1991 One of the issues that had been coming
 (9) back to us from the federal government particularly and
 (10) Exxon was that there was a concern that we were going to
 (11) quote reopen the whole oil spill and we were trying to make
 (12) them more comfortable with the fact that we weren't trying to
 (13) reopen the whole oil spill that we had valid reasons for going
 (14) back to the ones that we had listed But we also wanted to
 (15) show that we had given up a number too in a sense That we
 (16) had - we had agreed with them that there were a number that
 (17) needed no further reassessment
 (18) So the technical foundation of this was a lot weaker than
 (19) the political foundation It was a negotiating point
 (20) Q The technical foundation was a lot weaker - the political
 (21) foundation was stronger than the technical foundation then is
 (22) that what you're saying?
 (23) A Yes
 (24) Q What do you mean by that?
 (25) A Well again the whole point was to get a result and the

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(1) whole process was a negotiating process And you have to -
 (2) when you re trying to negotiate obviously you want to - you
 (3) don t want to have winners and losers you want to have at
 (4) least as best you can a win/win situation
 (5) And we were trying to show that yes indeed there are a
 (6) lot of places that we want to go to and a lot of things that we
 (7) want to do out there but at the same time we wanted to show
 (8) that we weren t going to insist on going back to every site
 (9) from day one that we weren t trying to be punitive or
 (10) obstructionists or that we were trying to give the federal
 (11) government and Exxon some assurance that we weren t just
 going
 (12) to go everywhere
 (13) So that s what I mean the political and negotiating
 (14) foundation was really a point
 (15) Q Did the state - among the three parties that we re talking
 (16) about here did the state have a strong negotiating hand or a
 (17) weaker negotiating hand as between the three?
 (18) A We had a weak negotiating hand and that s why it required
 (19) because the federal government had ultimate authority
 because
 (20) Exxon had expressed to us consistently that their goal was to
 (21) complete everything that the Coast Guard required
 (22) That had been the consistent statement to us from Exxon and
 (23) Exxon s statement publicly throughout 1989 and 90 and that
 (24) statement pointedly excluded what the state might require and
 (25) so as long as we were in the joint response where the federal

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(1) government had ultimate authority to move things around and
 (2) make those decisions we were in a weak negotiating position
 (3) and we had to find ways to get to - get to yes from that weak
 (4) negotiating position
 (5) Q You have a section here I just want to touch on it
 (6) briefly relating to bioremediation The first section is on
 (7) one page It doesn t say very much And then it goes on
 (8) sentence continues and covers your statement about
 (9) bioremediation for 1991 - and the jury will have it in the
 (10) jury room to read it at more length but could you summarize
 (11) for the jury what your position was about bioremediation and
 (12) why?
 (13) A The - the state s scientific advisors If I can summarize
 (14) their feelings as they expressed them to us were that putting
 (15) fertilizers on the shorelines probably didn t cause any
 (16) problems It wasn t dangerous to do that and there was some
 (17) good indications that it might do something in terms of
 (18) speeding up the degradation but that there were a lot of
 (19) unanswered questions and that some of them were very large
 (20) And so again from a political standpoint both the federal
 (21) government and Exxon were very bullish on using fertilizers and
 (22) very much wanted to make that an important part of the
 clean up
 (23) program We preferred that they pick the oil up rather than
 (24) leave the work to the fertilizers because of the lack of
 (25) scientific information behind it

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(1) So in an effort to get to a win for everybody the state
 (2) our policy that year was that We won t object to the use of
 (3) fertilizers go ahead and use them however we want you to do
 (4) more certain techniques first and after you ve done that go
 (5) ahead and put the fertilizers on
 (6) Q In other words Do it if you want but you better be doing
 (7) the other stuff too?
 (8) A Yes
 (9) Q Now the material that came to your attention about
 (10) bioremediation where it had been successful how was it
 (11) different than the material the application that was being
 (12) made of it in the intertidal zones of Prince William Sound
 (13) Lower Kenai and Kodiak?
 (14) A There were - there were different pieces of it The
 (15) piece were the initial studies that were done in very short
 (16) time in 1989 and our science - our science people and science
 (17) advisors were skeptical that there wasn t quite enough
 (18) scientific data to support some of the conclusions that were
 (19) coming out about its effectiveness
 (20) Exxon had provided - and then over the next winter
 (21) provided more scientific information but those were based on
 (22) closed system They were laboratory studies and you can
 (23) control a lot of variables in a laboratory study One of our
 (24) major concerns was that you didn t have those kinds of controls
 (25) on a shoreline you had two 10- or 12-foot tidal changes every

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(1) day You had rain you had groundwater runoff different
 (2) temperatures at different sites different kinds of
 (3) shorelines It was just not in our view a good bet to assume
 (4) that a laboratory study of a real specific situation was -
 (5) could be translated to all of the very very different kinds of
 (6) shorelines that were out there in the Sound
 (7) So again we didn t - there was some good reason to think
 (8) that bioremediation might be able to do something but we
 (9) weren t convinced that all the conditions existed to really
 (10) make it effective
 (11) Q Was it one big concern that the water comes along and
 (12) washes it away almost as soon as it s put on?
 (13) A That was one concern among it but the basic concern is you
 (14) had an open marine system as opposed to a closed lab
 situation
 (15) and the two don t necessarily add up I mean they re not
 (16) immediately transferable information
 (17) Q Now let s discuss one other matter
 (18) You wrote into your plan a section on archaeological
 (19) sites What was the concern of the state about the
 (20) archaeological sites?
 (21) A The state has some authority over - there s a section of
 (22) the division of parks which is the - an office that is in
 (23) charge of all state historical sites and the integrity of
 (24) archaeological sites and there were a couple of concerns One
 (25) was that some of them were damaged and so that the value of

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- (1) them - or some of them may have been damaged so that the value
 (2) of them was hurt. The other one was just trying to trade off
 (3) finding them or cleaning them against people finding out where
 (4) they were because looting and disruption of archaeological
 (5) sites is in certain areas is a really big problem and we
 (6) wanted to reduce as much as possible the - that occurrence
 (7) Q Now did you have occasion yourself in 1993 to walk upon
 (8) some of the segments and some of the beaches that you had
 (9) seen
 (10) previously mapped?
 (11) A Yes
 (12) Q Did you have occasion to test the idea that beaches that
 (13) were removed from the survey process were unsurveyed or
 (14) indicated no further treatment required had oil on them?
 (15) A Yes
 (16) Q Can you give us a couple of examples of that experience?
 (17) A Two that stand out in my mind particularly were on this -
 (18) on this 1993 survey there was a site and I believe it was
 (19) Green Island 103. And we went and we visited the site. And it
 (20) looked terrific. There was no apparent sign of oil at any of
 (21) the places that we had seen it before and so we wrapped up
 (22) there and the skiffs were around a point on the other side of
 (23) what I believe was Green Island segment 101 and so we
 (24) walked
 (25) from one around the shoreline to the other. And in the process
 (26) of going from 103 to where the skiffs were we went through a
 (27) field of - of shale paper thin sediments that had been lifted

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- (1) up a little bit over time and this was a site that had not
 (2) been on surveys for a number of years but throughout this
 (3) area several hundred meters there was quite a bit of oil
 (4) packed into these leaves of shale that were uplifted and there
 (5) was sheening in the tide pools and other things
 (6) This was a lousy candidate for cleanup which is why it was
 (7) not on subsequent surveys. That didn't mean that there was no
 (8) oil and that was a really striking example to me of that
 (9) process
 (10) Another one was at one of the more studied and famous sites
 (11) from the - from the time of the spill which was in Sleepy Bay
 (12) and we were out at LA 20-C which was LaTouche Island
 (13) Segment
 (14) Number 20 in Section C out towards the point. And in the
 (15) course of two site visits that summer last summer we found -
 (16) we were able by spending a fair amount of time there to
 (17) locate more oil than had been located in previous surveys and
 (18) also to locate a couple of areas of more significant oiling
 (19) that had been missed at one time or another
 (20) Q Counsel Exhibit Number 3958 DX
 (21) Showing you what has been marked as Exhibit 3958 do you
 (22) recognize that?
 (23) A I do
 (24) Q This has been I think previously published to the jury
 (25) and - could I have the Elmo please - this is a letter from
 (26) John Sandor the commissioner from the Department of

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- (1) Environmental Conservation to Rear Admiral Ciancaglini and
 (2) Mr Otto Harrison and it's sort of the end of the beach
 (3) treatment process
 (4) Are you aware of that?
 (5) A Yes
 (6) Q When you were the state on scene coordinator were you
 (7) involved in requests from Exxon for such a letter? Or a
 (8) similar letter?
 (9) A There was - I would hesitate to classify it as a request
 (10) simply because I don't remember whether it was a request but
 (11) there was a discussion at one of the - at the principal
 (12) preseason meeting in 1992 among the parties including the
 (13) admiral Mr Harrison myself and some of the staff about
 (14) what we did at the end if indeed this was the end and there
 (15) was some discussion about a letter that would go to Exxon that
 (16) said Your - the work is done you're released or something
 (17) something like that
 (18) It was not decided that - at that time as I recall what
 (19) exactly would be done but that issue came up
 (20) Q Were you told by any Exxon representatives that they really
 (21) wanted such a letter?
 (22) A I don't recall
 (23) Q Was this idea of a letter to end up the cleanup one of
 (24) those things that was the subject of some negotiation between
 (25) the state and Exxon?

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- (1) A It was a matter of some discussion within DEC
 (2) Q What do you mean?
 (3) A The technical staff of DEC generally said that -
 (4) MR CLOUGH Objection Your Honor I think we're
 (5) about to get some hearsay statements here and I haven't heard
 (6) a
 (7) reason why. That's the objection
 (8) MR PETUMENOS Well I think the issue goes to what
 (9) decision he made about sending such a letter what information
 (10) he had available to him and the decision that he made with
 (11) respect to that letter when he was in charge. And I'm
 (12) interested whether - I'm interested also in showing to the
 (13) jury regardless of the truth of the matter or the merits of
 (14) the statements of the DEC officials what the process was that
 (15) resulted in this letter which I think is important
 (16) THE COURT This letter that's signed by Mr Sandor
 (17) MR PETUMENOS Signed ultimately by Mr Sandor but I
 (18) think discussed early on when he was there
 (19) MR CLOUGH This went out June 22nd 1992 I believe
 (20) he testified he left that employment as state on scene
 (21) coordinator in March of 1992 four months before this or three
 (22) months before this
 (23) MR PETUMENOS Let me ask a few more questions and
 (24) let's see how this goes
 (25) BY MR PETUMENOS
 (26) Q The idea for this letter surfaced while you were state

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- (1) on scene coordinator?
 (2) A Yes
 (3) Q Did you send such a letter?
 (4) A No
 (5) Q Did you consult with people within your department as to
 (6) why you decided not to send such a letter?
 (7) A Yes
 (8) Q Were you aware of the discussions that were going on when
 (9) this letter in June of 1992 was sent?
 (10) A At the time it was sent?
 (11) Q Either way
 (12) A No I was not aware that letter went out until I saw it
 (13) Q So you didn't have anything to do with actually sending
 (14) this letter?
 (15) A No
 (16) Q Why did you not send one?
 (17) MR CLOUGH Objection Your Honor if he's going to
 (18) now testify as to hearsay information given from some third
 (19) party we would object to that
 (20) THE COURT The objection's overruled This question
 (21) deals with his reasons for not sending the letter
 (22) MR CLOUGH Just for the record we'd like to state
 (23) an objection of relevance as to the issue of him not sending a
 (24) letter
 (25) THE COURT I'm sorry counsel?

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- (1) MR CLOUGH Objection to the issue that he didn't
 (2) send a letter doesn't appear to us to be relevant so I object
 (3) also on that basis of relevance
 (4) THE COURT The objection's overruled
 (5) BY MR PETUMENOS
 (6) Q Mr Piper?
 (7) A The - there were a number - at the meeting that I
 (8) described that included the commissioner and Mr Harrison and
 (9) the admiral and myself and some other staff from each of our
 (10) agencies there was a long discussion about a variety of parts
 (11) of that what would be done at the end The letter was a part
 (12) of it There was public relations piece that was to be a part
 (13) of it and so on
 (14) My staff advised me about what DEC's procedure is normally
 (15) under these circumstances and their advice was that what DEC
 (16) normally does is that tell a spiller that it appears that we've
 (17) reached the limit of what we can do under this regulation
 (18) However we're setting up a monitoring program and if there's
 (19) any other problems in the future you're still - we still hold
 (20) you responsible for taking care of those problems So this
 (21) was - I put the issue aside quite frankly because one it
 (22) didn't need to be decided then and two there was a lot of
 (23) shoreline activity that had to take place between the time we
 (24) had that discussion and the time that any such letter would be
 (25) sent

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- (1) Q So based upon the information that - that you had at the
 (2) time that this issue came up this letter was not the sort of
 (3) thing that DEC in the normal course would have sent?
 (4) A That's the advice that I received
 (5) MR PETUMENOS I have no further questions
 (6) THE COURT Counsel would you like to take a break?
 (7) MR CLOUGH Yes a short break would be helpful Your
 (8) Honor
 (9) THE CLERK Please rise This court stands in
 (10) recess
 (11) (Jury out at 10 40 a m)
 (12) (Recess from 10 40 a m to 10 55 a m)
 (13) (Jury out)
 (14) THE CLERK Please rise This court now resumes its
 (15) session
 (16) Please be seated
 (17) THE COURT Counsel every time I come into court I
 (18) have a new pleading on my desk
 (19) MR DIAMOND Well we don't want you to leave
 (20) empty-handed Your Honor
 (21) THE COURT Take a speed reading class
 (22) MR PETUMENOS Judge I wanted to ask a few
 (23) foundation questions on that table to make sure it would pass
 (24) muster for admissibility and I was going to move to ask those
 (25) questions move to redirect Mr Clough has a problem with

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- (1) it
 (2) Would you rather I do it when the jury's here?
 (3) THE COURT You can do it now I've got them coming
 (4) over here later so we might as well use the time
 (5) VOIR DIRE OF ERNEST PIPER
 (6) BY MR PETUMENOS
 (7) Q Okay Mr Piper Exhibit Number 1553 do you know what this
 (8) is?
 (9) A Yes
 (10) Q What is it please and how did it - are you its author?
 (11) A The DEC hired me to write sort of a reader's guide to the
 (12) oil spill and I did that under contract to DEC a couple of
 (13) years ago
 (14) Q Now this book was not for purposes of litigation?
 (15) A No
 (16) Q It was a public document available to anyone?
 (17) A Yes
 (18) Q And this book was an informational piece to be given to the
 (19) public in general as part of the DEC's responsibilities to
 (20) inform?
 (21) A Yes
 (22) Q And I want to refer you specifically to page 135 which is
 (23) a table entitled Areas of Disagreement
 (24) Do you see that that page there?
 (25) A Yes

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- (1) Q And could you tell the Judge how that was written how it
 (2) came to be your role in it?
 (3) A We were attempting to summarize for the our purposes of the
 (4) 1991 response plan why we were doing that and we - I asked
 (5) the - the people that had participated in the TAG and in the
 (6) technical discussions on behalf of DEC and the other state
 (7) agencies to come up with a list of the major reasons or the
 (8) major shortcomings of the process as they viewed it and why we
 (9) needed to do a response plan
 (10) Q This response plan was the exhibit we moved into evidence
 (11) just a moment ago during the testimony before the jury?
 (12) A Yes
 (13) Q And it forms the basis of part of the rationale for having
 (14) put together that response plan?
 (15) A Yes
 (16) Q And did you have personal knowledge of some of the matters
 (17) that are contained in there?
 (18) A Yes
 (19) MR PETUMENOS That s it with respect to that page
 (20) Judge And there s another page about ten pages back titled
 (21) Exxon Valdez Oil Spill Project and a graph
 (22) BY MR PETUMENOS
 (23) Q Tell the Judge how that came to be and what you know about
 (24) that
 (25) A There had been a lot of discussions from 1989 even right

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- (1) through the present about how many miles of beach miles of
 (2) shoreline whether it had been treated or surveyed or that kind
 (3) of thing and the data and mapping people at DEC and other
 (4) state agencies had long disliked the data that they had been
 (5) getting back from other parties about it and so the lead
 (6) mapping and data management person who worked for me said
 (7) that
 (8) he could put together - he could reconcile the two sets of
 (9) data or the three sets of data and come up with what he felt
 (10) was more technically defensible series of numbers and I told
 (11) him to go ahead and do it
 (12) Q That s what s represented in your chart?
 (13) A Yes
 (14) MR PETUMENOS That s my offer Judge I would move
 (15) those two pages into evidence before the jury with similar
 (16) questions to that on the record
 (17) MR CLOUGH If I can address the two separately Your
 (18) Honor Do you have copies of them still in front of you?
 (19) THE COURT Question is do you want to - first do
 (20) you want to ask any questions?
 (21) MR CLOUGH No I think we ve got the foundation
 (22) stuff worked out
 (23) THE COURT I don t have them - I don t think I have
 (24) them
 (25) MR PETUMENOS Let me hand it to the Judge since
 (26) we re finished with the foundation The second one is opened

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- (1) there Judge and the first one is tagged
 (2) THE COURT The second page is 145
 (3) MR CLOUGH I was going to address 135
 (4) 135 I think you ll recall from looking at it a few moments
 (5) ago it was my understanding this was the one the Court had
 (6) more problem with of the two of them
 (7) I think the hearsay - you ve got a hearsay on hearsay
 (8) problem here first This is a document prepared as
 (9) Mr Piper s testified to at some time significantly after the
 (10) actual events Also these particular events occurred before
 (11) his tenure as state on scene coordinator He s testified that
 (12) what he did was he went and talked to people and he got
 (13) information from them He s also as we indicated in our
 (14) briefing papers did not make independent efforts to verify
 (15) that information We would think that this does not come in
 (16) under the exception of the hearsay rule it is excluded and we
 (17) would ask that this particular page be kept out on that basis
 (18) THE COURT Let s go to the next discussion counsel
 (19) MR CLOUGH The next one is simply based on
 (20) foundation presented to date We don t think sufficient
 (21) foundation has been laid for this one on 145
 (22) THE COURT Okay Thank you
 (23) MR PETUMENOS Does the Court require argument from
 (24) me?
 (25) THE COURT Pardon?

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- (1) MR PETUMENOS Does the Court require argument?
 (2) THE COURT Require? No you re entitled to waive
 (3) further argument
 (4) MR PETUMENOS Just very briefly the - he s the
 (5) author of the report It s a public document not - well
 (6) within the hearsay exception I don t think there s any
 (7) question about its admissibility I m trying to point out
 (8) relevant parts rather than introducing the entire document
 (9) although argument could be made - entire document at least
 (10) on
 (11) hearsay grounds probably not relevance but hearsay grounds
 (12) would be admissible
 (13) THE COURT Go ahead
 (14) MR CLOUGH Your Honor I d just cite to the Court
 (15) the same exclusions to that exception of the hearsay rule
 (16) THE COURT I know the exclusions This report is in
 (17) admissible - your intent is just to mark the two pages?
 (18) MR PETUMENOS And the cover page so they know where
 (19) it came from
 (20) THE COURT Fine Exxon can do the same thing
 (21) MR CLOUGH Your Honor If that s your ruling we see
 (22) no reason not to stipulate those two pages can be marked and
 (23) we see no reason for further direct examination of the witness
 (24) MR PETUMENOS I want the jury to know what it is
 (25) THE COURT Certainly you can do the questioning
 (26) I ve admitted the document and I ll admit it in front of the

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- (1) jury too
- (2) And you might want to - as part of your motion you might
- (3) want to explain that there's going to be three pages here of
- (4) this big document
- (5) MR PETUMENOS Right
- (6) THE COURT Okay let's see if they're in there
- (7) (Jury in at 11 03 a m)
- (8) THE COURT Okay the jury is present counsel Go
- (9) ahead
- (10) CONTINUED DIRECT EXAMINATION OF ERNEST PIPER
- (11) BY MR PETUMENOS
- (12) Q Mr Piper Exhibit 1553 do you know what this is?
- (13) A Yes
- (14) Q You helped write it?
- (15) A I wrote it
- (16) Q You wrote it you're the author It's entitled the Exxon
- (17) Valdez Oil Spill Final Report State of Alaska Response
- (18) What - what is this book why was it written? Tell the
- (19) jury
- (20) A From the early days in the spill the DEC had wanted to
- (21) have some kind of a comprehensive report written that was in a
- (22) readable form for the general public to find out what had gone
- (23) on why the State did what it did over the course of the oil
- (24) spill and after I had left as on scene coordinator DEC hired
- (25) me on contract to write that report and that's what that is

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- (1) Q It's a long book so we're not going to introduce the whole
- (2) thing but I want to point out two portions of it to you
- (3) One is at page 135 there's a little table there Can you
- (4) tell the jury what that table summarizes?
- (5) A That table summarizes the main arguments that DEC and
- (6) other
- (7) resource agency staff had - had brought to me to justify us
- (8) preparing the 1991 response plan
- (9) Q And then there's another page I've marked there about ten
- (10) pages back it's got a table Could you tell the jury what
- (11) this table says about the issue we discussed regarding the
- (12) amount of miles surveyed and your concerns there?
- (13) A There again dating back to the earlier days of the spill
- (14) there were a lot of disagreements about what constituted a mile
- (15) of beach what it was for purposes of cleanup or how much of it
- (16) had been oiled and so on and there were a lot of conflicting
- (17) sets of data coming from different sources and the DEC
- (18) technical staff had wanted to reconcile all those numbers at
- (19) some point and presented me a proposal to do it and I told
- (20) them to go ahead and do it
- (21) Q And that's what resulted?
- (22) A Yes
- (23) Q Now do you understand whether when a survey was
- (24) conducted
- (25) whether when it came back as surveyed that meant the
- (26) entire - every foot of it was - was surveyed by the survey
- (27) team?

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- (1) A No And particularly in the later surveys You've heard
- (2) me talk in terms of segments whether it's LA 20 C or Green 101
- (3) or 103 I mean that represents two points I mean a point on
- (4) a map from a headland to a headland or an entire bay or
- (5) something like that In later surveys nobody went back to do
- (6) the whole segment because some of them were very long
- (7) What
- (8) happened is we - it was gradually narrowed down so that you'd
- (9) only go back to a specific site on that segment that had
- (10) received work the previous year and the previous cycle
- (11) Q And - all right is that reflected in the - is that
- (12) caveat reflected in this graph or not?
- (13) A No this is - this is just a graph of miles of beach
- (14) and - and the point that I'm trying to make is that miles of
- (15) beach doesn't have much to do with - in terms of data doesn't
- (16) have much to do with how much was really looked at in any
- (17) given
- (18) time particularly in the later surveys
- (19) MR PETUMENOS Judge I move into evidence Exhibit
- (20) 1553 I will move in just the cover page so the jury is aware
- (21) of what it is and I move in pages 135 and 145 which are the
- (22) matters to which the witness has just testified
- (23) (Exhibit 1553 cover and pages 135 & 145 offered)
- (24) THE COURT All right 1553 will be the cover sheet
- (25) and the two pages specified and they are admitted
- (26) (Exhibit 1553 - cover and pages 135 & 145 received)
- (27) MR PETUMENOS Thank you Judge Your witness

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- (1) MR CLOUGH Your Honor Mr Piper we have no
- (2) questions for this witness Have a good day
- (3) THE COURT You may step down sir
- (4) MR PETUMENOS Good job on cross
- (5) Judge Shortell with the addition of a few issues relating
- (6) to the admission of certain exhibits with this witness the
- (7) plaintiffs on behalf of all of the municipalities the Native
- (8) corporations respectfully rest
- (9) THE COURT Counsel we can do that admitting of
- (10) various documents and exhibits out of the presence of the jury
- (11) can't we?
- (12) MR PETUMENOS Yes
- (13) MR STOLL Yes Your Honor we have the one issue of
- (14) the tape
- (15) THE COURT Oh yes we still have that Well maybe
- (16) what I'll do I'm going to give you as short a break I don't
- (17) know whether I'm going to let you go right now or resolve an
- (18) evidentiary question and bring you back in for just a little
- (19) more evidentiary proceedings so I'll send you back to the jury
- (20) room and bring you back in in about 15 minutes
- (21) (Jury out at 11 59 a m)
- (22) THE COURT All right You can all sit down
- (23) Mr Diamond I have a couple of questions for you As I
- (24) understand the situation as it exists now you've been able to
- (25) find - the documents relating to the Freitas work but not to

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- (1) the - the other witness work right?
- (2) MR DIAMOND The document relating to the Arthur D
- (3) Little engagement it doesn't specifically address Freitas
- (4) scope of responsibilities it's the Arthur D Little proposal
- (5) We have been unable to locate any additional documentation in
- (6) Dames and Moore on our files and we got in touch on Friday
- (7) with Dames and Moore to see if they had copies of the
- (8) referenced scope of work or I think that's what it was and
- (9) they told us they did not but there was a chance that it was in
- (10) dead storage They would retrieve the box hopefully today
- and
- (11) if they had something to report they were supposed to call us
- (12) this morning We checked in at the last break and we haven't
- (13) received anything so I think the assumption is there is no
- (14) such document never was or if there was such document -
- (15) THE COURT Why should I assume that when it's
- (16) specifically listed in the cover document?
- (17) MR DIAMOND Your Honor we've checked with -
- (18) THE COURT There is absolutely no description of the
- (19) work to be done and it refers specifically to the attached
- (20) scope of work right?
- (21) MR DIAMOND It refers to a scope of work proposal
- (22) that is correct These things were done very hastily The
- (23) clean up effort particularly in April was thrown together I
- (24) don't know that it was documented as neatly as it would have
- (25) been done in different times and I don't know whether it's a

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- (1) fair assumption to be drawn that such a document does exist
- and
- (2) anybody's withholding it We will continue to look but I'm
- (3) telling you as of now both sides to that contract can't put
- (4) their hands on it and I have no reason to believe anybody's
- (5) hiding the ball from me
- (6) THE COURT Well there's hiding and there's hiding
- (7) counsel The ball is hidden from you The question of whether
- (8) there is somebody hiding it isn't entirely in question There
- (9) are a lot of documents maybe some of them have been lost I
- (10) find it kind of interesting though that your clients were
- (11) able to come up with everything but that most critical document
- (12) in this particular independent contractor situation They came
- (13) up with the rest of it like that
- (14) MR DIAMOND Well we did furnish the cover sheet I
- (15) think there was a cover letter
- (16) THE COURT Yes right that's the problem The cover
- (17) sheet suggesting somehow that this was not - this was solely
- (18) an independent contractor situation and there was no control
- (19) and the one document that would show the possibility of control
- (20) is not attached
- (21) MR DIAMOND Your Honor I don't know that that's a
- (22) fair assumption that that's the one document -
- (23) THE COURT I'm making that assumption counsel
- (24) MR DIAMOND We have looked for this We have asked
- (25) the people who would normally be expected to know where to put

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- (1) their hands on it for it They tell us it is not in any
- (2) files Again I have no reason to believe and I don't think
- (3) the Court has any reason to be suspicious that somebody is
- (4) withholding information from either you or from me
- (5) THE COURT Well counsel I have every reason to be
- (6) suspicious The question is whether I act on suspicion or act
- (7) on better information that's within your power to give me and
- (8) you haven't given it to me yet
- (9) MR DIAMOND I haven't given it to you yet I've
- (10) supplied you with two affidavits under penalty of perjury from
- (11) people who are custodians saying they have reviewed their
- (12) files files they have access to the scope of work document is
- (13) not in those files
- (14) THE COURT Well I'm - Mr Stoll you're here
- (15) right?
- (16) MR STOLL Yes I'm here Your Honor
- (17) THE COURT I still want to follow up on this
- (18) question I want that scope of work I also want any
- (19) documents relating to the Freitas contract that show what -
- (20) what the reporting duties were Exxon's making the claim that
- (21) it was not within their duties that these statements were given
- (22) to Ms Katzke They may be right they may be wrong but
- (23) certainly those documents are critical documents for me to
- (24) understand the scope of these relationships
- (25) If Exxon doesn't produce them then Exxon runs the risk

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- (1) that I will find contrary to Exxon's argument that these
- (2) documents would show the kind of control that makes these -
- (3) these exhibits clearly admissible They may be admissible
- (4) anyway But I'm not going to foreclose a thorough search and
- (5) your presentation of any evidence that's available to me it's
- (6) just that the other side has a right to get everything so that
- (7) it can argue its position If you withhold it or if you've
- (8) lost it that's not their fault
- (9) MR DIAMOND Your Honor we have produced everything
- (10) that you've asked for and everything we know to exist with
- (11) respect to Arthur D Little You have all of the contractual
- (12) material between Freitas and Arthur D Little and between -
- (13) THE COURT The Arthur - am I wrong about this
- (14) counsel? The Arthur D Little material is very inexplicit
- (15) about what these people were doing right?
- (16) MR DIAMOND There's a one-page letter proposal that
- (17) we supplied to you which was done hastily but the exigencies
- (18) of the circumstances dictated that which said what work Arthur
- (19) D Little will be providing that was signed by both parties
- (20) That's part of the contract
- (21) I have given you everything that we know to exist with
- (22) respect to Arthur D Little and with respect to Mrs Freitas
- (23) Mrs Freitas relationship with Arthur D Little We have no
- (24) more than that and there's no documentation anywhere to suggest
- (25) there is anything more on that relationship The Suchanek

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- (1) Dames and Moore proposal I understand it was a reference
 (2) document we have not been able to locate We will continue to
 (3) look for that I will talk personally to the people in Seattle
 (4) at Dames and Moore and find out what kind of search of the
 dead
 (5) records they made this morning I will supply the Court with
 (6) an affidavit either from me or them as to what they've done
 (7) If we can find it if it's humanly possible to find it we will
 (8) do so I will report what best efforts we have been able to
 (9) make
 (10) THE COURT I appreciate that counsel I'm simply
 (11) going to withhold the question I may reopen the case in chief
 (12) to allow this to be presented or I may allow it to be presented
 (13) in rebuttal if I find either of these tapes are admissible
 (14) Okay now that means I can send the jury home right?
 (15) MR STOLL Your Honor in other words we're not
 (16) going to put it on - in any event we're not going to put it on
 (17) in our case in chief at this time
 (18) THE COURT At this time no but if you need it in
 (19) your case in chief and I find it's admissible because of the
 (20) circumstances I'll simply allow you to reopen your case in
 (21) chief and put it in all right?
 (22) MR STOLL Fine
 (23) THE COURT Okay let's bring the jury in - actually
 (24) is it all right with you if I simply let the jury go without
 (25) bringing them in and giving them the admonitions?

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- (1) MR DIAMOND That's fine Your Honor
 (2) THE CLERK They can come back tomorrow?
 (3) THE COURT Yes they can come back tomorrow 8 30
 (4) MR STOLL Your Honor I haven't had a lot of time to
 (5) respond to this but I've got a couple cases that I'll give to
 (6) the Court maybe a little later we can take up some other
 (7) matters first in response to their brief that I read this
 (8) morning - and actually not quite done with the brief but -
 (9) THE COURT You mean the brief on this question?
 (10) MR STOLL Yes
 (11) THE COURT That's fine You have the time
 (12) MR STOLL We shepherded the case and realize
 (13) there's a little problem with it
 (14) THE COURT Excellent
 (15) MR PETUMENOS Judge I have a couple of exhibit
 (16) matters to press upon you Is that what you want to do now
 (17) clean this matter up?
 (18) THE COURT Yes go ahead
 (19) MR PETUMENOS First of all I'm going to withdraw
 (20) 1592 1592 doesn't exist It was the misspeak we discussed
 (21) Apparently I admitted 1292 but didn't withdraw 1592 So the
 (22) clerk has asked me to do so
 (23) The other thing is I would impress -
 (24) THE COURT 1592 is in?
 (25) MR PETUMENOS Is withdrawn

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- (1) THE COURT You've withdrawn 1592?
 (2) MR PETUMENOS 1592 is withdrawn and 1292 is in
 (3) THE COURT It's taken out of evidence
 (4) MR PETUMENOS I would now like to press upon the
 (5) Court the admission of Plaintiffs Exhibit 1150 which if I can
 (6) approach the Court I'll give you my argument
 (7) THE COURT Yes
 (8) (Exhibit PX1150 offered)
 (9) MR PETUMENOS 1150 counsel Is the exhibit that was
 (10) from the Exxon briefing book from Mr Bush's testimony that I
 (11) sought to admit and was objected to by Mr Oppenheimer on
 two
 (12) grounds One was because it was biology which I think is
 (13) resolved when he withdrew it because I said I wouldn't call
 (14) Mr - Dr Bakus to the stand in the interest of shortening the
 (15) case but the second was that there was some indication that
 (16) the exhibit did not properly represent the material in the
 (17) Exxon briefing book because it had been altered or changed in
 (18) some material way
 (19) I have with me in court the Exxon briefing book and the
 (20) original chart as it appears in the Exxon briefing book and I
 (21) believe a review by the - a simple review by the Court of the
 (22) chart the way it appears in the Exxon briefing book and the
 (23) way it is depicted here will convince the Court that no license
 (24) had been taken and it is a proper representation of the
 (25) briefing book and I have it here for counsel to review because

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- (1) I'm sure it may not have been prepared for this motion to enter
 (2) the evidence but basically the briefing book had a chart had
 (3) a scale along the bottom which was condensed along the X axis
 (4) because the number of years that it would take to run it out
 (5) would have taken more than the number - the distance on the
 (6) page
 (7) The only significant alteration that I've been able to
 (8) determine from a material point is that rather than show the
 (9) years condensing out on the X axis so that it looks a little
 (10) misleading the expert has allowed the X axis to extend out a
 (11) little farther
 (12) Am I confusing the Court? Am I making myself clear?
 (13) THE COURT You're definitely confusing me
 (14) MR PETUMENOS Let me just show you Could you just
 (15) put up on Trial Link a blank piece of paper? I got it that's
 (16) fine Whatever you want to put up doesn't matter anything
 (17) will do
 (18) Okay Great Thanks
 (19) Along the X axis of the original chart it may go five 10
 (20) 15 50
 (21) MR OPPENHEIMER We have no objection to this chart
 (22) Your Honor
 (23) THE COURT Okay Keep drawing counsel
 (24) MR PETUMENOS All right To save space what they
 (25) did is condensed the later years in the original briefing book

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- (1) along the X axis the way I've shown you on the screen What
 (2) our expert did is he extended out the X axis further so that
 (3) the jury would get a better depiction of what the time frames
 (4) were on the chart
 (5) And there may have been other stylistic and color things
 (6) but I don't think counsel can point to any other material
 (7) change from -- from the chart as existed in the Exxon briefing
 (8) book I know that we didn't have the original briefing book
 (9) here and you were concerned about whether he had taken
 license
 (10) you didn't have it in front of you It's clearly an
 (11) admission He relied upon it as a touchstone for determining
 (12) whether his persistence estimates were within the ballpark and
 (13) the time frames and I move its admission
 (14) MR OPPENHEIMER Your Honor I haven't had a chance
 (15) to compare this with the briefing book recently What I'd like
 (16) to do is have an opportunity to do that and talk to
 (17) Mr Petumenos Looking at -- I'm not even sure which one of
 (18) these am I looking at? Is this the original or the changed
 (19) version?
 (20) MR PETUMENOS What you see it's written on but
 (21) it's --
 (22) MR OPPENHEIMER What I would request --
 (23) MR PETUMENOS I have no problem
 (24) MR OPPENHEIMER Mr Petumenos and I have worked out
 (25) such disputes and we will operate in good faith If we can

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- (1) we will
 (2) THE COURT I'm going to admit conditioned on your
 (3) examination of it to see whether it's the same If you have
 (4) some objection after that once you determine it is the same
 (5) if you further object you can bring it to my attention but I
 (6) want it in now so that it doesn't by oversight get left out
 (7) MR OPPENHEIMER I understand Your Honor
 (8) THE COURT Okay That's 2533 is it? I'm sorry --
 (9) DX1150
 (10) (Exhibit 1150 received)
 (11) MR PETUMENOS And the other if you could stay right
 (12) here I got another one for you
 (13) Another one is exhibit I failed to move into evidence it
 (14) is 1266 A It is a list of the Chugach Alaska Corporation
 (15) archaeological sites It already exists in admitted form The
 (16) only thing that it doesn't -- that this exhibit adds is the
 (17) numbers on the left hand side so they can tie it to other
 (18) exhibits
 (19) (Exhibit 1266 A offered)
 (20) MR OPPENHEIMER As alike as Mr Diamond and I are
 (21) this is something he knows about
 (22) MR PETUMENOS This will go on forever
 (23) This is the one that's in -- they're identical except they
 (24) contain the numbers -- and allow the jury to connect that up
 (25) MR DIAMOND No objection

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- (1) THE COURT So it's just --
 (2) MR DIAMOND Hard to compare all these numbers make
 (3) sure they total up to the same Hold it -- I'm worried because
 (4) Mr -- Mr Petumenos is now propounding a document that has a
 (5) number that's smaller than the original number but I --
 (6) MR PETUMENOS How reasonable we are
 (7) THE COURT You want the new document substituted?
 (8) MR PETUMENOS No I need them both The one I'm
 (9) moving into evidence is 1266 A
 (10) THE COURT DX1266 A is admitted
 (11) (Exhibit 1266-A received)
 (12) THE COURT Is that it?
 (13) MR PETUMENOS That's it
 (14) MR DIAMOND While we're doing housekeeping If I
 (15) may Your Honor?
 (16) I admitted -- I moved for the admission of certain
 (17) documents during the course of Johnson Lobdell examinations
 (18) Some of them were only excerpts from documents and I did not
 (19) identify that at the time I moved the admission I understand
 (20) from your clerk that I need to do that now so that we don't
 (21) have to put in the entire volume
 (22) The two in question are DX15335 which was a page from the
 (23) 1992 Lobdell report The only thing we moved the admission of
 (24) was Page 300259 dealing with Evans Island We're not moving
 (25) the entire expert report into evidence

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- (1) DX16243 were the Gallison field notes That's a book about
 (2) an inch thick We only referred to and would move the
 (3) admission of pages 37 53 54 96 99 and 120 They've already
 (4) been previously accepted into evidence
 (5) THE COURT They're admitted
 (6) (Exhibits DX15335 and DX16243 received)
 (7) MR STOLL Your Honor I have a few exhibits that I'd
 (8) like to --
 (9) THE COURT Okay go ahead
 (10) MR STOLL -- straighten up
 (11) Your Honor we have the following exhibits 946 which is
 (12) a Ouzinkie photograph 951 which is a Ouzinkie photograph
 (13) 1034 which is a Ouzinkie aerial photograph 1041 which is a
 (14) KIB chart of the land damages from -- summary chart that
 (15) Mr Carlson and Mr Shorett testified about 1044 which is a
 (16) photograph of Mr Shorett in Old Harbor with his little hat on
 (17) 1048 which is a map of Port Lions 1049 which is the board of
 (18) Mr Shorett called factors in determining lands damages the
 (19) six things that he testified about
 (20) 1521 -- these are all plaintiffs exhibits -- 1521 which
 (21) is a KIB property map 1523 which is a KIB property map 1525
 (22) which is a KIB property map Exhibits 5004 A through C which
 (23) are some Ouzinkie photographs Exhibits 5006 A through D
 (24) which are some Port Lion photographs DX13160-9 which is the
 (25) photograph of the pebbles and the pen and boot

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- (1) Those all of those exhibits I believe there is no issue
 (2) about and there s a few exhibits that I d like to -- that
 (3) there may be an issue about
 (4) (Exhibits 946 951 1034 1041 1044 1048 1049 1521
 (5) 1523 1525 5004A 5004B 5004C 5006A 5006B 5006C
 5006D
 (6) and DX13160 9 offered)
 (7) THE COURT Counsel no objection on any of these
 (8) exhibits?
 (9) MR OPPENHEIMER With no criticism intended because
 (10) Mr Stoll is following a slightly different procedure than we
 (11) have been using I m not familiar with all of these I think
 (12) they are different witnesses and what I would --
 (13) THE COURT That s true
 (14) MR OPPENHEIMER Again what I would propose if we
 (15) could talk about -- I don t think there s objection to any of
 (16) these but again if we could follow the procedure where we
 (17) compare these I will undertake to get the information
 (18) THE COURT I m going to do the same thing counsel
 (19) I m going to admit them You can move to have them taken out
 (20) if there s a problem
 (21) MR OPPENHEIMER Sounds fine
 (22) (Exhibits 946 951 1034 1041 1044 1048 1049 1521
 (23) 1523 1525 5004A 5004B 5004C 5006A 5006B 5006C
 5006D
 (24) and DX13160 9 received)
 (25) MR STOLL The next one Your Honor is one which

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- (1) Mr Oppenheimer is now reviewing This is the sections of the
 (2) Carlson appraisal report You recall this is exhibit --
 (3) what s the number?
 (4) MR OPPENHEIMER 906 Isn t it?
 (5) MR STOLL 906 that we discussed last week that I was
 (6) going to give them sections of it that related to the
 (7) worksheets and then the maps in the back but not the -- all
 (8) the narrative text -- and he s going through that now and we ll
 (9) work that out but I d like to get that admitted unless he
 (10) later has an objection that we can get resolved
 (11) (Exhibit 906 offered)
 (12) MR OPPENHEIMER Your Honor if you want to follow
 (13) that protocol that s fine
 (14) THE COURT I ll do it
 (15) (Exhibit 906 received)
 (16) MR OPPENHEIMER What I would like to do then is
 (17) add a few pages and I would add -- and we can have the same
 (18) protocol?
 (19) THE COURT Sure that s fine
 (20) MR STOLL Then Your Honor --
 (21) MR OPPENHEIMER Do you want to read the pages in
 (22) how do you want to do that?
 (23) MR STOLL Yeah that s fine
 (24) MR OPPENHEIMER Maybe I could make a suggestion
 (25) There are numerous pages Perhaps if we produced a list

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- (1) if we could submit that list to the Court I think it would be
 (2) easier on everybody
 (3) THE COURT Yes that s fine
 (4) MR STOLL Yeah that would be fine
 (5) Then Your Honor we do have a dispute with respect to
 (6) Exhibit DX15617 This is a two-page letter from Mr Shorett to
 (7) Mr Jamin dated February 22 1993 which contains his
 summary
 (8) of his damage calculation This was published to the jury
 (9) first page of this It s a two page document page and a
 (10) quarter
 (11) (Exhibit DX15617 offered)
 (12) THE COURT You want it in?
 (13) MR STOLL Yes That was published to the jury in
 (14) cross examination
 (15) MR OPPENHEIMER Your Honor this is an expert
 (16) report We have not been putting those in I think the
 (17) document -- we used the first page we wanted him to establish
 (18) for purposes of cross-examination was that that was his only
 (19) produced written material with respect to this analysis because
 (20) then there were follow up questions with respect to that
 (21) analysis We didn t go into the second page
 (22) THE COURT What s on the second page?
 (23) MR OPPENHEIMER Part of his calculation which is
 (24) hearsay in its present form and he testified to it in any
 (25) event and it --

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- (1) MR STOLL Well they -- they cross-examined him on
 (2) the contents of the second I think I can just hand the Court
 (3) the thing
 (4) MR OPPENHEIMER We cross examined him on the
 (5) methodology We did not cross examine him on the second
 page
 (6) We didn t go into the details
 (7) THE COURT I only remember the first page
 (8) MR STOLL Excuse me Your Honor I didn t mean to
 (9) suggest they showed -- they did not publish I thought I made
 (10) that clear They only published the first page but it s sort
 (11) of incongruous
 (12) THE COURT I m going to admit it
 (13) MR STOLL Pardon me?
 (14) THE COURT I m going to admit it What was the
 (15) number on that?
 (16) MR STOLL It is DX15617
 (17) THE COURT 15617 is admitted
 (18) (Exhibit DX15617 received)
 (19) THE COURT It s a two-page letter
 (20) MR STOLL There is -- I think this will take a
 (21) little time
 (22) This -- there is an Exhibit 915 which is the Emergency
 (23) Service Council minutes and this goes into various issues
 (24) about what is admissible and what s not admissible and I
 (25) haven t been able to sit down with Mr Clough yet and get that

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- (1) resolved and I went through it this weekend and I'd like to -
(2) need some time to talk to him about it
(3) THE COURT You can reserve the right to bring it up
(4) later
(5) MR STOLL That's fine We don't need to publish
(6) that to the jury now or anything so I think we can take that
(7) up later
(8) Could I just have one moment Your Honor? I just want to
(9) ask a question
(10) THE COURT Uh huh
(11) MR STOLL Your Honor the last exhibit - this goes
(12) back a little - a little bit but you'll recall that during
(13) the course of the testimony of Mr Tumeo Dr Tumeo there was
(14) a tape of some testing that was done in 1993
(15) THE COURT The boiling tape? Wasn't it that stuff
(16) boiling out of the beach was that it?
(17) MR STOLL Well you can call it - you can
(18) characterize it any way you want to but any rate it was the
(19) test that was done and there were two tapes and the first -
(20) the first tape the first one that was offered was designated
(21) 683 A and then the second tape which was the more complete
(22) one was offered at the end of that which is 683 and you ruled
(23) that the second one was not admissible it was cumulative of
(24) the first - first tape What we would like to do is offer the
(25) second tape substitute the two tapes In other words 683 A

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- (1) is only a segment of 683 What we would like to do is offer
(2) all of 683 and we'll withdraw 683 A
(3) THE COURT What did the jury see?
(4) MR STOLL Pardon me?
(5) THE COURT What did the jury see?
(6) MR STOLL The jury saw the segment of 683 A
(7) THE COURT So they didn't see the full tape?
(8) MR STOLL They did not see the full tape
(9) THE COURT Then what they get is what they saw To
(10) reverse the normal order yes
(11) MR STOLL I think that's all Let me just - that's
(12) all I have Thank you Your Honor
(13) THE COURT Yes thank you Anything else like
(14) exhibits
(15) MR McCALLION Your Honor we would offer the portion
(16) of Exhibit 1222-A which is the portions that were shown to the
(17) jury today of the videotape Sorry 1221 A I misspoke
(18) THE COURT It's not 1222 A
(19) MR McCALLION No It's 1221 A
(20) (Exhibit 1221 A offered)
(21) THE COURT All right sir it's admitted
(22) (Exhibit 1221 A received)
(23) MR CLOUGH Your Honor if I could just ask the
(24) plaintiffs to make a dubbed version? They had a problem with
(25) that there's other materials on the tape

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- (1) THE COURT Yes they have to come out
(2) MR McCALLION In addition we would move the
(3) addition of the admissions which were published to the jury
(4) today which I believe are -
(5) THE COURT I'm not going to admit them separately
(6) counsel They're in the record
(7) MR McCALLION Yes Your Honor
(8) Another outstanding issue relates to the one admission
(9) relating to the contingency plans and the oil spill - oil
(10) spill contingency plans If Your Honor would like - like us
(11) to address that at this point -
(12) THE COURT Yes go ahead
(13) MR McCALLION Okay In Plaintiffs Exhibit 17
(14) Exxon's response to request number 114 reads as follows
(15) Exxon
(15) admits that it has developed a comprehensive oil spill
(16) contingency plan suitable for any and all marine oil spills
(17) This plan included reliance on the site specific provisions of
(18) the Alyeska contingency plan but otherwise was not limited to
(19) Prince William Sound
(20) Now the portions of the Alyeska plan which we would seek
(21) to offer and they are Plaintiffs Exhibit Number 3 as well as
(22) Plaintiffs Exhibit Number 741 are certain site specific
(23) provisions relating to exclusion or sensitive areas
(24) There is a summary map with various numbers on it I could
(25) show Your Honor that and then there are descriptions of those

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- (1) particular sites
(2) These are admissions of sensitive areas throughout the
(3) Prince William Sound area which we believe would be relevant
(4) to
(4) plaintiffs case with respect to the existence and the location
(5) of sensitive environmental areas of particular importance and
(6) sensitivity relating to plaintiffs land damage claims
(7) THE COURT How many pages are in the document that
(8) you're seeking to admit?
(9) MR McCALLION Plaintiffs Exhibit Number 3 is
(10) section 3 of the document and if I can just see whether they
(11) are sequential - I'll just count them up
(12) Plaintiffs Exhibit 3 is 28 pages It is not the entire
(13) oil spill contingency plan itself But is pages 3 7 and
(14) consecutively section three dealing with these exclusion or
(15) environmentally sensitive areas
(16) The related document is Plaintiffs Exhibit 741 which is
(17) the first one in January 1980 It is very similar to the
(18) later one in 1987 It basically sets forth a - a map a coded
(19) map with numbers of exclusion or sensitive areas and then it
(20) contains -
(21) THE COURT I need to see the map I want to see what
(22) you're talking about
(23) MR McCALLION Yes Your Honor
(24) THE COURT What page is that map on?
(25) MR McCALLION The map is one of the first pages

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- (1) Your Honor
- (2) THE COURT Okay I see it
- (3) What s your position counsel?
- (4) MR DIAMOND We would strenuously object to the
- (5) introduction of this document I have not had an opportunity
- (6) to go page by page This is the first time I ve seen this
- (7) extract This is not our document this is a document prepared
- (8) by another company There s no foundation for it It is
- (9) patently hearsay
- (10) THE COURT Wait a minute Doesn t the admission say
- (11) you adopted the plan?
- (12) MR DIAMOND No it doesn t It says Exxon relied on
- (13) the plan established by Alyeska That s hardly tantamount of
- (14) making it an adoption
- (15) THE COURT What was the question?
- (16) MR DIAMOND You want me to read this to you?
- (17) THE COURT Yeah
- (18) MR DIAMOND The question was it was an RFA and the
- (19) request was Exxon Corporation never developed an oil spill
- (20) contingency plan for Prince William Sound We denied that
- (21) THE COURT And you said what?
- (22) MR DIAMOND And we say Exxon admits to the
- (23) development of a comprehensive oil spill contingency plan
- (24) suitable for all marine oil spills This plan included
- (25) reliance on the site specific provisions of the Alyeska

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- (1) contingency plan but otherwise was not limited to Prince
- (2) William Sound and all that says is that Exxon was relying on
- (3) Alyeska s spill contingency planning which is something
- (4) mandated under federal and state law
- (5) THE COURT In what sense were they relying? Relying
- (6) to show what areas were exclusion there were -
- (7) MR DIAMOND No what would be done in the event of
- (8) an oil spill This is all - this seems to be factual findings
- (9) made by somebody else of a very scientific and a very detailed
- (10) nature that I would anticipate the Court would require a
- (11) witness to come in and provide some verification of It s
- (12) not - this is not - not prepared by Exxon and to the extent
- (13) that Exxon relied on the contingency plan is hardly tantamount
- (14) to adopting all the findings somebody else may have made in
- (15) connection with their contingency plan
- (16) THE COURT That may be so counsel but the issue
- (17) here is if you relied on the plan and the plan said there were
- (18) environmentally sensitive areas in it then you had knowledge
- (19) that there were environmentally sensitive areas here right?
- (20) MR DIAMOND I don t know that that s the case
- (21) What - what the RFA said was that we were relying on Alyeska s
- (22) plan that they would do what they said they would do in their
- (23) plan in the event of an oil spill This - this is not the
- (24) plan document
- (25) THE COURT I see what you re talking about

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- (1) MR DIAMOND These were findings that were made in
- (2) anticipation of what Alyeska would do These findings these
- (3) assertions of fact were made by a third party pages and pages
- (4) of them and lord only knows what use counsel may want to
- (5) make
- (6) of this in closing argument I can only begin to anticipate
- (7) THE COURT Heck of a long closing argument wouldn t
- (8) it counsel?
- (9) MR DIAMOND For one it ll make me read the entire
- (10) thing but there may well be - there may well be factual
- (11) assertions in here patently wrong We have no foundation for
- (12) them no opportunity to challenge any of this
- (13) Beyond that what does this have to do with damages? I
- (14) guess that was my overriding issue
- (15) MR McCALLION Your Honor perhaps I neglected to
- (16) mention before there had been a - a stipulation previously
- (17) entered into at least as to the foundation of these documents
- (18) which would obviate the need to call Mr Chuck Flynn counsel
- (19) for Alyeska It was a stipulation at least laying a
- (20) foundation for the - for the Alyeska contingency plans I ve
- (21) discussed it with Mr Fortier I don t know if Mr Petumenos
- (22) would be in agreement but the evidence of the - perhaps I
- (23) should hand up that stipulation Your Honor
- (24) THE COURT No no I think I ve even seen it
- (25) MR McCALLION We think the site specific areas and

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- (1) certainly has been an issue in the plaintiffs case It s been
- (2) vigorously cross examined on by counsel for Exxon on the
- (3) various plaintiffs scientists and we expect that it will be
- (4) an issue as to which areas are more sensitive than others to
- (5) oil and what the long term effects may be the short term
- (6) effects what the effects of the cleanup were A summary chart
- (7) with site specific environmentally sensitive areas which we do
- (8) not believe is seriously in issue which areas are sensitive
- (9) and which - which aren t
- (10) THE COURT What does it prove counsel? That s the
- (11) point I always go back to What s your argument based on this
- (12) evidence? If this evidence is in the record what do any of
- (13) you intend to say about this particular document?
- (14) MR McCALLION Well Your Honor to the extent that
- (15) these - that this map identifies site specific sensitive
- (16) areas particularly on plaintiffs lands we would correlate
- (17) that and have correlated that with the oiling documents and
- (18) information as to the oil where it is the persistence
- (19) information - and testimony from Mr Bush for example relates
- (20) to some of these sites and the plaintiffs damages is really a
- (21) sum total of the number of factors one is the persistence of
- (22) the oil the amount of the oil the quantification is very
- (23) important But the site specific and sensitive nature of the
- (24) area we ve proved to some extent in certain sites that they re
- (25) environmentally sensitive but the qualitative nature and the

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(1) importance of a site - for example a sensitive stream an
 (2) area where - which is particularly rich and productive and a
 (3) direct hit an oiling on that area we would argue to the jury
 (4) based upon the scientific evidence which we've already
 adduced
 (5) supports plaintiffs land damage claims
 (6) Some areas were hit harder than others This doesn't go to
 (7) that issue It goes to the issue of which were the sensitive
 (8) areas which if hit and which were hit would be more likely to
 (9) have been more severely damaged than others And there's
 been
 (10) testimony elicited elicited from Mr. Bush that shoreline
 (11) conditions that beach conditions et cetera are related to
 (12) this but this goes to the issue specifically as to the
 (13) environmental sensitivity as opposed to just various
 (14) enumeration of various shoreline types
 (15) MR PETUMENOS Well just very briefly the clearest
 (16) example of it was in the opening statement of Mr. Clough when
 (17) he was talking about Point Helen and he says nothing here but
 (18) cobble nothing grows here nothing is here that we need to
 (19) worry about Well I think that causes us to be compelled to
 (20) prove in a persuasive way that the consortium of oil companies
 (21) Alyeska - which Exxon is a member - has mapped certain areas
 (22) that are the opposite of Point Helen and so the
 (23) characteristics of the property -
 (24) THE COURT Is Point Helen in here?
 (25) MR PETUMENOS No I'm saying that Exxon is making

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(1) an issue out of those areas that it contends does not have high
 (2) biological productivity and so we'll say then what does have
 (3) high biological productivity what is out there in the Sound
 (4) that's of concern and the Alyeska contingency plan under
 which
 (5) these oil companies are all operating did such a study before
 (6) the spill that adds certain credibility to it because it's not
 (7) just something that's being done in the course of litigation or
 (8) with litigation in mind but for the purpose of determining
 (9) what measures to take what steps to take where to go where
 (10) to be worried where the hatcheries are things like that is
 (11) what this went to
 (12) It went to where they were going to be going what they
 (13) were going to be doing keeping in mind what the priority areas
 (14) of the sound were in terms of the biota and its ability to be
 (15) injured and I see that as being directly relevant to some of
 (16) the issues that have been raised in here
 (17) MR DIAMOND That's - my worst fears are realized
 (18) because now we're told that this is a very very important
 (19) document that we're dealing with 80 parcels and they're going
 (20) to use this document to pinpoint those which are particularly
 (21) susceptible to environmental harm and make that part of their
 (22) case as to why they should get damages for those particular
 (23) areas If it was that important why didn't they have an
 (24) expert testify about those particular sites? Certainly had
 (25) enough people qualified to do that

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(1) With all - all the evidence basically in on the
 (2) plaintiffs side all of the witnesses now stood down they
 (3) want to put in a document that we didn't create basically to
 (4) prove in an unimpeachable way that certain locations among 80
 (5) parcels covering literally hundreds and hundreds of miles of
 (6) shoreline are uniquely susceptible to some sort of harm
 (7) This is not an admission This is not our document We
 (8) did not adopt this document This was prepared by a separate
 (9) corporation and as much as the Native corporations have made
 a
 (10) point of saying they're separate from the shareholders Alyeska
 (11) is not Exxon and Exxon is not Alyeska
 (12) THE COURT Mr. Diamond is this - is this document
 (13) part of Exxon's oil spill response plan?
 (14) MR DIAMOND As required under the federal Water
 (15) Pollution Control Act I don't know the answer to that I can
 (16) certainly inquire
 (17) THE COURT Well let's not talk about what's
 (18) required If it has a plan and this document is part of it
 (19) and you've said you relied on the Alyeska plan why is that not
 (20) an admission?
 (21) MR DIAMOND Well it - it would be if in - this is
 (22) a response written by a lawyer that Exxon relied on Alyeska's
 (23) plan What does that mean in reality -
 (24) THE COURT I know counsel
 (25) MR DIAMOND What's that?

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(1) THE COURT I know it is
 (2) MR DIAMOND You don't see my name brought up in
 (3) this I can tell you But lawyers are given to using terms
 (4) which we're comfortable with One is reliance
 (5) THE COURT Which other lawyers can argue in court
 (6) MR DIAMOND I think indeed if in fact - if in fact
 (7) Exxon Incorporated and adopted all of the findings predicates
 (8) factual assertions and spill contingency planning of Alyeska
 (9) this would be an adopted admission and there would be an
 (10) argument under 801
 (11) We don't have that here You haven't been offered any
 (12) evidence of that All you have is a statement that Exxon's
 (13) relying on Alyeska's spill contingency plan to do what Alyeska
 (14) would do in the event of a spill and suddenly that's the
 (15) predicate for very - now very key sort of scientific
 (16) shoreline by-shoreline information as to what areas are
 (17) sensitive and what areas are very sensitive and what areas are
 (18) most sensitive
 (19) THE COURT Let me see the request and the admission
 (20) please
 (21) MR PETUMENOS We'll do that Judge and I do - I am
 (22) concerned that we're getting foundation exhibits and hearsay
 (23) objections when we could have called the Alyeska person to
 say
 (24) all the things that I just said about how it was used when it
 (25) was produced We had a stipulation to avoid that and so I'm

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- (1) not only relying upon admissions as an adopted admission I
- (2) think it's independently admissible and if we had to call the
- (3) foundational witnesses to say what it is how it was prepared
- (4) what is it used for we could have done that
- (5) MR DIAMOND Your Honor that's not fair We
- (6) stipulated Mr Flynn would not have to be called to testify
- (7) this came out of his files of documents produced by Alyeska
- (8) and
- (9) stipulated away authenticity not the foundation for the
- (10) assertions the factual assertions they want in evidence
- (11) THE COURT Counsel this is the request Exxon
- (12) Corporation never developed an oil spill contingency plan for
- (13) Prince William Sound
- (14) This is the answer Exxon admits that it developed a
- (15) comprehensive oil spill contingency plan suitable for any and
- (16) all marine oil spills This plan included reliance on the
- (17) site specific provisions of the Alyeska contingency plan
- (18) The document that they're seeking admission for right now
- (19) is the site specific provisions of the Alyeska contingency
- (20) plan right?
- (21) MR DIAMOND Well the document does have a plan that
- (22) is site-specific What they are offering is a preamble of
- (23) that which deals with findings that Alyeska made in terms of
- (24) developing its plan I don't know that we are bound by those
- (25) findings What Exxon says in the event of a spill we are
- (26) going to do the site specific work that Alyeska said it was

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- (1) going to do because Alyeska is basically responsible for doing
- (2) the contingency planning
- (3) Does that make binding on us all of the statements made by
- (4) Alyeska concerning why they want to do what they want to do?
- (5) That's a different inquiry it seems to me Your Honor
- (6) THE COURT It might be counsel I tell you what
- (7) I'm not going to admit the document now On the other hand
- (8) it's fertile ground for cross-examination isn't it?
- (9) Now I think what I'm going to do on this one is reserve
- (10) and we'll see how the record develops as the case goes along
- (11) I'm - I reserve the right to let it in at the end of the case
- (12) without any further testimony on the request and the admission
- (13) because I think it's highly arguable that this is admissible
- (14) On the other hand I have a feeling that this document will
- (15) be used during the defense case and to the extent that it is
- (16) I'll simply have to take that into consideration as well as
- (17) everything else that's gone on in the case to determine
- (18) whether one this is admissible and two it's fair to admit
- (19) it
- (20) That's it
- (21) MR DIAMOND That's it
- (22) THE COURT And you can have all your papers back till
- (23) the next time
- (24) MR PETUMENOS Was Exhibit 1150 still with the Court
- (25) the colorful little chart? Did that get up there somewhere?

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- (1) THE COURT No I gave it to the clerk
- (2) MR PETUMENOS Okay
- (3) MR DIAMOND We have one final motion we submitted in
- (4) writing this morning
- (5) THE COURT On the archaeology -
- (6) MR DIAMOND On the archaeology claims
- (7) THE COURT Okay I want to discuss the motions and
- (8) how they should develop with you because in a case like
- (9) this - I'm - first there's an imperative for me I want to
- (10) get this case on as efficiently as I can This jury has been
- (11) jerked around a little bit and I want to - I want to make sure
- (12) that they aren't inconvenienced anymore more than we all can
- (13) afford to inconvenience them
- (14) So what I want to do and I'm going to ask for your input
- (15) on this is I want to do - do this I certainly want to read
- (16) your brief which I have not done yet I want to give a fair
- (17) opportunity for the plaintiffs to respond to your motion I
- (18) want to set a time for argument on the motion and I want to go
- (19) ahead with the defense case So what I normally do in that
- (20) kind of a situation is I say to you All right your motions
- (21) are made You filed the motions you can argue them later you
- (22) don't - you're going to have to put on your evidence but you
- (23) don't waive any of these motions by - by putting on your
- (24) defense evidence
- (25) Is that acceptable to you?

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- (1) MR DIAMOND That's fine Your Honor I should point
- (2) out that although that motion looked bulky I think the
- (3) original material was only four or five pages We attached a
- (4) reply brief that we submitted in connection with the
- (5) archaeology summary judgment motion simply because the
- (6) arguments that we rely on in terms of directed verdict are very
- (7) much the same we relied on in the summary judgment There's
- (8) not very much new material You're familiar with the
- (9) arguments Counsel's familiar with the arguments but we're
- (10) happy to argue that at any point
- (11) THE COURT If you don't want an argument I'll simply
- (12) look at the documents and afford a time for a response If a
- (13) written response is required I'll decide the issue but I -
- (14) MR DIAMOND I would like to be heard just so that I
- (15) can remind you of the cogency of the arguments we made the
- (16) last
- (17) time
- (18) THE COURT Reminding is what people do a lot in this
- (19) case
- (20) There are other things that are pending though - the OPA
- (21) 90 issue for instance - which is essentially a directed
- (22) verdict issue also I believe And I need to - first I need
- (23) to figure out what it is you think is still pending that I
- (24) should decide at this point in the case and afford you a time
- (25) to argue it if you want to do that
- (26) MR DIAMOND Well we do have the issue of OPA 90 we

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- (1) do have the issue on the archaeology front of the additional
 (2) jury instruction plaintiffs requested Quite frankly we did
 (3) not see OPA 90 at least in the way we briefed it earlier as a
 (4) directed verdict motion And I would add that it's my
 (5) understanding that in order to preserve our judgment and OB
 (6) rights we need to make a directed verdict motion but only
 (7) after the close of all motions rather than pile your desk full
 (8) of papers At this juncture it's our preference with respect
 (9) to most of these items to wait until the close of what we hope
 (10) will be a relatively brief defense case
 (11) THE COURT So the only motion you're making that we
 (12) need to have decided at this point in the case is the
 (13) archaeology motion correct?
 (14) MR DIAMOND Correct and that really won't change
 (15) won't affect our scheduling for the first week of our
 (16) presentation
 (17) THE COURT That's good You go ahead with your case
 (18) tomorrow at 8 30 This motion is under advisement and it's
 (19) pending anyway It needs a response
 (20) Do you want a time for a written response plaintiffs?
 (21) MR PETUMENOS Could we take a look and see if we
 (22) think we need to file a written response?
 (23) THE COURT You can tell me tomorrow whether you want
 (24) to file a written response
 (25) MR PETUMENOS I think Mr Diamond's right It is a

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- (1) four page document with previous summary judgment orders
 (2) attached It may be fully briefed let us take a look The
 (3) OPA 90 motion is really our motion and it is -
 (4) THE COURT I know but it's an issue It's a
 (5) troublesome issue and to the extent that I have to decide it
 (6) I should probably give you some idea how I'm going to decide it
 (7) relatively quickly I was willing to do it fairly early if you
 (8) wanted to do it If you want to defer it to the end of the
 (9) case that's fine
 (10) MR DIAMOND I certainly think it would be helpful
 (11) for both sides for you to decide that issuer sooner than later
 (12) MR PETUMENOS I do I thought we said a week ago or
 (13) so something like that that we didn't require oral argument
 (14) THE COURT I don't remember that
 (15) MR PETUMENOS Yeah we submitted on briefs
 (16) THE COURT Okay I'll - it's on my desk waiting for
 (17) me to act so I'll do it as quickly as I can
 (18) MR PETUMENOS May have changed their mind but they
 (19) did say that at one point
 (20) MR OPPENHEIMER No I think actually the suggestion
 (21) was made and I thought we had decided to submit on briefs
 (22) under
 (23) the OPA 90 issue
 (24) MR DIAMOND Obviously Mr Oppenheimer would like to
 (25) argue that
 (26) THE COURT You can tell me tomorrow

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- (1) MR PETUMENOS The last issue was the notice of
 (2) archaeological statute which I think we submitted the request
 (3) for judicial notice but no one has briefed it and everybody
 (4) has -
 (5) MR DIAMOND Yes you supplied a brief and we
 (6) responded to that today
 (7) THE COURT This was what motion?
 (8) MR PETUMENOS Request for judicial notice on the
 (9) interest of the Native corporations in archaeological materials
 (10) below the mean high tide line and we have submitted the
 (11) request for judicial notice that we want and I think it's been
 (12) briefed I don't know that we - did we get a -
 (13) MR McCALLION There was a response that we just
 (14) received - received this morning and I think it sets forth
 (15) clearly both sides issue on it We ask that the Court take
 (16) judicial notice of one particular section of the Alaska
 (17) Historic Preservation Act 41 35 020 and -
 (18) THE COURT Yeah I have it
 (19) MR McCALLION Exxon has responded by drawing the
 (20) Court's attention to some other related provisions primarily
 (21) which assert the state's ownership of the land below mean high
 (22) tide Which is -
 (23) THE COURT I see it counsel I see the opposition
 (24) I remember the motion The question is whether you want
 (25) further - another - a reply of some sort And that's for

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- (1) you Mr Diamond - no I'm sorry it's for the plaintiffs
 (2) Do the plaintiffs want to reply?
 (3) MR McCALLION Your Honor perhaps we could review
 (4) that and respond
 (5) THE COURT By tomorrow
 (6) MR McCALLION We could just respond verbally
 (7) tomorrow morning
 (8) THE COURT Well you could or if you want to brief
 (9) it you could tell me tomorrow
 (10) MR McCALLION Yes Your Honor thank you
 (11) MR DIAMOND Should we come prepared to argue that?
 (12) THE COURT Tomorrow?
 (13) MR DIAMOND Tomorrow morning
 (14) THE COURT Make your decision by 4 00 and call
 (15) Mr Diamond and tell him whether you're going to argue it
 (16) tomorrow or you're going to brief it
 (17) MR McCALLION Yes Your Honor
 (18) MR DIAMOND I had one final matter that I thought
 (19) would be useful to take up now rather than tomorrow morning
 (20) and I see Mr Petumenos packing his bags so I better speak
 (21) quickly
 (22) It concerns the issue of cross-examination by the
 (23) plaintiffs side of witnesses called by the defense I spoke
 (24) briefly with Mr Petumenos about this subject how many
 (25) cross-examiners will there be Are we going to be faced with

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- (1) three cross examiners or one?
- (2) THE COURT You mean three cross examiners in the
- (3) course of the - oh I see what you mean Is each party going
- (4) to cross examine?
- (5) MR DIAMOND That was the question I asked because
- (6) the statute doesn't talk about parties it talks about -
- (7) THE COURT Right
- (8) MR PETUMENOS I think this is what we're going to -
- (9) this is what we'd like to do and I - I think this'll work
- (10) fine
- (11) We have planned it so that we have a single cross examiner
- (12) as a general rule There may be occasions not with every
- (13) witness where a very short cross examination may need to be
- (14) conducted owing to the fact that unlike the defendants where
- (15) they have - they've got a stipulation on Order 40 that they
- (16) are one for the purposes of this proceeding we have three
- (17) separate client groups with different interests We have a
- (18) subsurface estate and surface estate we have municipalities
- (19) and so forth
- (20) There may be occasions where additional cross examination
- (21) of duration of five to ten minutes or something like that may
- (22) be required but in general to keep - we don't want to
- (23) protract the proceedings In general we're in agreement that
- (24) we plan to assign a single cross examiner to conduct the bulk
- (25) of the cross examination If we abuse that the Court would

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- (1) let us know but it would be our - that would be our position
- (2) where there's an individual issue where we feel like we need to
- (3) protect a particular client's interest we would like to
- (4) reserve the right to observe it We'll keep it very much under
- (5) control
- (6) THE COURT I think that's fair enough
- (7) MR DIAMOND Our view is not to preclude
- (8) cross examination by a second witness if there is disparate
- (9) interest It would be the general rule that would happen A
- (10) lot of our witnesses speak - generally don't talk about this
- (11) parcel that parcel or another parcel In that case clearly
- (12) their interests are all aligned There are no divergent
- (13) interests they are one party for those purposes and they ought
- (14) not to be permitted multiple shots at the same witness
- (15) I would suggest with the way we proceed make that the
- (16) standard operating procedure If any of plaintiffs counsel
- (17) would like to cross-examine separately if they would simply
- (18) ask us in advance we would probably consent to it if they tell
- (19) us on what terms If we have a problem we'll raise it with
- (20) you
- (21) THE COURT Well I tell you what I'm not going to
- (22) make you resolve this by elaborate protocols for
- (23) cross examination because I don't see it as a problem now If
- (24) I see it as a problem - first you're always entitled to
- (25) object

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- (1) MR DIAMOND We didn't want to have to do that in
- (2) front of the jury
- (3) THE COURT Well but you know there are ways and
- (4) you all know them so that the jury you don't have to do it in
- (5) front of the jury and get rebuffed Who knows you might not
- (6) get rebuffed But all I'll say to the plaintiffs is I don't
- (7) want to see duplicative cross examination and to the extent I
- (8) see it I'll stop it
- (9) The disparate interest problem is harder to determine on
- (10) certain questions on cross examination but I'll explore it if
- (11) it's necessary On the other hand if there's an hour long
- (12) cross examination and a five minute supplemental
- (13) cross examination that's related to a particular plaintiff's
- (14) case then there's no problem There's no objection and
- (15) there's no intervention by the Court
- (16) MR DIAMOND That's all we have
- (17) THE COURT That's it for everybody? Okay 8 30
- (18) tomorrow If I see a piece of paper on this desk that raises
- (19) an issue that should have been raised today - first I'm not
- (20) going to hear it And second I'll have a separate proceeding
- (21) for the lawyer who files it understood?
- (22) MR McCALLION Your Honor if I may along that line
- (23) we're double checking a couple of exhibits to make sure that it
- (24) was correctly - correctly entered Your Honor We don't
- (25) anticipate an issue

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- (1) THE COURT Let's talk about that 17 3 and 741
- (2) were those exhibits offered? My clerk is a little confused
- (3) It's 17 and 3 on a separate -
- (4) MR McCALLION I'm sorry 741 was the oil spill
- (5) contingency plan that was offered
- (6) MR PETUMENOS And reserved
- (7) THE COURT That's not in that's not in evidence 17
- (8) and 3 are not -
- (9) MR McCALLION And number 3 Your Honor
- (10) THE CLERK 17 he mentioned it at first
- (11) THE COURT What is 17?
- (12) THE CLERK Answers and questions to admissions on
- (13) November 16
- (14) THE COURT I did not admit those 17 was the answer
- (15) the admissions right? I said I wouldn't admit them
- (16) separately
- (17) MR McCALLION That's correct Your Honor
- (18) THE COURT Okay go ahead
- (19) MR McCALLION Your Honor if there's any additional
- (20) as we go through the list and double check the exhibits if an
- (21) issue arises today - I don't anticipate any but we'll discuss
- (22) it with the other side and -
- (23) THE COURT Well that's fine you do that But what
- (24) I'm telling you is don't raise it at 8 30 You'll have
- (25) tomorrow afternoon and there's no necessity to take jury time

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- (1) on those things
- (2) MR McCALLION I understand
- (3) MR PETUMENOS There s some confusion The Court is
- (4) not - if we have an exhibit snafu or something we rested our
- (5) case the point is we re not going to have to -
- (6) THE COURT Absolutely not It is a waste of time and
- (7) we ve wasted enough time at the front end of these sessions
- (8) MR PETUMENOS My understanding is that the direct
- (9) tomorrow according to the defendants estimate will take the
- (10) balance of the entire day
- (11) THE COURT For one witness
- (12) MR PETUMENOS For one witness So any problems that
- (13) we have or they might have with our cross or anything like
- (14) that there s no reason for us to be dealing with it at 8 30 in
- (15) the morning They ll be on direct the whole day
- (16) THE COURT There s not only no reason to do it but
- (17) if you do it you do it at your peril
- (18) MR PETUMENOS I got my checkbook ready
- (19) THE COURT It s cash in this court counsel
- (20) All right thank you
- (21) THE CLERK Please rise This court stands in
- (22) recess
- (23) (Recess at 12 07 p m)

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- (1) STATE OF ALASKA)
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA)
- (6) I Joy S Brauer RPR a Registered Professional
- (7) Reporter and Notary Public
- (8) DO HERBY CERTIFY
- (9) That the foregoing transcript contains a true and
- (10) accurate transcription of my shorthand notes of all requested
- (11) matters held in the foregoing captioned case
- (12) Further that the transcript was prepared by me
- (13) or under my direction
- (14) DATED this day
- (15) of 1994
- (21) JOY S BRAUER RPR
Notary Public for Alaska
- (22) My Commission Expires 5 10-97

Look-See Concordance Report

UNIQUE WORDS 2,231
TOTAL OCCURRENCES 8,808
NOISE WORDS 385
TOTAL WORDS IN FILE
26,747

SINGLE FILE CONCORDANCE**CASE SENSITIVE****NOISE WORD LIST(S)
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- (1) IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (2) THIRD JUDICIAL DISTRICT
 (4) In re) Case No 3AN 89 2533 Civil
) Anchorage Alaska
 (5) The EXXON VALDEZ) Tuesday August 9 1994
) 8 40 a m
 (6))
 (8) VOLUME 32 Pages 4976 through 5119
 (10) TRANSCRIPT OF PROCEEDINGS (Continued)
 (11) TRIAL BY JURY
 (13) BEFORE THE HONORABLE BRIAN C. SHUTTELL
 Superior Court Judge
- (16) APPEARANCES
 (17) FOR THE PLAINTIFF
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- (1) PROCEEDINGS
 (2) (Jury in at 8 40 a m)
 (3) (Call to Order of the Court)
 (4) THE COURT Good morning counsel
 (5) MR PETUMENOS Good morning Your Honor
 (6) Before we begin today I just want to introduce to the
 (7) Court and the jury a new attorney with the plaintiffs
 (8) Mr Terry Gargan who is working with our office and spent his
 (9) afternoons watching Mr Wizard when he was a kid so he s
 going
 (10) to conduct the cross-examination this morning
 (11) MR DIAMOND Your Honor may I introduce to the jury
 (12) George Brown one of our colleagues who is going to be
 (13) assisting in the presentation of Dr Page s testimony
 (14) MS SMITH Your Honor on this the thirty second day
 (15) of trial Exxon is pleased to call as its first witness
 (16) Dr David Page
 (17) THE CLERK Sir can you attach the microphone to your
 (18) tie and remain standing for the oath? Please raise your right
 (19) hand
 (20) (The Witness is Sworn)
 (21) THE CLERK Please be seated Sir for the record
 (22) can you please state your full name?
 (23) A My name is David Sanborn Page
 (24) THE CLERK And please spell your last name
 (25) A P a g e

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- (1) THE CLERK And your occupation?
 (2) A I m a college professor
 (3) BY MS SMITH
 (4) Q Dr Page where do you work?
 (5) A I work at Bowdoin College in Brunswick Maine
 (6) Q And what do you teach?
 (7) A I teach chemistry and biochemistry
 (8) Q All right How long have you held that position?
 (9) A I ve held that position since 1974
 (10) Q And what are you here to talk to the jury about today?
 (11) A Well I m here to tell the jury about what the shorelines
 (12) of Prince William Sound and the Gulf of Alaska are like and to
 (13) do that I m going to do my very best to bring these shorelines
 (14) to this courtroom
 (15) Q All right You say you are a chemist and a biochemist
 (16) What does a biochemist do?
 (17) A Well a biochemist studies the chemical processes
 (18) associated with living things so it s really the chemistry of
 (19) life
 (20) Q Tell us about your education
 (21) A Well I got my undergraduate degree from Brown University
 (22) in 1965 Then I went on to Purdue University where I got my
 (23) doctorate in chemistry doing research in biochemistry in 1970
 (24) Q What did you do when you got out of school?
 (25) A Well I taught for a year at Purdue teaching nurses

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- (1) chemistry Then I taught for three years at Bates College in
 (2) Lewiston Maine after which I joined the faculty of Bowdoin
 (3) College in Brunswick Maine where I've been ever since
 (4) Q In addition to your teaching and research responsibilities
 (5) have you published over 60 articles?
 (6) A Yes I have
 (7) Q How many in the field of biochemistry?
 (8) A About 30 roughly half
 (9) Q How did you come to be interested in oil spills?
 (10) A Well it's a long story but I'll make it short When I
 (11) joined the faculty at Bowdoin some colleagues of mine were
 (12) studying an oil spill that actually happened on our doorstep in
 (13) Casco Bay Maine and I became interested in that and so
 (14) interested in fact that that's been the primary focus of my
 (15) research ever since
 (16) Q Have you done research on other oil spills prior to working
 (17) on the Exxon Valdez spill?
 (18) A Yes Starting with the - what I just mentioned in the
 (19) last 20 years my colleague Dr Ed Gilfillan and I have
 (20) studied over a dozen large spills worldwide plus a bunch of
 (21) smaller ones
 (22) Q All right And did you work on the Amoco Cadiz?
 (23) A Yes I worked on the Amoco Cadiz oil spill in Brittany
 (24) France which is a much larger spill than the spill in Prince
 (25) William Sound We studied that for eight years In addition

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- (1) industry?
 (2) A Yes I have
 (3) Q Who have you worked for?
 (4) A Well we've worked - obviously with Amoco in the Amoco
 (5) Cadiz spill but we've had ongoing support from the mobile
 (6) foundation for example support PBS we've had ongoing
 (7) support from Arco we've had support from Exxon Production
 (8) Research for various projects
 (9) Q Have you worked with the government?
 (10) A Yes We have
 (11) Q Who have you worked with?
 (12) A Well first and foremost we've worked very closely over
 (13) the last 20 years with the State of Maine which is where I
 (14) live And I say we my colleague Dr Gilfillan and I have
 (15) done numerous spill related projects with the State of Maine
 (16) some of them in fact supported by oil industry money In
 (17) addition the work had support from the British government
 (18) I've had support from the U S government
 (19) Q All right Dr Page have you been accepted as an expert
 (20) in chemistry in biochemistry in the courts of the United
 (21) States including as an expert in the fate and effects of oil
 (22) spills?
 (23) A Yes I have
 (24) Q And have you been accepted as an expert on the fate and
 (25) effects of oil in administrative proceedings in the United

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- (1) I've studied spills in Puerto Rico spills in Florida studied
 (2) a spill in Nigeria and a whole bunch of smaller spills up and
 (3) down the East Coast plus numerous projects relating to oil
 (4) spills
 (5) Q Have you published on each of the spills?
 (6) A Yeah As academic scientists our main focus is really to
 (7) do scholarly work in the area of oil spills and so that all of
 (8) the major spills that we've studied have resulted in
 (9) publications and journals of one sort or another
 (10) Q You said you studied the fate and effects of oil during
 (11) these spills What does that mean?
 (12) A Well fate and effects studying oil spills is really a
 (13) question that has two sides to it There's a chemistry side
 (14) because oil is a substance which changes rapidly once it's
 (15) exposed to the environment and an effect side what it's doing
 (16) to the plants and animals in the area that it's affecting
 (17) Because oil breaks down naturally in the environment a
 (18) chemist
 (19) has to study - has to actually measure what the oil is like as
 (20) a function of time because that's going to govern the effect
 (21) that the oil's having on the plants and animals which is what
 (22) the biologists are measuring and so what it means is that in
 (23) order to really study oil spills well you have to have a very
 (24) close coordination between what the biology people are doing
 (25) and what the chemistry people are doing
 (26) Q All right Have you worked for other members of the oil

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- (1) States?
 (2) A Yes I have
 (3) MS SMITH May it please the Court I tender Dr Page
 (4) as an expert in the field of chemistry and biochemistry
 (5) including as an expert in the fate and effects of oil spills
 (6) MR GARGAN No objection
 (7) THE COURT He's qualified to give opinion in those
 (8) areas
 (9) MS SMITH Thank you Your Honor
 (10) BY MS SMITH
 (11) Q Dr Page - Professor Brown come on up - you said you
 (12) were going to tell the jury about what happened to the oil that
 (13) was spilled on the shoreline in 1989 Can you come on down
 (14) we're going to show the jury
 (15) MS SMITH And Your Honor we're going to call you
 (16) off a little bit and I left you a book
 (17) THE COURT Yeah I saw it Thank you
 (18) MS SMITH Or you can come on down
 (19) THE COURT I appreciate the invitation counsel
 (20) MS SMITH Feel like Monty Hall come on down
 (21) MS SMITH If any of you all can't see just tell us
 (22) to shove over
 (23) A Let's put it on the higher one so the people in the back
 (24) can see That's better
 (25) BY MS SMITH

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- (1) Q All right I show you DX1094 What are we looking at?
- (2) A Well this is a picture taken in 1989 of a shore on the
- (3) southern tip of Knight Island place called Point Helen and it
- (4) shows how heavily oiled that particular shoreline was And I
- (5) think anybody looking at this picture honestly could not
- (6) believe that a place like that could ever get better
- (7) Q And did Point Helen ever get any better?
- (8) A Yes it did
- (9) Q All right I show you DX13206 what's that?
- (10) A Well this is the same place and to make sure that it is
- (11) the same place let me call your attention this rock here and
- (12) that rock there This rock here is that rock there this rock
- (13) here is that rock there and you're kind of looking out here
- (14) into the low tide zone and that's the same view here and what
- (15) you're seeing in fact is the same place same photograph
- (16) taken during my survey in 1994 And what this shows is a - a
- (17) beach with no oil on it at all in this area It was raining
- (18) which often happened in Prince William Sound this summer
- (19) and
- (19) this dark stuff here is just wet gravel between the rocks and
- (20) these rocks are wet
- (21) I looked for oil in the cracks here There's no residue
- (22) and you wouldn't expect to find any here because this as you
- (23) can see in the waves the rocks these small rocks just batter
- (24) the surface of these large rocks which is why they're so
- (25) smooth and rounded and why you don't see any seaweed
- growing

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- (1) on them because anything that tries to grow here gets just
- (2) ground off in storms Yet down below in the lower intertidal
- (3) zone where it's protected you actually have a very dense and
- (4) lush growth of fucus and other plants and animals and off in
- (5) the distance you can see Green Island and little Green Island
- (6) in the same picture
- (7) Q All right Was Point Helen one of the most heavily hit
- (8) spots during the oil spill?
- (9) A Yes because of its location in fact and because of the
- (10) way the oil left the Sound this particular shoreline got very
- (11) heavily hit
- (12) Q All right Let me show you DX8941
- (13) A Can the people in the corner see that?
- (14) Q David I'm worried you're going to end up on your head
- (15) there Can you tell the jury what they're looking at?
- (16) A Well in fact you're looking at the southern tip of Knight
- (17) Island and this area here is known as Point Helen And that
- (18) picture in fact was taken where we were standing right here
- (19) and shooting in this direction toward Green Island
- (20) Q So this is Point Helen in 1994?
- (21) A Yes this is Point Helen in 1994
- (22) Q All right And see this dark strip that goes all along
- (23) here is that oil?
- (24) A Well if we had this picture back I could show you
- (25) Now what this is in fact and I don't think there'll be

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- (1) any question about it all of this dark stuff that's on the
- (2) edge of shore here is this very dense coat of fucus seaweed
- (3) that grows along the lower tide line in exposed beaches like
- (4) this And you know it's dense because when you try to go
- (5) ashore from a boat you have to walk through the stuff and
- (6) it's really difficult
- (7) Q All right And we've heard a lot a lot about sheening in
- (8) this case Is this oil sheen right here?
- (9) A No this is not oil streaming off of the - off of the
- (10) beach because really these beaches here are very clean You
- (11) can see the same kind of wind and current pattern over here on
- (12) the side of Point Helen that didn't get oiled at all in 1989
- (13) and you see wind and current patterns like these all over the
- (14) place You can walk down the coastal trail in Cook Inlet and
- (15) see the same thing so that's not anything related to the oil
- (16) spill
- (17) Q Do both sides of Point Helen look the same today?
- (18) A Yes I've walked both sides of Point Helen I can tell you
- (19) that you would be hard pressed to tell the difference between
- (20) the two This side is a little more sheltered from the waves
- (21) than this but if you didn't know there had been a spill you
- (22) really wouldn't tell there was anything here
- (23) Q All right And did you want to take a video to show the
- (24) jury what it was like up close and personal down at the beach?
- (25) A Yeah and I think to orient everybody what I - what I

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- (1) want to do is - is to get short sort of give you a dog's eye
- (2) view of the beach And what I'm going to do first is show you
- (3) what it's like up in the top of the beach where these logs are
- (4) and in an exposed beach like this as you go all the way up
- (5) This is about three miles here you see all of these logs at
- (6) the top of the beach and that's called the storm berm and what
- (7) happens in storms is that these floating logs which act like
- (8) battering rams on the shoreline get thrown up and accumulate
- (9) and so that in addition to sort of logs which are up there you
- (10) have decaying seaweed And along here in fact as I'll show
- (11) you there are traces of the spill and I want to show you what
- (12) they're like
- (13) And then what I want to do is take you down the shore here
- (14) to show you that really most of the action as far as plants
- (15) and animals are down in the lower intertidal zone because
- (16) anything that's living up here really has to live in an
- (17) environment that gets beaten up by waves a lot And so that
- (18) most of the plants and animals that live up here are really
- (19) sort of you know worms and other small animals that are
- (20) scavengers that are living on dead decaying seaweed and
- other
- (21) organic matter in this storm berm
- (22) Q All right let's show the video
- (23) MR PETUMENOS Do you have an exhibit number for the
- (24) video?
- (25) MS SMITH Yes I do Hang on DX13801

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- (1) (Videotape Played)
- (2) A The first that s me and I - and I m walking along a
- (3) 25-foot stretch of this storm berm You can see how much stuff
- (4) is piled up at the top of the beach and these logs are just
- (5) rounded by beating on the shoreline during their passage and
- (6) this is an important thing to think about and what it s like
- (7) being plant and animal in coastal Alaska
- (8) And I - what I had done is I d gone ~~to~~ ^{to} here and I
- (9) was looking for traces of surface oil on the rocks and what -
- (10) what you find up here is isolated patches of tarry material
- (11) and this is material that s - hasn't quite been ground off
- (12) yet
- (13) And then the camera s doing a closeup of the rocks that I
- (14) had located and as you can see here is a little patch of
- (15) tarry material and hasn't quite been pounded to smithenness
- (16) yet And here s another one in and amongst all this organic
- (17) matter that s breaking down naturally You can see a little
- (18) piece of the spruce needle here that hasn't quite gotten ground
- (19) up
- (20) Here s another one And in fact unless you knew what you
- (21) were looking at, you wouldn't give those rocks a second
- (22) thought And now we re starting at the top of the tide zone
- (23) This is all the seaweed that had been washed up by storms at
- (24) the top of the beach
- (25) Q Dr Page all the - all the rocks look black Is that

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- (1) oil?
- (2) A No As I said a minute ago as often happens when you re
- (3) doing fieldwork in Prince William Sound it was pouring the day
- (4) that this video was done and so that you ve got these wet
- (5) rocks and when these darker rocks get wet they look dark
- (6) they look darker and so what you re seeing here is wet rocks
- (7) And I ll tell you right now before we go any further
- (8) you re not going to see any surface oil You re not going to
- (9) see any trace of the spill on this video and what I want to
- (10) show you is that at the top of the beach because of the wave
- (11) energy banking these rocks around you don t see much in the
- (12) way of plants and animals but as we get farther down where
- (13) it s a little more sheltered in the lower part of the beach
- (14) that s when you start to see sea stuff and then we ll go on
- (15) This is what I meant by a dog s eye view and this is what
- (16) the beach at Point Helen looks like everywhere When you land
- (17) your boat you don t see oil sheen coming of this beach In
- (18) fact If you didn t know there had been an oil spill in Prince
- (19) William Sound you would think this was a - just a beach like
- (20) anywhere in Alaska
- (21) Now you can see barnacles these little white things
- (22) growing in the cracks of these rocks where it s a little bit
- (23) sheltered from being battered around Critters will move in
- (24) wherever they can and make a living
- (25) You also see limpets Now we re getting down in the bottom

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- (1) of the beach you see snails on the surface of the rocks again
- (2) in protected locations This green stuff here is algae growing
- (3) on the surface of the rocks that the snails are eating You
- (4) can keep the dog running here
- (5) And now we re in the lower part of the beach and we re
- (6) starting to see more stuff growing on the rocks more
- (7) barnacles these white things more snails and we re starting
- (8) to see seaweed Notice again how smooth the rocks are and
- how
- (9) the seaweed only wants to grow where it s protected because
- (10) where it s not protected it literally gets pounded off the
- (11) rocks
- (12) And this is what a beach like this is supposed to look
- (13) like A high energy boulder-cobble beach It s called a
- (14) boulder-cobble beach because it s cobbles these rounded
- rocks
- (15) and it s got a lot of boulders in it
- (16) Now we re in the lower intertidal zone You can see the
- (17) tide pools You don t see any oil sheening in the tide pools
- (18) because there isn t any And you see many different species of
- (19) marine algae, like this kelp, sort of draped over like these
- (20) sort of soggy fronds here and - and again all of these tidal
- (21) pools are just full of stuff
- (22) We re almost at the end of this trip but I wanted to kind
- (23) of show you what it was like close up And now I want to show
- (24) you what it s like what you have to go through to land here
- (25) from a boat And walking through this stuff is actually pretty

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- (1) difficult because these seaweed is so slippery at low tide
- (2) But it s just an incredibly productive area
- (3) You re seeing fucus that s what all of this stuff is here
- (4) draped all over the rocks Down in the lower intertidal zone
- (5) these little blobs here are kelp that grow in deeper water
- (6) And as we pan around there s where the picture was that I
- (7) showed you a few minutes ago and we re looking now up the
- top
- (8) of the beach and here s the log berm that we just walked
- (9) through and beyond it is another kind of beach elevation that
- (10) looks like a storm berm but it isn t because this beach was
- (11) actually raised up during the 1964 earthquake So there s
- (12) actually two upper beaches here the 1964 upper beach and
- (13) then - then the current one
- (14) Q Okay Thank you Can we get the lights?
- (15) (Videotape concluded)
- (16) BY MS SMITH
- (17) Q Can you come back over here? I want to ask you a question
- (18) Dr Page When you say- wait this wasn t the question but
- (19) when you say a dog s eye view were you down there with the
- (20) camera like this I have this -
- (21) A No I wasn t on my hands and knees I think everybody s
- (22) used a camcorder and I was kind of walking like this with the
- (23) thing pointing down again to get as close a view of the beach
- (24) as possible
- (25) Q All right Do you have an opinion about this shoreline?

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- (1) A Yes I do
 (2) Q And what is it?
 (3) A Well I think that what I've showed you fairly represents
 (4) what's going on at the shoreline I will tell you that you
 (5) know this is a place where there is subsurface oil right
 (6) behind this rocky outcrop You can't tell it's there and the
 (7) plants and animals living down here can't tell it's there
 (8) because whatever traces of the spill there are that are left at
 (9) this very heavily oiled place in 1989 are in a form and in a
 (10) location where it can't have any ongoing injury to plants and
 (11) animals living here
 (12) Q All right And tell the jury what do you mean by form
 (13) and location?
 (14) A Well form I said earlier when I talked about the vapor
 (15) boil when petroleum is released in the environment it changes
 (16) rapidly and so the remnants of the spill that are present at
 (17) places like this don't look like the stuff that was spilled in
 (18) 1989 They're very heavily weathered In other words they're
 (19) very heavily environmentally degraded and even as I speak
 (20) bacteria are chewing up the stuff that's there and it's going
 (21) away naturally and we know that because we've measured it
 (22) And it's not - it's - because it's well under the part of the
 (23) beach where plants and animals grow They grow mostly on
 (24) the surface It's in a location that's not doing any harm
 (25) Furthermore the stuff that I showed you at the top of the

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- (1) beach is like driveway I mean we don't wear moon suits when
 (2) we walk in our driveway and so that's in a form because it's
 (3) so heavily degraded that it's not having any adverse effect on
 (4) plants and animals
 (5) Q All right And what you're telling us about Point Helen
 (6) Point Helen is what we call one of the worst of the worst
 (7) locations right?
 (8) A Yeah There are a handful of places in Prince William
 (9) Sound that you call the worst of the worst And Point Helen is
 (10) one of the worst of the worst places because in 1989 as the
 (11) oil left Prince William Sound most of it went down Montague
 (12) Passage which is this area here and as it was flowing south
 (13) it just hit this whole shoreline of Point Helen And because
 (14) this side of Point Helen is protected this area here didn't
 (15) get - got little if any oil In fact most of this was
 (16) unoiled and so this was one of the most heavily oiled places
 (17) in Prince William Sound in 1989 but because it's such an
 (18) exposed shoreline it looks really good today because there's
 (19) very few remnants of the spill left there
 (20) Q All right You can resume the stand if I don't trip over
 (21) you
 (22) MS SMITH And Your Honor I move into evidence
 (23) DX1094 DX13206 DX8941 and DX13801
 (24) (Exhibits DX1094 13206 8941 and 13801 offered)
 (25) MR GARGAN No objection


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- (1) THE COURT Those exhibits are admitted
 (2) (Exhibits DX1094 13206 8941 and 13801 received)
 (3) MS SMITH Thank you Your Honor
 (4) BY MS SMITH
 (5) Q What kind of oil was spilled Dr Page?
 (6) A Well it was a North Slope crude oil
 (7) Q And is crude oil different from other fuels like diesel
 (8) fuel?
 (9) A Well crude oil is what other fuels are made from by
 (10) refining which is a process of distillation So in fact it
 (11) is very different from refined products
 (12) Q All right Let me show you DX5266-AA Tell the jury
 (13) what's in a barrel of oil
 (14) A Can I go down?
 (15) Q Sure You can use the pointer Always the teacher
 (16) A Well -
 (17) Q David If you stand - should I tilt the Barco? Can you
 (18) guys see him? Okay
 (19) A Okay This is a hypothetical barrel of crude oil and ANS
 (20) stands for Alaska North Slope crude but in fact the
 (21) proportions of these different fractions vary depending on
 (22) crude oil And so what I want to talk about is what these
 (23) different fractions of a barrel of crude oil are and what their
 (24) properties are
 (25) Q All right And tell us about the top part of the barrel

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- (1) A Well the top of the barrel - we're sort of going in
 (2) descending ease of evaporation The top of the barrel we've
 (3) all kind of had experience with because this is the part of
 (4) the barrel of crude oil that evaporates most easily Anytime
 (5) you go to the gas station to you know fill up your tank what
 (6) you smell is - are hydrocarbons from this fraction of the
 (7) barrel And in the case of Alaska North Slope crude the
 (8) fraction that evaporates most readily constitutes about 20 to
 (9) 30 percent of a hypothetical barrel of oil
 (10) Q All right Now tell the jury about the bottom of the
 (11) barrel
 (12) A Well if we were taking this barrel and refining it at a
 (13) refinery after we got our gasoline and you know butane
 (14) lighter fluid and stuff like that out which is this part and
 (15) after we got the middle of the barrel out again by refining
 (16) we'd be left with a black tarry material called asphalt and
 (17) asphalt is - we think of road tar roofing tar If you want
 (18) to see what the bottom of the barrel looks like from a - from
 (19) refined North Slope crude go out to the Carr's parking lot
 (20) because they've been filling cracks with asphalt and it looks
 (21) kind of like black chewing gum
 (22) Now that kind of material asphalt is - because of its
 (23) nature is biologically inert in other words it doesn't have
 (24) an adverse effect on plants and animals We know that
 (25) because
 (26) we use it in all kinds of products in everyday life roads

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- (1) roofs and driveways
 (2) It's also material that breaks down slowly in the
 (3) environment which is what we want in the case of roads roofs
 (4) driveways But in the case of a crude oil spill this stuff
 (5) isn't produced like it would be at a refinery So in the
 (6) environment in fact this stuff winds up as minute particles
 (7) that just sort of disperse and become part of the organic
 (8) background 
 (9) Q How about the middle section?
 (10) A This middle section has all the good stuff as far as
 (11) commercial uses It consists of different kinds of compounds
 (12) Compounds that have straight chains and compounds which
 (13) the
 (14) molecules have rings Now the straight chains and these sort
 (15) of fused rings here are like paraffin wax that we use for
 (16) candles crayons mineral oil like my old Norwegian uncle used
 (17) to take every night before he went to bed Because they are
 (18) straight chains and simple rings like this bacteria break them
 (19) down very readily and so that they are nontoxic and they
 (20) breakdown rapidly
 (21) When we think of these things for example we find
 (22) versions of this would be kerosene diesel fuel fuel oil
 (23) grease and then a whole bunch of products that we use around
 (24) the house These compounds here which are a small fraction
 (25) of
 (26) the barrel of Alaska North Slope crude are called polycyclic
 (27) more than one ring aromatic hydrocarbons or PAH and most
 (28) of

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- (1) the toxicity of petroleum is associated with these compounds
 (2) Now again we've all had experience with these For
 (3) example moth balls which is naphthylene is a polycyclic
 (4) aromatic hydrocarbon with two rings so it's - these are
 (5) things that we see in everyday life Creosote driveway
 (6) sealer all are things with aromatic hydrocarbons in them
 (7) They are more toxic They biodegrade naturally in the
 (8) environment but they biodegrade more slowly
 (9) Q Of the oil that was spilled in Prince William Sound did 20
 (10) to 30 percent the top of the barrel evaporate rapidly?
 (11) A Well yeah within a few weeks 20 to 30 percent of our
 (12) total spill volume evaporated In other words because of the
 (13) nature of Prince William Sound and the Gulf of Alaska and the
 (14) exposure to the atmosphere much of the spill actually
 (15) evaporated
 (16) Q All right And 18 to 20 percent is biologically inert?
 (17) A It's not hurting anything and you can't see it
 (18) Q What happened to the rest of it?
 (19) A Well what happened to the rest of it is that right after
 (20) the spill as I mentioned a few minutes ago it - with the
 (21) prevailing winds and currents at the time it worked its way
 (22) south out of the Sound
 (23) Q All right And did it undergo a process of weathering?
 (24) A Well once oil is released to the environment changes
 (25) start taking place immediately like evaporation and

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- (1) biodegradation and so yes once it started its journey as it
 (2) were it was biodegrading and weathering by physical and
 (3) biological processes
 (4) MS SMITH All right Your Honor I move the
 (5) admission of DX5266-AA
 (6) (Exhibit DX5266-AA offered)
 (7) MR GARGAN Your Honor may I object to this or at
 (8) least ask some questions?
 (9) THE COURT You may ask some questions
 (10) VOIR DIRE EXAMINATION OF DAVID S PAGE
 (11) BY MR GARGAN
 (12) Q Doctor where is the benzene in your scheme here?
 (13) A Well as I said what you smell when you're at the gas
 (14) station is largely benzene and toluene and this is a
 (15) representation of toluene And if we put our finger over that
 (16) that's a representation of benzene and therefore counsel
 (17) we're not trying to hide anything we're simply trying to
 (18) represent that the single-ring compounds are up here and your
 (19) multi-ring compounds are in the middle
 (20) Q Where is the most toxic component of crude oil as -
 (21) MS SMITH Your Honor Your Honor excuse me I
 (22) object to this I'm in the middle of a direct presentation
 (23) He's drawing out his cross
 (24) MR GARGAN I'm simply -
 (25) THE COURT Counsel counsel We haven't been

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- (1) together so you - so you don't remember all the instructions
 (2) I gave about not speaking when another person is speaking
 (3) MR GARGAN Excuse me
 (4) MS SMITH He will have his opportunity If he has
 (5) an objection to the exhibit - which I haven't heard before
 (6) but that's okay - then we can work that out or not work that
 (7) out
 (8) THE COURT That's fine I'll give him a few
 (9) questions counsel But I don't want you doing your
 (10) cross-examination counsel
 (11) BY MR GARGAN
 (12) Q Dr Page isn't it true that the most toxic carcinogenic
 (13) component is up in the top and it's not listed there?
 (14) A As I told you a minute ago counsel we're not trying to
 (15) hide anything here We're not trying to misrepresent anything
 (16) here and in fact if it pleases you I will say benzene which
 (17) is the most toxic carcinogenic compound of petroleum is in
 (18) here and we smell it every time we pump gas and the fact of
 (19) the matter is is that that stuff went off like a shot by
 (20) evaporation and never reached the beaches in the Sound
 (21) MR GARGAN Well I wouldn't object if we acknowledge
 (22) the fact that the most toxic carcinogenic material is listed
 (23) there consistent with the section where it says nontoxic
 (24) That's my only objection
 (25) THE COURT All right I'll admit the document

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- (1) MS SMITH Thank you
- (2) (Exhibit DX5266AA received)
- (3) A This doesn't say nontoxic up here counsel
- (4) DIRECT EXAMINATION OF DAVID S. PAGE (Resumed)
- (5) BY MS. SMITH
- (6) Q All right we don't need to argue with him. He'll have his
- (7) chance
- (8) I show you DX8951 and you can approach the jury
- (9) A Let me open it. Sorry Linda.
- (10) Q What is this?
- (11) A This is a Tupperware container
- (12) MS. SMITH Any challenge to that?
- (13) MR. GARGAN Stipulate to that
- (14) MS. SMITH Nontoxic
- (15) A What I did this summer is that at a shoreline in Shelter
- (16) Bay where Mr. Bush had one of his study sites and actually
- (17) showed videos of asphalt paving in court. I thought it would
- (18) be worthwhile to take a sample of the asphalt pavement that
- (19) Mr. Bush showed in his video and bring it in to court to show
- (20) you what weathered asphalt pavement really looks like. And
- (21) what this stuff is-- you can see it. You can actually find
- (22) patches of it on the beach and if you look closely at it some
- (23) of the stuff has roots growing through it and it looks like
- (24) dirt. And the reason it looks like dirt is that you can think
- (25) of any natural organic matter in the environment whether it's

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- (1) leaves that we've chopped up and made into a compost pile
- (2) whether it's seaweed that's been thrown up at the top of the
- (3) beach and is sort of composting away or whether it's
- (4) petroleum. It biodegrades and it composts and ultimately
- (5) breaks down and turns to dirt
- (6) Now I know this from experience with other oil spills
- (7) You notice I'm handling this and my hands have kind of sand on
- (8) them but they're not oily and in the case of the Amoco Cadiz
- (9) oil spill which was six times larger than the Exxon Valdez oil
- (10) spill there are a lot of sandy beaches and there was a lot of
- (11) pavement like this and by 1986 when I visited there which
- (12) was eight years after the spill what stuff that was left
- (13) looked like this and I took some back in fact and it was
- (14) March and grew shamrocks in it. And so what I'm saying is that
- (15) the ultimate fate of any natural organic matter in the
- (16) environment is to get recycled and composted like this. You're
- (17) free to look at it
- (18) Q I'm going to pass it around. You can look at it. If
- (19) you're daring you can touch it. We have a few more things
- (20) like this and we are-- we're representing to you you're not
- (21) going to have oil on your fingers afterwards however I do see
- (22) that we do have tissues here and you're free to do whatever you
- (23) like in terms of whether to pick it and we'll pick that up as
- (24) we go
- (25) Let's talk about the 11 million gallons of oil and where

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- (1) they went. We already talked a little bit about the 20 to 30
- (2) percent that evaporated. What happened to the rest of the
- (3) oil? Where did it go?
- (4) A Well as I said the rest of the oil moves south by winds
- (5) and currents and--
- (6) Q Go ahead
- (7) A And some of it-- some of it impacted shorelines in the
- (8) Sound and a lot of it went out of the Sound
- (9) Q All right Let me show you DX4831. What does this show?
- (10) A Well again would it be all right if I--
- (11) Q Sure sure
- (12) A Let me just stand here. What this is-- what this is is a
- (13) Landsat satellite picture taken from many miles up of Prince
- (14) William Sound. You can see Montague Island here. Here's
- (15) Knight Island and you can just see Bligh Island up here and
- (16) where this spill took place. And the important thing that this
- (17) shows is that along the southeast coast of Alaska this area
- (18) here there is a current called the Alaskan Coastal Current
- (19) and it moves along the coast of Alaska. In fact it moves quite
- (20) rapidly
- (21) And one of the things it does these light areas here are
- (22) actually sediment. The color looks funny because it's an
- (23) infrared picture and when the Alaskan Coastal Current this
- (24) body of water here reaches Hinchinbrook and Montague
- (25) Island a sizable part of it splits and goes up into the Sound and moves

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- (1) around and goes out whereas the remainder continues on the
- (2) outside
- (3) And what this means is that this constant flow of water
- (4) through Prince William Sound is one of the reasons it's so
- (5) productive because the water's constantly being renewed in
- (6) this way. The water in fact gets exchanged about once every
- (7) three weeks or so and that process is called flushing
- (8) MS. SMITH All right Your Honor I move the
- (9) admission of DX4831 and DX8951
- (10) (Exhibits DX4831 and DX8951 offered)
- (11) MR. GARGAN No objection
- (12) THE COURT They're both admitted
- (13) (Exhibits DX4831 and DX8951 received)
- (14) BY MS. SMITH
- (15) Q All right I'm going to show you what is known as the
- (16) Gault HAZMAT model which is DX1820A. Can you explain to the
- (17) jury who put this together?
- (18) A Well this video which is going to be short was put
- (19) together by scientists at the National Oceanographic and
- (20) Atmospheric Administration or NOAA and what it is it's a
- (21) hindcast and what that means is they took available wind and
- (22) current data for each day and sometimes each hour after the
- (23) spill plus observations of where the oil was on each day and
- (24) put it into a big computer model which included the
- (25) hydrography of the Sound and the shorelines of the Sound and made a

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- (1) visualization of what -- where the oil went after the spill and
 (2) that's what we're going to see
 (3) (Videotape Played)
 (4) A Okay Now this is Bligh Island and initially of course
 (5) the winds were coming from the north and moved the oil
 (6) southward toward Naked Island Eleanor Island Knight Island
 (7) and notice that the eastern part of the Sound and the western
 (8) part of the Sound didn't get oiled ~~The way the~~ wind and
 (9) currents went it was really again the north-facing parts of
 (10) these islands in particular that got heavily impacted And you
 (11) can also see the main body of the oil went out through
 Montague
 (12) passage which is this wide body of water here and we'll visit
 (13) some of these shorelines that got heavily hit a little bit
 (14) later on
 (15) In the Gulf of Alaska out here here's the Kenai Peninsula
 (16) for example Kenai Fjords here because you had such a wider
 (17) larger expanse of water the spill spread out and most of the
 (18) oil out here simply got dispersed, whereas what impacted the
 (19) shorelines here was actually much more scattered and of a
 much
 (20) different character than the spill that took place in Prince
 (21) William Sound
 (22) And now we're on April 17th which is almost a month after
 (23) the spill and most of -- it shows that most of the oil
 (24) floating oil mind you has left the Sound
 (25) Q Has NOAA taken a look in 1992 with where the oil was?

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- (1) A Yes they did
 (2) Q All right Let me show you DX5505AA and can you tell the
 (3) jury what they're seeing
 (4) A Well again NOAA compiled all of the available data that
 (5) they had on the time -- at the time in a publication of theirs
 (6) in 1993 to estimate where the oil went This kind of
 (7) calculation is called a mass balance and it's like an
 (8) inventory and it said what we said is about 20 percent or so
 (9) evaporated About 14 percent of the oil was cleaned up which
 (10) actually is a very high percentage for an oil spill About 62
 (11) percent of the original spill was flushed out of the Sound or
 (12) biodegraded and again biodegradation sort of bacterial
 (13) natural breakdown is the ultimate fate of organic matter in the
 (14) environment and this includes inert residue
 (15) It said as of 1992 three percent was still degrading
 (16) naturally and less than one percent And again when you get
 (17) to these small numbers you're in an area of great uncertainty
 (18) as far as these estimates Sequestered is in other words it
 (19) is in a form and location where it's not available to plants
 (20) and animals
 (21) Q All right How big is Prince William Sound?
 (22) A Well Prince William Sound has about 3 000 miles of
 (23) shoreline
 (24) Q And of those 3 000 miles of shoreline how much ever got
 (25) oiled?

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- (1) A Well between 80 and 85 percent never got oiled and what
 (2) that means is that about between 15 and 20 percent got oil to
 (3) some degree and I can tell you that most of it over 70
 (4) percent of the shorelines that got oiled were lightly oiled and
 (5) therefore recovered quickly
 (6) Q And you said that was between 15 and 20 percent that got
 (7) oiled?
 (8) A Got oiled right
 (9) Q And is that around 500 miles of shoreline?
 (10) A Roughly 500 miles out of the 3 000 miles of Prince William
 (11) Sound but again most of that 500 miles was in fact lightly
 (12) oiled
 (13) Q All right You're not telling this jury that 500 miles of
 (14) the shoreline in Prince William Sound looked like that first
 (15) picture at Point Helen covered with oil right?
 (16) A No And in fact in 1989 joint state federal Exxon
 (17) private survey parties surveyed almost 900 miles of the
 (18) shorelines in the Sound Over 400 miles of the shorelines that
 (19) were surveyed weren't oiled at all and that's what happens
 (20) with oil spills It's not like you take this paint brush and
 (21) paint the shoreline with black oil What happens is that it's
 (22) very discontinuous Some shorelines like Point Helen got hit
 (23) very hard Most of the shorelines didn't
 (24) Q What happened to the oil that went by the Kenai?
 (25) A Well again there were really two oil spills There was

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- (1) sort of the Prince William Sound oil spill and then there was
 (2) the Gulf of Alaska oil spill because as the oil floated out of
 (3) the Sound on the water it was evaporating And so instead of
 (4) something that was more liquid and could penetrate beaches
 (5) what you had out in the Gulf of Alaska was something called
 (6) mousse and tar patties and so as a result the shorelines of
 (7) the Kenai Kodiak and the Alaskan Peninsula where they got
 (8) oiled it was mostly stuff that sat on the surface
 (9) Q Now the Gulf of Alaska has over 6 000 miles of shoreline
 (10) How much of that ever got oiled?
 (11) A Well again the estimates vary but it's between eight and
 (12) nine hundred miles but most of that was light or very light
 (13) Sometimes a stretch of beach would be called lightly oiled if
 (14) one tar ball was found on a beach segment
 (15) MS SMITH All right Your Honor I move the
 (16) admission of DX4831 DX1820A and DX5505AA
 (17) (Exhibits DX4831 DX1820A and DX5505AA offered)
 (18) MR GARGAN Your Honor except for this last one I
 (19) have no objection but I would like to know the foundation of
 (20) this particular exhibit In other words what's the reference
 (21) so I might go into it on cross?
 (22) MS SMITH Is that a foundation objection?
 (23) MR GARGAN Yes it is
 (24) MS SMITH Oh fine
 (25) BY MS SMITH

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- (1) Q Who prepared this model the October 1992 NOAA model?
- (2) A This was prepared by Dr Doug Wolf who is a senior manager
- (3) at NOAA and his coworkers
- (4) THE COURT All right They re all admitted
- (5) (Exhibits DX4831 DX1820A and DX5505AA received)
- (6) BY MS SMITH
- (7) Q Now the oil that was left on the shorelines in 1989 is
- (8) all that oil still there today?
- (9) A No Again as I said before most of the shorelines in the
- (10) impact zone were either not oiled at all or lightly oiled and
- (11) therefore what we re really seeing today is sort of places
- (12) that you d call the worst of the worst Unless you knew where
- (13) to look unless you knew what beach to go to you would be
- (14) hard pressed to find anything
- (15) Q All right Let s talk about what happened to that oil and
- (16) let s start with surface oil first and then we ll go subsurface
- (17) oil Is there any surface oil left in the spill area?
- (18) A Yes there is Again if you know where to look and what to
- (19) look for
- (20) Q All right Let me show you DX1985 7 What does this
- (21) show?
- (22) A Well what this is is a rock that I brought back from a
- (23) beach near Eshamy Bay and I can tell you that I had to hunt
- (24) for this And the reason I was looking for this was that it
- (25) shows two black stains on it And often when you go out and

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- (1) look at an oil spill site you think anything that s black has
- (2) to be from the spill and what this is is a rock that has this
- (3) black lichen which is actually a living thing growing on this
- (4) rock which has - and you see lichen growing all over rocky
- (5) shores and on rocks in rocky shores
- (6) And what this is It s like what I showed you in the video
- (7) and it s a little - it s a little bit of remaining - called
- (8) asphalt coat and the way you can tell that it s from the spill
- (9) is that when this stuff was sort of fluid and sticky in 1989
- (10) the spruce trees in the Sound dropped their needles and a lot
- (11) of the stuff got coated with spruce needles And so when you
- (12) see sort of a black stain with spruce needles on it you know
- (13) that you re looking at sort of remnants from the spill and you
- (14) can kind of rub your hands over it - just lost a spruce needle
- (15) - and it s not oily And as you can see It s sort of on its
- (16) last legs but I wanted you to see something that s definitely
- (17) a surface coat from the spill and something that s definitely
- (18) not
- (19) Q How do you know this isn t?
- (20) A Well the simplest way is you can take some lighter fluid
- (21) or paint remover which I ve done in the field and rub it on
- (22) this and nothing comes off on your Kleenex
- (23) Q What is this?
- (24) A Well this is black lichen which is again a living thing
- (25) so it s not an oily film And if you were to take some paint

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- (1) remover and rub it on this your Kleenex would come off with a
- (2) brown stain on it
- (3) And I promise you won t get oil on your hands
- (4) Q All right Now I d like to show the jury DX8953
- (5) THE COURT We re going to take a break pretty soon
- (6) counsel You can pick the time
- (7) MS SMITH Okay
- (8) BY MS SMITH
- (9) Q Tell the jury where you got this
- (10) A There s an interesting story behind this rock and I ll
- (11) tell it very quickly This is a rock from a beach in Tattlek
- (12) which is in the - sort of above Bligh Island in the Sound and
- (13) in 19 - this year in fact June of 1994 I received a bunch
- (14) of photographs that Mr Bush had taken of rocks on this beach
- (15) Q Wait I don t know if you remember Mr Bush is Mr Bush
- (16) the plaintiffs oil guy?
- (17) A Yes he s the plaintiffs oil guy
- (18) Q Jim Bush okay Go ahead
- (19) A Well his pictures showed a bunch of rocks that had this
- (20) sort of black gooey type material on it and he asserted that
- (21) this was remnants of the spill and in fact it s not And
- (22) what we did is we went to this beach with the photographs of a
- (23) bunch of rocks with stuff like this on it and we actually found
- (24) a number of them and it was like a treasure hunted If
- (25) anybody s played Where s Waldo, that game where you re supposed

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- (1) to find the person in the crowd of people - but we found the
- (2) rock in fact this is the exact rock that is in one of his
- (3) pictures And we took samples from the same rocks that he had
- (4) sampled and sent for chemical analysis and what the results
- (5) showed is that this is stuff that you find all over the Sound
- (6) and it s interesting because it s like black chewing gum And
- (7) again it s just like the stuff you find in the cracks you
- (8) know in your supermarket parking lot and it s the remnants of
- (9) a spill of asphalt from tanks that they were using to build
- (10) roads and airstrips that had ruptured in Valdez during the 1964
- (11) earthquake and there was a lot of this stuff that was sort of
- (12) released in the Sound and landed on various rocks
- (13) And we see this black chewing gummy-type stuff You can
- (14) sort of take your fingernail and sort of dig around in it you
- (15) know this is Monterey type tar It s tar from California that
- (16) was spilled during the earthquake and because it was tar to
- (17) begin with it s kind of held out for a long time in certain
- (18) patches on the rocks Again it s totally inert and it s not
- (19) hurting anything but it can be confused with the spill And
- (20) again you won t even get dirty playing with it
- (21) MS SMITH Your Honor I ve got a couple of these
- (22) maybe we ll finish just so they can - the passing around can
- (23) be done then we ll go - then we ll take a break
- (24) THE COURT Sure
- (25) BY MS SMITH

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- (1) Q I show you DX1985 6 What are we seeing here?
- (2) A Well this is a rock that I brought back from Point Nowell
- (3) which is on the mainland in Prince William Sound and if you
- (4) look at pictures of rocky shores you see this sort of black
- (5) bathtub ring sort of around the top of the beach and what it
- (6) is this is an unusually heavy coat of black lichen It
- (7) happened to be in a place where it liked to grow and you can
- (8) take lighter fluid or paint thinner and it ~~can~~ clean off
- (9) which it would do if it were oil In fact even if you look at
- (10) it closely if you're nearsighted like I am you get a good
- (11) close look In fact it's living things and I'm just
- (12) bringing - brought this in to show you that everything that's
- (13) a black stain in the environment isn't related to oil spills
- (14) Q Is it still alive?
- (15) A These things are really tough and I wouldn't be a bit
- (16) surprised if those things are still alive because they only
- (17) need an occasional spray from the waves to keep them going
- (18) Q All right and I show you DX1985 2 the purple rock This
- (19) looks really gross Okay what is this?
- (20) A Well again as you walk around the shorelines you see
- (21) lichen you see algae and this is from the north end of
- (22) LaTouche Island and the little white things here are
- (23) barnacles and what - and sort of the purple color is
- (24) actually algae glowing on the rock but this dark circle here
- (25) - which looks just like a tar spot and you kind of feel it

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- (1) it feels like a tar spot - is an algae that grows all over the
- (2) intertidal zone and it has the name tar spot algae and if you
- (3) didn't know that you would kind of cruise along and think
- (4) there was an oil spot there but In fact if you look really
- (5) closely you're nearsighted like I am you can see this is dark
- (6) green and not black
- (7) Q What's the white stuff?
- (8) A These are barnacles
- (9) MS SMITH Your Honor I move the admission of
- (10) DX1985 7 8953 1985 6 and 1985 2
- (11) (Exhibits DX1985 7 DX8953 DX1985 6 and DX1985 2 offered)
- (12) MR GARGAN No objection
- (13) THE COURT They're admitted
- (14) (Exhibits DX1985 7 DX8953 DX1985 6 and DX1985 2 received)
- (15) BY MS SMITH
- (16) Q Now I show you a famous exhibit in this case It's
- (17) plaintiffs exhibit 1536 Mr Stoll's mouse patty that I asked
- (18) the plaintiffs to bring in He showed it to four Kodiak
- (19) witnesses Have you seen this before today?
- (20) A Yes I have
- (21) Q Did you - when you examined it did you think it was from
- (22) the Exxon oil spill?
- (23) A No I didn't
- (24) Q And why not?
- (25) A Well again the first thing that chemists do when they are

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- (1) presented with a sample like this is they smell it and - and
- (2) North Slope crude is a high sulfur crude and it has a very
- (3) characteristic sulfury smell and if you're a chemist chemists
- (4) like to smell things this smells like lube oil smells like
- (5) grease and it doesn't smell like it has sulfur in it at all
- (6) so that's the first thing
- (7) The next thing that chemists do is they kind of take some
- (8) of it and they touch it And when you take it and you rub it
- (9) between your hands like - my fingers like this it feels just
- (10) like shoe polish and in fact this stuff is pretty good shoe
- (11) polish because I've used it on my shoes and the reason is is
- (12) it's a very waxy petroleum product It doesn't - it has very
- (13) little in the way of aromatic hydrocarbons in it and it's
- (14) mostly these long chain waxy molecules that are In fact used
- (15) to make shoe polish
- (16) And then to sort of confirm that my sort of qualitative
- (17) estimation of what this is was correct I asked that this be
- (18) subjected to a very extensive battery of chemical tests
- (19) Q And what did it turn out to be?
- (20) A Well that's another interesting story because it turns
- (21) out that first of all this is a low sulfur high wax it's
- (22) either a bunker oil burned in large ocean going vessels like
- (23) factory ships for fishing fleets from Asia or it's a very
- (24) interesting crude oil that somehow got released that was very
- (25) heavy Because it's low sulfur it can't be from the spill

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- (1) and we've actually traced it Its most probable source is an
- (2) oil field in Malaysia And clearly because of its nature it
- (3) doesn't look anything like what you'd see from the spill
- (4) MS SMITH All right this would be a good time for a
- (5) break I gather the jury's already seen this one time we'll
- (6) pass on doing it again Thanks
- (7) THE COURT Take a break
- (8) THE CLERK Please rise This court stands in
- (9) recess
- (10) (Jury out at 9 42 a m)
- (11) (Recess from 9 42 a m to 10 01 a m)
- (12) (Jury in at 10 01 a m)
- (13) THE CLERK Please rise This court now resumes its
- (14) session
- (15) Please be seated
- (16) BY MS SMITH
- (17) Q Dr Page have you found any other sources of oil spill in
- (18) the spill - of oil in the spill area?
- (19) A Well I found both natural sources of petroleum in the
- (20) spill zone and also human sources of petroleum in the spill
- (21) zone that aren't related to the oil spill
- (22) Q All right let's start with the human Let me show you
- (23) DX9227 And you can tell the jury what it is What are we
- (24) looking at here?
- (25) A When you go around Prince William Sound what you see are
- a

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- (1) lot of places where there has been former activity canneries
 (2) sawmills mines This is the remains of an old fish processing
 (3) plant and happens to be in Sawmill Bay What happened to all
 (4) these places in 1964 they just got totally wiped out as did
 (5) the town of Valdez And in Prince William Sound even to this
 (6) day petroleum is the major source of power and so that you
 (7) have diesel generators at the villages generating electricity
 (8) You have fishing boats you have ~~large~~ ships and anywhere
 you
 (9) have human activity you have a certain amount of petroleum
 (10) being released whether it's pumping your bilges from a fishing
 (11) boat or a large vessel or whether it's a leaking tank
 (12) And this place is called Port Ashton and it's in Sawmill
 (13) Bay And if you go about a mile that way in this picture
 (14) you're at new Chenega Village And if you go about a half a
 (15) mile in this direction in this picture you're at the
 (16) hatchery the salmon hatchery in Sawmill Bay And what you
 had
 (17) in 1964 is three large fuel tanks There was one behind this
 (18) tree and these - they ruptured and when they ruptured the
 (19) contents of the tanks just cascaded down- along with a lot of
 (20) other tanks in the Sound cascaded down this hill across this
 (21) beach And even to this day you have this sort of black river
 (22) of oil cascading down and you have a subsistence area of
 (23) mussels a few hundred yards to the east where the Oil Spill
 (24) Health Task Force took mussel samples in 1990 I think it was
 (25) and you can find in those mussels petroleum residues from the

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- (1) spill but again as levels that don't cause any harm to
 (2) animals that eat them
 (3) Q Okay let me show you DX554A Is this a closer look?
 (4) A You can see the same tanks here and what this simply shows
 (5) is me again This is taken in 1993 during our shoreline
 (6) survey This is Dr Jerry Neff and this is my long time
 (7) colleague Ed Gilfillan And we're about to ascend this slope
 (8) and make our way up to investigate these tanks And again
 (9) this is a - a large oil spill which has sort of stayed
 (10) uncleaned up since 1964
 (11) Q Okay I'm not sure if we're showing the jury the back of
 (12) somebody we'll have anything to do with but is Dr Neff going
 (13) to testify right after you?
 (14) A Yes
 (15) Q And how about your partner Dr Gilfillan that you keep
 (16) talking about?
 (17) A Yes it's sort of one two three
 (18) Q You'll recognize them from the back okay
 (19) Now you talked about natural oil seeps What are you
 (20) talking about when you say a natural oil seep?
 (21) A Well again petroleum is something that is a natural
 (22) product It's produced by the breakdown of plant and animal
 (23) matter that was laid down you know millions of years ago and
 (24) the coast of Alaska is remarkable because of the - because
 (25) you have this sort of tectonic activity the plates moving

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- (1) around and faults and cracks that go very deep and you have
 (2) oil bearing formations because they produce oil in Cook Inlet
 (3) offshore There are many natural oil seeps all along the coast
 (4) of Alaska where oil comes naturally out of the ground and goes
 (5) into the streams and into the intertidal zone and breaks down
 (6) naturally and it's part of the environment that the plants and
 (7) animals there live in
 (8) Q All right And have you prepared a video on natural
 (9) seeps?
 (10) A Yes And in 19- - last year 1993 and again this year I
 (11) was fortunate enough to be able to actually go out in the field
 (12) and visit a bunch of natural oil seeps both seeps east of
 (13) Prince William Sound kind of upstream of the Alaskan Coastal
 (14) Current and a whole bunch of seeps on the Alaska Peninsula
 (15) west of Kodiak and I wanted to bring in just a short video to
 (16) show you what these places are like
 (17) Q All right I show you DX13803 And why don't you tell the
 (18) jury what they're seeing
 (19) (Videotape Played)
 (20) A Now this again is a video that I had put together and the
 (21) important thing is the people have known about these oil seeps
 (22) for a long time because before they understood how to drill
 (23) for oil and look for oil they looked for oil seeps and drilled
 (24) there So there's a whole bunch of reported seeps in the east
 (25) along the Alaskan Peninsula

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- (1) Here's Prince William Sound Sediment coming down from the
 (2) glaciers and the rivers here picks up petroleum from these
 (3) seeps carried by the Alaskan Coastal Current into Prince
 (4) William Sound as we'll talk about where it's deposited in the
 (5) subtidal areas
 (6) First we're going to go to the Alaskan Peninsula and the-
 (7) to a place called Oil Creek And I will tell you that I've
 (8) been to three oil creeks in coastal Alaska It's not an
 (9) uncommon name This is Puale Bay Oil Creek is a stream
 where
 (10) ADF&G count salmon and this is an index stream where salmon
 (11) are known to spawn This is what an oil seep looks like You
 (12) can see me giving my hand to science to show you that the stuff
 (13) that's bubbling out is natural gas because you can light it.
 (14) And I'm also - and I'm kind of spooning stuff away from this
 (15) to show you that this crude oil that's coming out is coming out
 (16) continuously And it's in this meadow and it's kind of going
 (17) down a hill here to a lake where you have a lot of tar Oil
 (18) Creek is in the background and to get down to Oil Creek from
 (19) where I was you have to walk across this field where you have
 (20) all of these tar seeps and what's coming up is actually -
 (21) it's like roofing tar and it's remarkable because grass is
 (22) growing up through it and it looks like - almost like a plowed
 (23) field which is what I thought it was at first And you can
 (24) take the stuff and sort of break it apart in your hands because
 (25) it's very heavily weathered even though it's tar because this

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- (1) was a particular seep that had stopped seeping
- (2) This is one that's active and you can actually sort of
- (3) walk on the stuff and hopefully not go through. Again you can
- (4) see grass growing up through it because it's biologically
- (5) inert and it has the consistency of roofing cement or road
- (6) tar and this is what a tar seep looks like
- (7) And tar balls kind of as you'll see in a minute originate
- (8) from these seeps and work their way down the sea from Oil
- (9) Creek. Along the bank of Oil Creek - this is a 1993 picture
- (10) There's Ed Gilfillan - all along the bank you have places
- (11) where there's continual seepage. And this looks just like a
- (12) pretty sort of coastal Alaskan stream except it happens to
- (13) have oil seeping out of the banks but you have wild flowers
- (14) you have small fish in the stream that I've seen and yet
- (15) there's this constant sheening
- (16) Here's a tar ball that we found sort of working its way
- (17) downhill
- (18) Can you just hold that for a minute?
- (19) Tar kind of oozing out of the banks of streams like these
- (20) - and there are many streams like these in the Alaskan
- (21) Peninsula - work their way down to the sea and this is just
- (22) one big one but I'm sure there were lots of small ones that we
- (23) didn't see. When you are walking the beaches along this part
- (24) of the Alaskan Peninsula and find a tar ball you can't
- (25) automatically say - assume it came from some vessel in an area

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- (1) where you have this natural seepage because when we went
- (2) back
- (3) in 1994 - this year in fact - to this very spot this tar
- (4) ball was gone so presumably it had sort of worked its way
- (5) downstream
- (6) And I'm just kind of showing you that it's in fact a tar
- (7) ball and not a piece of dirt. All along the shore of Oil Creek
- (8) you have these little sort of boulders where sort of oil's
- (9) naturally coming up out of the ground
- (10) Now this is an area - now we're going to where salmon
- (11) pink salmon and chums are known to spawn. They've been
- (12) observed to spawn in the gravel in this stretch of the creek
- (13) And what I'm doing here is digging around in the gravel in the
- (14) middle of the creek. And you can dig around anywhere in there
- (15) and you can pull up oil sheen and just because you see an oil
- (16) sheen in a place like this doesn't mean that it's doing bad
- (17) things to the plants and animals because whatever amount of
- (18) petroleum is in this stream it's clearly not having an adverse
- (19) effect on the salmon spawning in it because this is in fact
- (20) a stream that has a lot of salmon that spawn in it. It's a
- (21) large index stream
- (22) And here's some more. And if you sort of look down toward
- (23) the ocean, Shelikof Straits you know in the background you
- (24) can sort of follow this downward. It's actually a very pretty
- (25) place
- (26) Barbara Creek which is again on the Alaskan Peninsula is

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- (1) near Becharof Lake and it's part of a series of salmon streams
- (2) that have seeps on them that feed into Lake Ugashik and out
- (3) into Bristol Bay and it's a sockeye salmon spawning stream
- (4) In other words sockeye salmon are known to spawn along the
- (5) entire length of Barbara Creek
- (6) And this all along here this is one of a number of seep
- (7) areas that feed into Barbara Creek and this is - we're now
- (8) down on the active seep and it's again a remarkable place that
- (9) sort of oil is coming out of the ground naturally. There are a
- (10) number of old oil camps from the 1920s because people went
- (11) here
- (12) because they knew the seeps were there and tried drilling to
- (13) see if they could get oil
- (14) The stuff flows down the hill through a grove of pussy
- (15) willows and alders down the stream and it's a continuous
- (16) flow. And again whatever's coming down here from the seep
- (17) is
- (18) not having an adverse effect on the environment below. This is
- (19) natural crude oil at Oil Creek and in a second - now this
- (20) little stream from the seep is joining Barbara Creek where the
- (21) salmon spawn and this is a natural part of this environment
- (22) And now we're looking again in the creek proper and this
- (23) is a typical upland sockeye salmon spawning stream where
- (24) salmon
- (25) have been observed spawning all along here
- (26) Next we're going to go to Well Creek and the reason it's
- (27) called Well Creek is because there are seeps there and people
- (28) drilled for oil nearby in the 20s and it's called Well Creek

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- (1) and it's on the Iniskin peninsula here. Here's Cook Inlet and
- (2) Well Creek has a number of seeps nearby and it feeds into a
- (3) place called Oil Bay and it's associated with a salmon
- (4) spawning stream where salmon have been measured to spawn
- (5) it's
- (6) a typical very pretty coastal Alaskan meadow. There's a
- (7) beaver dam there so the meadow is very wet. And along one
- (8) side of it you see oil sheen next to the shore where the oil
- (9) seeps are next to a ridge or a fault along the north side of
- (10) it and you can actually skim oil off the surface of the seep
- (11) area as you would sort of fat off the surface of gravy. And
- (12) it's a pretty kind of light brown material much like Cook
- (13) Inlet crude. In fact it's very similar
- (14) And when you you know look a few yards away from where
- (15) the seep is - you can see juvenile fish of some kind swimming
- (16) in Well Creek proper and so whatever is going on in the seep
- (17) area is not having an effect on the plants and animals in this
- (18) area
- (19) Now east of Prince William Sound there's a whole bunch of
- (20) oil seeps along the Yakutat Peninsula and the Katalla area
- (21) here. Bering River and the Copper River area and we'll visit
- (22) just one Johnston Creek which is part of a very extensive
- (23) coho salmon habitat. Again which has been surveyed by
- (24) ADF&G
- (25) This is a bunch of salmon streams. Here's Johnston Creek
- (26) and as you can see it's carrying a lot of sediment and with
- (27) the sediment you have petroleum associated or sequestered in

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- (1) that sediment and when you go up into the seep area of Johnston
- (2) Creek up into the woods above the shore you find this little
- (3) stream where the oil seep was like the place where I tried to
- (4) light my hand -
- (5) Q Is that mousse?
- (6) A Yeah that's mousse And it flows down there's some skunk
- (7) cabbage and you often see with ~~eros~~ ^{eros} of this sort iron-colored
- (8) sediment associated with the produced waters and then again
- (9) flows down through a little meadow And then on the other side
- (10) of the grass here you have Johnston Creek and then we know
- (11) that this stuff gets down to the ocean because down where the
- (12) salmon are in the gravel you simply have again sheen in
- (13) spots And so it - this means that oil sheen doesn't tell you
- (14) that there's stuff there that's destroying everything It's
- (15) simply below levels at which it - whatever it is below which
- (16) it causes harm to plants and animals And again this is in
- (17) the area where salmon are known to live in this stream
- (18) Here's me again pointing to the confluence of Johnston
- (19) Creek with all these other salmon streams and flowing out into
- (20) the ocean there
- (21) So that's really a quick summary of my oil seep visits and
- (22) I think it's interesting that oil occurs naturally in the
- (23) environment in many places in Alaska
- (24) (Videotape Concluded)
- (25) Q How do you know that that petroleum gets into the Sound?

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- (1) A Well again one of the most interesting things about the
- (2) scientific studies that I've done over the last five years is
- (3) the fact that you can analyze the petroleum from these oil
- (4) spill areas around Yakataga and Katalla and they match exactly
- (5) with the stuff that you find in the depths of tidal sediments in
- (6) Prince William Sound Because what's happening is is that the
- (7) stuff we see kind of floating downstream gets tied up in
- (8) sediment that's carried from the land and the sediment is
- (9) carried along the Alaskan Coastal Current Some of it goes
- (10) into the Sound and because the current slows down into the
- (11) Sound it sediments out And we know that the sea floor
- (12) sediments of Prince William Sound come from the east because
- (13) actually geologists at the University of Alaska have shown
- (14) that
- (15) And so there's a real link between these seeps and this
- (16) large natural petroleum background in the subtidal areas of
- (17) Prince William Sound
- (18) MS SMITH Your Honor I offer DX9227 554 A and
- (19) 13803 for admission
- (20) (Exhibits DX9227 554-A and 13803 offered)
- (21) MR GARGAN No objection
- (22) THE COURT They're admitted
- (23) (Exhibits DX9227 554 A and 13803 received)
- (24) Q I want to show you DX1369 And can you tell the jury what
- (25) that is? It looks like a red and blue blob

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- (1) A Can everybody see this all right? This is a Landsat
- (2) satellite image again pointing straight down And again
- (3) it's an infrared picture so the colors look funny and what
- (4) this shows is here's Prince William Sound Here's Knight
- (5) Island and here's Montague Island and what you're seeing
- here
- (6) is sort of just the corner of the Copper River Delta
- (7) The Copper River is a very - is a very large river that
- (8) flows into coastal Alaska east of Cordova Cordova is over in
- (9) here And what this shows this light stuff here is actually
- (10) the plume of suspended sediment that's carried by the Alaskan
- (11) Coastal Current from the east to the west and what happens is
- (12) because the current splits some of this sediment in fact is
- (13) carried into the Sound You can actually see it sort of
- (14) pluming up into the Sound
- (15) Now like most things in Alaska this process is - it goes
- (16) on on a huge scale because Copper River Delta for example
- (17) they've estimated over a hundred million tons of sediment goes
- (18) into this coastal current every year which is mind boggling
- (19) but when you think about all the glaciers which are grinding up
- (20) the mountains and feeding sediment into this river you can see
- (21) that some sediment comes from farther east in the seep areas
- as
- (22) well and then dropping down into the sea floor itself
- (23) Q Now we've talked about surface oil and you've showed us a
- (24) man made and you've showed us a natural oil and you've
- showed
- (25) us things that don't look like oil - that look like oil that

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- (1) aren't oil What's the take-home message for the jury on this?
- (2) A Well after doing this stuff for 20 years studying oil
- (3) spills as my research interest one thing I've learned is you
- (4) have to have a very open mind when you go out in the field and
- (5) look at things One of the biggest mistakes you can make is
- (6) assuming that anything you see that's different is related to
- (7) the oil spill
- (8) For example If you simply went out in the subtidal areas
- (9) of Prince William Sound and found petroleum down there
- because
- (10) it is petroleum and didn't stop to think that it might not be
- (11) your spill petroleum you could be making a big mistake So
- (12) that you have to constantly question your assumptions and
- (13) conclusions when you're doing this kind of work
- (14) We've seen that - sorry
- (15) Q But you're not saying there's no surface oil left from the
- (16) Valdez spill are you?
- (17) A I'm talking -
- (18) Q You're not telling the jury that are you?
- (19) A No I'm saying it's part of a number of other sources now
- (20) in Prince William Sound and I'm not saying that there isn't
- (21) any oil left from the Exxon Valdez oil spill
- (22) Q Now the oil that's left from the Exxon Valdez on the
- (23) surface is it going away?
- (24) A Yes
- (25) Q How does it go away?

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- (1) A Well again it weathers by a variety of processes
 (2) physical evaporation initially and now what's happening is
 (3) it's biodegrading which is the fate of all organic matter
 (4) Q Is it hurting anything?
 (5) A No
 (6) Q Do you really expect us to believe this?
 (7) A Well you know -
 (8) MR PETUMENOS I'm sorry Judge - I can't hear her
 (9) when she's - could you keep your voice up? I can't hear you
 (10) MS SMITH Sure
 (11) BY MS SMITH
 (12) Q Do you really expect us to believe this? -
 (13) A All I can say is when you go over the oil spill literature
 (14) and if you look at past oil spills over the last 40 years you
 (15) can see that you know the same thing happens You know
 (16) there's an impact the environment suffers and then it gets
 (17) better
 (18) I mean for example World War II in 1942 in the first six
 (19) months of 1942 on the East Coast of the United States German
 (20) U boats sank enough vessels to have two Exxon Valdez size oil
 (21) spills and the East Coast was awash in oil yet you know you
 (22) don't hear about long-term damages due to that And I think
 (23) it's fair to say that oil spills are episodic and every study
 (24) that we have that sort of withstood the test of time says that
 (25) and so I'm speaking as a - as a person that does this as part

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- (1) of his research
 (2) Q Okay Let's talk about subsurface oil that's the stuff
 (3) underneath is Prince William Sound floating on a sea of
 (4) subsurface oil?
 (5) A No It certainly is not
 (6) Q All right I'm going to show you DX8641AA Tell the jury
 (7) what this shows
 (8) A In 1993 what this shows is a summary of some of the
 (9) results of the survey that a team of surveyors did for Exxon in
 (10) 1993 The purpose of the survey was to map out remaining
 (11) deposits of subsurface oil in Prince William Sound and
 (12) elsewhere in the Gulf of Alaska
 (13) To do that these people surveyed 30 miles of kind of the
 (14) remaining shoreline where there was concern about remaining
 (15) oil
 (16) in 1993 They dug over 1700 pits in the beaches to map out
 (17) that subsurface oil and I think they did as thorough a job as
 (18) is humanly possible And when you look over their reports
 (19) when you look over their data the interesting thing is that
 (20) you find that most of the subsurface oil - which again as I
 (21) showed you at Point Helen - is in a location well under the
 (22) beach where it's not in a position to do harm to biota
 (23) subsurface oil
 (24) MR FORTIER Excuse me Your Honor I apologize for
 (25) interrupting the witness but I'd like to approach - I object
 (26) to this testimony I believe there is a stipulation If I

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- (1) could approach the bench
 (2) (At side bar on the Record)
 (3) MR FORTIER Your Honor there was a stipulation that
 (4) was entered with regard to another witness by the name of
 (5) Mr Teal I just received back yesterday the - your order
 (6) regarding the stipulation There was to be no testimony
 (7) regarding a subsurface oiling pit study that was conducted in
 (8) 1993 because the report had been withdrawn
 (9) THE COURT Do you deny that?
 (10) MR DIAMOND No there was a stipulation that
 (11) Mr Teal would not talk about that
 (12) THE COURT Okay let's see the stipulation
 (13) MR FORTIER It was Mr Teal and all other -
 (14) THE COURT Let's see it.
 (15) MS SMITH Your Honor in connection with the cross
 (16) of this witness they designated PX688 which is about 25 pit
 (17) pictures that I assume they're going to use for
 (18) cross-examination
 (19) THE COURT Of this particular witness?
 (20) MS SMITH Yes yes
 (21) MR FORTIER Your Honor I don't believe that the -
 (22) whether or not that's been designated and whether or not it
 (23) will be used are two different questions
 (24) THE COURT Yeah but let's see the stipulation
 (25) Where is it?

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- (1) MR FORTIER Your Honor I'm unable to produce the
 (2) stipulation right now I didn't bring it I thought this
 (3) would come up with another witness I had no idea it would
 (4) come -
 (5) MS SMITH I was unaware of the issue I tell you
 (6) there's nothing he needs to say I mean I didn't even know he
 (7) was going to say this He's not the pit -
 (8) THE COURT Tell him to stay away from it and we'll go
 (9) on
 (10) MR FORTIER Can we have an instruction Judge?
 (11) THE COURT Absolutely not counsel You show me the
 (12) stipulation before that
 (13) MR FORTIER I will I apologize Judge
 (14) (Sidebar concluded)
 (15) BY MS SMITH
 (16) Q Why don't you go on and tell us again what this exhibit
 (17) shows pick up from where you left off
 (18) A Well it simply shows something that you see in any oil
 (19) spill Namely within four years after the spill your sort of
 (20) your worst of the worst places you become very limited in
 (21) number they become few and far between and irrespective of
 (22) these percentages of you know subsurface oil and in terms of
 (23) what was observed the important thing is is that what's there
 (24) is concentrated into a handful of places and we've heard about
 (25) these places over and over again

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- (1) Sleepy Bay Northeast LaTouche Island Point Helen Smith
 (2) Island and this little place by Knight Island and the reason
 (3) why these got heavily oiled in the first place is that when the
 (4) oil worked its way south out of the Sound these north facing
 (5) beaches the north end for example of this Knight Island
 (6) Eleanor Island group here these got heavily hit
 (7) This point here got heavily hit Point Helen which I
 (8) showed you got heavily hit and the north end of LaTouche
 (9) Island in particular because it was facing the stuff coming
 (10) down and because it's like a catcher's mitt to the stuff got
 (11) really heavily hit And so that's why today you know when
 (12) you talk about sort of you know remaining oil residues you
 (13) usually hear about this handful of places
 (14) Q And is the oil that's under these locations is that the
 (15) same as the oil that came out of the Valdez in 1989?
 (16) A No In fact I've dug you know in Point Helen and I've
 (17) dug in Sleepy Bay and I've dug in northeast LaTouche and I
 (18) can
 (19) tell you that the stuff is very heavily biodegraded which is
 (20) what happens to oil in the environment So it doesn't really
 (21) resemble - there's not this vast sort of sea of oil under
 (22) these beaches waiting to be released
 (23) Q All right On the - on the theory of oil lurking around
 (24) Mr. Bush talked to us about swash bars and oil lurking under
 (25) swash bars Do you agree with that?
 (26) A No I don't

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- (1) Q Why not?
 (2) A Well first of all beaches - gravel beaches in particular
 (3) - move around naturally If you have a large storm it kind
 (4) of moves rocks around and in Prince William Sound you sort of
 (5) move the same rocks around because there aren't new rocks
 (6) coming into these beaches and so that you can have say in
 (7) 1989 some surface oil on a beach covered over by gravel in a
 (8) storm and then the next year it can be exposed by another
 (9) storm And - and this whole notion of swash bars preventing
 (10) oil from breaking down doesn't make sense because what
 (11) happens
 (12) to any organic matter that's buried - and you can see this
 (13) going on at the top of all beaches with dead and decaying
 (14) seaweed - is that it breaks down naturally as long as air can
 (15) get at it And at low tide because these beaches are very
 (16) porous you have sort of a perfect situation for this stuff to
 (17) compost
 (18) In fact in this East Chenega site that he surveyed and
 (19) talked about in his testimony as having a swash bar he - he
 (20) went on to say that he dug down to his original layer and
 (21) couldn't find any oil and what happened to it It simply
 (22) biodegraded away In fact we saw that in a number of
 (23) locations in France during our eight years of studying the
 (24) Amoco Cadiz spill it went away naturally
 (25) Q All right How do you know how much oil is left on the
 (26) shorelines in the spill area?

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- (1) A Well I have a pretty good idea of what is going on with
 (2) the shorelines because I've been studying them for five years
 (3) now
 (4) Q All right Could you tell the jury about your work on the
 (5) Shoreline Ecology Program? How did the program get started?
 (6) A Well again this is a - I'm here as a person who does oil
 (7) spill research as part of my scholarly interest, and in 1989 I
 (8) was asked to be part of a group of - of advisors on scientific
 (9) studies for Exxon And then that group which my colleague
 (10) Dr. Gilfillan was a part of sat down in 1990 and designed a
 (11) group of scientific programs to measure the fate and effects of
 (12) the spill on the shorelines particularly the intertidal
 (13) shorelines of Prince William Sound and the Gulf of Alaska
 (14) Q All right And let me show you DX14002A.2 Tell the jury
 (15) what this shows
 (16) A Well first of all it shows Prince William Sound and it
 (17) shows the spill area in Prince William Sound And what the
 (18) initials SRS stand for is Stratified Random Sampling And what
 (19) we did in 1990 was we randomly selected 64 beach segments
 (20) hundred yards wide to go and study intensively as part of this
 (21) program These randomly selected sites - and you can see
 (22) they're sort of evenly spread out throughout this area these
 (23) randomly selected sites were selected over four major beach
 (24) types in Prince William Sound and those major beach types are
 (25) exposed rocky shores of which there are a lot, sheltered rocky

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- (1) shores of which there are a lot boulder-cobble beaches and I
 (2) showed you a boulder-cobble beach at Point Helens of which
 (3) there are quite a bit and then mixed pebble/gravel beaches
 (4) which is what we think of when we think of a beach and only
 (5) about less than four percent of the shorelines of the Sound are
 (6) kind of what we normally think of as beaches
 (7) In addition to sort of randomly selecting from among four
 (8) shoreline types which accounted for most of the shoreline we
 (9) also did it over four oiling levels heavy initial oiling in
 (10) 1989 moderate light and none And the reason you have to
 (11) study shorelines that aren't oiled is you don't know what an
 (12) oiled shoreline is supposed to look like when it's recovered if
 (13) you don't study unoiled shorelines at the same time
 (14) Q What did you do at each of the 64 sites?
 (15) A Well what we did was we went out and we did a very
 (16) thorough set of chemical biological and toxicological tests on
 (17) sediments and critters from the beaches and we did extensive
 (18) sampling Let me just say the keynote - the keystone of this
 (19) exhibit is the word random because when you're doing a
 (20) study
 (21) which is going to tell you how far along the road to recovery a
 (22) spill zone is in 1990 when we did the study it's a lot like
 (23) taking a public opinion poll where you're sort of asking the
 (24) Sound how do you feel in 1990 And if you don't select your
 (25) locations randomly then you run the risk of bias and you
 (26) know bias I think is one of the biggest problems in doing

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- (1) environmental studies sample bias
 (2) Q All right Now that I just wrote all over myself when you
 (3) survey a site tell the jury what you do
 (4) A Well okay You have 64 hundred-yard stretches of
 (5) shoreline that were randomly selected went to each one and
 (6) here's the woods here's the water And we went at low tide
 (7) always because what we wanted to do was sample a bunch of
 (8) zones on this shoreline And to do that we set out three
 (9) transects or study lines down the beach and the positions of
 (10) these were randomly chosen as well
 (11) And so we had to go to a lot of trouble to make sure we
 (12) didn't have any bias and we had our upper intertidal zone we
 (13) had our middle intertidal zone we had our lower intertidal
 (14) zone and then we had a station subtidally at minus six feet
 (15) underwater and one out here between ten and thirty feet And
 (16) so we were sampling nearshore subtidal as well as intertidal
 (17) and at each place what we did was we took sediment samples for
 (18) chemical analysis We took a big sediment sample to expose to
 (19) oil sensitive organisms to see how toxic the sediment was and
 (20) we took sediment samples to strain out all the critters living
 (21) in the sediment
 (22) Obviously you can't take sediment on a rocky shore and
 (23) when we did rocky shores we had the same setup but we
 (24) actually took a square yard of rock surface at each one of
 (25) these sites and sampled it for critters petroleum residues if

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- (1) present and we couldn't do toxic because we couldn't get a
 (2) sample to do that
 (3) Q All right After you went to all of these 64 sites and did
 (4) all the tests you described and did this kind of surveying
 (5) what did you conclude?
 (6) A Well by 1990 we concluded that between - depending on
 (7) how you calculate it between 73 and 90 percent of the intertidal
 (8) shoreline of Prince William Sound had recovered from the
 (9) spill And that means that the plants and animals on oiled
 (10) shorelines were largely indistinguishable from plants and
 (11) animals on shorelines that were not oiled our unoiled
 (12) reference shorelines in between 73 and 90 percent of the
 (13) cases Now what that says is by 1990 most of the shoreline of
 (14) the Sound is well on the way to recovery as far as all of the
 (15) intertidal zones
 (16) Secondly the toxicity studies that we conducted told us
 (17) that what residues were there were largely nontoxic because
 (18) again they had degraded and weathered over the 15 months or
 (19) so
 (20) since the spill Except for that a handful of places they
 (21) were really not in a form that could do adverse things to
 (22) plants and animals
 (23) Q All right As a person who's studied oil spills for 20
 (24) years did that conclusion that it essentially was recovering
 (25) by 1990 surprise you?
 (26) A No And the reason is very simple If you think back

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- (1) most of the shoreline in the spill zone was lightly oiled and
 (2) what that means is that in fact over 70 percent was lightly
 (3) oiled and therefore recovered quickly and you know we're
 (4) not talking about a handful of the worst of the worst type
 (5) places because the odds of picking one of those randomly
 (6) when
 (7) you do a random survey are very slim But if you're talking
 (8) about this whole shoreline you'd expect it to recover rapidly
 (9) because it was either not oiled at all or lightly oiled
 (10) Q All right Let me show you DX13808 and DX13810 Let's
 (11) start with 13808 which is right here What are we seeing?
 (12) A Okay This is one of our 64 random sites I could point
 (13) it out to you on the map over there but it's gone This
 (14) happens to be a mixed pebble/gravel beach It's kind of what
 (15) we think of when we think of a beach and this was lightly
 (16) oiled in 1989 and when - and this is a picture taken of the
 (17) beach in 1994 when we sampled this beach in 1990 15 months
 (18) after the spill Again you couldn't tell the difference
 (19) between this beach and a beach that hadn't been oiled
 (20) because
 (21) in the intervening winter you know whatever was there was
 (22) gone and there wasn't enough adverse impact initially to
 (23) affect the critters living there
 (24) Q All right Is this on a parcel owned by Chugach?
 (25) A Yes it is It's on the southern part of LaTouche Island
 (26) Q And by 1990 you found it to be recovered?
 (27) A Yes

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- (1) Q All right How about the other one defense 13810?
 (2) A Again this is a place called Wilson Bay on the southwest
 (3) coast of LaTouche Island and you can find this because a
 (4) place
 (5) called Chicken Island is sort of over here where the microphone
 (6) would be if you were out in the field And this is an example
 (7) of a little boulder-cobble beach which was lightly oiled in
 (8) 1989 and by 1990 it again was indistinguishable from a
 (9) reference beach You can see how - at low tide how lush kind
 (10) of the fucus in the lower intertidal zone is along these
 (11) beaches in the Sound
 (12) Q In your Shoreline Ecology Program did you also go to 12
 (13) sites that weren't random?
 (14) A Yes And the reason we did that was as my sort of SRS map
 (15) showed you that the odds of randomly selecting a worst of the
 (16) worst type site is pretty slim and we wanted to make sure that
 (17) we covered the worst of the worst type places so we picked a
 (18) bunch of these nonrandomly to go to over time
 (19) Q All right let's put up DX140028 1 What is this?
 (20) A Okay this shows the locations of the fixed and setaside
 (21) sites Let me just tell you that the fixed sites are
 (22) nonrandomly chosen and they cover the north end of
 (23) LaTouche
 (24) Island which again was very heavily oiled and many people
 (25) have
 (26) talked about
 (27) Point Helen which we've talked about a place in the Bay
 (28) of Isles here which we'll talk about Shelter Bay here on

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- (1) Evans Island and setaside sites refer to sites that in 1989 and
 (2) 90 were not cleaned up on purpose as directed by federal and
 (3) state scientists so that people could study the effect of
 (4) cleanup versus no cleanup And so some of these fixed sites
 (5) like this one here on north LaTouche in fact was a setaside
 (6) site in that it was never cleaned up on purpose
 (7) Q All right and are these what we have called before the
 (8) worst of the worst?
 (9) A These are the worst of the worst
 (10) Q And what did you conclude about the 12 worst of the worst?
 (11) A Well we followed these over time Many of these we had
 (12) data from 1989 We went out in 1990 and 1991 did the same
 (13) things that we did on these random sites that I talked to you
 (14) about and sampled some of them in 1993 And what you find
 (15) even at these heavily oiled sites as you would predict from
 (16) other oil spills the oil was breaking down naturally and going
 (17) away And in fact at many of these sites by 1993 they were
 (18) essentially at background And a handful three in fact were
 (19) recovering more slowly and they were the ones that we keep
 (20) hearing about Sleepy Bay setaside site on north LaTouche
 (21) that wasn't cleaned up and this little so-called Pocket Cove
 (22) at the Bay of Isles but the rest of these places were doing
 (23) very well
 (24) MS SMITH Your Honor I move the admission of
 (25) DX14002A 1 and DX14002A 2 DX13808 DX13810 DX8641AA
 and

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- (1) DX1369
 (2) (Exhibits DX14002A 1 DX14002A 2 DX13808 DX13810
 (3) DX8641AA and DX1369 offered)
 (4) MR GARGAN No objection
 (5) THE COURT Those exhibits are all admitted
 (6) (Exhibits DX14002A 1 DX14002A 2 DX13808 DX13810
 (7) DX8641AA and DX1369 received)
 (8) BY MS SMITH
 (9) Q Were you asked to go out and take a look at ICF sites
 (10) chosen by Mr Bush?
 (11) A Yes I was
 (12) Q And when did you do that?
 (13) A We started doing it in 1992 and then we continued in 1993
 (14) and 1994
 (15) Q And what did you do at these sites?
 (16) A Well we did what we normally do when we go to a site in
 (17) other words in order to understand what's going on at a - at
 (18) a shoreline you have to go there at low tide so you can see
 (19) the whole beach So we'd normally go to a site on or before
 (20) low tide even if it was like 4 00 in the morning and - and
 (21) then survey it for two to three hours not only looking for
 (22) residues of remaining oil and characterizing them and
 (23) documenting them but also understanding how the beach
 worked
 (24) and what the critters are doing
 (25) Q And did you go out again in 1993?

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- (1) A Yes
 (2) Q And by that time had you read his report from his 1992
 (3) survey?
 (4) A Yes I had
 (5) Q Were you surprised by it?
 (6) A Well to be perfectly honest when I read Mr Bush's
 (7) report first I wasn't sure that we were talking about the same
 (8) places because many of our fixed sites in fact were places
 (9) that Mr Bush had studied and so I really wanted to go out in
 (10) the summer of 1993 and see these places for myself
 (11) Q All right So you went out in '93 Did you go out again
 (12) in '94?
 (13) A Yes I did
 (14) Q All right Dr Page I show you DX13205 and DX8986 If
 (15) you put the clip in the middle it holds it straight
 (16) All right are these maps of all the locations that you
 (17) went to in the Sound and in the Gulf of Alaska?
 (18) A Each one of those orange dots represents a place that I've
 (19) personally been to and between again 1989 and 1994 Some
 of
 (20) the places are so close together - it's not that I was skin
 (21) diving off the north coast of LaTouche here but the sites are
 (22) so close together that we just had to represent them There's
 (23) over 130 dots here that - different places that I visited
 (24) many of them more than once
 (25) Q All right And if there's just a dot here does that mean

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- (1) you've only been there once or could you have been there ten
 (2) times?
 (3) A Oh some places I've been to half a dozen times or more
 (4) Q All right And roughly how many days have you spent in the
 (5) field?
 (6) A I've spent about - close to 130 days of my life in the
 (7) field
 (8) Q Let me show you DX13198 which I think we'll put
 (9) anywhere
 (10) MS SMITH Actually while he's doing that Your
 (11) Honor I move the admission of 13205 and 8986
 (12) (Exhibits DX13205 and EX8986 offered)
 (13) MR GARGAN No objection
 (14) THE COURT They're admitted
 (15) (Exhibits DX13205 and EX8986 received)
 (16) BY MS SMITH
 (17) Q All right the jury's seen this before This is a map
 (18) showing all the Prince William Sound land claim parcels and
 (19) it's 13198 I think you've seen it a lot of times
 (20) Dr Page some of the parcels don't have any shoreline do
 (21) they?
 (22) A No they don't
 (23) Q And the famous one we always use in this case is Nellie
 (24) Juan over a here?
 (25) A That's correct

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- (1) Q And there is also Raging Creek and Glacier River Silver Lake?
- (2) A Yeah there s quite a number of parcels that are landlocked and not near any shoreline
- (3) Q I gather you didn t do any work there?
- (4) A No I - I didn't climb mountains and glaciers to look for oil
- (5) Q And the Eyak parcels that are on ~~the~~ east side of the Sound did you do any work there?
- (6) A No
- (7) Q Why not?
- (8) A Again as I showed you with that NOAA video there s simply no oil went over in this side of the Sound
- (9) Q And the same would be true of the Tatitlek parcels that are over here?
- (10) A Yes
- (11) Q What about the Tatitlek rock that Mr Bush found?
- (12) A Well again we did a lot of tests on that rock and it s not related to the spill It s related to the asphalt spill up here from the earthquake of 1964
- (13) Q Now you get your geography lesson You get to show the jury how much you know Do you know whether Growler Island ever got oiled?
- (14) A Growler Island - Growler Island Growler Island up here
- (15) No it didn t get oiled

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- (1) Q How about McCloud Harbor?
- (2) A McCloud Harbor is down here and that didn t get oiled
- (3) Q How about Nelson Townsite?
- (4) A Nelson Townsite is way up in Eyak Deep Bay and that did not get oiled
- (5) Q All right Nuchek Island?
- (6) A Nuchek Island is out here at the Hinchinbrook Entrance here and it did not get oiled
- (7) Q Passage Canal?
- (8) A Passage Canal is way over by Whittier and that definitely did not get oiled
- (9) Q And would the same be true of Shotgun Cove 1 and 2?
- (10) A Yes
- (11) Q Isn t it true that only two Chugach properties got oiled?
- (12) A Yeah that s correct There s one on Knight Island here and then there s the south LaTouche that I d mentioned earlier here
- (13) MS SMITH Your Honor we re about to go on to something else I can break or not break
- (14) THE COURT It s a perfect time
- (15) THE CLERK Please rise This court stands in recess
- (16) (Jury out at 10 55 a m)
- (17) (Recess from 10 55 a m to 11 14 a m)
- (18) (Jury in at 11 14 a m)

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- (1) THE CLERK. This court now resumes its session
- (2) Please be seated
- (3) BY MS SMITH
- (4) Q All right let s go to the two Chugach parcels where the shoreline was oiled and I show you DX13257
- (5) Dr Page what are we looking at?
- (6) A What we re looking at is a - the east shore of LaTouche Island and this is right here on this parcel Chugach LaTouche Island parcel and what you see is a very exposed shoreline
- (7) It s a long boulder-cobble beach It s almost a vertical shore because the mountains come almost right down to the shoreline
- (8) itself And it s exposed to the waves because it - even though Montague Island looks like it s sheltering it this is about five miles of open water and so it s like in front of everything And because storms often come from the southeast
- (9) it means that this shoreline gets - it s a great deal of wave energy and battering
- (10) Q All right Was this one of Mr Bush s sites?
- (11) A Yes it was
- (12) Q And what did he find there?
- (13) A Well in his 1992 report they state that not only didn t they find any trace of oil in 1992 but they didn't find any in 1989
- (14) Q Does that surprise you?
- (15) A No It doesn t because this again is a very exposed

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- (1) shoreline
- (2) Q Okay To the extent that the shoreline was lightly oiled is this representative of what could happen to a beach? Can it clean up?
- (3) A Shoreline like this where you have so much wave exposure yes
- (4) Q All right Let me show you the other Chugach parcel and that s become sort of famous in this case I show you DX8942
- (5) In evidence You go around I ll go under
- (6) Dr Page what are we looking at here?
- (7) A What we re looking at is this is a sort of a bird s eye view into the mouth of the Bay of Isles And the Bay of Isles is right here and it was heavily oiled over part of its shoreline at least in 1989 and it s one - I think it s one of the most beautiful places in Prince William Sound
- (8) Q Okay Did Mr Bush have a transect site here?
- (9) A Yes he did If you - go right down here there s a little place right here that he went to to study remaining oil in the Bay of Isles
- (10) Q All right Let me show you DX8943 in evidence Does the jury remember the orange tape? What is the orange tape?
- (11) A Well the orange tape is - was put on by Mr Bush to indicate the location of his study transect which actually goes down along a little seasonal stream that flows through this site

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- (1) Q All right Is this transect site is this area
 (2) representative of the Bay of Isles?
 (3) A No It's not representative at all
 (4) Q Why is that?
 (5) A Well what this place is is actually it used to be a
 (6) little pond probably because it's really a peat bog If you
 (7) dig down anywhere around here you hit a layer of peat like you
 (8) buy in the garden store peat moss That's characteristic of
 (9) the kinds of marsh At some time it got breached to the sea
 (10) It's now a little pocket cove where stuff floats in doesn't
 (11) float out Muddy little places like this are very uncommon in
 (12) Prince William Sound because it's such a rocky shore and in
 (13) fact it's so uncommon that we had to include it - we actually
 (14) had to include this as one of our nonrandomly chosen sites so
 (15) we could get to study it
 (16) Q What percentage of Prince William Sound is peat bog?
 (17) A It's basically zero percent because there are - you're too
 (18) many places past the decimal point It's a miniscule
 (19) fraction Much much less than a fraction of a percent
 (20) Q Have you prepared a video giving us a shoreline tour of the
 (21) Bay of Isles?
 (22) A Yes I have
 (23) Q All right let's take everything down and run it and it's
 (24) DX9228AA?
 (25) MR GARGAN Are you going to leave this one up?

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- (1) A Can the people in the corner see this all right past
 (2) that?
 (3) MS SMITH There's one behind it Chuck
 (4) (Videotape Played)
 (5) A What this is is that - this is - pretend you're an eagle
 (6) and you're flying along the shoreline of the Bay of Isles
 (7) This is what you'd see Again the Bay of Isles is here
 (8) These are again a number of places that we've talked about
 (9) and the Bay of Isles has 29 miles of shoreline which is like
 (10) the distance from here to Girdwood and we're going to fly
 (11) along it The Bay of Isles parts of it were heavily oiled
 (12) but it was uneven Parts of it were heavily oiled parts of it
 (13) were moderately oiled parts of it were lightly oiled and
 (14) parts of it weren't oiled at all and a lot of it was light or
 (15) very lightly oiled
 (16) And in 1994 it - it sort of - we're going to start here
 (17) and we're going to fly around here And we're not going to do
 (18) the whole 29 miles but I'm just going to show you a little bit
 (19) of it And this is done in May of 1994
 (20) Now we're at the mouth north side of the mouth of the Bay
 (21) of Isles and you can see the rocky coast and it's low tide
 (22) and you can see the very heavy color - cover of fucus this
 (23) green stuff in the lower part of these rocky shores And
 (24) here's the dark lichen and algae stain that you normally see on
 (25) rocky shores like this and every so often you have little

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- (1) pocket boulder-cobble beach And this part is very wave
 (2) exposed and therefore gets a lot of battering from the -
 (3) from the waves And the Bay of Isles is a very pretty place
 (4) and I think that as you'll see from this video it's a place
 (5) well worth going out to visit Again fucus growing heavily
 (6) all along the lower intertidal zone
 (7) Q Where is the high tide line?
 (8) A Well the high tide line is sort of you know right up
 (9) here just below this you know black lichen band and - and
 (10) the lichen get enough moisture from spray in order to live and
 (11) so we're really talking about you know you can see the high
 (12) tide line on the shorelines because of the dead seaweed that
 (13) gets washed up normally sort of swash line depending upon
 (14) the tide
 (15) Boulder-cobble beach The water is so clean you can
 (16) actually see down quite deeply into the subtidal zone What
 (17) you're seeing the dark stuff is actually kelp and other
 (18) seaweed growing below the low tide line and again we're sort
 (19) of in the outer part of the Bay of Isles now at the mouth as
 (20) it were and we're sort of looking down in
 (21) Q These snowcap mountains is that part of the Bay of Isles
 (22) or is that - you can keep running it
 (23) A Keep running it Well again Knight Island is very
 (24) mountainous and so that the shorelines often you know are
 (25) very steep go from - Knight Island you can be on a mountain

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- (1) almost a mile high and two miles out into the Sound be in
 (2) water almost a mile deep I mean it's - it's an amazing
 (3) place
 (4) And now we're getting more sheltered and you can see the
 (5) fucus growing on these rocks is more abundant because the
 waves
 (6) don't batter it as much As you get more sheltered you see
 (7) that the growth is more lush And we're working our way into
 (8) the inner part of the Bay of Isles and Mr Bush's site is way
 (9) back in here And I've edited this a little bit to kind of
 (10) make it a little quicker but what you're seeing is sort of a
 (11) representation of the shoreline types
 (12) You saw exposed rocky shore we're looking at sheltered
 (13) rocky shores here We're seeing you know little bit of
 (14) boulder cobble protected boulder-cobble beaches There's
 (15) your lichen band here Again a sheltered rocky shore here
 (16) And a little - again small boulder-cobble beach here which
 (17) is protected so the rocks aren't rounded
 (18) And we're now well into the Bay of Isles We've gone
 (19) probably about eight miles so far Again you can look right
 (20) down and see the bottom along these places Lichen Fucus
 (21) growing Again the shorelines in the Sound are mostly - are
 (22) mostly bedrock either sheltered or exposed bedrock like this
 (23) shoreline here
 (24) And again a little area pocket boulder-cobble beach here
 (25) and this dark stuff that you see is actually mussels Mussels

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- (1) like to grow where there's fresh water because it keeps
 (2) starfish away
 (3) Now we're well into the Bay of Isles. Some of these
 (4) beaches are actually fine gravel
 (5) Q Sure is pretty
 (6) A It's one of my favorite places to go to. I really spent a
 (7) lot of time in the Bay of Isles doing various projects
 (8) And now what we're going to be doing ~~looking~~ coming the corner
 (9) and we're going to be heading up what they call the west arm of
 (10) the Bay of Isles. The Bay of Isles is shaped like a "T" and
 (11) we're almost through our trip. We don't have much farther to
 (12) go
 (13) And now we're well into the west arm. And what we're
 (14) coming up to for example is a - a very large mussel bed that
 (15) was one of our nonrandomly chosen sites right here. There's a
 (16) large fucus/mussel bed that we sampled in 1990 and 1991 and
 (17) again found that this place recovered very quickly from the
 (18) effects of the spill
 (19) And we're going into a little lagoon now and what you have
 (20) up here is a large salmon stream and in the - about this time
 (21) of the year in fact when the salmon are running you have
 (22) gone in this cove. In 1991 when we were doing a subtidal
 (23) survey at the Bay of Isles it was like a cafeteria for
 (24) eagles. It was sort of after the salmon were running and
 (25) everybody was out trying to catch them and it was just -

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- (1) Q David you know what you need to move back a little bit
 (2) A Oh I'm sorry
 (3) Q These guys are blocked
 (4) A And eagles sort of lined up along the shoreline here
 (5) having a - having a field day. And in fact these streams
 (6) are running very heavily this year in the Sound
 (7) And now we're sort of heading back toward the middle of the
 (8) Bay of Isles and only have another minute or so to go. Again
 (9) trying to represent what these shorelines actually look like
 (10) So far you haven't seen any oil or any oil residue
 (11) There's no - none of this video you can't see oil in any of
 (12) these pictures. The dark staining is lichen and algae. This
 (13) is a very pretty little cove salmon stream here big eelgrass
 (14) bed in through here
 (15) And then what we're doing is we're going to kind of go
 (16) around a little point again biological stain lichen and
 (17) algae. Lots of fucus in the lower intertidal zone and we're
 (18) sort of looking down the south arm of the Bay of Isles. And as
 (19) we go along this part of the shore we come along a little
 (20) Pocket Cove which is here and we're now going to look
 (21) around
 (22) and see Mr. Bush's site algae growing here mussels
 (23) barnacles and this is just a lot of sort of peat
 (24) And we go through it's about the size of McDonald's
 (25) parking lot and then we're out you know back into the Bay of
 Isles again and we can you know continue on. We've done

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- (1) about 14 miles and rather than subject you to another 14 miles
 (2) of eagle's eye view I think we'll just stop right here and I
 (3) will tell you that it's going to be more of the same. It's a
 (4) very pretty place
 (5) Q All right is the video a fair representation of the Bay
 (6) of Isles?
 (7) A Yes absolutely
 (8) Q Let's turn to Chenega parcels. Did all the Chenega parcels
 (9) get oiled?
 (10) A No not all the Chenega parcels got oiled
 (11) Q Did Chenega have a handful of parcels that got hammered?
 (12) A Oh yes yes
 (13) Q And those are part of what we call the worst of the worst?
 (14) A Yes We've already talked about them
 (15) Q Let me take you to north Chenega. I show you DX13225
 (16) Okay what are we looking at?
 (17) A This shows a bird's eye - again a bird's eye view of the
 (18) north end of Chenega Island and on this parcel map what
 (19) we're
 (20) looking at is right down here and right down Dangerous
 Passage
 (21) and as you can see this whole area is very mountainous and
 (22) the shorelines especially in through here either got lightly
 (23) oiled or didn't get oiled at all. So a lot of the Chenega
 (24) parcels were either lightly oiled or weren't oiled at all but
 (25) these north facing points like North Chenega in fact portions
 of them did get heavily oiled in 1989

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- (1) Q All right Let me show you DX8929 Is this a closeup?
 (2) Tell the jury what we're looking at
 (3) A Okay Mr. Bush had a study site as part of the shoreline
 (4) surveys and his study site was right over here in this little
 (5) pocket cove. And what this is is simply a closer look at
 (6) that. And again this picture accurately and fairly
 (7) represents what this place looks like today
 (8) Q All right And did Mr. Bush say in his field notes that
 (9) the oil was near saturation point in the sediment here?
 (10) A Yes he did
 (11) Q All right Did you conduct an investigation?
 (12) A Yes I did
 (13) Q When did you do it?
 (14) A Well I went there in 1993 I spent quite a bit of time
 (15) there and we spent quite a bit of time there in 1994 as
 (16) well
 (17) Q All right What did you find?
 (18) A Well again all of this dark stuff here is - is just
 (19) lichen. It's not oil staining. And all this -
 (20) Q Can you guys see?
 (21) A Sorry All of this green stuff here is very heavily coated
 (22) fucus. This is a mussel bed here. There's a big eelgrass bed
 (23) in this lagoon here and again you're looking at the bottom
 (24) here. This is kelp and other algae offshore. Mr. Bush's study
 (25) transect was right here at the head of the cove and when you

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- (1) go to this place you can find some isolated places of coat
 (2) with spruce needles on it in some of the rocks up here and if
 (3) you go in this area you can find stuff that looks like the
 (4) stuff I showed you from Shelter Bay in other words the
 (5) asphalt paving which formed there in 1989 By 1994 really
 (6) looks like dirt and I really couldn't locate the kind of stuff
 (7) that Mr. Bush was talking about
 (8) There are a couple of places here and here where there's
 (9) some deposits of subsurface oil but you'd have to know where
 (10) to look to find it
 (11) Q All right What are your overall conclusions about North
 (12) Chenega?
 (13) A Well this picture fairly represents what you see In
 (14) fact this is a very pretty place and whatever traces are left
 (15) from the spill they're clearly not having any adverse effect
 (16) on what's going on here as far as the plants and animals
 (17) living on this shoreline
 (18) Q All right Let's go to Sleepy Bay Was it heavily oiled?
 (19) A Sleepy Bay was probably the most heavily oiled place in
 (20) Prince William Sound
 (21) Q All right and I show you DX1441 That looks fairly
 (22) dreadful What are we looking at?
 (23) A Well as I showed you the picture of Point Helen in 1989
 (24) this is what the western shores of Sleepy Bay looked like in
 (25) 1989 And all of this black stuff in the upper intertidal zone

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- (1) where again oil Because it floats on water is pushed into
 (2) the upper intertidal zone is very heavily coated with oil
 (3) Again because Sleepy Bay is like a catcher's mitt facing
 (4) north When the oil left the Sound it just packed into this
 (5) one particular location very heavily
 (6) Q All right Let me show you DX1442 and tell the jury what
 (7) that is
 (8) A Well this is the same beach in 1992 and we can key in on
 (9) this rock here and there's this rock here and this is taken
 (10) at a lower tide so you see this dark band of fucus in the lower
 (11) intertidal zone that you don't see here because the tide is
 (12) higher but it shows the same stretch of the western shore of
 (13) Sleepy Bay
 (14) Q What happened between 89 and 92?
 (15) A Well a number of things happened You had a bunch of
 (16) winter storms that turned this beach over very heavily You
 (17) had extensive clean up operations in Sleepy Bay that were
 (18) conducted And in addition you had nature biodegrading and
 (19) chewing up the stuff you know that was in this beach and so
 (20) this is actually - I was on this beach in 1992 and this is a
 (21) fair representation of what it looks like
 (22) Q All right Let me show you DX8936 Tell the jury what
 (23) this shows
 (24) A Let's see if I can move this a little bit closer without
 (25) wrecking it Because it's a-

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- (1) MS SMITH Joy are you okay?
 (2) A I'm sorry
 (3) MS SMITH In your face
 (4) BY MS SMITH
 (5) Q Go ahead David
 (6) A This shows Sleepy Bay Sleepy Bay has a mile and a half of
 (7) shoreline and if - let's start here and kind of work our way
 (8) around What you see here because it's at low tide - this is
 (9) taken in 1994 - somebody in a sailboat here And the
 (10) important thing to remember about Sleepy Bay is that the lower
 (11) intertidal zone is very lush and productive and that's what
 (12) all this stuff is here It's a very - this place here is a
 (13) beautiful low tide platform with lots of tide pools and
 (14) critters living in it Large mussel beds in the lower
 (15) intertidal zone and you have exposed kind of boulder cobble
 (16) gravel beaches here here here here - which I showed you is
 (17) this beach - and here
 (18) In addition along this shoreline you have a number of what
 (19) are called boulder fields at the top of the tide zone and what
 (20) they are - and you can see for example here is a rocky area
 (21) where you have a lot of boulders that protect stuff from wave
 (22) action and here you have a boulder field where stuff that's at
 (23) the top of the beach is protected from wave action
 (24) Q Did Bush have any study sites here?
 (25) A Yes Mr. Bush had a study site here by this salmon stream

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- (1) and out here in this little stretch of rocky shore on the
 (2) eastern side of the Sleepy Bay
 (3) Q And did you conduct an investigation here?
 (4) A Yes I did
 (5) Q When did you go?
 (6) A Well I've been going to Sleepy Bay since 1991
 (7) Q Okay
 (8) A So I've been there many times
 (9) Q What did you find?
 (10) A Well what I found is that as of today in this worst of
 (11) the worst places most of oil residues that are left are
 (12) concentrated in a few places And most of what you see if you
 (13) want to find remaining residues of the spill you go to these
 (14) boulder fields because it's trapped between the rocks at the
 (15) top of the beach in amongst these boulders and so we're
 (16) talking about here here and here as the principal places on
 (17) this shoreline where you find significant amounts of remaining
 (18) oil At the top of the beach not down at the bottom of the
 (19) beach where all the you know plants and animals are and
 (20) what's up here is biodegrading and weathering away and isn't
 (21) hurting anything
 (22) Here we found the shoreline here to - around the salmon
 (23) stream to have cleaned up very quickly
 (24) Q David let me show you DX15348 What is this?
 (25) A Well here is the eastern side of Sleepy Bay and that's

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- (1) this place right here and it - see this little white place on
 (2) the map this little light-colored place that's this little
 (3) beach right here which is a little exposed boulder-cobble
 (4) beach. And what this is is one of Mr. Bush's study sites and
 (5) he characterized this as a rocky shore study site and he
 (6) surveyed that in 1989 and 1992.
 (7) Q And did he say there was ongoing biological damage at this
 (8) site in 1992?
 (9) A Yes, he did.
 (10) Q All right. And what did you find?
 (11) A Well, we were perplexed about that and when we got there
 (12) we realized that Mr. Bush's conclusion had to do with the way
 (13) he chose this place to study. As you can see, most of the
 (14) shoreline is rocky and you've got all this stuff growing in the
 (15) lower tidal zone, fucus and critters, which is supposed to be
 (16) there. And the reason it's there is that waves don't knock it
 (17) off because these rocks don't move and this little pocket you
 (18) have rocks that move in storms and therefore any plants and
 (19) animals that are living here have - it's like living in a
 (20) clothes dryer full of bricks. It's - if you turn it on, that
 (21) is. And so therefore this place is naturally sort of bare of
 (22) plants and animals. That's the way it's supposed to look like
 (23) but if you didn't realize that you would think there was
 (24) something wrong there and Mr. Bush just happened to put a
 (25) study site at that place.

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- (1) Q All right, let me show you DX13281. What is that, aside
 (2) from a picture of all you guys?
 (3) A Well, this - the person who took the picture was standing
 (4) here and shooting in this direction and so we're looking at
 (5) this little - this is where Mr. Bush did his biological
 (6) studies and this isn't representative of a rocky site at all.
 (7) This is a little boulder-cobble beach. There's my colleague
 (8) Dr. Giffillan with his feet wet. There's Mr. Neff studying
 (9) the rocks and there's me.
 (10) And what happens in this part because you have these small
 (11) stones during storms they beat up on the critters that are
 (12) living on these rocks and you can see how exposed parts of
 (13) these rocks appear to be and it doesn't have anything to do
 (14) with the spill. This is what this part of the beach is
 (15) supposed to look like but if you want to characterize this as
 (16) a rocky shore which is what it was supposed to be
 (17) characterized as you'd put your study transect through all
 (18) this stuff here because that's what a rocky shore in Prince
 (19) William Sound is supposed to look like.
 (20) Q You mentioned there was some remaining oil in the boulder
 (21) fields. I'm going to show you a picture of that it's DX13289.
 (22) Is this the boulder field on Sleepy Bay?
 (23) A This is - in fact I was standing right here and shooting
 (24) in this direction when I took that picture this year so we're
 (25) looking across the top of the beach here are these logs, the

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- (1) sort of battering rams and we're in this boulder field that I
 (2) was talking about earlier. And these little dots on the rocks
 (3) incidentally are snails.
 (4) Q All right. Dr. Page on this beach the whole of Sleepy
 (5) Bay is any of the remaining oil that's here doing any harm to
 (6) plants and animals?
 (7) A No, it's in a form kind of stuck up between these rocks
 (8) at the top of the beach and it's biodegrading naturally away.
 (9) It's going away where it's not having any impact on the stuff
 (10) down here. In fact you know with the snails all over the
 (11) place I'm not, you know, convinced that it's having any impact
 (12) on the critters that are supposed to be living up here as
 (13) well.
 (14) Q All right, let's go to North LaTouche. I'm going to show
 (15) you DX8938. What are we looking at?
 (16) A Well, okay. What we're - here what we're looking at
 (17) here's the north end of LaTouche Island, the worst of the
 (18) worst and we're sort of, again, bird's eye view looking in
 (19) this direction. And you can see Sleepy Bay in the background
 (20) and the mountains beyond and I surveyed this whole area here
 (21) in 1993 and again in 1994.
 (22) Q All right. And is it similar to Sleepy Bay?
 (23) A What I said about Sleepy Bay really applies to the north
 (24) end of LaTouche as well. Most of what you find in the north
 (25) end of LaTouche Island is in the upper intertidal zone again.

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- (1) associated with these boulder fields, these sort of
 (2) refrigerator size boulders.
 (3) Q Dr. Page, are you trying to tell this jury that there's no
 (4) oil here?
 (5) A No, I haven't said that at all.
 (6) Q All right. And what are you trying to tell them about that
 (7) oil?
 (8) A Well, what I'm saying is, is that here you have all this
 (9) sort of lush biota. This environment you know that's doing
 (10) very well, doing what it's supposed to do. And the reason -
 (11) and here's your - again, your black lichen at the top of the
 (12) beach. And what's happened is that the - what remaining
 (13) traces of the spill there are are simply in a location
 (14) generally at the top of the beach and in a form you know
 (15) where present heavily biodegraded that it's simply not doing
 (16) bad things to these plants and animals living in this
 (17) productive part of the intertidal zone.
 (18) Q All right. Did you go to Eshamy Bay?
 (19) A Yes, I did.
 (20) Q Let's put up DX8944?
 (21) MR. BROWN: You don't want 13228.
 (22) MS. SMITH: Sure. And DX13228, let's put them both
 (23) up. Sorry, George.
 (24) BY MS. SMITH:
 (25) Q Was Eshamy Bay heavily oiled in 1989?

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- (1) A Well Eshamy Bay this is Eshamy Lagoon There s a big
 (2) fishing camp back in here That was not heavily oiled If
 (3) anything it was very lightly oiled The parts of Eshamy Bay
 (4) were heavily oiled at this sort of north facing end here but
 (5) again most of it was either not oiled at all or lightly oiled
 (6) Q All right And show the jury on this map where Mr Bush
 (7) put his site
 (8) A Well this is a wonderful place ~~too~~ and Mr Bush s site
 (9) is a little sort of horseshoe shaped beach right here at the
 (10) mouth of the Bay of Isles on this north facing point
 (11) Q All right And if you look behind you at DX8944 is this
 (12) Mr Bush s transect site?
 (13) A Well let me just raise it up so that they don t have to
 (14) dislocate their necks to see it
 (15) Q Did you conduct an investigation in this site?
 (16) A Yes I did
 (17) Q When did you go there?
 (18) A Well I went there in 1993 and I went there in fact two
 (19) times in 1994
 (20) Q And what did you find?
 (21) A Well I found that again this picture fairly represents
 (22) this site I brought you a rock from the - from Eshamy Bay
 (23) And what you find is that this end of the beach there s some
 (24) isolated pockets of asphaltic stuff with spruce needles in it
 (25) and along the upper part of this beach here you have some

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- (1) isolated patches of - looks almost like - hate to use the
 (2) word cheap driveway - but it looks like you know asphalt
 (3) in little patches but it s only in patches along the top
 (4) Q All right I show you DX13280 and what are we looking
 (5) at?
 (6) A Well okay to key yourself into this as with most beaches
 (7) in the Sound they have a lot of stuff above the high tide line
 (8) that gets washed in by major storms and so you have this
 (9) so-called log berm here and these logs here are shown here
 (10) and what this is is the line at the very top of the beach near
 (11) the logs where you can find if you look isolated pockets of
 (12) weathered asphaltic material sort of sitting on the surface of
 (13) the beach just below the cobbles
 (14) Q Okay Now I m confused It looks like there s a big long
 (15) beach here and here you re at the - looks like at the
 (16) boulders right away I don t understand that Can you explain
 (17) it?
 (18) A Well as an ancient English king once found time and tide
 (19) for no person wait and this is a picture of this place at low
 (20) tide and it shows the mussel beds and the fucus and
 (21) everything When we were there - in fact it was almost high
 (22) tide and so the water line here is actually right about here
 (23) where my finger s pointing
 (24) Q And did you find Mr Bush s tar patch?
 (25) A Yes I did

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- (1) Q Where was it?
 (2) A It was right up at the tippy top of the beach here along a
 (3) line
 (4) Q All right I show you DX13277 What is this?
 (5) A Well let me just give a quick explanation We surveyed
 (6) this beach in 1994 before Mr Bush surveyed it and then we
 (7) read a report of his where he said that there were - there was
 (8) a large band of tar across the top of the beach along this
 (9) line with two - let s see six to nine feet wide 80 yards
 (10) long 20 to 60 percent coverage of the beach It didn t make
 (11) sense because that s not what we saw
 (12) So we went out a second time and we actually matched the
 (13) photographs that Mr Bush had taken in 1994 so that we knew
 (14) we were in the right place And in fact we found sort of places
 (15) where they had scraped away some of the beach material to
 (16) take - to take pictures of tar and - and I - with my bare
 (17) hands I might add - pulled away more of the beach surface to
 (18) see whether this stuff really was six to nine feet wide and to
 (19) see if it really did go 80 yards across the top of the beach
 (20) and this is what I found was that it didn t And in fact
 (21) what you have are these isolated patches and this is like the
 (22) hole of a doughnut and what you have here is clean beach all
 (23) the way around this weathering decaying eroding patch of
 (24) stuff that s on its last legs from the 1989 spill This is wet
 (25) rock wet sand wet sand wet sand This is an oil stain

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- (1) Q All right wait a minute Did you just go to this beach
 (2) match the picture clear away one little doughnut with your
 (3) bare hands and go home?
 (4) A No Actually I did it at three places Here s another
 (5) one of my doughnuts That doughnut picture is taken right
 (6) behind the helicopter The only place I didn t check was right
 (7) underneath the helicopter and then there was a third doughnut
 (8) back here near the rocks
 (9) Q Why didn t you crawl underneath the helicopter?
 (10) A Probably because I couldn t fit
 (11) Q I didn t think you were going to say that
 (12) I show you DX13278 What s that?
 (13) A Well this is another one of our three doughnuts and it
 (14) again shows that this is about a two-foot square batch It
 (15) really looks like a driveway on its last legs and it s heavily
 (16) weathered and eroding and all the way around it this is a
 (17) four-by six foot area that I cleaned away with my hands, not
 (18) bringing gloves on this trip and there was no oil residue or
 (19) tar anywhere And I think I could have continued clearing and
 (20) not found anything and I m holding my hands out simply to
 (21) show
 (22) you that they re not covered with tar or oil
 (23) Q Next time you go out could you dress appropriately
 (24) please?
 (25) What were your overall conclusions about Eshamy Bay?
 (26) A Well it s what you d expect to find in a place like this

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- (1) five years after the spill There s some isolated patches
 (2) They re at the top of the beach where they re not hurting
 (3) anything They re going away and it s certainly not 20 to 60
 (4) percent of the beach covered by this you know oozing asphalt
 (5) over an area of 80 yards It s simply not what s real out
 (6) there
 (7) Q Did I ask you to take a look at a few of the Natalie Fobes
 (8) pictures?
 (9) A Yes you did
 (10) Q She s the photographer who testified for the plaintiffs and
 (11) took some pictures?
 (12) A Yes
 (13) Q All right I m going to show you on the Elmo - assuming
 (14) we can make a way for you guys to see it - PX245-26 which is
 (15) an Elmo copy that was produced to us of this picture And it s
 (16) pretty lousy but I ll show it to you and then I actually
 (17) have -
 (18) MS SMITH I have a copy of PX245, counsel from the
 (19) federal trial that looks clearer if I could throw that one up
 (20) MR GARGAN Sure
 (21) MS SMITH Okay let me see if I can do anything with
 (22) it
 (23) BY MS SMITH
 (24) Q This is - this is 245-26 which is - we checked to see if
 (25) it was on the Barco but it wasn't so this is the best we ve

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- (1) done Let me show you the one from - this is the federal
 (2) exhibit It s PX245 and It s page 47
 (3) MR PETUMENOS Excuse me was this an exhibit that
 (4) was admitted in this trial?
 (5) MS SMITH Yes it was It s just a better copy
 (6) MR PETUMENOS We might be able to get you to print
 (7) it maybe
 (8) MS SMITH Okay
 (9) BY MS SMITH
 (10) Q Do you recognize this little island?
 (11) A Yeah it s - It s a little island in Foul Bay which is on
 (12) the mainland parcel
 (13) Q Have you walked this shoreline?
 (14) A Actually in 1993 I did I circumnavigated this little
 (15) island
 (16) Q All right And let me show you DX8985 We need to put it
 (17) so they can see the Trial Link too This has become known
 (18) among the lawyers as no name lawyers but it is in Foul Bay
 (19) What did you find there?
 (20) A Well first of all let me say I took this picture myself
 (21) this year And this is taken at high tide and what you don t
 (22) see is the fact that this whole place this little island is
 (23) surrounded by these incredible sort of rocky tidal platform
 (24) where you have - It s really the answer to a marine
 (25) biologist s prayer because there s all kinds of stuff there

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- (1) and you can sort of see that in this picture that there s a
 (2) lot of rocks that go way out and when I walked around this
 (3) island in 1993 we went there because one of NOAA s mussel
 (4) beds
 (5) was there and it s actually a place - the bed itself is
 (6) about the size of the jury box and there aren t many mussels
 (7) there but there was some oil there and there was another
 (8) little pocket of oil about 20 yards where some people
 (9) kayakers were camping and we woke them up And the rest of
 (10) the place is just oil free and beautiful even though it was
 (11) obviously very heavily oiled
 (12) Q It has streams of oil running off it over here?
 (13) A Yes
 (14) Q It s cleaned up?
 (15) A Yes except in those two little places I mentioned
 (16) Q And is this on a parcel?
 (17) A No
 (18) Q Okay Natalie Fobes testified that she went to Perry
 (19) Island and she turned over rocks and found oil in 1993 You ve
 (20) been to Perry Island?
 (21) A Yes I have
 (22) Q All right How many times?
 (23) A Well actually many of our scientific studies sites were on
 (24) Perry Island so I ve been to places on Perry Island many
 (25) times
 (26) Q Do you want to show the jury where it is?

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- (1) A Perry Island is - get my cord Perry Island is right
 (2) here
 (3) Q All right Is it on a parcel?
 (4) A No It s not
 (5) Q Are the plaintiffs claiming any damages for it?
 (6) A I don't know
 (7) Q Okay Let s take a look Was it heavily oiled?
 (8) A Well parts - parts of it were Most of it was either not
 (9) oiled or lightly oiled The only place in Perry Island that
 (10) actually was heavily oiled was this little cove here And then
 (11) this little point right here that s a little pocket beach that
 (12) was heavily oiled in 1989
 (13) Q All right Let s see DX13265 Is that Perry Island?
 (14) A Well yes this is the southern - southwestern tip of it
 (15) and what you re looking at is - is a place in Perry Island
 (16) called South Bay And these little white lines here actually
 (17) a big oyster farm in here that s been in operation for a number
 (18) of years and the site that is of concern is this little pocket
 (19) beach right here at the point
 (20) Q All right That s what Ms Fobes photographed down here?
 (21) A Well she photographed some rocks in one corner of it
 (22) Q All right Let me show you DX13266 What is this?
 (23) A This is a place called Meares Point and this is a little
 (24) pocket beach that I was telling you about and in 1989 It s a
 (25) boulder-cobble beach It was heavily oiled and in 1994 We

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- (1) went out there and surveyed this area
 (2) Q And can you get us even closer?
 (3) A Yes I can
 (4) Q All right let's see DX13264 Is this part of the shot
 (5) that we see in DX13266?
 (6) A Yeah This picture here I was standing on this rock and
 (7) shooting in this direction This - this is a very very
 (8) pretty beach and I will tell you that here are some - if you
 (9) know where to look you can find a few rocks right up in this
 (10) end of the beach where there's some weathered kind of
 asphaltic
 (11) moussey type material under there
 (12) There's also quite a bit of Monterey tar like we found at
 (13) Tattilek on this beach Now you walk across this It's
 (14) clean it's pretty there's an eagle that lives up here and if
 (15) you go right in here and if you look hard enough you can find
 (16) a little area about the size of a cafeteria tray of sort of
 (17) coat with a little bit of spruce needles on it but it's on its
 (18) last legs
 (19) Q Ms Fobes testified that it was typical to turn over rocks
 (20) and see oil on them Do you agree with that?
 (21) A No not at all
 (22) Q Do you have a conclusion regarding this shoreline?
 (23) A Well I think again this picture here is a fair
 (24) representation of the shoreline This is a place where I would
 (25) love to you know have a boat and take a picnic This is a

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- (1) very pretty shore and you know, unless you know exactly
 where
 (2) to look and know what you're looking for there is no visible
 (3) evidence of the spill here
 (4) Q You're saying no visible evidence but how about if I
 (5) turned over all these rocks?
 (6) A No We tried that and we tried that at other beaches and
 (7) you can't just turn over any rock and find oil under it
 (8) MS SMITH Your Honor you're still behind all this
 (9) stuff
 (10) THE COURT No I left about ten minutes ago
 (11) MS SMITH Is this a good time to take a break?
 (12) THE COURT Yes
 (13) THE CLERK Please rise This court stands in
 (14) recess
 (15) (Jury out at 12 02 p m)
 (16) (Recess at 12 02 p m to 12 20 p m)
 (17) (Jury in at 12 20 p m)
 (18) THE CLERK This court now resumes its session
 (19) Please be seated
 (20) MS SMITH Your Honor my colleagues have asked me to
 (21) tell the jury that this is our longest witness
 (22) BY MS SMITH
 (23) Q Dr Page tell the jury where we're going to go on the rest
 (24) of the shoreline tour
 (25) A Well what I'd like to do is show you a couple more places

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- (1) that Natalie Fobes went to and then I'd like to take you out
 (2) of the Sound to some places on the Kenai and then I'd like to
 (3) take you to some places on Kodiak and then it'll be done
 (4) Q All right Now we've seen goosy pictures of Rua Cove from
 (5) Ms Fobes in 1993 Have you been there?
 (6) A Yes In fact I have
 (7) Q Is this place awash in oil?
 (8) A No Right now Rua Cove it turns out is awash in salmon
 (9) What - there's a - actually a really interesting place
 (10) There's an old miner's cabin here and there's an old mine up
 (11) in the woods This is a pink salmon stream and when I was out
 (12) there this whole little cove where all this eelgrass is was
 (13) just packed with salmon And since then the salmon have
 come
 (14) up the stream to spawn in the gravel here and you see kind of
 (15) the remains of salmon all throughout the intertidal zone I'm
 (16) sure the bears are there now And there's a big eagle's nest
 (17) right here and you can see - sort of the eagles have gotten a
 (18) lot of the salmon as well
 (19) As you walk around the shoreline again is a typical
 (20) shoreline area in the Sound a very dense growth of fucus in
 (21) the lower intertidal zone band of - sort of the bathtub ring
 (22) effect of lichen and algae in the splash zone here And all in
 (23) all a pretty little place
 (24) Q And the thing you've been pointing to is DX13297 2 Let me
 (25) give you a closer look It's DX13297 1

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- (1) All right where's the oil?
 (2) A Well I - I'm proud to say I took this picture myself
 (3) because I think it's a pretty good picture And I was
 (4) standing -
 (5) Q Can you guys see if he stands there?
 (6) A Am I standing in front of everyone?
 (7) Q I think maybe you should come over toward me
 (8) A What I was doing was I was standing right here and I was
 (9) shooting out in this direction and what you have in Rua Cove
 (10) is the same type of situation You have a lot of these beaches
 (11) that have boulder field at the top of the beach and at Rua
 (12) Cove you have a little pocket here that actually was overlooked
 (13) during the cleanup in 1989 And right at the top of the beach
 (14) here there's a boulder field which is shown right here up
 (15) with all the logs and everything And if you look in between
 (16) these rocks in this area if you turn over the right rocks you
 (17) can find some remnants of the spill which is primarily
 (18) probably the gooiest kind of weathered asphaltic looking stuff
 (19) as you'll find So if you want a place to go to show people
 (20) stuff that's left from the spill this is a good place to go
 (21) Can't go over here you can't go over here In fact you can't
 (22) even go over here It's - you have to go to this one little
 (23) area right here And if you go ten feet down the beach from
 (24) this area in this area here you can turn over rocks till the
 (25) cows come home and all you're going to find is critters living

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- (1) underneath them And so what's left is going away naturally
 (2) and it's in a part of the beach where it's not hurting anything
 (3) down lower in the intertidal zone
 (4) Q Is Rua Cove on a parcel?
 (5) A Rua Cove is right here on Chugach Alaska land
 (6) Q Okay Let's go to Green Island Ms Fobes showed us some
 (7) pictures from Green Island in 1989 but she said she hadn't
 (8) taken any current pictures I bet you she ~~was~~
 (9) A Well I've been to Green Island a number of times since
 (10) 1989 and I was there as recently as 1994 Some of our - our
 (11) scientific random study sites are on Green Island so I've been
 (12) to a lot of parts of Green Island
 (13) Q Can you show -
 (14) A Green Island is right here and this is little Green Island
 (15) here
 (16) Q All right is this a parcel?
 (17) A No it's not
 (18) Q All right I show you DX8949 - maybe What are we
 (19) looking at?
 (20) A Well this is clearly an aerial photograph and it's an
 (21) aerial photograph of the southwest part of Green Island It's
 (22) this little kind of hooky part of Green Island that sticks out
 (23) here And during the spill again when the oil kind of worked
 (24) its way south down out of Montague Strait out of the Sound
 (25) this place here got heavily oiled because it was oriented

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- (1) toward the north
 (2) And what we're looking at now is an aerial view of that
 (3) place And one of the distinguishing things about this is you
 (4) have what are called these vertical shale areas that's sort of
 (5) the - the layers of rock actually are vertical instead of
 (6) horizontal and I've surveyed this whole area and in isolated
 (7) places you can find some tarry residue at the top of the beach
 (8) and even in some of these places you might even see a little
 (9) sheen but it's nothing like what you see in oil seep areas
 (10) Q All right And did you come up with a crazy idea about
 (11) this beach?
 (12) A I don't think it was crazy at all The - basically I
 (13) wanted to test the hypothesis that you could go along say a
 (14) beach like this that had been heavily oiled and turn over any
 (15) rock and find oil And so what I did was I went to Carr's and
 (16) bought some Nerf balls in case I lost one and threw them over
 (17) my head randomly and wherever the ball landed on the beach
 (18) started turning over rocks to see if there was any oil under
 (19) there and to make sure that if there was any tarry material
 (20) under those rocks that I missed I wore white gloves and I have
 (21) the gloves here as well as a video of me doing this
 (22) Q All right We're just going to show the beginning of that
 (23) video and it is - let me make sure DX13802
 (24) (Videotape Played)
 (25) A Okay what this is is a picture now of the beach that I

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- (1) showed you in that aerial and this is a boulder cobble beach
 (2) and it's got a lot of bedrock and all this dark stuff is
 (3) actually dark volcanic rock and in areas where the waves don't
 (4) beat up on stuff you actually have a very dense cover of
 (5) fucus And that's me and I'm - I'm anxious to begin the
 (6) survey This is all seaweed that you see at low tide the tops
 (7) of seaweed offshore And these rocks here have a dark coating
 (8) of lichen under the surface
 (9) VIDEO VOICE We're at Green Island Segment 1 B
 (10) which is on a boulder-cobble beach on the southern end of
 (11) Green Island It was very heavily oiled during the spill We're
 (12) here to test the assertion that you can turn over rocks
 (13) anywhere in Prince William Sound and find oil under them and
 (14) to test that assertion I'm going to throw this ball over my
 (15) head as I did at Smith Island and wherever it lands on the
 (16) beach randomly we're going to pull the rocks away and see
 (17) what's underneath them As you can see behind me in this
 (18) stable bedrock outcrop here the dark colored rocks very
 (19) abundant fucus there's eelgrass lots of mussels anywhere
 (20) there's enough protection from the waves and so we're going
 (21) to
 (22) start with ball number one and I'm going to throw it right
 (23) now With-
 (24) A Do the next
 (25) MS SMITH Yes please thought it was going into
 (26) slow motion

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- (1) VIDEO VOICE As you can - this is number one As
 (2) you can see they're large rocks that I'm pulling away and
 (3) there is limpets snails lots of amphipods more limpets more
 (4) snails You can see the amphipods crawling over the bottom of
 (5) this rock and the beach is just alive with them but there's no
 (6) oil
 (7) Now we'll do Number 2 Number 2 okay this is Number 2
 (8) This dark staining here is - is lichen not oil stain and
 (9) these are dark rocks included in this dark beach material and
 (10) as you pull these rocks over and we're sort of behind bedrock
 (11) here and so if you're going to find any stuff that's trapped
 (12) this is where you're going to find it And again as we saw at
 (13) pit one lots of critters lots of clean rocks but no - no
 (14) oil
 (15) Okay now we're going to go on to number 3 Okay number
 (16) 3 Okay this is number three Again black lichen spots on
 (17) the surface of these rocks which is a biological coating You
 (18) can see amphipods turning over these rocks algae lots of
 (19) snails baby snails all over the bottom of these rocks Again
 (20) this place is just alive with hopping critters but no - no
 (21) oil
 (22) Now we're going to do number 4
 (23) MR PETUMENOS Objection Your Honor cumulative
 (24) VIDEO VOICE Okay we're going to do number 4 Now
 (25) we're at the top of the beach very nearly and start pulling

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- (1) rocks away and you can see these things hopping all around
 (2) There s plenty of stuff living in here but there s no -
 (3) there s no oil
 (4) Okay now we re going to do number - number five
 (5) MS SMITH What a wimpy throw
 (6) MR PETUMENOS That s number five counsel
 (7) VIDEO VOICE Number five lifting a rock brings about
 (8) an explosion of hopping amphipods. Pulling these away you
 can
 (9) see the bottom of these are perfectly clean There s lots of
 (10) things hopping and living in this beach but no oil
 (11) MS SMITH Okay Joel
 (12) (Videotape concluded)
 (13) BY MS SMITH
 (14) Q How many attempts did you make to find oil pulling away the
 (15) rocks?
 (16) A I did - it hurts for me to think about it I - I think
 (17) it was about 23 at that beach The end at the very end of
 (18) that sequence on the last one I think I talked about it
 (19) earlier I believe it was 23
 (20) Q All right And I show you DX14803 2 What are these?
 (21) A These are the white gloves that I wore during my efforts to
 (22) locate oil under the rocks in Green Island
 (23) Q All right And after - did you do the same thing at Smith
 (24) Island?
 (25) A Yes I did

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- (1) Q And the jury doesn t have to watch that tape does it?
 (2) A Not unless they want to
 (3) Q How - what did you find at Green Island?
 (4) A Well I found that I turned over probably a hundred rocks
 (5) It felt like it probably more I found one rock that had some
 (6) weathered asphaltic stuff that I couldn t rub off with my
 (7) glove and I talk about that in my video I found some
 (8) Monterey tar on the beach and I found a roof shingle under one
 (9) of the rocks but I didn t find anything else related to
 (10) petroleum
 (11) Q How about on Smith?
 (12) A Smith I did 25 stops with the ball and came up dry every
 (13) time I couldn t find any trace of oil under any of the rocks
 (14) Q And did you sleep well that night?
 (15) A Thanks to Ibuprofen yes
 (16) Q Let s go to the Kenai I show you DX13205 All right
 (17) never mind I ll show you the parcel map instead What is
 (18) it?
 (19) According to Professor Brown It s DX13199
 (20) How many miles of the 1500 miles of the Kenai were ever
 (21) oiled?
 (22) A Well again various surveys differ but it was roughly 200
 (23) miles Most of that was light to very light oiling
 (24) Q All right Let me show you DX13238 David you got this
 (25) right behind you Tell the jury what that is

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- (1) A This is a picture of Mr Bush s study site at Verdant Cove
 (2) on the Kenai and it s aptly named
 (3) Q Can you show the jury over here just where it is?
 (4) A Verdant Cove -
 (5) Q Are you huffing and puffing just watching your tape?
 (6) A I m reliving it
 (7) If I remember correctly Verdant Cove is somewhere in this
 (8) Harris Peninsula area but it escapes my memory exactly where
 (9) Q All right Was Verdant Cove lightly oiled?
 (10) A Yeah It was lightly oiled in 1989
 (11) Q And did Mr Bush go there after 1989?
 (12) A He went there in 1992
 (13) Q What did he find?
 (14) A He found that it was - there was no trace of the spill in
 (15) 1992
 (16) Q No oil?
 (17) A No oil
 (18) Q Did you go there also?
 (19) A Yes I went there in 1993
 (20) Q What did you find?
 (21) A I found that there was no trace of the oil either In
 (22) fact It s a very pretty place
 (23) Q All right Is Verdant Cove representative of shorelines in
 (24) the Kenai that were lightly oiled in 1989?
 (25) A Yes I think so This is a sheltered rocky shore typical

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- (1) of many shorelines in the Kenai and any shoreline that was
 (2) lightly oiled in 1989 would have recovered very quickly
 (3) Q All right I want to show you DX13239 in evidence Where
 (4) are we?
 (5) A Well this is a picture of Taroka Arm And again this is
 (6) a site that Mr Bush had visited in 1989 1992 and in 1994
 (7) Q All right And he says in his 1994 field notes that he
 (8) found a large tar mat here and in his 1994 deposition he says
 (9) he found over 30 yards of oil Does that surprise you?
 (10) A Actually it does because in his - in the report that
 (11) they wrote of their 1992 survey they said they had to go back
 (12) to this place three times to find any traces of asphaltic
 (13) material and oil spills don t get worse you know over time
 (14) They get better over time so I was very surprised
 (15) Q All right Let me show you DX13240 in evidence Tell the
 (16) jury what this is
 (17) A Well this is a closer view You can see Taroka Arm This
 (18) is a closer view of the area that Mr Bush surveyed in 1989
 (19) 1992 and 1994 And in fact the area that he surveyed is
 (20) right here between these two rocks
 (21) Q So you think this transect site is - should be moved over
 (22) to here?
 (23) A Yeah that s where the photographs that they took match up
 (24) with the rocks on the shoreline
 (25) Q All right Let me show you DX13267 That looks pretty

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- (1) dramatic What is this?
- (2) A Well in 1994 again we - I got Mr Bush's photographs
- (3) that he took at Taroka arm and he has - he says in this area
- (4) at the top of the beach which is in this zone right along here
- (5) there was this very large deposit of asphalt pavement gooey
- (6) material extending sort of down the beach and across the beach
- (7) for many yards And one of his pictures ~~shows~~ his coworker
- (8) pointing at sort of three places on the beach where they'd
- (9) located asphaltic material and what I - what I'm doing is
- (10) pointing to the same three places
- (11) Q How do you know it's the same place? -
- (12) A Well I have - again we had Mr Bush's photographs and
- (13) we - we had to match the rocks literally
- (14) Q All right Let me show you DX13275 What is that?
- (15) A Well this is one of Mr Bush's photographs and I wanted
- (16) to replicate his survey as closely as possible and so that
- (17) this person here is pointing to exactly the same part of the
- (18) beach that he's pointing on To prove that that's so look at
- (19) this rock here with this little quartz or white inclusion
- (20) That's right down here in the lower corner here This rock
- (21) here is this rock right here and this rock here for example
- (22) under their kit is this rock here with this characteristic you
- (23) know brown inclusion so we were at exactly the place they
- (24) were And I'm pointing to exactly the same things that they
- (25) were pointing to in the area where they said there was all of

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- (1) this oil on the beach
- (2) Q All right Let me show you DX13270 What is this?
- (3) A Well this is just a - a picture of the overall area
- (4) that's shown in that picture here and it shows that unlike
- (5) Eshamy Bay when I cleared the beach away with my bare hands
- (6) this time I was smart enough to bring a shovel and some gloves
- (7) and so what I did was I cleared away a large area of this upper
- (8) beach to see in fact if there really was any oily material
- (9) under that rocky cover
- (10) Q What did you find?
- (11) A Well I found the same thing that I found at Eshamy Bay
- (12) Namely - well the next exhibit actually shows what I found
- (13) Q DX13268?
- (14) A This - I was really surprised I cleared away an area six
- (15) feet by 18 feet and I would have done more but I had done the
- (16) Eshamy Bay trip and this is hard work clearing this away and
- (17) all of this area is just dirt There's no oil in here
- (18) There's no asphaltic residues in here And what you have is
- (19) three little pie plate size patches of very weathered asphaltic
- (20) material just like the stuff I showed you in the Tupperware
- (21) container
- (22) Q Not the mousse?
- (23) A Not the mousse
- (24) Q Our Tupperware container?
- (25) A Not the round one the square one

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- (1) Q What's the white stuff?
- (2) A Well I didn't have anything to mark it with so I had to
- (3) use tissue paper from the helicopter
- (4) Q All right And what was your conclusion about this beach?
- (5) A Well the conclusion is that there's certainly not square
- (6) yards of asphaltic material on this beach and it's - and
- (7) really what you have is sort of the last remnants of the oil
- (8) spill in fact it took me 20 seconds just to crumble these
- (9) three things up with my hands after I took the photograph and
- (10) this is what you'd expect in - you know in an oil spill the
- (11) fact that this stuff biodegrades weathers away becomes
- (12) brittle and basically becomes dirt like the rest of the beach
- (13) Q All right Let's go to Windy Bay
- (14) George how about DX6273
- (15) And meanwhile David if you can show the jury where it is
- (16) on the parcel chart
- (17) A Okay Well we've left Taroka Arm which is right here
- (18) and we were in this little hooky type place right here on the
- (19) map Now we're going to go west working our way toward Kodiak
- (20) to Windy Bay and Windy Bay is this area sticking in right
- (21) here
- (22) Q All right Was it heavily oiled?
- (23) A Portions of Windy Bay were heavily oiled from the Kenai
- (24) there were deposits some heavy deposits in some of the
- (25) shorelines Much of it wasn't

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- (1) Q Did Mr Bush have a transect site here?
- (2) A This is a bird's eye view incidentally of Windy Bay And
- (3) Mr Bush's transect site his study site was way back in here
- (4) in a little protected area And what you see - which is
- (5) interesting about Windy Bay and it's interesting to me because
- (6) I've been going back there now for many years since the spill
- (7) - is that every year you go back the - the shoreline
- (8) becomes more and more cut over because there's very
- (9) intensive
- (10) logging going along here so these light spots are actually
- (11) areas that are clear cut
- (12) Q What did Mr Bush find?
- (13) A Well Mr Bush went to a lot of places in Sleepy Bay (sic)
- (14) but in his transect site when they went back in 1992 they
- (15) couldn't find any effects of the spill
- (16) Q Did you conduct an investigation at the site?
- (17) A Yes I did
- (18) Q All right Let me show you DX13227 All right and is
- (19) this approximately where Mr Bush's transect site is on
- (20) DX13227?
- (21) A It's close It's actually where this land slip is but in
- (22) this little cove here is where they studied
- (23) Q All right And did you investigate around here?
- (24) A Yeah Actually at one time or another I've walked this
- (25) shoreline and this year I walked this shoreline up past the
- (26) log facility in 1993 I walked a lot of the shoreline of Windy

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- (1) Bay and a - in fact I even went to some of the islands in
 (2) Windy Bay in 1993
 (3) Q And did you find any oil?
 (4) A In isolated places in certain locations yes There s some
 (5) little patches up among the rocks along here with the top of
 (6) the tide zone Mr Bush s site I didn t find any oil except
 (7) I found some stuff that had recently floated in from a more
 (8) recent source something about the size of a pancake And
 (9) again unless you know what to look for or where to look
 (10) there s very little remaining oil residues that Windy Bay
 (11) Q All right let me show you DX13281
 (12) MR BROWN 282 I have 13282
 (13) MS SMITH Thank you 13282
 (14) BY MS SMITH
 (15) Q Can you locate us on Windy Bay?
 (16) A Yes I can Let me use the big map to locate us and this
 (17) was taken during my survey of the north shore of Windy Bay in
 (18) 1993 And what I did as I started at this large cove here and
 (19) just walked the entire shoreline almost a mile down to where
 (20) the logging facility was and this picture here fairly
 (21) represents the shoreline of Windy Bay which is mostly a rocky
 (22) shore indented with little pocket beaches
 (23) And what you re seeing here is again very dense coat of
 (24) barnacles these white things This black band is a very dense
 (25) coat of mussels sort of living on the rocks and then you have

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- (1) this very heavy coat of fucus in the you know lower tide
 (2) platform
 (3) Q And did you walk around the corner here?
 (4) A Yeah During my - during my journey I walked around the
 (5) corner and this is pretty much what I saw And in fact I
 (6) was looking very carefully for traces of the spill and there
 (7) was very few traces left There were some isolated sort of
 (8) patches of - of spruce needles with a little bit of coat and
 (9) I - when I walked around oh about 60 yards past this point
 (10) I came to sort of a big stone pier that had been built for the
 (11) Log Transfer Facility and I climbed up that and looked around
 (12) that area
 (13) Q All right And let me show you DX13283 Is this the view?
 (14) A Yeah this is what I saw when I climbed to the top of the
 (15) pier and looked at the log - and it s a typical sort of
 (16) logging operation and it s what you d see all over the place
 (17) Here s some crank case oil somebody had dumped there and
 (18) there s some drums and there was heavy equipment trundling
 (19) logs
 (20) to barges and it s a very busy place but it was kind of a
 (21) surprise going from this really pretty shoreline and then -
 (22) then looking at the very intensive logging that was going along
 (23) all throughout the shore of Windy Bay
 (24) Q Do you think the 1989 oil spill is having any continuing
 (25) effect on Windy Bay?
 (26) A No the only - the only impact on the Windy Bay shorelines

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- (1) now are the activities that are going on in connection with the
 (2) logging
 (3) Q Do you think man is having a continuing negative effect on
 (4) Windy Bay?
 (5) A Well it s - whatever it is it s part of the logging
 (6) process that s going on there
 (7) Q All right Let s go to our last site in the Kenai Let s
 (8) go to Black Bay
 (9) Dr Page you showed us Verdant Cove before Are all of
 (10) the shores in the Kenai as lush and protected as Verdant Cove?
 (11) A No
 (12) Q All right And what are we going to see on Black Bay?
 (13) A Well again Black Bay if I can -
 (14) Q For the record this is DX13222
 (15) A Okay Black Bay is right here It s sort of down the
 (16) peninsula from Taroka Arm and it s this area here And
 (17) because of its orientation it s very exposed to storms from
 (18) the southeast which is where a lot of storms come from and
 (19) this is - this is typical of all of this exposed coast It s
 (20) very rocky It s very exposed If you re a plant or animal
 (21) living on a shoreline like this it s kind of a rough place to
 (22) live because storms are very common in this area and so that
 (23) this is obviously some pretty rough weather down here
 (24) I surveyed this boulder beach here very carefully because
 (25) that was one of the sites we visited in Black Bay And I can

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- (1) tell you if you want to get a sort of a Fred Flintstone
 (2) bowling ball that s a good beach to go to because it s
 (3) literally got round hard rocks that have been rounded almost
 (4) perfectly spherical by storms
 (5) Q Did you look for oil on this shoreline?
 (6) A Yes I did
 (7) Q Did you find any?
 (8) A Found one patch of asphaltic stuff about the size of a plum
 (9) back in here which may or may not have been from the spill
 (10) Q Do you think that the shorelines of the Kenai are suffering
 (11) continuing damages as a result of the oil spill in 1989?
 (12) A No
 (13) Q Let s go to Kodiak Dr Page what was the oil like that
 (14) hit Kodiak in 1989?
 (15) A Well first of all the oil had been at sea for several
 (16) weeks
 (17) Q Oh we woke Mr Stoll
 (18) MR STOLL Yeah I got up
 (19) A The oil had been at sea for several weeks by the time the
 (20) leading edge of the spill hit Kodiak Right here we re about
 (21) 300 miles from Bligh island so it s a long way for stuff to
 (22) travel so what hit here was really very asphaltic weathered
 (23) sort of floating tarry mousse and it sort of hit places in
 (24) the shoreline where it hit in patches
 (25) Q Do you know how much of the shoreline was ever touched by

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- (1) oil?
 (2) A Well it's hard to say because the shoreline of Kodiak
 (3) wasn't as intensively surveyed as the Kenai or Prince William
 (4) Sound but you know I'd venture to say that maybe 10 or 20
 (5) percent but I'm guessing
 (6) Q Would that have been lightly oiled?
 (7) A Most of it would have been in the form of tar balls or tar
 (8) patches so it would have been light ~~oil~~ light oiling
 (9) Q All right Where is Shuyak Harbor?
 (10) A Shuyak Harbor is on Shuyak Island and it's right here
 (11) this little indentation that I'm pointing to
 (12) Q And did you go to any parcels there?
 (13) A I went to - well I went to this parcel on Shuyak Island
 (14) right at Shuyak Harbor
 (15) Q All right Let me show you DX13271 What are we seeing
 (16) here?
 (17) A Well what we're seeing is Perevalnie Pass which to locate
 (18) everybody is this little sort of strip of open water between
 (19) these offshore islands on the northern tip of Shuyak Island
 (20) and it's one of the places where Mr Bush's survey team went in
 (21) 1994 And this - in fact we surveyed the entire area in this
 (22) picture very carefully
 (23) Q All right Do you know what Bush found here?
 (24) A Well they - Mr Dawson Mr Bush's partner reported a -
 (25) showed a close up picture of a heavy deposit of mousse or

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- (1) asphaltic material that he said was on this beach right here
 (2) Q All right Did you perform an investigation on this
 (3) shoreline?
 (4) A Yes I did
 (5) Q What did you find?
 (6) A Well we surveyed this In fact you can see here is the
 (7) remains of an old World War II radio station and down here is
 (8) the remains of an old bulldozer that made the road up the
 (9) beach
 (10) to the radio station and we walked this entire area We
 (11) walked all along here and found again very clean very
 (12) productive very pretty and we found one little spot that had
 (13) some tarry material in it
 (14) Q All right Let me show you DX13280 Tell the jury what
 (15) that is
 (16) A Well I'm standing in fact right down here pointing my
 (17) camera up the beach very lush and productive fucus all kinds
 (18) of algae and right at the tippy top of the beach right
 (19) amongst these rocks here there is a little pocket of asphaltic
 (20) material
 (21) Q All right and that's DX13272 That's Mr -
 (22) MR BROWN Do you want 72 next right?
 (23) MS SMITH Yeah please
 (24) MR STOLL Your Honor may I approach?
 (25) THE COURT Just you counsel?
 (26) MR STOLL Well with counsel

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- (1) THE COURT You don't mean approach me you mean
 (2) approach them
 (3) MR STOLL Yes
 (4) (At side bar on the Record)
 (5) MR STOLL Your Honor I don't know where we're
 (6) going but there's been reference to Bush or Dawson making
 (7) some
 (8) finding There's no evidence in the record about any statement
 (9) by Dawson or any - anything about - I don't know where we're
 (10) going with Dawson is he going the reference what Dawson
 (11) said?
 (12) MS SMITH Well I don't think we have to reference
 (13) it but ICF went out through Dawson to Kodiak and checked out
 (14) the shorelines and he went to two of the ones ICF went to
 (15) THE COURT That's all he's going to say is he went to
 (16) two that ICF went
 (17) MS SMITH That he didn't find oil or found a little
 (18) oil or whatever the testimony is
 (19) MR STOLL A little what?
 (20) MS SMITH A little oil He's going to say what he
 (21) found when he walked the same beaches ICF -
 (22) MR STOLL I don't have any problem with him doing
 (23) that but we have no testimony about ICF doing anything on
 (24) Kodiak I don't see the relevance of sighting ICF doing
 (25) something There's been no testimony about ICF going -
 (26) MS SMITH Well they did go to Kodiak

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- (1) THE COURT That's all right skip it Just say what
 (2) he saw Forget the ICF
 (3) (End of bench conference)
 (4) BY MS SMITH
 (5) Q Tell the jury what you found at DX13272
 (6) A Well we had Mr Dawson's photographs and we matched
 (7) the
 (8) rocks and we found that he had this little patch right up here
 (9) at the top of the beach It's some tar If you know where to
 (10) look and if you know what you're looking for you can find
 (11) probably a couple square feet of stuff spread out through
 (12) here What I did was I again pulled away the surface rocks to
 (13) see whether it's widespread and it's not And I went all
 (14) across this beach looking for it and it's only in this little
 (15) corner and it's on its last legs breaking down and going away
 (16) naturally But again you just don't notice it unless you know
 (17) what to look for
 (18) Q Pointing back to DX13271 Do you have an opinion about
 (19) the
 (20) shoreline of Perevalnie Passage?
 (21) A Yes
 (22) Q And what is it?
 (23) A Absolutely no remaining effect of the spill on this very
 (24) beautiful place
 (25) Q All right Did you go anywhere else in Kodiak?
 (26) A Yes Shuyak Harbor
 (27) Q Let me show you DX13281 Wow that's beautiful What is

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- (1) this?
- (2) A This is an aerial picture that I took myself of Shuyak Harbor. If you look off in the distance you can see the mountains of the Alaskan Peninsula across Shelikof Straits.
- (3) And this is a little sport fishing camp. This is a fishing boat and we landed here and surveyed this entire shoreline here within this little protected area.
- (4) Q And what did you find?
- (5) A Well it's interesting. I found some tar from some other source out here. And I found about a tablespoon of what might be remains of the spill right here but other than that I didn't find anything oily.
- (6) Q All right. Is there any continuing damage to this parcel in your opinion in Shuyak Harbor from Exxon Valdez oil?
- (7) A Absolutely not. In fact we observed setnets in here salmon fishing lines all over the place and it's clearly an active productive area.
- (8) Q Dr. Page the plaintiffs will say that these are all pretty pictures maybe you could go into the coffee table book business but the question is is all of this shoreline sitting on subsurface oil? Is there a sea of subsurface oil underneath?
- (9) A Absolutely not.
- (10) Q Why not?
- (11) A Well again as I said many times you know oil -

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- (1) petroleum once it's released in the environment changes rapidly. It's a natural organic compound a material that breaks down bacteria chew it up it evaporates it changes character and even in subsurface areas as long as you have water percolating back and forth with air in it to support the growth of bacteria which chew it up even if it's subsurface oil under a foot or more of rocks and cobbles or even sand it's going to break down naturally and that's what I saw going out year after year in the Sound digging in places like Point Helen looking at what was happening to that stuff 18 inches beneath the surface of the beach.
- (2) Q As a result of your five years of study do you believe that the spill area is still full of oil?
- (3) A Absolutely not. It's behaving just like any other oil spill that ever happened. It looks really terrible at first and you you know have all of these awful pictures and people compare it to disasters which we can make a long list of but oil spills are episodic. They happen and they have their impact and then the environments that they happen in recover because it's an episodic event.
- (4) Q Is this like other oil spills in that regard?
- (5) A Yes absolutely. In fact this is behaving just like other oil spills that have been studied over time and people have studied oil spills for a long time and they know a great deal about them.

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- (1) MS SMITH Thank you Dr. Page. And thank you Professor Brown for all of that work. Your witness.
- (2) MR GARGAN Your Honor it will take us a minute to put some things on the overhead projector.
- (3) THE COURT Do you want to take a break?
- (4) MR GARGAN Well if I could get started I'd just as soon get started.
- (5) THE COURT Go ahead.
- (6) MR GARGAN Flip it and catch the legend if you could.
- (7) MR GARGAN Dr. Page -
- (8) MS SMITH One second I'm sorry.
- (9) MR DIAMOND May we approach a moment Your Honor?
- (10) THE COURT Sure.
- (11) (At side bar on the Record)
- (12) MS SMITH Your Honor this is pit comp.
- (13) THE COURT It isn't clear from this.
- (14) MS SMITH Sam is this okay with you?
- (15) MR FORTIER The objection that I had went to the discussion concerning the relative amounts of oil.
- (16) THE COURT Comparisons.
- (17) MR FORTIER Right this is a picture it's a depiction.
- (18) THE COURT I just don't want him to go launching off into it because you have opened the door.

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- (1) MR DIAMOND Well if you guys want to get into it then it's fair game.
- (2) MS SMITH It has to be.
- (3) MR FORTIER As opposed to a picture depicting something ask him what it is.
- (4) MS SMITH That's fine but all the written stuff -
- (5) THE COURT When you ask a question you have to be careful about what you ask because I can't tell what the answer is going to be. So if the answer comes out and that issue which is stipulated away is back in the case it's - that's tough.
- (6) MR FORTIER Do you understand Terry?
- (7) MR GARGAN But am I on the spot that I'm walking through a mine field I'm going to ask him what the picture represents what does it show what does the abbreviation stand for that's it.
- (8) THE COURT Okay you can do it.
- (9) (Bench conference concluded)
- (10) CROSS-EXAMINATION OF DAVID S. PAGE
- (11) BY MR GARGAN
- (12) Q Dr. Page can you read the legend in the box?
- (13) A Yes I can.
- (14) Q Okay would you read it for the jury please?
- (15) A Well I'm sorry that's wrong I cannot I can read the - the location name but the legend in the box is

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- (1) illegible
 (2) THE COURT Read it to him counsel It will be much
 (3) easier You can do it counsel
 (4) BY MR GARGAN
 (5) Q It says closeup of mousse on rock surface Note the dead
 (6) littoria shells Would you like to look at this exhibit for a
 (7) moment?
 (8) A I'll be happy to counsel
 (9) MS SMITH Your Honor I have a foundational
 (10) objection He hasn't established anything about this
 (11) document
 (12) MR GARGAN I will I was trying to get that we --
 (13) could understand it and read it
 (14) BY MR GARGAN
 (15) Q Do you know when this photograph was taken?
 (16) A This photograph was taken by John Harper a member of the
 (17) 1993 post SAP survey team that went and dug over 1700 pits as
 (18) part of their shoreline survey in Prince William Sound the
 (19) Kenai and the shoreline of Kodiak in places
 (20) Q Where was this particular photograph taken?
 (21) A This is a picture in fact of the place I just described
 (22) as at Perevalnie Pass taken in 1993 at the top of the beach
 (23) and it is -- exactly the way I described it You have an
 (24) isolated patch of asphaltic material at the top of the beach
 (25) where in fact dead snails and other debris wash up And in

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- (1) fact it's very weathered and in fact it's very localized
 (2) And if you have a close up lens and do a good job you can get
 (3) a very clear picture of a small part of the beach That's a
 (4) pen incidentally in the photograph
 (5) MR PETUMENOS Your Honor I object the question was
 (6) where was the picture taken
 (7) THE COURT That's true The witness did go beyond
 (8) the question
 (9) A Sorry Your Honor
 (10) MS SMITH Your Honor are we going to have three
 (11) sets of objections?
 (12) MR PETUMENOS We covered this yesterday I thought
 (13) THE COURT We covered --
 (14) MS SMITH This is not an issue --
 (15) THE COURT We didn't cover it completely counsel
 (16) I'll expect the objections from the examining lawyer
 (17) BY MR GARGAN
 (18) Q Have you seen this picture before?
 (19) A Yes I have
 (20) Q Could we look at the next one please? And again is this
 (21) a photograph taken by the same person performing the same
 (22) function that you described in the prior photograph?
 (23) MS SMITH Counsel this is a 25-page exhibit May
 (24) we have the page please?
 (25) MR GARGAN We have four of this particular

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- (1) location It's exhibit 688 I think It's exhibit 688
 (2) which --
 (3) THE COURT The ones you're going to use counsel
 (4) give her the numbers so we don't go through this repetitively
 (5) MR GARGAN I have just four
 (6) MS SMITH I found it Thank you very much
 (7) BY MR GARGAN
 (8) Q This particular one has a legend which says basically the
 (9) same thing a closeup of mousse on rock surface note the dead
 (10) littorian shells Now is that from a different location on
 (11) the beach?
 (12) A No that's from the same area that the previous one was
 (13) taken
 (14) Q Same general area?
 (15) A Yes
 (16) Q And we're going to look at the next one now Again it's
 (17) taken in the same place Perevalnie Pass by Harper It reads
 (18) closeup of -- I have to pick it up to read it SOR/H rim around
 (19) a boulder at the base of the beach face before excavation area
 (20) of pit number three So my first question obviously is what
 (21) is SOR? And you can answer
 (22) A SOR stands for Surface Oil Residue asphaltic material on
 (23) the surface of the beach
 (24) Q And what does the slash H stand for?
 (25) A Heavy

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- (1) Q And how many pits did the -- did that team dig on this
 (2) particular beach?
 (3) A Frankly I don't remember counsel Usually when they went
 (4) to a beach post SAP dug between five and ten pits In many
 (5) cases they dug more They were obliged to take a photograph
 (6) make a record of each pit and again this survey was done in
 (7) 1993
 (8) Q And the next one? Again taken in the same general area
 (9) that is Perevalnie Pass it reads as follows Closeup of
 (10) SOR/ -- /H rim around a boulder at the base of the beach face
 (11) after excavation pit area number three And I wonder if you
 (12) could describe for us what is on the -- that person's finger
 (13) A Again weathered asphaltic oily material as it existed at
 (14) that corner of the beach that I described to you in my
 (15) testimony but in 1993 not 1994
 (16) Q How deep did the surveyors dig these pits?
 (17) A Normally they would dig as deep as they can This
 (18) particular beach because it was underlain by bedrock in the
 (19) area where this asphaltic material was at the top of the beach
 (20) they couldn't dig very deeply In fact that's probably the
 (21) remnants of a tarp that came into that corner of the beach
 (22) in 1989 Where it was possible they dug far deeper than that
 (23) but here the pits weren't very deep because I dug there myself
 (24) in 1994 and couldn't get very far down
 (25) Q Now when you performed your random ball toss
 experiments

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- (1) did you dig beyond the boulders?
 (2) A The purpose of the ball toss experiment was not to deal
 (3) with subsurface oil It was dealing with the question of
 (4) whether you could turn over any rock on the beaches in Prince
 (5) William Sound and find oil under them and therefore the
 (6) purpose of that exercise was in fact not to deal with
 (7) subsurface oil but to deal with the question of oil lurking
 (8) under rocks on the beach
 (9) Q Now that particular beach that you were at I guess on
 (10) Green Island when you were doing the ball toss did you do
 any
 (11) excavation of - of sediments while you were there?
 (12) A On that particular beach?
 (13) Q Yes
 (14) A No
 (15) Q And how about the other island that you were on Smith
 (16) Island did you dig into the sediments of Smith Island when you
 (17) were performing the survey?
 (18) A That was difficult to do at Smith Island because in most of
 (19) the Smith Island beach in fact the bedrock was very close to
 (20) the surface so it would have been very difficult to dig down
 (21) Q And that bedrock acts as an armor doesn't it over
 (22) anything that might be in the sediment underneath it?
 (23) A No bedrock is bedrock It's an impenetrable surface
 (24) It's like somebody poured concrete under the cobbles
 (25) Q Well the rocks that you showed in your video they were

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- (1) large rounded rocks That's the ones I'm referring to Do
 (2) they act as an armor over the sediment below?
 (3) A The cobbles
 (4) Q The cobbles?
 (5) A The cobbles do serve as an armor to protect the sediment
 (6) below from being worked over by storms
 (7) Q So if oil had found its way into those inter - intervals
 (8) spaces between rocks and were down in there it would be very
 (9) difficult for wave action to release that oil is that true?
 (10) A Yes And that's why in fact it doesn't pose a threat to
 (11) the environment and why it's naturally biodegrading because
 (12) those beaches are porous And so what's down there in fact
 (13) has been breaking down naturally over the years and it's in
 (14) the process of going away without ever coming back and
 hurting
 (15) anything because it is protected by being under this cobble
 (16) armor
 (17) Q And this process of breaking down is biodegradation?
 (18) A No It's biodegradation
 (19) Q Biodegradation And does it need oxygen too?
 (20) A Yes And because those beaches are porous they get plenty
 (21) of oxygen
 (22) Q Okay Let's look now at some photographs and the next
 one
 (23) I'll put on is of Knight Island It was done in 1993 and
 (24) before I put it down let me read the comment Pit number one
 (25) large cobble overburden sand pebble cobble subsurface
 OP

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- (1) from 13-18 HOR from 18-40 CM bottom of oil not reached
 (2) MS SMITH Before you put it up could you just tell
 (3) me what page it is of the exhibit
 (4) MR GARGAN Oh sure It's 720
 (5) MS SMITH Thank you very much
 (6) BY MR GARGAN
 (7) Q So Doctor if you would tell us what OP stands for
 (8) A OP stands for Oil filled Pores
 (9) Q And is that - does that mean that the sides of the pit
 (10) are - think of the sides as having little pores in them
 (11) spaces between the sediment totally filled with oil dripping
 (12) out.
 (13) A No what it means is that there is a layer within that pit
 (14) that has that kind of condition sort of like a lens of oily
 (15) material sort of perhaps in an area of - of less heavy
 (16) concentration of oil and that sort of characterizes not the
 (17) whole pit but a portion of that pit And I know that because
 (18) I've dug pits in - this is Point Helens I believe it is
 (19) KN405A and I've dug there myself and seen that in the area as
 (20) I've described in my testimony
 (21) Q And you found oiled pores when you dug?
 (22) A Well in 1990 and 1991 I found quite a bit you know in
 (23) 1993 and especially in 1994 that's the exception rather than
 (24) the - than the rule because as I said in these porous
 (25) beaches - and you can see how coarse the beach structure is

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- (1) and this is at the top of the beach behind that rocky outcrop I
 (2) described you get lots of water percolating up and down so
 (3) what you're seeing in this picture is stuff that's very heavily
 (4) biodegradable and naturally going away and I didn't see
 much
 (5) quote unquote OP in the pits that I dug in 1994 I'm sure
 (6) there was more OP in 1993 and I'm sure there was more in '92
 (7) and '91
 (8) Q And the next notation here it says 13 to 18 is that
 (9) centimeters? That there was 13 to - in the range of 13 to 18
 (10) centimeters would be oiled pores existed in the pit?
 (11) A And the reference point for that 13 to 18 centimeters
 (12) which is about four to six inches is the surface of the beach
 (13) after you take the boulders away from the surface in other
 (14) words once they've removed these 50-pound boulders and got
 out
 (15) their pick ax and started digging that's the reference point
 (16) for that So it's quite a ways beneath the surface of the
 (17) beach as you see it
 (18) Q In other words elevation zero is after the boulder is
 (19) removed?
 (20) A (Nods head up and down)
 (21) Q Okay So then it looks like the first four to six inches
 (22) down you had the oiled pores and then past that you have
 HOR
 (23) And would you tell the jury what HOR is?
 (24) A First of all that's incorrect counsel It's not the
 (25) first four to six inches They're describing the fact that you

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- (1) have to go down four to six inches to find the stuff
 (2) Q I see okay
 (3) A You know well below where any cutters that might be in
 (4) this stuff would be living
 (5) Q I see okay so I understand that
 (6) Now tell us what the - what HOR is and where it was found
 (7) in this particular pit?
 (8) A Okay Well again HOR stands for ~~Heavy Oil~~ Residue and
 (9) it represents a more degraded form of OP OP becomes heavy
 (10) oil residue and that's kind of what happens when you have a lens
 (11) or an area of buried petroleum It sort of decays from the top
 (12) and the bottom
 (13) Q And it says - well what is 18 centimeters about nine
 (14) inches a little less than nine inches?
 (15) A Yeah I -
 (16) Q About - 18 divided by 2 54?
 (17) A I wish I had my desk calculator
 (18) Q I happen to have one for you
 (19) A Thank you counsel It's about 18 did you say counsel?
 (20) Q Yes?
 (21) A 7 2 inches
 (22) Q So from 7 2 inches to 40 centimeters which would be about
 (23) what?
 (24) A Well that would again be about ten inches or so
 (25) Q 40 centimeters? Divided by 2 54 - 22 or so

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- (1) A I'm sorry 16
 (2) Q 16 In that zone we have the heavy oil residue and then
 (3) it goes on to say bottom of oil not reached Apparently there
 (4) was obstructions to further digging like big stones or
 (5) something would that be the case?
 (6) A Well the difficulty in digging in the beach at Point Helen
 (7) is as you dig deeper the sides of the holes cave in on you
 (8) and so that the beach material sort of is very easily moved
 (9) around So I think it's fair to say they dug as deeply as they
 (10) practically could
 (11) Q And the sides would collapse?
 (12) A (Nods head up and down)
 (13) Q And so from what I gather you've told us so far in places
 (14) where there's oil residue in sediments in beaches such as the
 (15) one described in this exhibit 688 page 720 Knight Island
 (16) that it would be fair to expect that in the first four to six
 (17) inches you wouldn't find any oil and then if - if there is
 (18) oil present that is sedimentary oil it's going to start
 (19) existing below four to six inches and there'll be more below
 (20) that but if you turn over a rock or if you scratch the - the
 (21) sand under the rock for the first four inches you don't find
 (22) anything is that a fair statement?
 (23) MS SMITH I'm going to object to that question as
 (24) compound
 (25) THE COURT No he can understand it counsel He

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- (1) didn't - I don't think the jury heard it Go ahead answer
 (2) the question
 (3) A It's not a fair statement The reason is because you
 (4) picked Point Helen which I've described to the jury as - as a
 (5) place to make a point about subsurface oil and Point Helen is
 (6) the worst of the worst of the worst as far as subsurface oiling
 (7) is concerned and in fact most of the remaining subsurface oil
 (8) that remains on the beaches in Prince William Sound is
 (9) probably
 (10) in this one little location and it's going away naturally and
 (11) you cannot make generalizations about shorelines from one
 (12) particular place Point Helen in fact is exceptional and
 (13) that doesn't mean that the stuff at Point Helen isn't going -
 (14) it's not a fair thing to say because you are not using a - a
 (15) representative example of a Prince William Sound shoreline
 (16) even with deposits of subsurface oil to make that point
 (17) Q Okay
 (18) MR GARGAN Your Honor if it please the Court this
 (19) would be a logical place
 (20) THE COURT Sure that would be fine Don't talk to
 (21) anybody about the case Don't form or express any opinion
 (22) until it's submitted to you for deliberation See you
 (23) tomorrow
 (24) (Jury out at 1 27 p m)
 (25) MS SMITH Your Honor I have about 15 exhibits to
 (26) move in I tried to do them as I went along but if I could do

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- (1) that
 (2) THE COURT Sure Talk fast counsel
 (3) MS SMITH Very fast They have a list so -
 (4) THE COURT Well before you start counsel it's sort
 (5) of a tedious process Are the plaintiffs prepared to tell me
 (6) which of these exhibits they object to If they object to any
 (7) of them?
 (8) MS SMITH I'm going to move in the pictures starting
 (9) with -
 (10) MR GARGAN I have no objection to the pictures
 (11) THE COURT All right
 (12) MS SMITH DX13257 which is LaTouche DX9228AA the
 (13) Bay of Isles video DX13225 Chenega 9B DX8929 Chenega
 (14) 9B
 (15) The next four are Sleepy Bay 1441 1442 8936 15348 These
 (16) are also Sleepy Bay 13281 13289 North LaTouche 8938
 (17) Eshamy Bay DX13226 13280 13277 13278 Foul Bay
 (18) DX8985
 (19) Perry Island DX13265 DX13266 DX13264 Rua Cove
 (20) DX13297 2
 (21) DX13 - excuse me DX13297 1 Green Island DX8949 And a
 (22) video which is DX13802 and the gloves DX14803 2 Verdant
 (23) Cove DX13205 DX13238 Taroka Arm DX13239 - I'm sorry
 (24) that's in evidence excuse me DX13267 DX13275 DX13270
 (25) DX13268 Windy Bay DX6273 DX13282 DX13283 Black Bay
 (26) DX13222 Shuyak parcel the Perevalnie Pass DX13271
 (27) DX13260
 (28) DX13272 Shuyak Harbor DX13261 DX13262
 (29) (Exhibits DX13257 DX9228AA DX13225 DX8929 DX1441

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- (1) DX1442 DX8936 DX15348 DX13281 DX13289 DX8938 DX13226
 (2) DX13280 DX13277 DX13278 DX8985 DX13265 DX13266 DX13264
 (3) DX13297 1 DX13297 2 DX8949 DX13802 DX14803 2 DX13238
 (4) DX13267 EX13275 DX13270 DX13268 DX6273 DX13282 DX13283
 (5) DX13222 DX13271, DX13260, DX13272 DX13261 DX13262 offered)
 (6) THE COURT They re all admitted without objection
 (7) (Exhibits DX13257 DX9228AA DX13225 DX8929 DX1441
 (8) DX1442 DX8936 DX15348 DX13281 DX13289 DX8938 DX13226
 (9) DX13280 DX13277 DX13278 DX8985 DX13265 DX13266 DX13264
 (10) DX13297 1 DX13297 2 DX8949 DX13802 DX14803 2 DX13238
 (11) DX13267 EX13275 DX13270 DX13268 DX6273 DX13282 DX13283
 (12) DX13222 DX13271 DX13260 DX13272 DX13261 DX13262 received)
 (13) THE COURT Okay counsel Is there anything else to
 (14) bring up on the record?
 (15) MR FORTIER Your Honor a couple of things as to
 (16) the archaeological directed verdict motion we would request
 (17) that our response be due on Monday Is that -
 (18) THE COURT Mr Diamond?
 (19) MR DIAMOND We anticipate some very minuscule
 (20) testimony about archaeology on Friday of this week but I have
 (21) no problem putting it over till next week
 (22) THE COURT Are you going to want to - you want to
 (23) evaluate whether you want to file a written response?
 (24) MR DIAMOND A written reply

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- (1) THE COURT Yes
 (2) MR DIAMOND Yes I d like to see theirs first
 (3) THE COURT If you want a written response it will be
 (4) due on Tuesday
 (5) MR DIAMOND It will be due when?
 (6) THE COURT Tuesday
 (7) MR DIAMOND Fine
 (8) MR FORTIER And the only other thing - I d like to
 (9) speak with Mr Oppenheimer about this - but in reviewing the
 (10) documents that weren t admitted - or exhibits that weren t
 (11) admitted there was one 1133 It was used during the green
 (12) deposition PX1133 It s Kenal Fjords the English Bay
 (13) portion the Harris Bay the raging controversy over Harris
 (14) Bay
 (15) MR OPPENHEIMER I m sorry
 (16) MR FORTIER I move for its admission I can bring
 (17) it tomorrow to show Mr Oppenheimer It s one that I forgot to
 (18) move for the admission of Your Honor It s been a while
 (19) too
 (20) (Exhibit PX1133 offered)
 (21) MR DIAMOND Mr Oppenheimer in the corner was just
 (22) saying he would like to see it before he consents to its
 (23) admission
 (24) MR OPPENHEIMER If we have no objection we ll
 (25) stipulate to it We ll look at it tomorrow

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- (1) THE COURT I ll put it in you can take it out if
 (2) there s an objection
 (3) (Exhibit PX1133 received)
 (4) MR OPPENHEIMER 1135
 (5) THE COURT I thought it was 1133 counsel
 (6) MR FORTIER 1133
 (7) And Your Honor the only other two issues are the OPA 90
 (8) judicial notice request and the archaeological statutes
 (9) THE COURT Let s talk about OPA 90 The pending
 (10) motion work only deals with first whether I take judicial
 (11) notice and second whether I instruct the jury now The
 (12) important question there is do I instruct the jury now The
 (13) answer is no I ll instruct them at the end If it s
 (14) appropriate But the motion raises a very serious legal
 (15) question regarding what damages can be claimed here So
 you
 (16) better check that out counsel and brief it to its utmost both
 (17) of you
 (18) Now what else?
 (19) MR FORTIER Well the archaeological judicial notice
 (20) request Your Honor The issue there being what the statute
 (21) says We proposed to take judicial notice of the statute with
 (22) regard to aboriginal claims below the mean high tide I think
 (23) the defense has suggested that we should take judicial notice
 (24) You got to take judicial notice and read the whole statute to
 (25) the jury

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- (1) THE COURT I think that s - I can deal with that
 (2) later It seems to me to be an instruction issue and not an
 (3) in-trial instruction issue
 (4) MS SMITH Your Honor may the witness step down?
 (5) THE COURT Yes In fact I was going to tell him
 (6) that and I lost sight of that
 (7) MS SMITH I did too Sorry David
 (8) THE COURT All right Is there anything else today?
 (9) All right Thank you
 (10) THE CLERK. Please rise This court stands in
 (11) recess
 (12) (Recess at 1 32 p m)

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 (3) BY MR GARGAN 4998
 (5) DIRECT EXAMINATION OF DAVID S PAGE (Resumed)
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 (6) BY MS SMITH 5000
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 (2) DX1369 received 5041
 (3) DX13205 and EX8986 received 5043
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 (5) DX4831 DX1820A and DX5505AA offered 5007
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- (1) STATE OF ALASKA)
 (2) Reporter s Certificate
 (3) DISTRICT OF ALASKA)
 (6) I Joy S Brauer RPR a Registered Professional
 (7) Reporter and Notary Public
 (8) DO HERBY CERTIFY
 (9) That the foregoing transcript contains a true and
 (10) accurate transcription of my shorthand notes of all requested
 (11) matters held in the foregoing captioned case
 (12) Further that the transcript was prepared by me
 (13) or under my direction
 (14) DATED this day
 (15) of 1994
 (21) JOY S BRAUER RPR
 Notary Public for Alaska
 (22) My Commission Expires 5-10-97

Look-See Concordance Report

UNIQUE WORDS 2,336
TOTAL OCCURRENCES 10,977
NOISE WORDS 385
TOTAL WORDS IN FILE 32,757

SINGLE FILE CONCORDANCE

CASE SENSITIVE

NOISE WORD LIST(S)
NOISE NOI

INCLUDES ALL TEXT
OCCURRENCES

IGNORES PURE NUMBERS

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- (1) IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (2) THIRD JUDICIAL DISTRICT
 (4) In re) Case No 3AN 89 2533 Civil
) Anchorage Alaska
 (5) The EXXON VALDEZ) Wednesday August 10 1994
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 (10) TRANSCRIPT OF PROCEEDINGS (Continued)
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 (13) BEFORE THE HONORABLE BRIAN C. SHORTELL
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- (1) PROCEEDINGS
 (2) (Jury In at 8 42 a m)
 (3) (Call to Order of the Court)
 (4) MS SMITH Your Honor we wanted to move into
 (5) evidence one last David Page exhibit and it's DX15489 It's
 (6) his artwork
 (7) (Exhibit DX15489 offered)
 (8) MR GARGAN No objection
 (9) THE COURT Okay it's admitted
 (10) (Exhibit DX15489 received)
 (11) MR GARGAN Good morning Your Honor Good morning
 (12) ladies and gentlemen Dr Page
 (13) A Good morning Mr Gargan
 (14) CROSS-EXAMINATION OF DAVID S. PAGE (Resumed)
 (15) BY MR GARGAN
 (16) Q I'd like to go back to the photographs that we were talking
 (17) about yesterday I have three more to show This is from
 (18) Exhibit 688 This particular one is page 727 and if you could
 (19) zoom in on the legend Can you read the legend in this
 (20) particular exhibit Dr Page?
 (21) A I feel like I'm at the eye doctor's here It's a little
 (22) hard to see some of those Pretty much but you'll have to
 (23) help me with some of the letters
 (24) Q Okay Let's see pit equals 8 - or pit Number 8 I guess
 (25) surface cobble and boulder, 0.25 centimeter pebbles 5.35

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- (1) centimeters SGPC I guess that's the first question What is
 (2) SGPC?
 (3) A I think that's a term referring to surface gravel, but
 (4) again I'm not familiar with that. I don't think it's an
 (5) oiling designation Mr Gargan
 (6) Q Maybe porous core?
 (7) A Huh?
 (8) Q Maybe porous core perhaps?
 (9) A Surface gravel porous core
 (10) Q Okay then let's go on to 35 water level OP again is
 (11) oiled pore and 5.35 centimeters and brown sheen on water
 (12) Okay could you interpret that for us in a general sense?
 (13) A Well what I take it to mean is that they dug a pit Number
 (14) 8 This again is at Point Helens site I described yesterday
 (15) and it's a - apparently has porous gravel in the upper
 (16) stratum and at 35 centimeters down - which is what about 15
 (17) inches - they hit the water level which would depend on what
 (18) the tide was and so forth and that they hit a lens of oily
 (19) material this OP and they saw brown sheen on water And
 (20) again I'm not quite sure what the - whether the 5- to
 (21) 35-centimeter designation the shorthand refers to you know a
 (22) layer of OP that thick which doesn't seem likely because I've
 (23) dug around in there but that's really the best I can do with
 (24) that
 (25) Q Okay let's move on to the next one then Again there's

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- (1) a photo of a pit This is on page 728 and if we could zoom in
 (2) on the legend please I guess this is the same pit
 (3) A (Nods head up and down)
 (4) Q And all the things you said before obviously apply to this
 (5) one to this picture okay
 (6) Can we move to the next one please?
 (7) Okay this is pit 5 could you read it for us please?
 (8) A Okay this is LA 20-C again an area that I described and
 (9) it's pit number 5 It's Sleepy Bay Pit number 5 closeup of
 (10) moderate oil residue located between 10 and 22 centimeters
 down
 (11) below the surface of the beach The pit is one meter below
 (12) last high water swash line so it's right up at the top of the
 (13) beach
 (14) Q Okay could you just focus back on the picture?
 (15) MR GARGAN All right Your Honor, at this time I
 (16) would like to move the admission of those particular
 (17) photographs part of Exhibit 888 It's pages 218, 219 222
 (18) 221 and the ones that we just showed this morning which are
 (19) 727 728 and 720
 (20) (Exhibit 888 (pages 218 219, 221, 222 720 727 and 728)
 (21) offered)
 (22) MS SMITH Your Honor I don't think he has any
 (23) foundation This witness just read what was on them but he
 (24) did not prepare them himself He just testified to what they
 (25) say and what his understanding of the terms might be

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- (1) THE COURT Counsel?
 (2) MR GARGAN Your Honor, this is a document that is
 (3) kept in the normal course of the business of the survey teams
 (4) It was a document that was identified prior to trial today and
 (5) If it's simply a foundation objection I think the holding
 (6) would be the same way the ruling was when I opposed the
 (7) foundation
 (8) THE COURT Just come up here, maybe I can clear this
 (9) up
 (10) I don't think I need you
 (11) (Bench conference off the record)
 (12) THE COURT I'll admit the documents
 (13) (Exhibit 888 (pages 218 219, 221 222 720 727 and 728)
 (14) received)
 (15) BY MR GARGAN
 (16) Q Could you put up exhibit 5505AA.
 (17) Dr Page yesterday we - you talked about this particular
 (18) exhibit 5505AA and you explained to the Court that the basis
 (19) for this document was Mr Wolf's report - or Dr Wolf's
 (20) report and I would like to show you what I've marked as
 (21) plaintiffs Exhibit 8070 which is entitled Fate of the Oil
 (22) Spilled From the T/V Exxon Valdez in Prince William Sound
 (23) Alaska. The lead author is D A Wolf of NOAA
 (24) MS SMITH Counsel may I have a copy of that?
 (25) MR GARGAN Sure

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- (1) MS SMITH Your Honor If I could just have a minute
 (2) this is one of the three three unproduced
 (3) THE COURT Sure okay Counsel go ahead
 (4) MR GARGAN I was just allowing Dr Page-
 (5) THE COURT That's fine I couldn't tell what stage
 (6) of the proceeding you were in
 (7) BY MR GARGAN
 (8) Q Dr Page is this the author that you were referring to
 (9) yesterday?
 (10) A Yes it is
 (11) Q And is this the paper that you were referring to yesterday?
 (12) A Yes it is
 (13) Q Would you look at page 73 please? Is it 53? I'm sorry
 (14) 53 And on page 53 we find a mass balance as you described
 (15) the mass balance yesterday That is an accounting for where
 (16) all the oil went that went into the system initially?
 (17) A Yes
 (18) Q Is that correct? Now I've prepared another document last
 (19) night which I didn't have the opportunity to give to counsel
 (20) but I'll do it now And if you could put up Exhibit 8069 and
 (21) if you would look on the right hand side I copied out from
 (22) Dr Wolf's paper his mass balance that's contained on page 53
 (23) and if you would just compare that I did the copying correct
 (24) we could go forward
 (25) A You correctly copied the estimates from that table

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- (1) Q Okay Now is it correct then using Dr Wolf's paper and
 (2) the NOAA studies that were done to conclude that 13 percent of
 (3) the 11 million gallons that were spilled in Prince William
 (4) Sound are contained in subtidal sediment?
 (5) A As he says in his table -
 (6) Q Just - okay I'm sorry I didn't mean to interrupt you
 (7) A Again -
 (8) THE COURT Hang on counsel maybe we better
 (9) establish the procedures here You can answer the question
 (10) first If an explanation is necessary you can then explain
 (11) A That is what the table says with an asterisk at the bottom
 (12) of it which qualifies the form in which he is indicating that
 (13) those subtidal residues occur
 (14) BY MR GARGAN
 (15) Q Of course I didn't ask for that part of the question
 (16) THE COURT Counsel he should have a fair opportunity
 (17) to explain If the answer is maybe or yes with qualification
 (18) he has to give it.
 (19) BY MR GARGAN
 (20) Q So 13 percent of 11 million gallons is 1 430 000 gallons
 (21) Now if you want to check that arithmetic again I have my
 (22) calculator Would you like to check it?
 (23) A I don't dispute your estimate counsel but as Dr Wolf
 (24) states in his table to refer to this material that he denotes
 (25) with an asterisk which he defines as highly weathered

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- (1) refractory residuals in terms of gallons is incorrect because
 (2) it's basically particulate microscopic particles of degraded
 (3) the bottom of the barrel as we talked about yesterday that's
 (4) essentially dispersed throughout the environment as any other
 (5) organic matter. So we can't talk about stuff like that as if
 (6) it were oil in the barrel. We have to talk about it as if it
 (7) were just any other refractory organic matter that's sitting
 (8) down there not doing any harm.
 (9) Q Isn't it true that Dr. Wolf and his colleagues
 (10) determined that 13 percent of the oil spilled from the Exxon
 (11) Valdez is contained in subtidal sediments?
 (12) A It is correct as again qualified in his own table.
 (13) Q Now let's turn to the material that Dr. Wolf characterizes
 (14) as having been beached and that's on line three of - of this
 (15) exhibit that we're looking at Exhibit 8069. Now two percent
 (16) of 11 million gallons is 220,000 gallons. Isn't it?
 (17) A Yes it is. And counsel again I note that that entry in
 (18) Dr. Wolf's table has an asterisk next to it indicating that
 (19) that as well is in the form of highly weathered refractory
 (20) residuals in other words bottom of the barrel, inert
 (21) material.
 (22) Q And Doctor for example some of the pits that we looked
 (23) at earlier that were contained in Exhibit 688 where we saw
 (24) oiled pores that wasn't highly weathered refractory material,
 (25) was it?

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- (1) A That material in fact in those pits is very highly
 (2) weathered.
 (3) Q It's in a liquid form?
 (4) A It appears to be in a liquid form because it's floating on
 (5) water but I can tell you because I've sampled it myself, is
 (6) that that's very much mixed up with clay particles. It is very
 (7) highly weathered. It couldn't even stick to a metal spoon when
 (8) you stick a spoon in it. In other words it's well on its way
 (9) to kind of being biodegraded. It's not the stuff that went in
 (10) there in 1989.
 (11) Q And if you put your nose in the pit do you smell oil?
 (12) A Some of them you do.
 (13) Q And that would be volatile aromatic hydrocarbon?
 (14) A No actually that would be sort of semivolatile stuff
 (15) that's in very low concentration now.
 (16) Q Okay let's turn for a moment to - to the hindcast model
 (17) that you talked about yesterday and that was based on a - on
 (18) work of Mr. Gault of NOAA?
 (19) A Yes.
 (20) Q The work that Mr. Gault did was a computer simulation was
 (21) it not?
 (22) A Yes.
 (23) Q And do you know how he simulated for example the contour
 (24) of the land? Are you familiar with the process of computer
 (25) simulation for mass transfer of that type?

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- (1) A What they do when they do a computer - again this is a
 (2) simulation in the sense that it's - knows what the answer is
 (3) because it's tracked the spill. It knows what the topography
 (4) is because the shape of the shoreline islands the map of the
 (5) Sound. If you will is - you know is entered into this model
 (6) and so it's entered into - it is what they call a GIS
 (7) Geographic Information System type of computer file.
 (8) Q Are you telling us that the computer simulation starts out
 (9) using a map?
 (10) A Well in order to enter in where the shoreline is and where
 (11) the islands are somebody actually has to enter in the location
 (12) of the shoreline into a computer file so the computer
 (13) ultimately can do the simulation based on what the Sound and
 (14) the islands and the shoreline actually look like.
 (15) Q Okay I'd like to put up on the screen now the cover sheet
 (16) of a document entitled Fate and Transport of the Exxon Valdez
 (17) Oil Spill, and it's plaintiffs Exhibit Number 1949. Are you
 (18) familiar with that document?
 (19) MS SMITH Is this - has this been produced to us?
 (20) MR GARGAN I don't know.
 (21) BY MR GARGAN
 (22) Q Are you familiar with that document?
 (23) A It says it's part four of a five-part series so it must
 (24) have been published sometime in the past. I may have read it,
 (25) but I don't remember seeing that particular article.

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- (1) Q It was published in 1991. You see on the lower left side
 (2) it says 202 Environment Science Technology Volume 25
 (3) Number 2 1991. What I'm really driving at in talking about
 (4) Dr. Gault's model is how precise is it in terms of predicting
 (5) where the oil had gone and what degree of error is
 (6) acknowledged?
 (7) In this particular model that's the exercise. And if you
 (8) could - if we could now turn to page 202 and put it on the
 (9) screen - 205. You see in the drawing on the left side the
 (10) digitation of the shoreline. Do you see that?
 (11) A Yes.
 (12) Q And in fact there's no map drawn into the simulated model
 (13) as a starting point is there?
 (14) A Well again that's a map that was obviously drawn in with
 (15) sufficient resolution to permit them to run the model. I mean
 (16) they clearly didn't make up the relative orientation of the -
 (17) of the islands. It's kind of like a low res computer picture
 (18) but it clearly shows the important topographic features of
 (19) Hinchinbrook Island north end of Montague Island Knight
 (20) Island and Naked Island complex Bligh Island Bligh Reef
 (21) And
 (22) in terms of the - the ability of the model to resolve clearly
 (23) the resolution is adequate and those figures had to be entered
 (24) in. I mean those are - the orientation of those you know
 (25) islands even at low resolution are not made up. They were
 (26) entered in as data.
 (27) Q Right and there might even be some islands that are so

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- (1) small that they couldn't make it into the grid because of the
 (2) space between the grid isn't that true?
 (3) A Well again this is a hydrodynamic model and I think that
 (4) I note Smith Island is there and that's pretty small so it's
 (5) clear that they've added all of those features that are
 (6) important terms of water flow and oil transport.
 (7) Q Look to the right if you would of that particular sketch
 (8) and it says talking about correcting the model for its - it's
 (9) predictability if they sighted patches of oil swimming
 (10) upstream then they would disregard that evidence or that
 (11) particular output of the computer isn't that so?
 (12) A Yes
 (13) Q So in other words there is - there is clearly an error
 (14) factors built into the program because that's all we can do
 (15) that's all we know how to do isn't that right?
 (16) A Well again Mr Gargan what they're simply saying is is
 (17) that they constantly corrected their model for actual
 (18) observations and that's - that's what they were saying
 (19) Q Okay Now, can you conclude from this particular - well
 (20) before I go there do you know whether this was a
 (21) two-dimensional model or a three-dimensional model?
 (22) A It was dealing with the surface oil on the surface of the
 (23) water
 (24) Q So that's two dimensions?
 (25) A Yes

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- (1) verified that the model basically is a fair representation of
 (2) what happened
 (3) Q Now you relied on this model to rule out certain places as
 (4) not having oil?
 (5) A Yes
 (6) Q And then was there a verification of that decision?
 (7) A Yes
 (8) Q And how was that done?
 (9) A Again that was done by observation and shoreline survey
 (10) I think it's fair to say if anyplace had got oiled in 1989
 (11) people would have known about it and so reported it
 (12) Q Now are you familiar with - could we get exhibit PX8801
 (13) please? Are you familiar with a document entitled Fate of Oil
 (14) Supplemental Report by Hans Jahns dated February 17th
 1994
 (15) plaintiffs exhibit PX80817
 (16) A Yes
 (17) Q And tell us who Dr Hans Jahns is?
 (18) A Well Dr Jahns - Mr Jahns is actually retired now He
 (19) was a senior scientist at Exxon
 (20) Q Okay And did he study the fate of the oil?
 (21) A Yes he did
 (22) Q And he wrote this report?
 (23) A He did
 (24) Q If we could look at Table 1 B which is - it's on Page 14
 (25) of Dr Jahns report

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- (1) Q And therefore there was no - no provision in the model
 (2) for mixing?
 (3) A No
 (4) Q So we have to then conclude this is a pretty simple model?
 (5) A Well again I think that it's not a pretty simple model
 (6) because it takes into account wind current, topography, where
 (7) the oil was at any given time and therefore I think it's
 (8) probably the best representation we have of where the oil was
 (9) and wasn't within sort of the scale of Prince William Sound
 (10) Q And for example in the first three days of the spill
 (11) there was no wind essentially? There was no wind driving
 (12) waves for example isn't that so?
 (13) A Yes
 (14) Q So the oil that spilled at Bligh Reef simply spread based
 (15) on its randomness and chaos theory perhaps wouldn't that be
 (16) the basis for a random distribution of oil just coming out
 (17) without anything driving it?
 (18) A Yes and a little bit of tidal movement of the water mass
 (19) Q So my point is that there perhaps are places in Prince
 (20) William Sound that received oil but by Jerry Gault's model
 (21) you wouldn't have expected it necessarily to be there isn't
 (22) that true?
 (23) A I think it's fair to say that it's highly unlikely that any
 (24) significant amount of oil reached places that aren't so
 (25) indicated on the model and I think again observation has

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- (1) MS SMITH Mr Gargan may the witness have a copy?
 (2) MR GARGAN Okay
 (3) MS SMITH David we'll get you one
 (4) BY MR GARGAN
 (5) Q Table 1-B of course is entitled Oiled Shoreline Mileages
 (6) and Areas of Significant Subsurface Oil Residue in Prince
 (7) William Sound and it's based on surveys of 1993 1992 et
 (8) cetera 89 and it appears that in the first year, 1989 899 3
 (9) miles of Prince William Sound were surveyed and of that
 (10) number 486 8 were found to be oiled is that right?
 (11) A Yes
 (12) Q And we could go - I'm not going to go through each one
 (13) but what I want to do is bring this someplace, so I'd like to
 (14) look at Exhibit 8011
 (15) MS SMITH Your Honor before this is put up on the
 (16) screen we have an objection to 8011
 (17) THE COURT Come up here
 (18) (At side bar on the Record)
 (19) THE COURT Got it What's the objection?
 (20) MS SMITH The objection is there's no foundation for
 (21) this It is not created by Mr Jahns or Mr Page We don't
 (22) know who did it
 (23) MR GARGAN Well I'll tell you where it came from
 (24) It's simply taking the numbers that are contained in Dr Jahns
 (25) report and just divide - in other words taking the percentage

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- (1) of the oiled land compared to the inspected land and saying
 (2) that 54 percent of 1989 was found to be oiled and whatever the
 (3) next number is to the next year it's just simple arithmetic
 (4) THE COURT Unfortunately it's simple arithmetic is
 (5) something he should do in order to confirm these things
 (6) MR GARGAN I'll ask him
 (7) THE COURT But then it may take some time is there
 (8) anything - can you pass this and go on to something else?
 (9) MR GARGAN Well I would like to establish it based
 (10) on Dr -
 (11) THE COURT I'm going to let you establish it The
 (12) question is why don't we do it efficiently and if he has to do
 (13) a math problem in here it's going to take some time because
 (14) he's going to quibble with these things it's going to take
 (15) time So can you pass it or do you want me to send the jury
 (16) out?
 (17) MR GARGAN I'd like to if I could stay with it
 (18) THE COURT Is the pit free?
 (19) THE CLERK Yes it is
 (20) THE COURT Would you head out to the - the
 (21) supplemental jury room please?
 (22) MR GARGAN I'm sorry to do this but it sort of like
 (23) fits into the pattern
 (24) (Jury out at 9 13 a m)
 (25) MS SMITH Not only that but there are three or four

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- (1) of these
 (2) THE COURT If that's true he's going to -
 (3) MR GARGAN There's another one after this
 (4) MS SMITH While we're going through this our
 (5) objection - and I'm happy to have him use the calculator to do
 (6) the math There's no foundation for the use with this witness
 (7) in the sense they're not our numbers they're not - our
 (8) position is they're not simple mathematical calculations,
 (9) they're very misleading and they're for the plaintiffs
 (10) THE COURT I think that's a legitimate I guess we
 (11) don't have to whisper anymore I think that's a legitimate
 (12) objection but to the extent he can compare this with the
 (13) original and then do the problems the objection to me goes
 (14) away If he can't do that then I've got to know about that in
 (15) order to make a ruling
 (16) MS SMITH What we might want to do I'll give them
 (17) to him and he has looked at these before is put on the record
 (18) right now what he says about them and then let Your Honor as
 (19) an offer of proof as to why it shouldn't be used and then let
 (20) Your Honor decide
 (21) THE COURT Yes that's fine That's fair enough
 (22) Would you do me a favor? While counsel is questioning would
 (23) you sit down?
 (24) MS SMITH They put the woman who's operating the
 (25) Elmo in front of me and I can't see over her

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- (1) THE COURT We're going to have to change the
 (2) courtroom because that's -
 (3) MS SMITH I'd love to sit down
 (4) MR GARGAN Sit in my seat I'm not sitting there
 (5) THE COURT Do it the way that's best but if she has
 (6) to move she has to move
 (7) MS SMITH I'd rather sit in my own seat
 (8) THE COURT If we have to move the Elmo we'll move
 (9) the Elmo How long is this going to take?
 (10) MR GARGAN Ten minutes
 (11) THE COURT I'll give you 15 I'm going to give them
 (12) 15 in the good jury room I'll give you 15 too
 (13) THE CLERK Please rise this court stands in
 (14) recess
 (15) (Jury in at 9 15 a m)
 (16) (Recess from 9 15 a m to 9 32 a m)
 (17) THE CLERK This court now resumes its session
 (18) Please be seated
 (19) (At side bar on the Record)
 (20) MS SMITH Your Honor here's where we are On this
 (21) one we still maintain our objection that this is something
 (22) that was put together by the plaintiffs and it has no
 (23) foundation but we have performed the calculations and they
 (24) are
 (25) accurate So we have our problems with the exhibit and we
 (26) continue to press the objection but it's not a mathematical

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- (1) calculation objection
 (2) THE COURT I'm not going to rule on the objection
 (3) now I'm going to have to hear the examination I may not
 (4) admit the document, but as far as a basis for questioning
 (5) right now it's acceptable
 (6) MS SMITH Okay On the second one which is - I
 (7) don't know if Your Honor has seen this yet.
 (8) THE COURT I have not.
 (9) MS SMITH Got my argument written on the side
 (10) THE COURT It's a very good argument. I can't read
 (11) it.
 (12) MS SMITH This one we object to on more than just
 (13) foundation We think it's inaccurate and misleading It's a
 (14) derogation of something that the plaintiffs put together and
 (15) what it does the analogy we came up with over the break it's
 (16) as if you looked at last year's videos of your family vacation
 (17) it would be an accurate predictor of this year's family
 (18) vacation I mean it really is - we think it's not.
 (19) MR GARGAN It's five years of your family vacations
 (20) and you watch the children grow
 (21) THE COURT I'm going to let it be used
 (22) (End of bench conference)
 (23) BY MR GARGAN
 (24) Q I'd like to put up Exhibit 8011 on the screen please
 (25) Dr Page during the break did you have an opportunity to

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- (1) do the simple calculation of determining what percentage of
 (2) surveyed shoreline - of surveyed shoreline found oil in
 (3) sediments over between the years 1989 and 1992?
 (4) A Let me very quickly explain for the benefit of the jury
 (5) how we would do it, because we've got all these numbers here
 (6) And I must admit at first I was a little confused by what you
 (7) were trying to do but yes I had a chance to do that
 (8) Q And would it be correct that in 1989 899 3 miles were
 (9) surveyed and that of those - those miles surveyed 486 8
 (10) miles there was oil found in subsurface areas?
 (11) A Well it doesn't say anything about subsurface oil there
 (12) It simply says 486 8 miles of shoreline were found oiled and
 (13) conversely about the same amount in other words
 (14) 480-some-odd
 (15) miles - or more actually miles of shoreline were found
 (16) unoiled over 500
 (17) Q So if you - if you take Dr Jahns numbers that's shown in
 (18) Table 1-B on this exhibit, he said that the people who are
 (19) concerned with this question went out and looked at 899 3
 (20) miles and in those - in that length of area of beach stretch
 (21) they found significant subsurface oil residue in 486 8 miles of
 (22) that area that they surveyed isn't that what he's saying to
 (23) us?
 (24) A No If you look at Table 1-B in your exhibit in 1989 they
 (25) surveyed - state federal Exxon people surveyed almost 900
 miles of shoreline and that the miles of shoreline with

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- (1) 28 percent of that which was surveyed was found to have - have
 (2) oil in subsurface areas isn't that true?
 (3) A In order to get that number as I calculated however I
 (4) must state that instead of dividing 486 by 899 miles which you
 (5) do in 1989 in 1993 they only surveyed 31 miles of shoreline
 (6) because the difference between 31 and 899 was found to be
 (7) unoiled by previous surveys And so that these percentages
 (8) this percentage of surveyed shoreline found oiled column
 (9) represents the percentages of surveys that were decreasing in
 (10) size year by year because they - they sort of didn't go back
 (11) and resurvey clean shorelines and so that each year they only
 (12) found about 30 percent of their shorelines that they surveyed
 (13) to have oil but each year, they surveyed less and less and by
 (14) 1993 they only had to survey 31 miles instead of 900 miles
 (15) Q But Doctor -
 (16) A If you do the arithmetic you get those numbers
 (17) Q If you do the arithmetic you get those numbers And this
 (18) in fact is what was done increasingly smaller samples of the
 (19) same population that all of the surveys that were done in the
 (20) years after 89 were within the area of the 899 3 miles
 (21) right?
 (22) A Yes
 (23) Q And now if you take those percentages and you plot them
 (24) up
 (25) that's the standard thing that engineers and scientists do,
 isn't it that you put data on graphs?

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- (1) various oiling breaks down as given in that table And they
 (2) don't have a column for unoiled but the difference between
 (3) 899 3 and 486 8 is the amount of shoreline unoiled and then
 (4) they don't give any value at all for area with significant
 (5) subsurface oil for 1989
 (6) Q Okay but it's inescapable isn't it really that if you
 (7) look at the column in Dr Jahns report where it says "total
 (8) oiled that 486 8 miles was found to have oil in it out of the
 (9) 899 3 isn't that inescapable?
 (10) A Yes
 (11) Q Okay And isn't it true that we do the same thing for
 (12) 1990? We find that 687 6 miles were surveyed and 280 9 were
 (13) found to have oil?
 (14) A And again the difference between 280 and 687 6 were not
 (15) found to have oil So we have a sort of decreasing survey area
 (16) every year because they're obviously not going to go out and
 (17) survey clean beaches because they were supposed to look for
 (18) oil
 (19) Q So if you take a percentage of the - percentage of the
 (20) beach stretch that's found to have oil let's say in 1990
 (21) 1989 or the portion that was found to have oil and you simply
 (22) do a simple percentage you come up with the numbers that are
 (23) shown in the next to the last column in that lower table 54
 (24) percent in 1989 37 percent in 1990 25 percent in 1991 and so
 (25) forth till finally the last survey that's reported is 1993 and

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- (1) A Yes
 (2) Q And you do it for the purposes of trying to see patterns
 (3) emerge from the data?
 (4) A Yes
 (5) Q Could you put up the next exhibit, which is plaintiffs
 (6) 80107
 (7) Dr Page you've had an opportunity to look at this graph
 (8) both before you came here because I supplied it well in
 (9) advance and then during the break?
 (10) A Yes
 (11) Q And are the points that are plotted on this graph
 (12) consistent with the data that was in the column of the exhibit
 (13) we just took off the screen?
 (14) A Yes
 (15) Q And do you - you're familiar with a process of
 (16) mathematical interpretation of - of data called a best fit?
 (17) A Yes
 (18) Q What is that exactly?
 (19) A Well what that - when you fit data for example what's
 (20) shown here is data over time you use a mathematical
 (21) expression
 (22) that has physical meaning that describes how those data
 (23) behave
 (24) for example over time Exponential decay for example is -
 (25) is how we would fit say time series data like this And that
 would let us make predictions from time series data that we
 know points for In fact we've done that in our own studies

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- (1) Q And did you have an opportunity to look at the support the
 (2) support mathematic support for this best fit?
 (3) A Yes
 (4) Q Does it look reasonable?
 (5) A No
 (6) Q What doesn't look reasonable?
 (7) A Well if you look at what they did it corresponds to no
 (8) known model for fitting time series data I know because I
 (9) teach that stuff and I've graded papers of students for over
 (10) 25 years and I must confess I've yet to have a student make
 (11) the mistake that your workers made in doing those data You
 (12) don't fit a model where you have time transformed in log form
 (13) As I remember - as I remember that accompanying spread
 (14) sheet to your model, they have an expression where you have
 (15) log
 (16) of percentage oiled equals log time natural log of time plus
 (17) a constant and you never transform time when you fit data to a
 (18) time series expression and so that you know you can push a
 (19) button on a computer and get all kinds of stuff out but that
 (20) whole page that spread sheet is totally incorrect
 (21) Q You think that the best fit curve is represented in this
 (22) Exhibit 8010?
 (23) A If that's the model they used no that's - that's a very
 (24) incorrect way to fit those data But let me also say in
 (25) grading students papers for 25 years I've - I've never quite
 (26) seen something as - as misleading because this implies that

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- (1) oil is not going away with time and what's really happening
 (2) because it's mistrilled and really what it's showing is that
 (3) every year when they went out and they surveyed less and less
 (4) shoreline each year because the year before they found at least
 (5) half of the shoreline or more had cleaned up that what they
 (6) found in any given year was about 30 percent or so of the
 (7) shorelines that they surveyed had oil But if you wanted to
 (8) represent what was happening to the oil on those shorelines
 (9) you would simply have in 1989 899 miles here - and I could
 (10) draw it on that - and in 1993 it's sort of down at the bottom
 (11) with around what 8.73 miles less than a percent. So this
 (12) graph as shown here has no real meaning in terms of what's
 (13) going on with the shorelines and the oiling It simply says
 (14) each year they you know saw less and less oil which is true
 (15) and this is what the table says
 (16) Q And it does reflect the information that was presented by
 (17) Dr. Hans Jahns in his report isn't that correct?
 (18) A It doesn't reflect the information that Dr. Hans Jahns
 (19) represented in his report It represents some numerology that
 (20) was done with the information that was presented in Hans
 (21) Jahns report but again this is a meaningless graph
 (22) Q Now Doctor I'd like to turn your attention to another
 (23) subject matter the prior condition of Prince William Sound
 (24) before the tanker started to traverse Prince William Sound
 (25) And I'd like for us to look at defendant's Exhibit 3217 Just

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- (1) put the first page up And this is a document that NOAA - was
 (2) produced by NOAA of a study that was done of intertidal
 (3) sediments in 1977 to 1980 Are you familiar with this
 (4) document?
 (5) A Yes I am
 (6) Q And on page Roman numeral four the conclusion is drawn?
 (7) MS SMITH Mr Gargan may the witness have a copy of
 (8) the document?
 (9) MR GARGAN Sure
 (10) A Are you going to let me have the whole thing?
 (11) MR GARGAN Well I need another copy with Page 4 in
 (12) it
 (13) MR PETUMENOS He can see it on the screen
 (14) THE COURT He can see one page counsel He might
 (15) want to see others
 (16) MR PETUMENOS It was just missing the page?
 (17) A It would be helpful to see the whole thing
 (18) MR GARGAN No I agree
 (19) A Thank you very much
 (20) BY MR GARGAN
 (21) Q The last paragraph of this report says that the intertidal
 (22) zone and the mussels in Prince William Sound were remarkably
 (23) free of petroleum contaminant hydrocarbons during the period
 (24) of
 (25) the study Do you have any information that indicates that
 (26) this was not the case in 1977 to 1980?

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- (1) A Well in fact, this report, if you read it cover to cover
 (2) says quite the opposite For example they found petroleum
 (3) hydrocarbons in Constantine Harbor which is one of their study
 (4) sites and their data showed that, and they weren't, you know
 (5) quite clear about the source of the hydrocarbons because,
 (6) again the analytical techniques that they used back in 1977
 (7) were not as good as the ones we use today But if you turn to
 (8) page 28 in the discussion it says sediment contamination
 (9) levels were highest at Constantine Harbor and the
 (10) contamination
 (11) was probably the result of a combination of sources And it
 (12) goes on and I think that the problem with this report is that
 (13) it is sort of rewritten in 1993, and I'd like to see the - the
 (14) report of the 1977 study as it was originally produced not as
 (15) it was rewritten in January 1973 (sic) but this sort of add-on
 (16) here on the front clearly overstates sort of the - the total
 (17) pristine nature of the Sound which again is a - is a
 (18) wonderful pristine place but because there's vessel traffic
 (19) and so forth there are sources of petroleum which they've in
 (20) fact report in this document
 (21) Q Well if you look at Page 3 of the report, Roman numeral
 (22) three NOAA reports that talking about Constantine Harbor
 (23) that the contamination level was generally less than 10
 (24) nanograms per gram Am I saying that correctly?
 (25) A Well what it says is that sediments at these three
 (26) stations - because they had three stations Constantine

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- (1) Harbor Rocky Bay and Mineral Flats - had contamination by
 (2) aromatic hydrocarbons found at concentrations of generally
 less
 (3) than ten nanograms per gram on a dry sediment weight but
 above
 (4) detectable limits and I take that to mean individual
 (5) hydrocarbon analyte So that what they're saying is that
 (6) they're - you know as you would expect to find that they did
 (7) see some stuff out there but - and they weren't sure about
 (8) the source but if you sort of compared it probably to what we
 (9) talk about as an unrolled shoreline in Prince William Sound
 (10) it's what you'd expect to find today
 (11) Q Which is what what level of contamination?
 (12) A I'd say again for the individual analytes probably on
 (13) that order but again the way that the chemistry was done in
 (14) 1977 to 1980 it's like comparing a Model A Ford with a Ford
 (15) Mustang so that it's kind of difficult to draw quantitative
 (16) conclusions from data that are 17 years old now
 (17) Q Now if you just read on in that particular place it says
 (18) in contrast the remaining five stations showed no indications
 (19) of petroleum hydrocarbon contamination Now is that
 (20) consistent with what you're just telling us?
 (21) A Well, again it was below the ability of the methods used
 (22) in 1977 to 1980 to detect it, and I think it's fair to say that
 (23) we're probably at least a hundred times better able to detect
 (24) these kinds of compounds now than we were in 1977 So using
 (25) the methods that they had available in 1977 they weren't able

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- (1) to see it. It doesn't mean it wasn't there It was just below
 (2) their ability to detect it.
 (3) Q But their detection limit was one nanogram per gram
 (4) according to this statement right?
 (5) A Per analyte which again is much greater than our ability
 (6) to detect stuff today
 (7) Q That's a part per billion nanograms per gram?
 (8) A Per analyte right.
 (9) Q Okay Now did you do any sediment studies in the subtidal
 (10) region after the spill?
 (11) A Yes I did
 (12) Q What did you find?
 (13) A Well as I described in my testimony yesterday the sea
 (14) floor even in shallow nearshore waters of Prince William
 (15) Sound has a very high background of natural petroleum
 (16) hydrocarbons that are carried in on this sediment that's coming
 (17) on the Alaskan Coastal Current and flowing into the Sound and
 (18) sedimenting out It doesn't mean that there's lodges of oil
 (19) kind of lurking on the sea floor because it's bound up in
 (20) sediment so it's simply part of the natural background in
 (21) Prince William Sound
 (22) Q But I'm asking what do you find?
 (23) A That's what I found
 (24) Q And what was the level of -
 (25) A Oh the levels ranged anywhere - in sediments that were

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- (1) laid down a hundred years before the spill we found over a
 (2) thousand parts per billion total aromatic hydrocarbons in the
 (3) sediments
 (4) Q And you were able to distinguish those from the Exxon
 (5) Valdez oil?
 (6) A Yes
 (7) Q How did you do that?
 (8) A By a process called chemical fingerprinting
 (9) Q Okay Could you tell the jury what - what chemical
 (10) fingerprinting is?
 (11) A Well chemical fingerprinting is something we do
 (12) conceptually every day Chemical fingerprinting simply
 (13) involves analyzing say a sample of sediment or a sample of
 (14) oil from one source and getting a pattern of compounds from
 (15) that sample and then analyzing a second sample from perhaps
 a
 (16) second source getting a pattern of compounds and then
 (17) comparing those patterns
 (18) It's much the same kind of process that we do when we
 (19) rummage around you know a drawer full of keys trying to find
 (20) that extra house key that always seems to get misplaced And
 (21) what you do is now here's two keys to my apartment, and one
 of
 (22) them's to the front door and one of them's to my apartment and
 (23) they look the same they're brass keys and yet if I were to
 (24) fingerprint these by comparing the patterns by lining them up
 (25) I'd see the pattern of the cutouts is different on each one

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- (1) That's basically what chemical fingerprinting is all
 (2) about. It's the same idea except you're comparing patterns of
 (3) analytes or individual compounds in a sample and it - it's
 (4) sort of again that two of these things belong together one
 (5) of these things is not the same idea You're simply matching
 (6) up patterns to determine the source
 (7) Q Let's look at Exhibit 3170 please And this a paper that
 (8) you prepared?
 (9) A Yes
 (10) Q I take it - and do you want to look at the actual paper
 (11) Dr Page?
 (12) A Why not.
 (13) Q Okay And I really want to talk about the area that's
 (14) highlighted and that's the ratio of C2 Dibenzothiophenes to C2
 (15) Penanthrenes that's shown in the second column right?
 (16) A Yes
 (17) Q And by definition you say if that ratio is 1.07 plus or
 (18) minus .17 then it's by definition Alaskan North Slope crude
 (19) oil is that right?
 (20) A It corresponds to an AS - Alaska North Slope contribution
 (21) in say a sediment sample and oil sample yes
 (22) Q If that ratio which is the comparison of two components
 (23) two compounds in a mixture of many many hundreds of
 compounds
 (24) which makes up crude oil if that - if that ratio becomes 15
 (25) plus or minus .3 then you call it natural background?

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- (1) A Yes
 (2) Q Now you told us yesterday how petroleum crude oil starts weathering as soon as it's released to the atmosphere and it starts coming into contact with various agents which tend to tear it down right?
 (3) A Yes
 (4) Q Now we have a paper from Exxon which is Exhibit 8006 entitled Fingerprinting the Valdez Oil Spill - and if we could put the cover sheet on the Elmo - and it's by a gentleman named Michael Parsons an Exxon document
 (5) MS SMITH Your Honor we have a foundation objection here in terms of this witness He's never seen it nor did he rely on it
 (6) MR GARGAN It was supplied there Sunday
 (7) MS SMITH I didn't say you didn't send it over but in his real life -
 (8) THE COURT Have you seen this sir?
 (9) A Yes I have Your Honor
 (10) THE COURT How much time have you had to review it?
 (11) A Two two and a half days
 (12) THE COURT You've actually had two and a half days to review it?
 (13) A Well I didn't spend the last two and a half days reviewing it but I've had that length of time
 (14) THE COURT How much time did you spend on it?

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- (1) A I've read it
 (2) THE COURT You can question him about it
 (3) BY MR GARGAN
 (4) Q And the Exxon lab out of which this report came they were conducting tests of the Exxon Valdez oil right here in Anchorage weren't they as the oil was being cleaned up and processed?
 (5) A Yes
 (6) Q And doesn't Mr Parsons on page 10 of this report which we'll flash up on the screen in a minute doesn't he tell us that -
 (7) A Could I - excuse me could I have a copy of the document?
 (8) Q Sorry Doesn't he tell us that the Dibenzothiophene which is in the top part of the equation that you had that you had developed in your paper doesn't that go down more rapidly than the Phenanthrene isn't that what that says?
 (9) A No Actually it's not what it says at all and I think this is a very important point for the jury to understand When you choose these among the compounds that you can use to fingerprint oil you have to choose compounds that you can measure reliably And the reason we chose the C2 Dibenzothiophene and C2 Phenanthrenes is that in the analytical procedure that you use to measure them they're much less subject to interference by other peaks than the C3 Dibenzothiophenes and Phenanthrenes

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- (1) And so what he is saying here he's talking about C3 Phenanthrenes and C3 Dibenzothiophenes the normalized which
 (2) In fact, we didn't rely on at all in making our fingerprinting He also indicates refers to a figure Figure 2 3(e) which shows the whole analyses for those samples and when you actually calculate the ratios for his North Slope crude and his sheen sample that he's talking about here for the analytes that we used they're identical They don't change at all And the reason what he thought was weathering at the time he wrote this is really due to a problem in the analytical procedure that he used in his lab in Anchorage to measure this particular C3 Phenanthrenes causing interfering peaks to make that appear larger than it actually is and so that - I'm sorry to say Mr Gargan that I can't agree with you because it's not supported by what Mr Parsons document really says
 (3) Q And Mr Parsons was not doing it precisely right?
 (4) A Mr - I think again for the purposes of his analyses he was doing a very good job And in fact if we used his C2 Dibenzothiophene C2 Phenanthrene data we would certainly be using precise and accurate data and in fact, in our own database with the C3 Dibenzothiophenes and C3 Phenanthrenes we had interference problems which is why we didn't use them in doing our fingerprinting We found that the C2s were much more reliable

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- (1) Q You - you - it is part of your evidence that, in fact the Exxon Valdez oil does weather till it becomes indistinguishable - indistinguishable from background oil isn't that true?
 (2) A Yes
 (3) Q That's beyond dispute?
 (4) A Yes
 (5) Q And when you were working on the Amoco case you so testified that that particular crude oil weathered to background relatively quickly?
 (6) A Yes
 (7) Q Within weeks?
 (8) A Well again depending upon the environment a great deal of the 70 million gallons of the Amoco Cadiz oil spill weathered at sea before it stranded but I - I think it's fair to say in some cases a lot of it weathered within weeks and other cases it took longer But by 1986 eight years after that particular spill again we were at the same situation there that we're at here five years after the spill in other words isolated traces on their last legs
 (9) Q So for example if you were to look at sediment studies now you wouldn't be able to distinguish what was Amoco - was Exxon Valdez from background that is the Exxon Valdez oil added to the background is that correct?
 (10) A Well we have to again be very careful in answering yes or

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- (1) no to that question because background is this low sulfur sea
 (2) boil that is transported into the Sound And as you know
 (3) whatever contribution to the nearshore subtidal environment
 (4) there is from the spill that just gets incorporated into that
 (5) background and so this far down the line after the spill you
 (6) could probably still do this kind of mixing calculation this
 (7) approach that's on this recipe because the fact is that
 (8) Phenanthrenes and Dibenzothiofenenes because they're very
 (9) similar molecules in many ways breakdown in the environment
 at
 (10) very nearly the same rate And so even though they're - the
 (11) amount decreases with time as bacteria chew them up their
 (12) relative amounts remain the same - very nearly the same
 (13) Q And it's important for your model that they have to
 (14) deteriorate at the same rate is that true?
 (15) A Well again that's true, and I must qualify that by saying
 (16) that we applied our model to data from 1990 and 1991 one and
 (17) two years after the spill I'm not sure that I would apply the
 (18) model to sediments from 1995 simply because I haven't tried
 (19) it.
 (20) Q Okay Let's turn to another subject, and I'd like to ask
 (21) you about the Trustees report. There are two reports that
 (22) we'll be talking about One is called the Restoration Plan and
 (23) the other is called the Environmental Impact Statement. Both
 (24) are drafts and I hand you copies of them then we'll refer to
 (25) them

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- (1) A Thank you very much
 (2) Q Now tell us who the Trustees are or what is the Trustees
 (3) Council?
 (4) A Well under the provisions of the laws governing response
 (5) to spills of oil and hazardous materials after a spill a group
 (6) of state and federal agency representatives are set up to act
 (7) in the capacity as Trustees for the affected environment and
 (8) in that capacity the first thing they do is they engage in -
 (9) in what are called NRDA studies And NRDA stands for Natural
 (10) Resource Damage Assessment, and the idea is to determine
 how
 (11) much if anything the responsible party for the spill is
 (12) liable for and in monetary damages and a bunch of studies are
 (13) done sort of in a litigation mode after the spill as part of
 (14) the Trustees studies
 (15) Q Okay Now before giving your opinion that Prince William
 (16) Sound and the shoreline of Prince William Sound has largely
 (17) recovered from the spill did you read the - the Trustees
 (18) report both the Environmental Impact Statement and the
 (19) Restoration Plan?
 (20) A Yes And I've also read other documents that are more
 (21) recent that are put out by the Trustees such as their current
 (22) May 16th invitation for proposals for work for next year
 (23) Q Turn to page 27 of the Restoration Plan put that on the
 (24) screen if you would
 (25) Do you take exception to the Trustees statement that

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- (1) certain resources in Prince William Sound have not recovered?
 (2) MS SMITH Can I interrupt for one minute? I'm
 (3) sorry I thought you were looking at the Trustees Restoration
 (4) Plan and I can't find it Could you give me the exhibit
 (5) number please?
 (6) MR GARGAN Sure
 (7) MS SMITH Thank you
 (8) THE COURT What are we looking at so the jury knows?
 (9) MR GARGAN It's the Trustees draft Restoration Plan
 (10) dated November 1993 and it's Exhibit 8003
 (11) THE COURT Thanks
 (12) BY MR GARGAN
 (13) Q And I guess there was a question outstanding Do you
 (14) have - take exception to the Trustees statement that certain
 (15) resources in Prince William Sound have not recovered?
 (16) A Yes I do
 (17) Q Okay And did you review the scientific reports that are
 (18) in the bibliography of the Environmental Impact Statement
 some
 (19) 185 reports? Did you review any of them?
 (20) A Yeah I've reviewed a number of them yes
 (21) Q I'm sorry -
 (22) A Yeah I've reviewed a number of them
 (23) Q Are these generally the scientific reports that are
 (24) contained in the - in that bibliography are they generally
 (25) peer reviewed reports?

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- (1) A No
 (2) Q They're not?
 (3) A They are reviewed within the Trustees Council They're not
 (4) sent out for - to sort of independent scientists not
 (5) associated with the program as would be the case, say if you
 (6) were publishing a paper in a journal So that this is a - all
 (7) of this is internal to the Trustees program
 (8) Q Like Dr Peterson for example were you here when he
 (9) testified about the peer review process that went into
 (10) scientific reports submitted to the Trustees?
 (11) A Dr Peterson was a peer reviewer I was not in court at
 (12) the time he testified
 (13) Q And do you know that some of the - that the scientific
 (14) papers are sent out to different people in academia?
 (15) A Perhaps
 (16) Q Now could we look at page 27 of the Trustees report -
 (17) oh I'm sorry let's go to page B-13 Doctor do you have -
 (18) do you disagree with the statement that the Trustees are making
 (19) in this report that an estimated 120 000 to 134 000 murre
 (20) adult breeder murre were killed by contact with oil?
 (21) A Again I listened to a series of very good presentations of
 (22) studies that don't support that statement and I think that
 (23) bird surveys are very difficult to do accurately And I
 (24) personally think that the bird surveys that were done as part
 (25) of our overall program not by me personally but by the people

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- (1) who were responsible for it are much more accurate
 (2) You have to understand with birds sea birds especially
 (3) is that their populations are subject to great fluctuations
 (4) and while I'm not an expert at sea birds I do know that it's
 (5) very difficult to get accurate population estimates of sea
 (6) birds because if you disturb the colony simply by observing
 (7) them
 (8) Q Could we look at Page 14 please? The statement is made -
 (9) THE COURT Hold on counsel
 (10) MS SMITH Your Honor I'm objecting to this line of
 (11) questioning as beyond the scope of his direct
 (12) THE COURT Objections sustained
 (13) BY MR GARGAN
 (14) Q Now Doctor would you agree that recovery has two
 (15) components to it? One being that the oil is either gone or is
 (16) somehow so inaccessible as to be effectively gone that's one
 (17) component That's - talking about recovery of Prince William
 (18) Sound after the oil spill And that the second component is or
 (19) consists of a study of whether or not the marine communities
 (20) that inhabited Prince William Sound prior to the spill have
 (21) recovered Isn't that two essential questions that have to be
 (22) satisfied before you can conclude recovery has taken place?
 (23) A I think it's inaccurate to define recovery in terms of
 (24) presence or absence of oil because we know as you indicated
 (25) oil can be present but not causing any adverse effect because

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- (1) It's below whatever toxic level and it simply becomes food for
 (2) bacteria and that is why when we did our 1990 study we - we
 (3) measured recovery in 1990 in terms of the plant and animal
 (4) communities in the intertidal zone of 64 randomly chosen
 (5) sites Biological - defining recovery in biological terms is
 (6) definitely the right way to do it.
 (7) Q Could we look at Exhibit 6001 please?
 (8) Now would you agree that in order for a conclusion to be
 (9) arrived at that recovery has taken place in marine communities
 (10) that these four conditions have to be fulfilled?
 (11) MS SMITH Your Honor we would object to this
 (12) exhibit as having no foundation We have no idea who
 (13) prepared
 (14) THE COURT Sustained the objection sustained
 (15) BY MR GARGAN
 (16) Q Let's if we might turn to the Restoration Plan on page
 (17) B-4 And we're looking at the Trustees report and their
 (18) definition of ecological recovery And they say that for
 (19) ecological recovery to have been achieved the population of
 (20) flora and fauna are again present at former or pre-spill
 (21) abundance that they're healthy and productive and that there
 (22) is a full complement of age classes at the level that would
 (23) have been present had the spill not occurred and that the
 (24) recovered ecosystem provides the same functions and service
 (25) as
 (26) would have been provided had the spill not occurred

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- (1) Do you agree with that definition of recovery?
 (2) A Well, I disagree strongly with that definition and I'd
 (3) like to have the opportunity to explain why You can't define
 (4) recovery in terms of pre-spill conditions I'll give you an
 (5) example
 (6) Supposing the oil spill had happened in 1963 the year
 (7) before the big earthquake where portions of the shoreline of
 (8) Prince William Sound went up as much as 30 feet other
 (9) portions
 (10) of the shoreline sank as much as ten feet or more Return to
 (11) pre-spill conditions you know would mean that somehow
 (12) you'd
 (13) have to go out with bulldozers and backhoes and sort of move
 (14) the shorelines back into their pre-spill places And the
 (15) problem with pre-spill as sort of the benchmark is that it
 (16) ignores the fact that nature is constantly changing For
 (17) example Prince William Sound can have very harsh winters
 (18) which can kill a lot of plants and animals
 (19) Last summer I think we all remember how hot it was It
 (20) was the only time I was ever in Prince William Sound when I
 (21) didn't have to wear a raincoat for weeks on end In fact I
 (22) didn't even have to wear a T-shirt a lot of the time
 (23) And I think that if you go to the paragraph above where it
 (24) says in general, resources and services will have recovered
 (25) when they return to conditions that would have existed had the
 (26) spill not occurred, that is the definition of recovery that's
 (27) consistent with the federal Natural Resource Damage
 (28) Assessment

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- (1) regulations
 (2) It goes on to say that it's difficult to predict conditions
 (3) that would have existed in the absence of the spill Recovery
 (4) is usually defined as return to principal conditions which I
 (5) think is inappropriate or to conditions comparable to those of
 (6) unilled areas which again is what the regulations state is the
 (7) appropriate thing to do and that's the approach and, in fact
 (8) the definition of recovery that we adopted in our scientific
 (9) studies
 (10) Q And does it -
 (11) A But this Trustees document, which is a draft, after all
 (12) is very inconsistent in these definitions because sometimes
 (13) they hue to the - the line as indicated in the regulations
 (14) that govern these studies and sometimes they kind of go off
 (15) the track a little bit but this is a draft.
 (16) Q Now I take it then that you're not concerned with the
 (17) biological communities when you arrived at your opinion of
 (18) what
 (19) constitutes recovery?
 (20) A As I said earlier that's how we define recovery in terms
 (21) of plant and animal communities and we measured that in the
 (22) all important intertidal zone in 1990 and found that between 70
 (23) and 90 percent of the shorelines in the spill affected area of
 (24) the Sound have recovered It again makes sense because most
 (25) of
 (26) it was lightly oiled and if that was true in 1990 you know
 (27) certainly by 1995 you know the progression is toward more

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- (1) more recovery each year and therefore we felt that it was so
 (2) close to recovery in 1990 in most - all but these worst of the
 (3) worst places that it was a fair statement to make
 (4) Q Okay Now one last thing You first started working on
 (5) oil spills in 1974 in the Tomano case?
 (6) A Yes
 (7) Q And that was a ship that spilled oil in Casco Maine?
 (8) A It's Casco Bay
 (9) Q And then you worked on the Zoe Colocotronis in Puerto
 (10) Rico?
 (11) A Yes
 (12) Q And you worked on the Amoco Cadiz?
 (13) A Yes
 (14) Q And you worked on the Arco Anchorage case?
 (15) A Yes
 (16) Q The Presidente Rivera?
 (17) A Yes
 (18) Q And the Apex Houston?
 (19) A And many others
 (20) Q And Glacier Bay?
 (21) A Yes
 (22) Q And you've worked for Amoco you worked for Mobil Exxon
 (23) Arco, State of Maine in the studies of -
 (24) A In fact many of the studies that - for example, the API
 (25) studies that we did were done in conjunction with the State of

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- (1) handed
 (2) MR GARGAN That's all I have Your Honor Thank
 (3) you
 (4) MR STOLL Your Honor I have five minutes of cross
 (5) MS SMITH Your Honor -
 (6) THE COURT We've already discussed this counsel I
 (7) said I would allow brief supplemental questioning
 (8) MS SMITH On divergent interests
 (9) THE COURT No I don't think I limited myself to
 (10) that, counsel I said if the issue arose counsel then I'd
 (11) explore it. You can check the record
 (12) CROSS-EXAMINATION OF DAVID S PAGE
 (13) BY MR STOLL
 (14) Q Dr Page you're not a - you agree that an expert should
 (15) not be an advocate, then I gather from your last comments?
 (16) A An expert should certainly stand up for his or her
 (17) conclusions, but I'm not an attorney, no
 (18) Q And the expert should stay and express an opinion - should
 (19) stay within his or her area of expertise?
 (20) A Yes
 (21) Q And you're not a real estate evaluation expert, are you?
 (22) A No
 (23) Q And you've never studied the title of real estate that's
 (24) involved in this case have you?
 (25) A No

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- (1) Maine and basically it's fair to say that we've worked for a
 (2) lot of different funding sources both the public and private
 (3) Q Have you ever worked for or testified on behalf of the
 (4) damage assessment of oil spill?
 (5) A Yes In fact, our work on the Tomano spill was on behalf
 (6) of the State of Maine and led to compensation from the
 (7) spiller We worked with the State of Maine on a damage
 (8) assessment for the - for a large spill of jet fuel up the
 (9) coast from where we live And I think it's fair to say that in
 (10) terms of our scientific studies our conclusions are based on
 (11) unbiased observations and so that whether we worked for a
 (12) person who's say had oil spilled on them which we have
 (13) done or you know a - a person who is - or entity that has spilled
 (14) oil I mean truth kind of only comes in one flavor and you
 (15) can't go out and say something's real if it's not.
 (16) Q Isn't it true Doctor that perhaps the 90 percent of
 (17) the - of the work that you've done in oil spills has been for
 (18) either ship owners oil companies or oil organizations?
 (19) A In terms of the level of effort that we put in I'd say
 (20) it's more 50/50 because we've done many large projects again
 (21) primarily with my home state the State of Maine that may have
 (22) been funded by American Petroleum Institute but it was in
 (23) conjunction with the State of Maine so I don't count that as
 (24) sort of working for the petroleum industry So that if you
 (25) look at what we've done I'd say it's actually pretty even

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- (1) Q And you're not an expert on whether oil has to touch the
 (2) shore of real estate before the values can be impacted?
 (3) A No
 (4) Q And you're not an expert as to whether or not the fact that
 (5) beaches are oiled or oil remains on those beaches even if it's
 (6) nontoxic oil in your opinion even if that happens as to the
 (7) value of the real estate?
 (8) A No
 (9) MS SMITH Your Honor I think this is outside the
 (10) scope of direct.
 (11) THE COURT The objection's overruled
 (12) BY MR STOLL
 (13) Q And your comment about benzene not reaching the shore
 (14) you
 (15) don't know how toxic chemicals in the water surrounding the
 (16) land can affect the real estate do you?
 (17) A No
 (18) Q And you agree do you not that beaches can be reoiled and
 (19) in fact that that happened in Prince William Sound?
 (20) A In 1989 as the oil was leaving the Sound But again I
 (21) think everybody agrees that there was an oil spill in 1989
 (22) Q I agree with that. That's why we're here And with
 (23) respect to swash bars - swash bars the swash bars sometimes
 (24) cover up oil and other times the swash bars move on and they
 (25) uncover oil that's on the beach Isn't that - doesn't that -
 (26) can't that occur?

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- (1) A Again as I testified you - just because oil is covered
 (2) over doesn't mean it's going to - it's not going to
 (3) biodegrade Oil will biodegrade as long as this material
 (4) that's covering it is porous which it is and I've seen oil in
 (5) the Amoco Cadiz spill buried three feet under sand go away
 (6) in - in two and a half years because I dug down there and saw
 (7) it
 (8) And so this notion of swash bars covering over and
 (9) protecting oil just doesn't fit with - with scientific
 (10) experience with oil spills Now that - it can cover it over
 (11) at the time of the spill but that doesn't mean it's going to
 (12) protect it over a long period of time
 (13) Q What do you mean by a long period of time years?
 (14) A Again depending upon the level of initial oiling It
 (15) could be months It could be a couple of years but again
 (16) based on my own personal experience with similar situations
 (17) with a much larger oil spill as long as you - you have a
 (18) porous beach material where air and water with oxygen in it
 (19) can work up and down by tidal action It goes away surprisingly
 (20) quickly
 (21) Q The beaches of Brittany have a different composition than
 (22) some of the beaches in Alaska Isn't that correct?
 (23) A Yes they re - tend to be much finer grained and therefore
 (24) -
 (25) Q Thank you

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- (1) A - you expect oil to persist longer
 (2) Q I'm just trying to get through this as quickly as we can
 (3) MS SMITH He's entitled to finish his answer
 (4) MR STOLL Oh I want him to finish his answer I
 (5) want to do my five minutes
 (6) THE COURT Oh no counsel I'll give you a little
 (7) extra time if the witness needs to explain
 (8) MR STOLL Thank you Your Honor
 (9) BY MR STOLL
 (10) Q But you don't disagree do you not with the statement that
 (11) swash bars can cover deposited oil on the beach?
 (12) A Short term
 (13) Q Short term Which can be months or a couple years in your
 (14) opinion?
 (15) A At - at the most
 (16) Q Is that correct?
 (17) A Yes
 (18) Q And the swash bars as they move can uncover oil that has
 (19) previously been covered by the swash bar Isn't that correct?
 (20) You'd agree with that?
 (21) A Well again what's - what gets uncovered you know can
 (22) be very highly biodegraded and not look like oil at all and I
 (23) simply refer to Mr. you know Bush's own observations about
 (24) digging through his swash bar at East Chenega and not finding
 (25) anything to sort of verify that Beach surfaces move around

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- (1) and that's -
 (2) Q Right.
 (3) A And that can happen in one winter storm which is why so
 (4) much oil got removed from the beaches
 (5) Q So even Mr. Bush and other people have looking for oil
 (6) have been able sometimes to find oil there Other times
 (7) they've gone back and it - they haven't been able to find it
 (8) or vice versa Isn't that right?
 (9) A Well again the only testimony that I'm aware of from
 (10) Mr. Bush is sort of a negative result In other words through
 (11) a swash bar and not finding anything Best of my knowledge
 (12) reviewing his reports and materials I don't remember him
 (13) digging through a swash bar and finding oil He speculated
 (14) that there's oil down there but when he tried to find it -
 (15) Q I guess you weren't here when he testified or did you read
 (16) the transcript about when he testified about part part of his
 (17) team going to a particular beach or some other beaches when
 (18) they were unable to at first find oil they went back
 (19) subsequently and did find oil do you recall that?
 (20) A Yes I do
 (21) Q Okay And with respect to the Katalla Yakataga oil
 (22) seepage that's these creeks that you showed on the screen -
 (23) A Well -
 (24) Q - Is that right?
 (25) A That's just one of many -

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- (1) Q All right.
 (2) A - faults with seeping oil
 (3) Q Okay Those - those - the Katalla seepage and the
 (4) Yakataga that you showed on the screen those are not on
 (5) Kodiak
 (6) Island are they?
 (7) A No
 (8) Q They're not within the oil impacted area of Prince William
 (9) Sound are they?
 (10) A Again they are the source of the subtidal petroleum
 (11) background which is very significant in Prince William Sound
 (12) so that - but it doesn't have anything to do with what's on
 (13) the shorelines
 (14) Q Okay And you would agree with the notion of what's called
 (15) bioaccumulation?
 (16) A Yes
 (17) Q And that is that if there's a certain layer of what you
 (18) call background oil and then someone comes along and
 (19) dumps 11
 (20) million gallons on top of that oil that it has - while the
 (21) background oil may not have any effect by the time you add
 (22) enough oil onto it It can have an effect You would agree
 (23) with that wouldn't you?
 (24) A No Because the background oil is in a form and location
 (25) where it's not accessible to plants and animals and however
 (26) in the video that I showed you of the seeps in those streams
 (27) and in the intertidal area at Johnston Creek in Yakataga the

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- (1) oil from the seepage was in the form and location that was
- (2) accessible to plants and animals but clearly at a level below
- (3) which it was causing any harm
- (4) Q And you're not contending that the Katalia oil or the
- (5) Yakataga oil seepage is killing salmon or salmon eggs or
- (6) herring?
- (7) A On the contrary in these salmon streams that I showed you
- (8) in the video it - these salmon spawn and co-exist with this
- (9) natural crude oil that's being released in these streams
- (10) Q And you're not an expert on the genetic effects of - of
- (11) the Exxon Valdez oil on herring, are you?
- (12) A No
- (13) Q And prior to the Exxon Valdez spill you would agree that
- (14) Prince William Sound was abundant in - from what you've read
- (15) at least - was abundant in sea otters and birds and seals?
- (16) MS SMITH Your Honor, beyond the scope of his
- (17) direct.
- (18) THE COURT Give me the question again
- (19) MR STOLL Pardon me?
- (20) THE COURT Give me the question again
- (21) MR STOLL I said before the Exxon Valdez oil spill
- (22) from what his knowledge is would he agree that Prince William
- (23) Sound was abundant with sea otters seals and birds
- (24) THE COURT Well he can answer that question
- (25) A Well again I'm not trying to be argumentative because

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- (1) to - to answer that question you have to define when For
- (2) example sea otters were hunted to extinction and were absent
- (3) from the Sound and virtually absent from the Sound in 1950
- (4) and
- (5) clearly Prince William Sound at the time did not have a - was
- (6) not -
- (7) BY MR STOLL
- (8) Q Let me -
- (9) A And I guess to - let me just complete the thought -
- (10) Q Let me just limit the time so that we don't have to talk
- (11) about history?
- (12) THE COURT Change the question You can rephrase the
- (13) question
- (14) MR STOLL I will
- (15) BY MR STOLL
- (16) Q Immediately before let's say the year during the year
- (17) before the spill from what you've read, would you agree that
- (18) Prince William Sound was abundant in sea otters seals and sea
- (19) birds?
- (20) A As it is today
- (21) Q And so you would disagree then with the finding of the
- (22) Trustees scientists that as much as a quarter or a third of all
- (23) the sea otters in Prince William Sound were killed as a result
- (24) of the Exxon Valdez spill?
- (25) A I think that again there is a - there is a lot of
- (26) speculation in those types of numbers and I think it's fair to

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- (1) say that whatever happened during the - during the spill and
- (2) it's clear that marine animals died as a result of the spill
- (3) in terms of the natural interannual variation that occurs in
- (4) environments in coastal Alaska you can have through a harsh
- (5) winter for example as many if not more birds and sea otters
- (6) die and so that the whole problem in answering these
- (7) questions
- (8) about what happened to plants and animals is that you have
- (9) these natural processes working at the same time you're
- (10) studying the spill recovery which is why the Trustees in
- (11) their May 16 request for proposals for next year insist that
- (12) anybody doing studies now take into account natural variation
- (13) due to factors other than the spill
- (14) Q You've mentioned May 16 The June 1994 Trustees
- (15) Environmental Impact, Draft Environmental Impact Statement
- (16) came
- (17) out after the May 16 study isn't that correct?
- (18) A Yes it's dated June 1994
- (19) Q Just as the other one is dated in May?
- (20) A Well they're two very different documents
- (21) Q I agree with you And incidentally, when you did this film
- (22) of portions I think you showed a film of some portion of
- (23) Prince William Sound, the video where you were flying along in
- (24) the Exxon helicopter or some helicopter looking at -
- (25) A Was it - was it the shoreline view of the Bay of Isles?
- (26) Q Shoreline yes I guess that was it And you made the
- (27) point that you could see into the - that was taken this year

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- (1) is that right?
- (2) A Yes
- (3) Q And you could see down into the water?
- (4) A In many - yeah sure
- (5) Q And was there some reason - did you try to avoid - I
- (6) looked at that film and I - it just occurred to me while we
- (7) were watching that film it was taken in the springtime right
- (8) this spring?
- (9) A Yes
- (10) Q It occurred to me that I saw only one bird in the whole
- (11) segment one - saw one little gull fly and I didn't see any
- (12) sea otters or seals Did you intentionally try to avoid taking
- (13) any photographs of any wildlife?
- (14) A Well if I was a sea otter or a bird or a seal and heard a
- (15) helicopter coming which you can hear a long way away I'd
- (16) head
- (17) for the hills because I certainly wouldn't you know want to
- (18) be near something that's such an alien part of the
- (19) environment
- (20) It's sort of an example of the fact that when you go on
- (21) surveys especially the helicopters or airplanes you really
- (22) don't see as much and which is why you have to sit out often
- (23) for hours on end in a boat being very quiet if you want to see
- (24) certain types of birds especially reclusive birds
- (25) So you know the fact that you didn't see anything with the
- (26) helicopter tour doesn't mean they're not out there because

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- (1) I've seen tons and tons of wildlife during my surveys this
- (2) summer but you know when the helicopter comes I think
- (3) everybody heads for the hills
- (4) Q And Mr. Jahns was an employee of Exxon?
- (5) A Yes
- (6) MR. STOLL Thank you
- (7) MR. PETUMENOS Your Honor could I ask how fast a
- (8) seal can swim?
- (9) THE COURT Can you ask how fast - no you can't
- (10) MR. PETUMENOS Okay
- (11) MS. SMITH Your Honor I need to regroup for about
- (12) two minutes for redirect
- (13) THE COURT I don't know what time we came in here
- (14) but I guess that's okay
- (15) MS. SMITH Thanks
- (16) THE CLERK Please rise This court stands in
- (17) recess
- (18) (Jury out at 10 40 a.m.)
- (19) (Recess from 10 40 a.m. to 10 57 a.m.)
- (20) (Jury in at 10 57 a.m.)
- (21) THE CLERK This court now resumes its session
- (22) Please be seated
- (23) THE COURT Yes counsel
- (24) REDIRECT EXAMINATION OF DAVID S. PAGE
- (25) BY MS. SMITH

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- (1) Q David we've heard a lot about the swash bar theory of oil
- (2) persistence In your 130 visits to the Sound and the Gulf of
- (3) Alaska how many swash bars have you seen?
- (4) A Well they're very very rare and the reason is is that
- (5) most of the shorelines of the Sound and Gulf of Alaska are
- (6) rocky shores and you have swash bars where you have sort of
- (7) river deltas where you have fine - finer grain sediment the
- (8) gravel that can be moved around and I can think of probably
- (9) three places
- (10) Q Okay The pits we saw the pictures of the pits PX688
- (11) how many locations did the plaintiff show us?
- (12) A Well pits not sort of surface tar on rocks but actual
- (13) pits were from Point Helen and from Sleepy Bay the west
- (14) shore
- (15) Q During post-SAP how many pits were dug?
- (16) A Well post SAP during - this is the 1993 shoreline survey
- (17) where the purpose of it was to map out subsurface oil and they
- (18) dug over 1700 pits in beaches or shorelines where there was
- (19) reason to believe that there would be subsurface oil and 1700
- (20) pits is really doesn't lie I mean that's a lot of pits
- (21) Now I will also say that of that 1700 over 1150 came up
- (22) clean and so that we're not talking about 1700 pits like we
- (23) saw in those exhibits They were the exception not the rule
- (24) Q All right
- (25) Joel If you can hit the Elmo
- (26) We saw this before it's PX8011 Maybe I can zoom it

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- (1) out - okay At the bottom it says subsurface oil residue
- (2) shoreline mileage Prince William Sound is that on Mr. Jahns
- (3) chart?
- (4) A No it's not
- (5) Q And is the lower boxing or even up here on the top the
- (6) type of oiling do these mileages go to subsurface oil?
- (7) A No they don't What they - what they in fact refer to
- (8) is - is surface oiling because that's what the surveys were
- (9) measuring in during those years I might also mention that
- (10) there weren't two surveys in 1992 That's a typographical
- (11) error in the top
- (12) Q Okay Dr. Page why do you say that you took exception to
- (13) the list shown to you out of the Trustees Draft Restoration
- (14) Report?
- (15) A Well to understand - it's important to read these Trustee
- (16) documents very very carefully When you do it you - one of
- (17) the most common words is perhaps maybe might possibly
- (18) and - and it's very conditional
- (19) Now to understand why people consider these resources to
- (20) still be injured of course we know for example pink salmon
- (21) which is on that list as having a near record year in Prince
- (22) William Sound this year and so that, again it goes back to
- (23) the idea that fishermen and farmers have good years and bad
- (24) years and every year can't be a record year but when the -
- (25) when the Trustees restoration studies were set up it was

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- (1) funded through a mechanism that generated a lot of money
- (2) earlier and as part of the sort of civil settlement agreement
- (3) that created this restoration fund which is funding all of
- (4) this stuff
- (5) MR. STOLL Your Honor I have a matter -
- (6) THE COURT Objection sustained The remark is
- (7) stricken
- (8) Counsel I want you to caution the witness
- (9) MS. SMITH Your Honor may we approach?
- (10) THE COURT Yes The jury is to disregard the last
- (11) sentence that the witness spoke
- (12) (At side bar on the Record)
- (13) THE COURT Yes
- (14) MS. SMITH With each of the next three witnesses
- (15) they have designated the Trustees restoration I am on my
- (16) tiptoes
- (17) THE COURT I knew it was going to be a problem
- (18) MS. SMITH The Trustees Draft Environmental
- (19) Statement the Trustees Draft Restoration Program and one
- (20) other Trustees document it's the Chief Scientist Five-year
- (21) Anniversary Report In those reports themselves they talk at
- (22) length about the money and how they're going to divide it off
- (23) and who gets it and one of the things one of the central
- (24) principles they talk about in each one of these things is if
- (25) you can't find any remaining impact from Exxon Valdez oil you

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- (1) don't get any money okay
 (2) And we have Peterson about this and we have - it says on
 (3) it within the body of the documents and my guys feel very
 (4) strongly that there is a bias in the - in the way the studies
 (5) go because everyone knows if you can't find Exxon Impact you
 (6) don't get funding
 (7) If they want to ask about these things and how come the
 (8) Trustees aren't finding recovery of certain species they're
 (9) opening the door to getting this out Now I told him -
 (10) THE COURT I hear your argument and I understand
 (11) what your argument is and it's very dangerous to be using those
 (12) documents and they can tell from the beginning it was going to
 (13) be an interest. The objection has been sustained I've done
 (14) it strongly You're to caution your witness not to talk about
 (15) the money and get off the subject We'll talk about the next
 (16) witness - I'll send the jury out before we have the next
 (17) witness
 (18) MR PETUMENOS Judge I thought for sure by now it
 (19) was clear that before they get into the area we were to
 (20) approach the bench
 (21) THE COURT I thought it was clear too counsel
 (22) that's why I spoke out strongly Go back to the table and get
 (23) this witness off the stand
 (24) MS SMITH Okay Can he say -
 (25) THE COURT Hold on What?

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- (1) MS SMITH Do you want me to pass on the subject
 (2) entirely?
 (3) THE COURT Yes I prefer you to do that.
 (4) MS SMITH Because he could say there is a fund and
 (5) he doesn't have to indicate -
 (6) THE COURT No no Stay off it.
 (7) MS SMITH Well I object strongly to them getting to
 (8) ask if we don't get to ask
 (9) THE COURT Hold on counsel As you know what I
 (10) said was I'll take it up out of the presence of the jury I
 (11) suspect he's not going to be leaving the state between 11 00
 (12) and 11 30 Am I right about that?
 (13) MS SMITH Yes shortly after
 (14) THE COURT Thank you
 (15) (Sidebar Concluded)
 (16) BY MS SMITH
 (17) Q Dr Page you spent some time at Bush's sites in 1994
 (18) Some of them - many of them you'd already been to before a
 (19) few of them you hadn't. Why did you go to all of what we're
 (20) calling these Bush sites?
 (21) A Well as I mentioned earlier when you go out and you say
 (22) you saw something it's very likely that others are going to go
 (23) out and want to confirm what you saw In fact that's basic to
 (24) the whole scientific process confirmation of observations
 (25) And that was basically what we - main reason why we went to

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- (1) these Bush sites to simply see whether what he was seeing was
 (2) really representative of that shoreline
 (3) In 1994 we went to many Bush sites because his surveys were
 (4) more of a - sort of an oil hunt than actual survey and so
 (5) that he - he's hopping around the Sound spending 28 minutes
 (6) in one place and maybe 40 minutes at another place and again
 (7) to be thorough and not miss anything we wanted to make sure
 (8) that there was something - that there was nothing out there that
 (9) was really awful that we didn't know about
 (10) Q Were the Bush sites typical of the 64 random sites that you
 (11) went to in connection with the Shoreline Ecology Program in
 (12) 1990?
 (13) A Again Mr Bush's sites included some of our - sort of
 (14) worst of the worst fixed sites that we purposely studied but
 (15) if you go to our 64 random sites they didn't include any of
 (16) those locations that we went to
 (17) Q Doctor Mr Bush went where he could find oil?
 (18) A Well I think - I think it's fair to say that that's true
 (19) because-
 (20) Q And why -
 (21) A I'm sorry
 (22) Q Go ahead
 (23) A Well one of the reasons why it's very important to spend a
 (24) lot of effort studying places that were never oiled in an oil
 (25) spill study is so that you know what the place is supposed to

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- (1) look like and Mr Bush simply didn't go to any places in the
 (2) Sound that weren't oiled And so that I think it's fair to say
 (3) that he really didn't have a frame of reference to know what
 (4) these places were supposed to look like In terms of plants and
 (5) animals living on them
 (6) Q Dr Page why did all the pictures this jury saw yesterday
 (7) why didn't you show us lots of pictures of oiled shorelines
 (8) that had recovered by 1990?
 (9) A Well I - I was thinking if I - if I kind of showed
 (10) people what sort of the worst case places looked like in 1994
 (11) that it would be clear that places that were not heavily oiled
 (12) which were the majority of the sites in the spill zone would
 (13) have looked that good long before then and that's what we
 (14) found in 1990 You know we could spend hours looking at
 (15) beautiful pictures of shorelines that were lightly oiled in
 (16) Prince William Sound and I did show some of them but I was
 (17) hoping that people would realize that if these worst case
 (18) places looked the way they do now then those that weren't
 (19) heavily oiled the majority looked that way far earlier
 (20) Q The plaintiffs have talked a lot in this case about
 (21) uncertainty In your expert opinion is there any uncertainty
 (22) as to where the surface oil is in the spill area?
 (23) A No I think - the Exxon Valdez oil spill is probably the
 (24) most intensively surveyed oil spill of all time The idea of
 (25) people going out in Prince William Sound and surveying 900

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- (1) miles of shoreline in 1989 where a lot of that shoreline is
 (2) rocky and really hard to get around I think is - is
 (3) amazing And I think that we probably know more about where
 (4) remaining traces remnants of - of surface oil are in this
 (5) spill than people have known for any other spill
 (6) Q All right And let me ask you about the other part of this
 (7) question Is there uncertainty about where the subsurface oil
 (8) is in the spill area?
 (9) A 1712 pits can't be wrong I mean this - the notion that
 (10) again a group would go out and dig that many pits trying to
 (11) map out remaining areas of subsurface oil in those areas where
 (12) you were likely to find it in 1993 I think it's amazing
 (13) that's a lot of pits
 (14) Q All right Finally last question at least from me As
 (15) the result of your five years of study do you believe the
 (16) spill area is full of oil?
 (17) A No I - I think that if you go out to the shorelines
 (18) of - of the - of Prince William Sound and the Gulf of Alaska
 (19) which I - like I have done I think I've been very fortunate
 (20) to get to go out there you'll see that they're very beautiful
 (21) places and I think that they're not awash with oil I think
 (22) that the environments in coastal Alaska are very resilient
 (23) environments because nature puts a lot of stress on those
 (24) environments in many different ways In addition to what human
 (25) activities cause including oil spills and so that these are

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- (1) populations that recover from injury whether it's natural or
 (2) - or human very quickly I mean they've been living in a
 (3) hard environment for a long time
 (4) Now you can - as with all oil spills you can go out you
 (5) know if you know the right beach to go to and if you know
 (6) where to look where to dig the hole or what rocks to turn
 (7) over you can find remnants of the spill and you know if you
 (8) have your close-up lens you can take a picture of it And
 (9) we've seen lots of close-up pictures and I think it's fair to
 (10) say that these are in a form heavily biodegraded in a
 (11) location generally at the top of the beach where they're not
 (12) having any ongoing adverse effect on plants and animals living
 (13) on the shoreline and they're - these remnants are going away
 (14) naturally as they have done with all oil spills
 (15) Now if you go out to the Sound and say visit a beach or
 (16) a shoreline that hadn't been oiled in 1989 which I've done a
 (17) lot of and visited shorelines that were oiled in 1989 if you
 (18) went out there in 1994 you would really be hard pressed
 (19) walking over that beach to tell which was which I think the
 (20) pictures and the videos and what - I've tried to bring the
 (21) Sound into this courtroom really fairly represent what those
 (22) places look like and I think it's fair to say that they look
 (23) really good amazingly good after five years
 (24) MS SMITH Thank you Dr Page
 (25) MR STOLL I have a few questions Your Honor

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- (1) RECROSS-EXAMINATION OF DAVID S PAGE
 (2) BY MR STOLL
 (3) Q First of all Dr Page I'd like to turn your attention to
 (4) what you call the Bush hunt for oil And the ICF Kaiser
 (5) Engineering and Mr Bush went out to Prince William Sound on
 (6) number of occasions isn't that correct?
 (7) A Yes
 (8) Q Not just this year but in prior years isn't that correct?
 (9) A Yes
 (10) Q And the 20-minute - what you've called the 25-minute
 (11) stops or whatever when they turned over rocks and found oil
 (12) that was this year isn't that what the testimony was?
 (13) A Yes
 (14) Q And so you said something that I didn't - I had a little
 (15) problem He knew exactly before he went to a particular site
 (16) this year in 20 minutes he knew exactly which rocks to turn
 (17) over Is that the implication of what you're saying so that
 (18) he'd know where to find the oil? Without being on that beach
 (19) before he just flew in there turned the rock over and left
 (20) found the oil and left?
 (21) A Well if - again if you -
 (22) Q Is that what you were suggesting? I just want to know
 (23) A In many places that's true because he was - in his own
 (24) field notes he indicates that in many cases he was you know
 (25) led to parts of the beach by others

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- (1) Q And every time you've been out in the field in Prince
 (2) William Sound you've been paid for your time by Exxon?
 (3) A Absolutely
 (4) Q And you don't deny that at least in 1989 there was a lot of
 (5) toxic oil spilled out of the Exxon Valdez?
 (6) A There was an oil spill in 1989 I'm not denying that
 (7) Q And there was a lot of toxic oil poisonous killing oil
 (8) isn't that correct?
 (9) MS SMITH Your Honor argumentative and also beyond
 (10) the scope of redirect
 (11) MR STOLL She asked about what came out
 (12) MS SMITH On direct I did
 (13) THE COURT I'll allow it I'll allow it Go ahead
 (14) answer the question
 (15) A Well again we talked about what fractions evaporated from
 (16) the oil and I think that one of the reasons why the impact of
 (17) the Exxon Valdez and the recovery was as rapid as it was was
 (18) that much of the toxic volatile components did evaporate
 (19) True in 1989 in heavily oiled beaches there was toxic
 (20) oil on the beach but it was far less toxic than the cargo oil
 (21) because much of it had evaporated
 (22) BY MR STOLL
 (23) Q Now my question is You do agree there was a lot of - I
 (24) think I got the answer but I just want to make sure There
 (25) was a lot of toxins in the oil that was spilled by the Exxon

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- (1) Valdez
- (2) MS SMITH I m going to object as asked and answered
- (3) cumulative third time
- (4) THE COURT Answer the question Answer the question
- (5) and then if you need to explain further I d let you explain
- (6) further
- (7) A Again as I said -
- (8) THE COURT No answer the question and then if you
- (9) need to explain you can explain further
- (10) A The answer to your question is yes there was a large oil
- (11) spill in 1989
- (12) BY MR STOLL
- (13) Q And there was a lot of toxins in that when it spilled out
- (14) isn t that - that s the question isn t that right?
- (15) A Yes when it spilled out.
- (16) Q Okay Now were you hired by Exxon first hired -
- (17) MS SMITH Your Honor beyond the scope of redirect.
- (18) THE COURT Sustained objection sustained
- (19) BY MR STOLL
- (20) Q Now with respect to this uncertainty business that you
- (21) testified to the lack of uncertainty in your mind you feel
- (22) that there is in your own mind a lot of lack of
- (23) uncertainty - I guess that s maybe a double negative Let me
- (24) rephrase that
- (25) MS SMITH I m uncertain as to what you said

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- (1) MR STOLL I m uncertain
- (2) BY MR STOLL
- (3) Q You have some certainty as to what the condition of Prince
- (4) William Sound is in your own mind?
- (5) A I think -
- (6) Q Is that your testimony?
- (7) A As I - as I testified as I said we know more about this
- (8) oil spill because it has been more intensively surveyed than
- (9) any other oil spill that ever happened before So we have a
- (10) higher level of certainty about this than any other oil spill
- (11) that s ever happened
- (12) Q Now but there s - there s - there s that "we " I m
- (13) asking about you You feel certain about what happened?
- (14) A Well I m - counsel I m using "we" in the sense that we
- (15) use it in Maine I ll use "I" from now on I think it s fair
- (16) to say that if there was any major deposits of oil residues
- (17) left out there that have not been surveyed we would have heard
- (18) about it and so I think our degree of certainty about this
- (19) particular spill is very high Indeed
- (20) Q Okay You would agree would you not, that there is -
- (21) there is some significant uncertainty as to the effects of the
- (22) oil spill even today five years after isn t that correct?
- (23) A I think that s fair to say yes
- (24) Q I mean you have a point of view and Dr Peterson who
- (25) testified he has a point of view correct?

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- (1) A Yes
- (2) Q And Dr Kocan who is an expert on herring he has a point
- (3) of view or an opinion isn't that right?
- (4) A Yes
- (5) Q And Dr Phil Mundy who is another scientist with the
- (6) Trustee Council he - he s made certain findings that you
- (7) don't agree with isn't that right?
- (8) MS SMITH Your Honor I object to this as
- (9) argumentative and beyond the scope He s talking about
- (10) herring
- (11) and salmon
- (12) THE COURT These are things that should have been
- (13) explored on - on the original cross-examination
- (14) MR STOLL Your Honor he asked - he was asked
- (15) questions on the redirect on uncertainty and I m simply -
- (16) MS SMITH With respect to surface and subsurface oil
- (17) only
- (18) MR STOLL Oh I misunderstood what he was saying
- (19) THE COURT So confine it.
- (20) MR STOLL Okay
- (21) BY MR STOLL
- (22) Q So your opinion Dr Page as to certainty or the
- (23) uncertainty is limited to what you were saying that you think
- (24) that there s - that there s certainty as to where the oil is
- (25) and what the surface and subsurface oil is?
- (26) A Yes and conclusions that I've presented based on our own

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- (1) studies
- (2) Q Okay and not the effects of that oil?
- (3) A Again I ve quoted results from our own Shoreline Ecology
- (4) Program
- (5) Q That s the Exxon Ecology Program the so-called -
- (6) A Yes
- (7) Q - Exxon Ecology Program?
- (8) A That s the results which we presented in Atlanta and have
- (9) since been accepted after peer review for publication yes
- (10) Q Now let s since you just mentioned Atlanta that was the
- (11) conference that Exxon had some scientists put on some -
- (12) excuse
- (13) me I ll rephrase the question
- (14) That was a conference in Atlanta where the scientists who
- (15) were retained by Exxon had their papers reviewed by the public
- (16) relations department of Exxon before they put on the - put on
- (17) their papers?
- (18) MS SMITH Objection beyond the scope of redirect
- (19) and argumentative
- (20) THE COURT Second objection is sustained
- (21) BY MR STOLL
- (22) Q Did you see the tape the videotape of the subsurface what
- (23) was found in the subsurface at Sleepy Bay that Dr Tumeo from
- (24) the University of Alaska testified about?
- (25) A No
- (26) Q Now my calculations are correct that there s - I think

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- (1) you testified about 3500 miles of shoreline in Prince William Sound that was in the oil impacted area?
- (2) A No that's incorrect
- (3) Q That's the total shoreline in that Prince William Sound -
- (4) A No that's not correct either
- (5) Q Do you think it's incorrect that there's 2900 miles of shoreline in Kodiak Island?
- (6) A I don't know the actual number for Kodiak Island That could be correct but again if you include all of the bays that go in to be perfectly honest I don't know counsel
- (7) Q So out of these - whatever the actual number of miles is in Prince William Sound out of this if it was 3500 if it was 2900 miles for Kodiak that's 6400 miles and so out of that there was 1700 pits dug?
- (8) A The -
- (9) Q Is that right just 1700 pits was your number?
- (10) A 1700 pits were dug at those places that were indicated by the 1991 and 1992 shoreline surveys as being most likely to have remaining traces of oil Remember that in 1989/90 and 91 many hundreds of miles of shoreline were surveyed both in Prince William Sound and the Gulf of Alaska including Kodiak Kenai Most of the pits in fact were dug in Prince William Sound because that's where most of the remaining places were that were of special concern But those places that were indicated as being a special concern such as

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- (1) Perevalnie Pass in Kodiak and Kenai were in fact visited and pits were dug but far fewer because there was much less oil there
- (2) Q And how - how big in circumference was each of these pits?
- (3) A Well again I wasn't at post-SAP but the pictures that I've seen in this courtroom indicate that they were probably on the order of two to three feet wide at the top and probably as much as two to three feet deep And so that I think that a lot of effort was made into digging these pits
- (4) Q And you're not an expert - you don't purport to be an expert on pink salmon or the effects of the oil spill on pink salmon do you?
- (5) A I can read fishery statistics as well as the next person
- (6) Q That's not my question My question is whether you consider yourself to be an expert and are you being offered as an expert on pink salmon?
- (7) A I'm not being offered as an expert on pink salmon
- (8) Q Okay And do you know who Paul Boehm is?
- (9) A Yes
- (10) Q And tell the jury who he is
- (11) A Paul Boehm is one of my colleagues coworkers who worked with us on the Shoreline Ecology Program and he directs a laboratory at Arthur D Little which is a large consulting firm in Cambridge Massachusetts

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- (1) Q And he was - he was retained by Exxon also in this -
- (2) MS SMITH Your Honor beyond the scope of redirect
- (3) THE COURT Sustained objection sustained
- (4) MR STOLL May I ask one question?
- (5) THE COURT Not in that area no
- (6) MR STOLL Well this goes to his issue Your Honor about whether there is - whether there's oil there or not oil there I just had one question -
- (7) THE COURT Not in that area counsel
- (8) MR STOLL May I approach the bench please?
- (9) THE COURT Yes
- (10) (At side bar on the Record)
- (11) MR STOLL Your Honor he's testified that - that there's not oil in the - this is the implication of his testimony The last question of counsel was whether there was oil still in the Sound and Boehm has said - we played the tape for this - that it's physically impossible to physically remove the oil And I'm going to ask him simply does he disagree with Mr Boehm's statement. That's all the only question I have
- (12) MS SMITH It's a 1989 admission that you worried about and they showed with another witness
- (13) THE COURT You mean the video?
- (14) MS SMITH Yes
- (15) THE COURT I agree with that but Boehm is relatively

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- (1) unimportant for that question isn't it?
- (2) MR STOLL What's that?
- (3) THE COURT He's relatively unimportant for that isn't he?
- (4) MR STOLL He's supposedly one of the chief scientists
- (5) THE COURT That hasn't been established What I'm trying to tell you in no uncertain terms is you don't get to lay that foundation in front of the jury
- (6) MR STOLL The video has already been in The video's already been in evidence We put it in
- (7) THE COURT I'm sorry I forgot you were Kodiak
- (8) MR STOLL I'm not into that
- (9) THE COURT You can ask him about Boehm
- (10) MR STOLL That's the only question I have Thank you Your Honor
- (11) (Sidebar Concluded)
- (12) BY MR STOLL
- (13) Q So Dr Page then do you disagree with your colleague on this Exxon project when he says it's physically impossible in this environment to physically remove the oil? There was a tape recording with Mr Boehm that we played to the jury I think it was Monday of this week
- (14) MS SMITH May we have the year that statement was made please? Was it 1989?

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- (1) MR STOLL. Okay that's fine
 (2) MS SMITH I think it's relevant
 (3) A Well I think it's fair to say with any oil spill
 (4) especially in 1989 that it's impossible to get every last drop
 (5) of oil off the shorelines You do the best you can in cleanup
 (6) to give nature a head start on recovery and that's what was
 (7) done and I think what he said is true You can't get every
 (8) last bit of oil off the beaches You do the best you can
 (9) MR STOLL Thank you
 (10) MS SMITH Nothing further
 (11) THE COURT All right you can step down sir Thank
 (12) you very much
 (13) THE COURT I have a matter to discuss with the
 (14) parties So I'm going to send you out to this jury room
 (15) please I'll bring you back in as quick as I can
 (16) (Jury out at 11 32 a.m.)
 (17) THE COURT All right let's get to it counsel
 (18) Milling around is not my idea of efficient use of time
 (19) MR DIAMOND Your Honor, I do want to make a
 (20) statement with respect to the preparation of Mr - Dr Page in
 (21) connection with the issue that you took very strong exception
 (22) to
 (23) THE COURT You mean the issue of the settlement
 (24) moneys?
 (25) MR DIAMOND He was - he was asked - he was

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- (1) instructed not to raise that not to -
 (2) THE COURT He was instructed before he testified not
 (3) to do that.
 (4) MR DIAMOND During our conversations we told him
 (5) that he was not - not to volunteer that. Obviously he did not
 (6) understand did not get the message but Ms Smith did not
 (7) explain that to you at the bench conference and I thought the
 (8) record should reflect.
 (9) THE COURT I was certainly going to ask the question
 (10) because there was plenty of time to talk to him about it.
 (11) MR DIAMOND Yeah he was told to avoid the money
 (12) but it probably was fair game to talk about the incentive of
 (13) the scientists to have to find something in order to proceed
 (14) under the Trustees program And if - if he went too far it
 (15) obviously was a mistake on our part and not admonishing him
 (16) strongly enough but we did make an effort
 (17) THE COURT All right I appreciate that counsel
 (18) Thank you
 (19) MS SMITH But Your Honor as - I don't know who's
 (20) going to argue the other side of this
 (21) MR PETUMENOS I'm prepared to argue I don't know
 (22) what we're arguing yet
 (23) MS SMITH I thought you wanted to take this up
 (24) THE COURT I said I would take it up because you
 (25) argued strongly that there were other witnesses that this might

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- (1) come up with and you also said - I'm just trying to make a
 (2) record here counsel - and you also suggested that somehow
 (3) this witness should be testifying further about the issue of
 (4) the settlement money because they went to the question of -
 (5) of the bias of the report
 (6) MS SMITH That's correct
 (7) THE COURT Tell me how
 (8) MS SMITH Okay The scientists the experts who we
 (9) have who were up have - all three of them have received as
 (10) cross-examination the Spies five-year after report which he's
 (11) the chief scientist for the Trustees the Trustees draft
 (12) Restoration Plan and the Draft Environmental Impact Statement
 (13) They all say that within those documents that unless you can
 (14) find continuing impact from Exxon Valdez oil you can't have
 (15) any money
 (16) That continued funding of your project Trustee scientists
 (17) is conditioned upon you finding continuing EVOS EVOS impact
 (18) and it is the view of our people if they are asked about the
 (19) Trustees studies particularly these documents which say it
 (20) within it, but even in general, if they're asked about, you
 (21) know, the one that talks about black oyster-catcher
 (22) reproduction in the second hatch of eggs they won't - that's
 (23) not something that'll come up but if they're asked why there's
 (24) this list of unrecovered species and why the Draft
 (25) Environmental Statement is the way it is and why the

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- (1) Restoration Plan says what it says their view is that - that
 (2) their strong view is that the reason that - one of the
 (3) reasons at least and a strong one for why there's so many
 (4) species that are found to be unrecovered is because if they're
 (5) found to be recovered there's no funding and there's this
 (6) enormous pot of money 300 million has already been paid out
 (7) so there's 600 million dollars out there to fund very valuable
 (8) scientific work that people in the fields have been dying to
 (9) do and they - they will be able to use this money to advance
 (10) the ball in all sorts of species in the Sound and the Gulf of
 (11) Alaska.
 (12) I think what's going to come out of this is going to be
 (13) fabulous for science but there is a view that there is a
 (14) tendency to not find recovery because of the presence of this
 (15) huge pot of money which is greater than the National
 Endowment
 (16) for the Sciences and our - our people feel strongly that they
 (17) are entitled to comment on the bias that that creates in the
 (18) Trustees studies especially when the Draft Restoration Plan
 (19) is sort of an RFP
 (20) And we also have Your Honor - I mean I hate to take all
 (21) my cards out of my pocket at once but we have memos from
 (22) Dr Peterson where - which say no EVOS impact no more
 (23) funding He's peer reviewing somebody else's thing and
 (24) they're not finding enough of a continuing impact from Exxon
 (25) Valdez oil and he's saying then no money

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- (1) And we also have guidelines that say - from the Trustees
 (2) that layout in several pages If you can't find continuing EVOS
 (3) impact your funding gets cut off And when these scientists
 (4) come in on this RFP to prove that they want continued funding
 (5) they have to prove that they have a continuing EVOS effect
 (6) And our people If asked about it want to be able to say
 (7) that because they deeply believe that that is affecting these
 (8) documents
 (9) THE COURT Yes And you're - after this hearing
 (10) you're going to tell your people whoever they are that what
 (11) they deeply believe is irrelevant to me If I make a ruling
 (12) they live with it
 (13) MS SMITH I'm willing to tell them that Your Honor
 (14) but I'm saying if the door -
 (15) THE COURT You told your last one and he disregarded
 (16) you I'm just trying to make it very plain that when you give
 (17) the caution and I make the ruling they are not to go beyond
 (18) it
 (19) MS SMITH Your Honor I respect that 100 percent,
 (20) but I think Your Honor, respectfully that they don't get to
 (21) use the documents I'm going back to the other issue
 (22) THE COURT That's the different question
 (23) MS SMITH Right The question if you tell us "X"
 (24) our witnesses have to understand "X" yes, I agree We'll take
 (25) care of that

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- (1) THE COURT Let's not talk about feeling strongly
 (2) That injects an emotional issue into this determination which
 (3) I should not be affected by
 (4) MS SMITH Well if they open the door on these
 (5) documents that's what our people say
 (6) THE COURT That's what your people will not say
 (7) unless I let them say it.
 (8) MS SMITH On that issue I agree with you but I
 (9) think they are entitled to say it if they ask these questions
 (10) THE COURT And I'll tell you whether or not they
 (11) are
 (12) MR DIAMOND Your Honor may I just add one -
 (13) THE COURT No counsel I know what the issue is
 (14) Counsel?
 (15) MR STOLL Yes Your Honor
 (16) THE COURT This - I'm going to give you a ruling
 (17) This is a perspective ruling You're not to use the Trustee
 (18) Council documents without approaching the bench and telling
 (19) me
 (20) you're going to use them and I'll tell you how you're going to
 (21) use them They are risky documents to use You've heard the
 (22) argument from the other side It may be because of the type of
 (23) information you elicit from the next witnesses that I may allow
 (24) the - the answer that the defense witnesses want to give are
 (25) dying to give clearly so you - so first it's not enough I
 can tell it's not enough for me to caution either side to be

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- (1) careful
 (2) So you're not to - this is categorical You're not to use
 (3) the documents You're not to mention them until you let me
 (4) know what's coming and I have a hearing out of the presence
 (5) of
 (6) the jury
 (7) MR STOLL All right Your Honor in that regard I
 (8) think that it's likely that we may want to use the results of
 (9) the findings of the scientists of the Trustees as to what
 (10) the - as to - you know what they found Just as we had
 (11) Dr Peterson testify we had Dr Kocan testify we had -
 (12) MR PETUMENOS Excuse me I'm a little confused I
 (13) don't want to - I want to make sure I'm on the same wavelength
 (14) as the Court
 (15) The - approaching the Court prior to using them is clearly
 (16) no problem At what point do you want to hear argument from
 (17) the plaintiffs with respect to what we just heard because
 (18) there is a counter argument?
 (19) THE COURT If you can give the counter argument to me
 (20) briefly I'll deal with it because I'm not going to leave the
 (21) jury out for very much longer
 (22) MR PETUMENOS I'm aware of that That's exactly my
 (23) point.
 (24) THE COURT What is the counter argument?
 (25) MR DIAMOND May I just ask Mr Petumenos one
 question off the record?

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- (1) THE COURT Sure
 (2) MR STOLL Your Honor what we maybe could do to move
 (3) this ahead I'm going to do the principal cross-examination for
 (4) Dr Neff who I understand is the next witness and why don't
 (5) we put him - they can put him on and I'm not going to ask any
 (6) questions on cross-examination until probably not today the
 (7) way we're going so why don't - why don't they put Dr Neff on
 (8) and we can take this up this afternoon
 (9) MR PETUMENOS Great idea keep the jury going
 (10) THE COURT All right that's good Let's bring them
 (11) in
 (12) (Jury in at 11 42 a m)
 (13) THE CLERK Sir could you attach the microphone to
 (14) your tie please stand up and raise your right hand
 (15) (The Witness Is Sworn)
 (16) THE CLERK Please be seated
 (17) Sir for the record can you please state your full name?
 (18) A My name is Jerry Michael Neff N-e f f
 (19) THE CLERK And your occupation?
 (20) A I'm senior research leader at Battelle Ocean Sciences
 (21) Laboratory
 (22) MS SMITH Your Honor may I approach?
 (23) THE COURT Yes
 (24) DIRECT EXAMINATION OF JERRY M NEFF
 (25) BY MS SMITH

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- (1) Q I never got to say we call as our next witness Jerry Neff
 (2) so here you are okay
 (3) Dr Neff you re currently employed as a senior research
 (4) leader at Battelle Ocean Sciences Laboratory?
 (5) A That is correct
 (6) Q Tell the jury about Battelle Ocean Sciences Laboratory?
 (7) A Well Battelle Ocean Sciences Laboratory is a part of the
 (8) Battelle Memorial Institute The Battelle Memorial Institute
 (9) is a not for profit contract research organization By that I
 (10) mean that we do contract research for government and industry
 (11) throughout the world and any profits that come from that
 (12) either go to charity or are reinvested in the capitalization of
 (13) the company that means building new building and equipment.
 (14) Q Does Battelle just do work for Exxon?
 (15) A No Exxon s one of our minor clients Actually the total
 (16) Battelle research budget is about 500 million dollars a year
 (17) which a very small fraction is from Exxon Most work is for
 (18) the federal government
 (19) Q What percentage of the work would you say is for the
 (20) federal government?
 (21) A For whole Battelle it s approximately between 80 and 90
 (22) percent.
 (23) Q All right. And do the scientists at Battelle Ocean
 (24) Sciences specialize in marine biology chemistry toxicology
 (25) and physical - let me see if I can do this oceanography?

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- (1) A Yes that is correct
 (2) Q And what do you specialize in?
 (3) A Well I m a sort of a renaissance man I specialize in
 (4) several different disciplines My major discipline is marine
 (5) biology but I also have extensive expertise in marine
 (6) chemistry and toxicology
 (7) Q All right How did you become interested in marine
 (8) biology?
 (9) A Well I grew up on the coast of Massachusetts in a small
 (10) town whose major industry was lobster fishing and since I was
 (11) very young I ve been an avid fisherman and avid consumer of
 (12) lobster and various other fish products from my hometown So
 (13) I developed an interest in marine biology that is the study of
 (14) marine animals and plants very early and when I went to
 (15) college I specialized in that area
 (16) Q So you started - you started down this track because you
 (17) liked to eat fish?
 (18) A And lobster too yes
 (19) Q And lobster all right Dr Neff are you married?
 (20) A Yes I am I ve been married for 23 years and I have two
 (21) children age 13 and 19
 (22) Q And tell the jury about your education
 (23) A Okay After high school I went to Antioch College in
 (24) Yellow Springs Ohio and that s a small liberal arts college
 (25) a work study college and earned a degree Bachelor of Arts in

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- (1) biology in 1963 And during my stay there I had many jobs
 (2) part of the work study program in marine biology including a
 (3) year in England studying oceanography
 (4) After I left Antioch in 1963 I received a fellowship at
 (5) Duke University in Durham North Carolina and Duke University
 (6) has one of the best marine sciences programs in the country
 (7) and I studied marine biology with a minor in biochemistry and
 (8) physiology there and obtained a Ph D degree in zoology with
 (9) a minor in biochemistry and specialization in marine biology in
 (10) 1967
 (11) Q Where did you go from there?
 (12) A I went just down the street from Duke University to the
 (13) University of North Carolina for five years and I was on the
 (14) research faculty there doing basic research in marine biology
 (15) for five years
 (16) Q All right. Did you join the faculty of the biology
 (17) department of Texas A&M?
 (18) A Yes after - I left the University of North Carolina I
 (19) went to Texas A&M University in College Station Texas and
 (20) was on the faculty of the biology department there for eight
 (21) years When I left Texas A&M I had the position of Associate
 (22) Professor with full tenure
 (23) Q Okay While you were at Texas A&M did you do any work
 (24) relating to oil spills?
 (25) A Yes I had a fairly extensive research program at Texas

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- (1) A&M University and most of the work I did I was focused on
 (2) the fate and effects of petroleum in the marine environment.
 (3) And of course being in Texas I studied the marine
 (4) environment of the Gulf of Mexico and did a lot of basic
 (5) research on the toxicity of oil and the effects of offshore oil
 (6) and gas development in the Gulf of Mexico
 (7) Q Okay And jury I promise you I m not going to ask
 (8) another witness what the fate and effects of oil as I think
 (9) they ve heard it 12 times now
 (10) Did you break new ground with your Texas A&M research?
 (11) A Well our work on the toxicity of oil was very
 (12) fundamental We were the first laboratory to carefully measure
 (13) the concentrations of oil and specific hydrocarbons that caused
 (14) different types of effects in marine animals and we published
 (15) this work in the early 1970s And it was as I said very
 (16) basic fundamental work that s been built on since then by
 (17) many laboratories throughout the world
 (18) Q Dr Neff has there been a tremendous burgeoning of
 (19) interest in the health of marine environments in recent years?
 (20) A Well there s been a tremendous increase in environmental
 (21) awareness throughout the world and especially in the United
 (22) States including of course marine environment which is
 (23) viewed by many as the last I might say frontier last
 (24) pristine environment in the world And so yes there s been a
 (25) tremendous interest and growing awareness of problems in the

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- (1) marine environment and interest in protecting the marine
 (2) environment
 (3) Q All right In 1980 you went to Battelle?
 (4) A That is correct yes I took the position at Battelle in
 (5) 1980
 (6) Q Did you do a three-year stint at Arthur D Little and come
 (7) back to Battelle?
 (8) A Yes Between 1990 and 93 I worked at Arthur D Little
 (9) which is just down the street from Battelle Ocean Sciences
 (10) Laboratory or 50 miles down the street anyway
 (11) Q You've done a lot of work for the government, haven't you?
 (12) A Yes Most of my research has been for the government in
 (13) particular the U S Department of Interior Minerals
 (14) Management
 (15) Service
 (16) Q All right And when you do this work, you focus on man
 (17) introducing chemicals into the marine environment?
 (18) A Yes The major focus of all my work in the last two years
 (19) has been the effect of man's activities on the marine
 (20) environment and also on fresh water environments That is if
 (21) man's activities introduce chemicals into the environment, what
 (22) effect do those chemicals have on marine animals and marine
 (23) ecosystems and by the same token what level of chemical
 (24) contamination can be tolerated by marine organisms because
 (25) we
 (26) only have so much money to study marine pollution and we
 (27) need
 (28) to focus on the real problem So my work has dealt with the

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- (1) effects of chemicals from man's activities on marine organisms
 (2) Q All right And you looked at a proposed sewage outfall in
 (3) Massachusetts Bay?
 (4) A Yes That's an ongoing study We're studying the
 (5) potential effects of this new sewage outfall on marine - the
 (6) marine ecosystem including whales and sea turtles and so
 (7) forth
 (8) In Massachusetts Bay
 (9) Q All right And you've looked at marine pollution from
 (10) ocean dumping?
 (11) A Yes Until recently New York and New Jersey dump their
 (12) sewer sludge off in the Atlantic Coast about 106 miles
 (13) offshore and we were asked by EPA to monitor that and
 (14) determine the effects of that And since that that's been
 (15) banned that activity
 (16) Q I would hope so Okay
 (17) Did you work with the Department of Interior in California
 (18) to figure out whether there were long term impacts from
 (19) offshore development of oil and gas resources?
 (20) A Yes We did a study there for the Minerals Management
 (21) Service of the Department of Interior on the long-term effects
 (22) of offshore oil and gas activities in the Santa Maria Basin
 (23) That's just north of Santa Barbara California
 (24) Q Did you do the same thing in George's Bank?
 (25) A Yes We did an even larger we - well about as large a
 (26) study on George's Bank George's Bank is a big ocean bank off

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- (1) Massachusetts and it's a major marine fishery area for the
 (2) Atlantic coast And we studied potential effects of
 (3) development of oil and gas activities on the fishery and the
 (4) whole environment of George's Bank And by the way we
 (5) found
 (6) no effect on the fishery The current fishery declines are
 (7) related to overfishing and not oil and gas development which
 (8) never actually occurred there after several exploratory wells
 (9) Q Okay Did the Interior Department ask you to look at
 (10) models of the impact of an oil spill on fisheries?
 (11) A Well one project I did for Minerals Management Service was
 (12) to review so-called oil spill fishery impact models and these
 (13) are models that you heard earlier about the Gault model which
 (14) sort of tracks the fate of the oil, in other words where it
 (15) moves in the environment
 (16) Well these kind of models are also linked to fisheries
 (17) models that estimate the movements and biology of the fish
 (18) and
 (19) by combining them together Minerals Management Service
 (20) was
 (21) trying to determine if a spill happened say on George's Bank
 (22) or in Bristol Bay would - would that have a serious impact on
 (23) the fisheries and I reviewed those models for MMS to
 (24) determine
 (25) If, in fact the toxicological part that is the effects of oil
 (26) on marine fish was accurate in the model
 (27) Q Okay Tell the jury about your work with the Australian
 (28) Petroleum Exploration Association?
 (29) A Well about two years ago I had the honor of being

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- (1) appointed to an independent review committee for the
 (2) Australian
 (3) Petroleum Exploration Association And Australia is about 20
 (4) years behind the United States in offshore oil and gas
 (5) development and are very concerned as in the United States
 (6) about potential effects of offshore oil and gas development
 (7) And this committee that I was on basically commissioned the
 (8) review of what the potential effects would be of offshore oil
 (9) and gas activities on the marine environment of Australia and
 (10) the results of that investigation were just published in
 (11) January as a 600-page book dealing with this topic
 (12) Q And is that the polycyclic aromatic or is that a different
 (13) book?
 (14) A That's a different book
 (15) Q I'm going to give his book a plug I know you're all going
 (16) to run out and buy it I know I will It's call Polycyclic
 (17) Aromatic Hydrocarbons in the Aquatic Environment Sources
 (18) Fates and Biological Effects Did you write that?
 (19) A Yes I wrote that book in 1979 and despite the esoteric
 (20) title it has been widely read and used among marine aquatic
 (21) scientists who are studying polycyclic aromatic hydrocarbons
 (22) which are components of the petroleum
 (23) Q Did you also publish responses of marine animals to
 (24) petroleum and specific petroleum hydrocarbons?
 (25) A Yes I published that book in 1981
 (26) Q Is that all you wrote?

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- (1) A Well I - I also have about 110 to 120 scientific
 (2) publications in journals and symposium volumes and book
 (3) chapters and so forth. The reason I don't know the exact
 (4) number it's kind of hard to determine in some cases whether
 (5) it's an fish publication or just an elegant report but
 (6) approximately 120 publications dealing with marine science
 (7) Q All right. Have you worked on oil spills?
 (8) A Yes I've done several oil spill studies in the last 20
 (9) years
 (10) Q When you're asked to work on an oil spill what do you do?
 (11) A Well as I indicated earlier I'm a marine biologist by
 (12) training so my concern with respect to oil spills is the
 (13) effect of the oil on marine organisms and marine ecosystems
 (14) And so that's usually the major focus of the work that I've
 (15) done for - in relation to other oil spills in other words
 (16) the effects on fish and fisheries the effects on intertidal
 (17) communities and so forth
 (18) Q All right. What's the biggest oil spill you've ever worked
 (19) on?
 (20) A The largest one is the infamous now to this jury, Amoco
 (21) Cadiz spill which occurred in France, 1978 and the spill was
 (22) about seven or eight times larger than the Exxon Valdez spill
 (23) Q Okay Did you work on the Amoco Cadiz involved evaluating
 (24) the effects of oil after it hazard had gotten into seawater?
 (25) A Yes The project I did which was supported by NOAA, the

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- (1) A Well diesel fuel is a part of crude oil and actually it's
 (2) the part that contains most of the toxic ingredients of oil. If
 (3) we want to talk about toxic ingredients so it generally is
 (4) more toxic than a crude oil
 (5) Q Were you hired by the government of Italy?
 (6) A Yes There was a spill in 1991 off Genoa Italy in what's
 (7) called the Ligurian Sea and the Italian government hired -
 (8) well I was at Arthur D. Little at the time contracted with
 (9) Arthur D. Little to study the effects of that spill on sea
 (10) grass beds along the coast which are important nursery areas
 (11) for fish and also offshore fishery resources from the spill
 (12) from the Haven which was a large tanker that basically blew up
 (13) and sank off the Italy - Italian coast.
 (14) Q Have you been hired by the government of the United Arab
 (15) Emirates?
 (16) A Yes Recently in February of this year there was a spill
 (17) of crude oil in the - near the Straits of Hormuz and that's
 (18) that narrow corridor there through which all the oil from the
 (19) Middle East goes back and forth and which was the subject of
 (20) the Iran Iraq war and so forth and there was a spill there in
 (21) Emirate of Fujairah which is a very poor part of the United
 (22) Arab Emirates, and there was a concern about, again the
 (23) effects of that oil spill on the fisheries there which are
 (24) borderline subsistence and commercial fisheries and so we
 (25) assisted the Fujairan government in assessing the effects of

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- (1) National Oceanographic and Atmospheric Administration dealt
 (2) with the effects of the oil on several small bays near the -
 (3) near the spill site and the effect particularly on oysters and
 (4) bottom living fish
 (5) Q All right. And did you look at a bottom-dwelling fish
 (6) called a plaice p-l-a-c-e?
 (7) A Yes I did. It's similar to a flounder and halibut but a
 (8) little smaller than halibut
 (9) Q Did you work on an oil spill in Texas in the late 1970?
 (10) A Yes There was a small spill of crude oil in Nechez River,
 (11) Texas which is near Beaumont, Texas and the salt marshes
 (12) along the Nechez River a very important commercial area for the
 (13) shrimp near the gulf of Mexico. So I was asked to study the
 (14) effect of that oil spill on the juvenile shrimp in the estuary
 (15) Q Okay Did you work on a spill in fresh water in the
 (16) Monongahela River?
 (17) A Yeah several years ago there was a spill of diesel fuel
 (18) near Pittsburgh Pennsylvania into the Monongahela River
 (19) concern so much not for the Monongahela but the Ohio River
 (20) in which that other river flows because that's a major source
 (21) of drinking water along the shores for people both in Ohio and
 (22) Kentucky. And so we studied the effect of that diesel spill on
 (23) both the acceptability of drinking water and also on the -
 (24) the fresh water fish and animals that live in the Ohio River
 (25) Q How does diesel fuel compare to crude?

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- (1) that oil spill
 (2) Q All right. Are you involved with any other oil spills
 (3) right now?
 (4) A Yes There's one other oil spill I'm involved with right
 (5) now that's rather an unusual one. It's in Milan Italy and
 (6) what happened was they were drilling a production well in the
 (7) middle of a rice field and the well blew out and what happens
 (8) there is the oil shoots out - you've probably heard of gushers
 (9) from oil wells well usually we can control them, but
 (10) sometimes there's an accident and the oil just spewed up into
 (11) the air 300 and three days kept flowing out and spread over all
 (12) the rice fields in this area. And so we've been studying the
 (13) effects of that oil spill on the rice fields and on the plants
 (14) and animals like frogs and birds and so forth that live in the
 (15) area of the oil spill
 (16) Q Did NOAA ask you to participate in the biostudy and can
 (17) you tell the jury what that is?
 (18) A The biostudy was an experimental oil spill and one of the
 (19) ways we have of learning about the effects of oil spills is to
 (20) conduct experiments in the field and usually you can't do
 (21) that but Canadian government agreed to perform an
 (22) spill on the north shore of Baffin Island which is in the
 (23) Arctic Ocean arctic part of Canada and I was funded by NOAA
 (24) to participate in that experimental oil spill and I studied
 (25) the effects of the oil spill on bivalve mollusks that's clams

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- (1) and so forth that live near Baffin Island
 (2) MS SMITH Your Honor I would tender Dr. Neff as an
 (3) expert in marine biology and marine toxicology with particular
 (4) emphasis on the fate of spilled oil and its effect on the
 (5) marine environment
 (6) MR STOLL No objection
 (7) THE COURT He's accepted in that area. Are you going
 (8) to go right into his - into his review and what his opinions
 (9) are?
 (10) MS SMITH Yes
 (11) THE COURT Why don't we take a break before you do
 (12) that
 (13) MS SMITH Your Honor is it me or is it -
 (14) THE COURT It's really warm in here. Actually
 (15) something's coming down on me that feels like cold air so I'm
 (16) going to take ten minutes
 (17) THE CLERK Please rise. This court stands in
 (18) recess
 (19) (Jury out at 12 00 p m)
 (20) (Recess from 12 00 p m to 12 10 p m)
 (21) (Jury in at 12 10 p m)
 (22) THE CLERK This court now resumes its session
 (23) Please be seated
 (24) THE COURT Gee it's cold in here
 (25) BY MS SMITH

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- (1) Q Dr. Neff I had to move the Barco and now I can't see you
 (2) A Well I'll scrunch forward a little bit.
 (3) Q Being short has a lot of disadvantages. Let's get to the
 (4) spill and your role
 (5) What are you going to talk to this jury about today?
 (6) A Well I'm going to talk about what happened to the water
 (7) column at Prince William Sound after the spill and how the
 (8) water column basically cleaned up very quickly. In other words
 (9) the water quality in Prince William Sound is now excellent.
 (10) I'm also going to talk about the interaction between the
 (11) water column and shoreline organisms particularly mussels
 and
 (12) how they initially became contaminated but now also are in
 (13) excellent health and have very low concentrations of oil
 (14) Q Tell the jury how you got involved with the Valdez spill
 (15) A Well just a few days after the spill I got a call from
 (16) a - an environmental firm here in Anchorage asking me to
 (17) please get on a plane as quickly as possible and get up here
 (18) that Exxon needed my help to design and implement studies
 (19) relating to damage from the oil spill. And so I got on a plane
 (20) and got here about the 29th of March. I met - basically
 (21) worked with two local environmental firms America North and
 (22) Kinetics Laboratories both located here in Anchorage and
 began
 (23) working with Exxon on the spill
 (24) Q All right Did you immediately meet with NOAA and ADEC?
 (25) A Yes The afternoon I arrived in Valdez I spent most of

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- (1) the day meeting with the various Trustee groups trying to reach
 (2) a consensus on analytical chemistry methods and sampling
 (3) designs and so forth
 (4) Q All right Was there a real sense of urgency to getting
 (5) this program going?
 (6) A Yes particularly with the water column program. We wanted
 (7) to get out there as quickly as possible so that we could
 (8) determine if water quality was seriously impaired and if it
 (9) was a potential hazard to important marine fisheries such as
 (10) herring and salmon
 (11) Q All right What was the main focus of the meeting?
 (12) A As I indicated the main focus of the meeting that I had on
 (13) the day I arrived was what chem- - what methods would we use
 (14) to determine the concentration of petroleum in the water
 (15) column. That sounds pretty simplistic I mean there's so
 (16) much oil out there, what do you need to worry about but
 (17) actually the available methods at the time dictated by EPA
 (18) were unsatisfactory for measuring the low concentrations of
 (19) hydrocarbons we expected in the water column. So I was
 (20) proposing much more sensitive and specific methods that
 would
 (21) allow us to determine very low concentrations or to track the
 (22) petroleum down to very low concentration in the water column
 (23) and therefore do an adequate assessment of the overall
 (24) distribution of oil in the environment.
 (25) Q All right. And were the more exact methods ultimately the

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- (1) ones that were used?
 (2) A Yes We reached an agreement with ADEC and NOAA
 (3) basically to try both the EPA method and the method I was
 (4) proposing which was really just a modification of that and on
 (5) the first field survey we used both methods and basically found
 (6) that the method I was proposing was the only one that gave any
 (7) useful information and subsequently all the Trustees, as well
 (8) as Exxon studies used these methods
 (9) Q All right. I know that we'd like to hurry your testimony
 (10) along but I have a feeling the court reporter would really
 (11) like it if you slowed down just a touch
 (12) A I'll try and speak more slowly
 (13) Q You're really romping
 (14) A It's so exciting
 (15) Q Maybe to you
 (16) How did you decide where to - where to choose the sites
 (17) that you were going to test?
 (18) A Well the America North group had just also produced
 (19) habitat maps which are maps showing where seals haul out,
 (20) where important wild bird populations are where - and so
 (21) forth and we used these - and of course also major fishery
 (22) areas. And we used these maps to identify locations adjacent
 (23) to key - what we call key habitats which are areas where we
 (24) were concerned about fisheries we were concerned about
 seals
 (25) we were concerned about marine birds so our stations were

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- (1) located adjacent to these sites
 (2) We then went to NOAA and ADEC and asked if there were - if
 (3) they approved of those sites and in addition if there were
 (4) additional sites where we should be monitoring and they
 (5) selected several additional sites so that's how we developed a
 (6) list of locations to sample
 (7) Q How long did the water quality sampling program last the
 (8) offshore?
 (9) A The offshore program that I just described which was only
 (10) one of several water quality programs lasted for just under a
 (11) year The first sampling survey started on March 30th and the
 (12) last samples were taken in February - of '89 and the last
 (13) samples were taken in February of 1990 So there were a total
 (14) of eight different field surveys throughout Prince William
 (15) Sound and as I say, the first was in March of '89, just a few
 (16) days after the spill The last was almost a year after the
 (17) spill
 (18) Q All right. When you got to February of 1990 did you go
 (19) home?
 (20) A No I stayed in Anchorage and basically worked on among
 (21) the many other things, worked on interpreting all the chemistry
 (22) data we were getting from the water column both from the
 (23) study
 (24) I managed and also from various other studies that other
 (25) contractors were performing for Exxon and try and pull all
 this mass of information together and come up to some

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- (1) conclusions about how was the water quality in Prince William
 (2) Sound how good was it, were there problems and so forth
 (3) Q All right. Overall how many days since March of '89 have
 (4) you spent studying the impacts of the Valdez oil spill?
 (5) A Rough estimate would be something like 700 days
 (6) Q Okay By the way did the plaintiffs take your deposition
 (7) in this case?
 (8) A Actually they did very exhaustively I have a total of
 (9) eight days of depositions to my credit.
 (10) Q We're going to talk about the results of your work but
 (11) first you need to tell us what you're talking about I'm going
 (12) to show you DX14004 and why don't you come on down and
 (13) tell
 (14) the jury what is the water column and what lives there
 (15) A I have to manage my tether here
 (16) This is a cartoon of you might say, Prince William Sound
 (17) or any water body and the water surface is this line here
 (18) between the darker and lighter blue I hope it shows up Why
 (19) don't I get over here so the Judge can see
 (20) And - and so the water column is the area between the
 (21) water surface and the bottom of the ocean And this is a very
 (22) important part of the environment of Prince William Sound
 (23) Now this is where the salmon live where the herring live
 (24) where other commercial fisheries species live And of course
 (25) they rely on food in the water column for sustenance and they
 don't show up well here but the food includes phytoplankton

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- (1) which are microscopic plants that live floating in the upper
 (2) water column the upper about a hundred feet of the water and
 (3) these microscopic plants are fed on in turn by zooplankton
 (4) And in other words zoo which means a place where you go to
 (5) look at animals and these are animal - small animals about
 (6) the size of - of a little small insect In fact they're
 (7) often called the insects of the sea They swarm in great
 (8) numbers in the upper ocean feeding on the phytoplankton
 (9) Well the salmon particularly the juvenile salmon and all
 (10) age classes of the herring feed on these animals so a lot's
 (11) going on here in the water column It's very important to the
 (12) whole of Prince William Sound It's a major component of the
 (13) Prince William Sound environment as a whole
 (14) Q All right I'm confused because I thought that oil and
 (15) water don't mix When does the oil from the oil spill just
 (16) float to the top here?
 (17) A Well the old adage that oil and water don't mix is
 (18) basically true but there are components of petroleum that are
 (19) slightly soluble and they will go into solution So when you
 (20) have a massive oil spill most of the oil floats on the water
 (21) column and initially is very thick and then gets thinner and
 (22) thinner as it spreads out and some components of the oil
 (23) actually do go into solution go down into the water and remain
 (24) dissolved there
 (25) In addition if you have a storm as happened about three

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- (1) days after the spill the waves breaking will also force some
 (2) droplets of oil down into the water column and some of these
 (3) droplets will remain there suspended for a period of time
 (4) Most of them - because oil floats it's less dense than water
 (5) - will float back up to the surface but for a period of
 (6) time the dispersed oil and the dissolved oil will be present
 (7) in the water column particularly the upper water column
 (8) Q All right. Why don't you go ahead and resume your seat.
 (9) MS SMITH Your Honor I move the admission of
 (10) DX14004
 (11) (Exhibit DX14004 offered)
 (12) MR STOLL No objection
 (13) THE COURT It's admitted
 (14) (Exhibit DX14004 received)
 (15) BY MS SMITH
 (16) Q Now Dr Page talked about - Dr Page talked about
 (17) volatiles or VOAs V-O-A Call them VOAs They're in the top
 (18) part of the barrel and PAHs which are in the middle part.
 (19) Are these the potentially bad parts of oil?
 (20) A Yes The work I alluded to at Texas A&M that I did earlier
 (21) identified these as the most potentially toxic fractions of
 (22) oil and many investigators have confirmed that but the VOA
 (23) compounds and the low molecular weight PAHs are what cause
 (24) toxicity In other words what can kill fish if there's enough
 (25) in the water column

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- (1) Q And do VOAs stick around?
- (2) A No as the name implies the VOAs are volatile That
- (3) means they evaporate very quickly And so things like benzene
- (4) and toluene even though they re present in the crude oil that
- (5) was in the tanker at high concentrations they immediately want
- (6) to get up into the atmosphere and evaporate and go away and
- so
- (7) most of them evaporated within a day or so after the spill
- (8) Q All right is that the same kind of stuff we smell when we
- (9) pump gas?
- (10) A Yes If you go to the gas station and pump gas the vapors
- (11) you re smelling is mostly the VOA compound benzene and
- (12) toluene and so forth so you get a whiff of it almost any time
- (13) you go to the gas station
- (14) Q We were going to do this as a physical exhibit but we
- (15) thought that the federal government - the state government
- (16) might find it objectionable We were going to bring in a
- (17) bottle of scotch and pour a glass and leave it. Tell the jury
- (18) what happens if you do that?
- (19) A Okay Well, the analogy I used in federal, basically if
- (20) you did pour out a nice glass of scotch and left it on the
- (21) table there and forgot about it - I can't imagine why you d
- (22) forget about it - but forget about it and came back the next
- (23) day and went to drink it you d say gee this is kind of flat
- (24) there s no kick left. Well of course what s happened is the
- (25) alcohol in the scotch has evaporated Those of us who are less

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- (1) alcoholic the same thing happens with a Coca-Cola If you
- (2) take it out and pour it into a glass and let it sit for several
- (3) hours it s gone flat and all the carbon dioxide and some of
- (4) the things that smell good in Coca Cola - if you can say
- (5) Coca Cola smells good - have gone and the stuff doesn't taste
- (6) very good anymore That s the same thing that s happening
- with
- (7) oil These volatile compounds leave the oil very quickly and
- (8) go up into the atmosphere and the sunlight breaks them down
- (9) very quickly so they don t persist in the atmosphere very long
- (10) Q Has the EPA set standards for VOAs in water columns?
- (11) A Yes One of EPA s mechanics is to set what are called
- (12) water quality criteria for the protection of aquatic life and
- (13) EPA has set criteria for a wide variety of chemicals man uses
- (14) and tends to accidentally or otherwise distribute into the
- (15) environment And there are cterna for VOA chemicals for the
- (16) protection of aquatic life
- (17) Q And I show you DX5658B You can see it - there go
- (18) ahead
- (19) What are we looking at?
- (20) A Okay this summarizes some of that EPA data on what
- (21) marine water quality criteria for volatile aromatic compounds
- (22) and - and well anyway benzene over here on the - on your
- (23) left there has a criterion of 700 parts per billion in water
- (24) That s dissolved in water Toluene is less toxic so it has a
- (25) criterion of 5 000 parts per billion Another compound

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- (1) ethylbenzene is similar to benzene and what that means is that
- (2) EPA has said that if the concentration of benzene in an aquatic
- (3) environment say a fresh water or in this case a marine
- (4) environment in the ocean in the water column is 700 parts per
- (5) billion or less then there will be no adverse effects on
- (6) marine life no matter how long that concentration stays below
- (7) 700 And so this is a protective concentration in other
- (8) words it s a no-effect concentration
- (9) Q How small is a part per billion?
- (10) A Well you know we talk about these numbers that just are
- (11) astronomical and you obviously know that a billion is a
- (12) thousand million even a million is a very big number to me
- (13) I ve never seen a million dollars and I m sure most of the
- (14) people here haven't, so a thousand million is one billion And
- (15) by way of analogy that would be - one second in 32 years
- (16) would be - one billionth of 32 years would be one second
- (17) Or if I - I took my pencil and plopped it down on the
- (18) floor here and made a dot on the middle of the floor in this
- (19) courtroom that dot would represent one billionth of the floor
- (20) space in this room So we re talking about a vanishingly low
- (21) amount of material and a very large volume of water
- (22) Q What about the PAHs do they stick around for a little
- (23) longer? That s the stuff in the middle of the barrel
- (24) A That s right. The PAHs which is a short way of saying
- (25) polycyclic aromatic hydrocarbons - which is a mouthful even

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- (1) for me who s been studying it for 20 years - they are less
- (2) volatile so they don't evaporate quite as quickly And
- (3) they re slightly soluble not as soluble as benzene but
- (4) slightly soluble, so they tend to go into solution in a little
- (5) bit and stay in the water longer than the VOAs do
- (6) Q Okay Has the EPA set criteria for PAHs in the water
- (7) column?
- (8) A Yes they have They ve set an acute criterion which
- (9) means for brief exposure for total PAHs and they also have
- (10) specific water quality criteria for PAH compounds
- (11) Q All right Let me show you DX5657
- (12) A Okay On the - let me try this again here On the left
- (13) here There we go On the left here - or the right excuse
- (14) me is the federal criterion as I said the acute criterion in
- (15) other words It can't be more than this for even a short period
- (16) of time is 300 parts per billion total PAHs in the water and
- (17) that - that means is that if that amount isn t - isn't
- (18) exceeded then fish or zooplankton or phytoplankton can
- survive
- (19) for a short period of time in the presence of that If it s
- (20) lower then of course they re perfectly happy
- (21) Q All right What s the bar on the left that says Alaska?
- (22) A Okay EPA as I said sets criteria for water quality
- (23) However they ask the states to - each state individually to
- (24) set their own criteria which now are called standards because
- (25) they refer to specific water bodies And so each state is

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- (1) asked to set standards for the quality of the water in that
 (2) state for the different uses of the water in that state
 (3) Alaska has set a standard for total aromatic hydrocarbons
 (4) in marine waters of the State of Alaska and that number is 10
 (5) parts per billion or much, much lower than the concentration
 (6) of - in the criterion, and the states are allowed to do that
 (7) They can't set a standard higher than the EPA criterion but
 (8) they can set it lower so this means that the State says that
 (9) if the concentration of total aromatic hydrocarbons in the
 (10) water does not exceed ten parts per billion that marine life
 (11) and all the uses to which we put marine waters in the State of
 (12) Alaska are not in any way infringed in other words, the
 (13) animals can live there The plants can live there The
 (14) animals can live there their whole lives without any harm
 (15) whatever
 (16) This by the way, is the most stringent standard in the
 (17) whole country Alaska's leading in many things like this and
 (18) they have the most strict standards in the whole country
 (19) Q All right. Under your prior analogy ten parts per billion
 (20) would be the same as ten seconds in 32 years?
 (21) A That's correct, yes
 (22) Q Let me show you DX5232 What does this show?
 (23) A Okay this is the wording of the - that goes with the
 (24) standard of ten parts per billion and it says what Alaska has
 (25) said is that this ten part per billion standard is designed to

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- (1) protect marine waters for the growth and propagation of fish
 (2) shellfish other aquatic life and wildlife so that pretty much
 (3) covers the main uses that the State of Alaska puts their marine
 (4) waters to in other words the natural population of wildlife
 (5) and propagation of fish and so forth
 (6) Q Does Alaska only protect against hydrocarbon
 concentrations
 (7) that kill plants and animals?
 (8) A Well the standard by definition is a concentration that
 (9) protects wildlife In other words it is not harmful to the
 (10) environment
 (11) Q So it would cover sublethal effects as well?
 (12) A Oh yes It covers all effects As I say, lifetime
 (13) exposure should be acceptable at this concentration
 (14) Q Can you tell the jury how Alaska came up with its standard?
 (15) A Well In 1979 - really in I guess in anticipation of the
 (16) Alyeska Terminal Alaska decided to set a standard for aromatic
 (17) hydrocarbons and they went to the scientific literature and a
 (18) lot of what they used was the work I was - the results of
 (19) research I was doing at Texas A&M University In addition
 (20) they used work from the Auke Bay Laboratory of NOAA down
 near
 (21) Juneau and these studies were studies of the acute toxicity
 (22) That's a short term the amount of oil that - or amount of
 (23) water soluble components which is aromatic hydrocarbons
 needed
 (24) to kill animals and also the effects of long term exposure to
 (25) low concentrations of aromatic hydrocarbons how much was

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- (1) needed to effect reproduction and all types of sublethal
 (2) responses and then apply - brought those numbers compiled
 (3) them got an average and developed basically added a
 funneling
 (4) factor to lower that, say 1/100th of that level to cause the
 (5) effects We'll use that as the standards
 (6) MS SMITH Your Honor I move the admission of
 (7) DX5658B 5657 and 5732
 (8) (Exhibits DX5658B DX5657 and DX5732 offered)
 (9) MR STOLL No objection
 (10) THE COURT They're admitted
 (11) (Exhibits DX5658B DX5657 and DX5732 received)
 (12) BY MS SMITH
 (13) Q You've told us about the offshore water quality study
 (14) What does 'offshore' mean?
 (15) A Well in the context of the spill studies what we
 (16) identified or what we defined as offshore was more than about
 (17) 300 feet from a shoreline In fact most of our so-called
 (18) offshore water quality stations were in places like Northwest
 (19) Bay Herring Bay Snug Harbor These are probably areas
 you've
 (20) heard about before that were heavily oiled by the spill So
 (21) even though we call them offshore they were in coastal waters
 (22) for the most part, though some samples were offshore where
 the
 (23) oil spill or slick was migrating after the spill Basically
 (24) 300 feet from shore
 (25) Q Was there also a nearshore quality program?

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- (1) A Actually there were several nearshore water programs
 (2) because again we recognized early on the greatest potential
 (3) for contamination of water quality was in the nearshore zone
 (4) where oil had washed up on the beach and was being washed
 back
 (5) into the - into the nearshore zone or where shoreline
 (6) clean-up activities were going on to recover oil from the
 (7) shoreline So several studies dealt with what are the
 (8) concentrations of hydrocarbons in that nearshore water which
 (9) is just really a few feet offshore and a few - few feet water
 (10) depth
 (11) Q What were the other water quality studies that were
 (12) undertaken?
 (13) A In addition to the nearshore studies there were several
 (14) studies that focused on different natural resources which were
 (15) of concern In other words there were water quality programs
 (16) associated with the herring fishery and also studies
 (17) associated with wild run pink salmon In other words
 (18) anadromous streams streams where the salmon spawn and so
 (19) forth various other offshore resources deep water resources
 (20) for shrimp and bottom fish and so forth
 (21) Q Did you also take studies from unlined areas?
 (22) A Some of our offshore water quality stations or sampling
 (23) locations were on purpose in areas where we know the oil did
 (24) not go We did this because we didn't have a good - any
 (25) information on what the background level of hydrocarbons
 were

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- (1) in the environment and our methods were so sensitive that we
 (2) were going to be detecting very very low concentrations so we
 (3) needed to know what - what is the natural level in the
 (4) environment and so we did have a few stations that were
 (5) outside the spill impact area
 (6) Q Now you talked about NOAA and ADEC and Exxon
 discussing
 (7) where to sample How did you decide where to sample?
 (8) A Well as I say with respect to the offshore water quality
 (9) program -
 (10) Q Yes
 (11) A - that was a consensus pretty much We selected a bunch
 (12) of locations asked for their input. They suggested other
 (13) locations We either changed some of ours or accepted theirs
 (14) in addition to ours and so forth So initially you've got to
 (15) realize in the few weeks after the spill all the different
 (16) parties were working close together and cooperating trying
 (17) to - what was called the emergency phase of the spill trying
 (18) to understand what was happening to the oil what were the
 (19) effects of the oil so there was a lot of collaboration in
 (20) those first few weeks after the spill
 (21) Q What levels of the water column did you take your samples?
 (22) A Okay The samples were taken just below the water surface
 (23) and at about three feet about 20 or 30 feet and down to about
 (24) a hundred feet. And a few samples were taken even deeper,
 and
 (25) we focused on the upper water column Because remember
 that

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- (1) cartoon I showed the phytoplankton and zooplankton that's
 (2) where most of them live And most of the fish that we're
 (3) really concerned about live for the most part, in the upper
 (4) water column And also we know from previous oil spills that
 (5) the highest concentrations are in the upper water column the
 (6) petroleum hydrocarbons so we focused on upper hundred feet
 of
 (7) the water column
 (8) Q In all eight or nine of the water quality programs that you
 (9) described how many samples were taken?
 (10) A There were well over 3 000 water samples taken and
 analyzed
 (11) for petroleum hydrocarbons in both the Prince William Sound
 and
 (12) the Gulf of Alaska
 (13) Q All right How does 3 000 samples compare to the size of
 (14) our water quality sampling programs?
 (15) A It's much much larger than any water quality sampling
 (16) program ever undertaken after an oil spill even much larger
 (17) spills like the Amoco Cadiz There was fairly extensive water
 (18) quality sampling but the number of samples are in the
 hundreds
 (19) not the thousands
 (20) Q All right Let me show you DX8886AA Are these the
 (21) results?
 (22) A This graph summarizes the results of our water quality
 (23) sampling within the spill path area that's areas oiled by the
 (24) spill in Prince William Sound between 1989 and 90 so it's a
 (25) two year effort We took more than 1500 water quality samples

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- (1) for analysis of PAHs and of those this is a breakdown of
 (2) those 1500 samples and the little dots here I see under the
 (3) blue under the thousand there's one dot for each sample just
 (4) an artistic license I guess but anyway the lowest the 1 001
 (5) samples contained between zero and .07 parts per billion
 (6) Remember that's a very small number Basically that's
 (7) background or nondetectable and our techniques to detect
 even
 (8) a part per trillion which is everyone's more mind boggling
 (9) number So a thousand of these samples or a little over a
 (10) thousand contained practically no hydrocarbons at all and this
 (11) is in the spill path And then 280 samples contained slightly
 (12) more up to 2 parts per billion And getting over to the
 (13) punchline on the right, of the 1500 or more samples only 13
 (14) contained more than ten parts per billion total PAH which was
 (15) the State of Alaska standard for safe water So basically of
 (16) those 1500 samples only a few contained slightly elevated
 (17) levels of PAHs
 (18) Q Should we be worried about the 13?
 (19) A That's a good question and the answer is Well where did
 (20) the 13 occur? And so I went back into our database and you
 (21) have this all on a computer and I can roll through it and look
 (22) at each sample individually and it turns out, of those 13
 (23) samples about half of them were from the water surface and
 (24) contained what we call sheen material very thin layer of oil
 (25) on the water surface And of the other ones they all were

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- (1) associated with shoreline clean-up activities in Northwest
 (2) Bay - you remember I said that we took some of our offshore
 (3) samples actually in bays - and we went back and looked and
 (4) sure enough when we had several of what we call hits you
 (5) know higher than the criterion value they were all associated
 (6) with shoreline clean-up efforts and for the most part, some of
 (7) those samples were inside the booms
 (8) When they do cleanup of the shoreline washing and so
 (9) forth they don't just let the oil go off into the water They
 (10) boom off that part of the shoreline and recover the oil as it
 (11) washes off the beach but a little bit slips under the booms
 (12) and we were monitoring that so that's where all these samples
 (13) came from
 (14) Q All right.
 (15) A Many cases we went back the next day and the samples of
 the
 (16) water was back down to background concentrations
 (17) Q Did these all end up retesting back to lower than ten?
 (18) A Yes As I say those samples associated with beach cleanup
 (19) or in Northwest Bay during massive clean up efforts we went
 (20) back in most cases the next day and took additional water
 (21) samples and by then the concentrations were down for the
 (22) most - mostly below one part per billion
 (23) Q Does this mean that the water column in Prince William
 (24) Sound was clean?
 (25) A With the exception of these rare special instances yes

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- (1) the water quality in Prince William Sound is basically clean
 (2) it's completely satisfactory for aquatic life water column
 (3) organisms of all type
 (4) Q That's in 1989/ 90?
 (5) A Yes basically 89 into 90
 (6) Q Can I drink it?
 (7) A Yes but you'd probably object to the salt but other than
 (8) that it's perfectly drinkable The salt will kill you but no
 (9) hydrocarbons would
 (10) Q Great Did NOAA also do a water quality sample?
 (11) A Yes they did Their water quality program was focused in
 (12) the two or three months immediately after the spill That's -
 (13) they started about the same time we did basically a day later
 (14) and went through April May and June of 1989 and they
 sampled
 (15) mostly in sheltered bays nearshore waters places like Snug
 (16) Harbor and Northwest Bay, and so forth
 (17) Q And how did the results of the NOAA study compare with
 your
 (18) results?
 (19) A Well, I did a careful comparison of their results Finally
 (20) I was able to get a copy of their final report, basically in
 (21) May of this year and I've looked at it very carefully and
 (22) there's a very good agreement between our study and their
 (23) studies Basically their highest concentration that they
 (24) measured that they could identify as Exxon Valdez oil was six
 (25) parts per billion However that was found in a location where

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- (1) we also found elevated levels of petroleum hydrocarbons about
 (2) the same time and so there was very good concurrence
 Where
 (3) they found oil we found oil and their highest concentrations
 (4) were in most parts similar to our highest concentrations
 (5) Q How much water does Prince William Sound hold?
 (6) A You want another big number huh?
 (7) Q Yeah I do
 (8) A Okay It's something like - again it's really hard to
 (9) estimate this because there are places in Prince William Sound
 (10) that are 3 000 feet deep but at any rate the total value is
 (11) something like 500 trillion gallons which is something - I
 (12) have no concept what that means
 (13) Q That would be one second in -
 (14) A Yeah a hundred trillion years
 (15) Q Hundred trillion years all right.
 (16) A It's a very large volume
 (17) Q When the oil was flushed out of the Sound and into the Gulf
 (18) of Alaska how did that affect the water column down there?
 (19) A Well the water that the - most of the water (sic) as
 (20) we've already said stayed on the water surface It didn't go
 (21) into the water column but that that did that was dispersed
 (22) It was flushed out of the Sound as well because the surface
 (23) waters of Prince William Sound upper hundred feet or so are
 (24) flushed out every two to three weeks perhaps a month There
 (25) were different estimates so we know that within a very short

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- (1) period of time those hydrocarbons on the surface and in the
 (2) water column were flushed out into the Gulf of Alaska but
 (3) there they were diluted by even greater volumes of water So
 (4) the concentrations of hydrocarbons in the water column of the
 (5) Gulf of Alaska along the Kenai Peninsula and so forth were
 (6) even lower than those in Prince William Sound
 (7) Q Did you systematically sample the water quality outside the
 (8) Sound?
 (9) A Yes we did We had two studies shortly after the spill
 (10) and some extending into later in the summer of 1989 focusing
 (11) on - particularly on nearshore waters along the Kenai
 (12) Peninsula in the major oil spill path area
 (13) Q All right Let me show you DX14005 - oops 14005 2
 (14) MR STOLL What is it?
 (15) MS SMITH Going to make me do it three times
 (16) MR STOLL Yeah slowly
 (17) MS SMITH 14005 2 Got it? All right.
 (18) BY MS SMITH
 (19) Q Tell the jury what this shows
 (20) A Okay There were more than 500 water samples - oops
 (21) anyway
 (22) Q That's okay, everyone's done that once
 (23) A Anyway there were more than 500 water samples taken in
 the
 (24) Gulf of Alaska during the spring and summer of 1989 Most of
 (25) those were taken in April just after the oil came out of the

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- (1) Prince William Sound The oil first emerged from Prince
 (2) William Sound the leading edge of the oil on about March
 (3) 30th and after that most of the oil was in the Gulf of
 (4) Alaska Of those 500 samples 435 were as I say the
 (5) so-called background level undetectable or 07 parts per
 (6) billion There were about 75 samples that were between 07
 and
 (7) one part per billion and there were no samples over ten parts
 (8) per billion in all the samples we took in the Gulf of Alaska
 (9) Q All right This was in 1989?
 (10) A This was in the spring and summer of 1989
 (11) Q Did this result surprise you?
 (12) A Well going into the water quality program I had expected
 (13) to see more high concentrations of petroleum in the water
 (14) column but given the results we were getting from the Prince
 (15) William Sound it wasn't terribly surprising that the
 (16) concentrations were even lower and so all of results are
 (17) consistent with - throughout.
 (18) MS SMITH Your Honor, I move the admission of
 (19) DX8886AA and DX14005 2
 (20) (Exhibits DX8886AA and DX14005 2 offered)
 (21) THE COURT They're admitted - oops they're not
 (22) admitted
 (23) MR STOLL Well I don't know for sure and I'd like
 (24) to move the case ahead you know the proceeding ahead So
 can
 (25) we just - I have them I've got copies of them but I just -

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- (1) I want to see what happens on the cross in terms of what the
 (2) basis of these figures are
 (3) THE COURT I'll do what I've done previously
 (4) counsel I'd admit them and then if there's an issue
 (5) regarding the admissibility it's up to you to bring it up so
 (6) that I can determine whether they stay admitted
 (7) MR STOLL That's fine I think that would be faster
 (8) (Exhibit DX8886AA and DX14005 2 received)
 (9) BY MS SMITH
 (10) Q Now let's look at 1990 Did you sample for PAHs in 1990?
 (11) A Yes There was more limited sampling but we did do
 (12) sampling Mostly in nearshore waters in 1990
 (13) Q Did you go out to the Gulf of Alaska again?
 (14) A No there weren't water - we studied shorelines in the
 (15) Gulf of Alaska but we didn't do water sampling
 (16) Q Why not?
 (17) A Because basically in 1989 the Gulf of Alaska was clean
 (18) So it didn't seem appropriate to go out and spend several
 (19) million dollars more to see that it was clean again
 (20) Q It was still clean?
 (21) A Still clean yeah
 (22) Q Let me show you DX14005 3 Tell the jury what this chart
 (23) shows
 (24) A Okay In 19- during the summer of 1990 there were more
 (25) than 305 samples taken and as I indicated most of these were

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- (1) In nearshore waters associated with the Intertidal Ecology
 (2) Program In other words effect of the oil spill on the
 (3) intertidal zone And nearly all those samples were basically
 (4) what I call nondetects zero to 07 parts per billion There
 (5) were a couple of samples that had a trace of oil in them and
 (6) all the rest were nondetects Basically the water in
 (7) nearshore waters of Prince William Sound was very clean by the
 (8) spring and summer of 1990
 (9) Q Does NOAA agree with your results?
 (10) A Well NOAA did not do water quality sampling in 1990 What
 (11) they did Instead was shift to what's called a mussel watch
 (12) type program where they deployed mussels which are marine -
 (13) similar to clams in cages offshore and they were able to
 (14) detect traces of oil in late summer of 1989 and into the summer
 (15) of 1990 and you can back calculate the concentrations in the
 (16) mussels to what the mussel was exposed to and they're
 (17) comparable to these numbers
 (18) Q Why did the water clean up so quickly?
 (19) A Well Prince William Sound and the Gulf of Alaska are very
 (20) high energy dynamic environments As I say the water moves
 (21) through Prince William Sound quite quickly The whole system
 (22) flushes or turns over in a matter of a month or so at least
 (23) the upper surface waters and the Gulf of Alaska is subject to
 (24) storms and very high energy mixing of water And the
 (25) tremendous amount of water there and the mixing energy
 combined

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- (1) to dilute these hydrocarbons and in addition of course the
 (2) natural populations of bacteria that live in the water and
 (3) they consumed the hydrocarbons and convert them to carbon
 (4) dioxide and water actually and then of course additional
 (5) hydrocarbons evaporate So all these mechanisms to get the
 (6) oil out of the water dilute it back to background were taking
 (7) place very quickly in Prince William Sound and the Gulf of
 (8) Alaska
 (9) MS SMITH All right Your Honor I move the
 (10) admission of DX14005 3
 (11) (Exhibit DX14005 3 offered)
 (12) MR STOLL With the similar understanding Your
 (13) Honor
 (14) THE COURT Same way It's admitted
 (15) (Exhibit DX14005 3 received)
 (16) BY MS SMITH
 (17) Q Dr Neff you mentioned an oil sheen What is an oil
 (18) sheen?
 (19) A Well an oil sheen is a very thin layer of oil on the
 (20) surface of the water and I'm sure in you know puddles in
 (21) parking lots and so forth you've seen what looks like the
 (22) colors of the rainbow It's an iridescent sheen and that's of
 (23) course in that case usually from diesel or gasoline but crude
 (24) oil also forms sheens on the water surface And if the sheen
 (25) is iridescent that means it has the colors of the rainbow We

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- (1) now how thick that is and it's very thin It's something like
 (2) 1/400th of a thickness of a piece of paper and it - actually
 (3) even though it's very visible it contains very, very little
 (4) oil And after the oil spreads out for a long period of time
 (5) or a little bit washes off the beach it forms a sheen this as
 (6) I say is a vanishingly thin layer of oil on the surface of the
 (7) water
 (8) Q Did you do any sampling of sheens in your water quality
 (9) program?
 (10) A Yes The offshore water quality program after the first
 (11) cruise - or field survey our field people were coming back
 (12) and saying well gee we sampled where you told us to but
 (13) there was a sheen over here shouldn't we sample that? So we
 (14) told them yes we want to know what's in the sheens So we -
 (15) after the first - after the second cruise we asked them to go
 (16) and sample sheens where they saw them Part of the offshore
 (17) water quality program included surface samples that included
 (18) sheen material
 (19) In addition In October as part of a marine bird survey in
 (20) various bays in Western Prince William Sound we also took
 (21) samples of sheens and of course, the NOAA - the Exxon
 (22) operations group monitored sheens through the - from 1989
 (23) through 1990 So there was extensive sheen sampling
 (24) Q Do sheens pose a threat to marine organisms?
 (25) A Well one of the reasons we sampled the sheens was to

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(1) determine if they do And the bottom line basically is that
 (2) they don't The sheens are so thin that there's so little oil
 (3) per unit and per unit surface area of the water surface that
 (4) even an animal that uses the water surface like an otter or
 (5) marine bird gets very little contact with oil
 (6) An example of that If you've been to Valdez or Cordova in
 (7) the boat harbors there - I know one in Valdez because I got
 (8) very friendly with him - there's a sea otter there that lives
 (9) there and there's sheens on that water every day and he was
 (10) perfectly happy and - I can't say He was doing very well
 (11) and so sheens contain vanishingly small amounts of oil Our
 (12) sheen sampling showed what we really wanted to confirm was
 (13) was the oil weathered and in fact it was weathered That
 (14) means most of the toxic fractions were gone
 (15) Q All right And we've seen heart wrenching pictures of
 (16) birds that were oiled during the slick I gather there's a big
 (17) difference between a slick and a sheen?
 (18) A Yes A slick is a thick layer of oil on the water
 (19) surface Usually at least maybe an eighth of an inch or so or
 (20) more And early after the spill certainly in some coastal
 (21) waters where the oil was pushing up against the shore you
 (22) could get several inches of oil Well if a bird comes in
 (23) contact with that he's just - he's gone I mean he's going
 (24) to be completely covered with oil There's nothing he can do
 (25) to get the oil off He's going to die of hypothermia loss of

(1) Q Tell the jury what a toxicity test is
 (2) A Okay Sounds like a heartless thing but it's the only way
 (3) we know to learn if chemicals in the water compounds in the
 (4) water are potentially toxic to aquatic animals And what we do
 (5) is set up an aquarium in our laboratory and put different
 (6) plants or animals in the aquarium and dose in different
 (7) concentrations of a chemical we're interested in And the U S
 (8) Environmental Protection Agency has very strict guidelines on
 (9) how you do these tests in terms of how they're performed the
 (10) statistical basis of them and also the types of species to be
 (11) used and we use standard EPA approved test organisms in our
 (12) tests
 (13) Q And what are those?
 (14) A Well there are three types of organisms that EPA
 (15) recommends to get a broad brush view of all the different types
 (16) of organisms that live in the marine world and these include a
 (17) phytoplankton species Remember that's the microscopic
 (18) plants
 (19) that live up in the water column So we did tests with
 (20) phytoplankton We did test with mycid which is a small
 (21) shrimp-like creature very small maybe a quarter-inch long
 (22) that EPA has shown to be very very sensitive to chemicals in
 (23) the water including petroleum And then we also did tests
 (24) with the early life stages of a fish In this case EPA
 (25) recommends the sheepshead minnow which is a small minnow
 that
 (25) occurs in coastal waters We did three types of test with

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(1) heat because he doesn't have any insulation That happened
 in
 (2) basically the two months after the spill there were lots of
 (3) birds and sea otters that got heavily oiled but that was from
 (4) slicks not sheens
 (5) Q Are you supposed to take water quality samples on the top
 (6) of the surface of the water?
 (7) A If you're doing monitoring to see if you're in compliance
 (8) with the State of Alaska ten parts per billion standard the
 (9) stated ADEC advises you to avoid taking samples through
 sheens
 (10) or near sheens because of the probability that you'll
 (11) contaminate the water sample with surface material And the
 (12) State of Alaska standard applies to water column that is below
 (13) the surface and so it's very hard to take a clean water sample
 (14) without special gear so we took great precautions to avoid
 (15) contaminating our water column samples with sheen material
 (16) Q Did you perform toxicity tests both in April and July of
 (17) 1989?
 (18) A Yes As part of our offshore water quality program we did
 (19) toxicity tests on water samples from the water column in Prince
 (20) William Sound and the purpose of this was to - we were
 (21) getting low numbers for the toxic fractions of oil in the
 (22) water but I'm a biologist I want to confirm are those
 (23) numbers for real or are animals perhaps dying out there even
 (24) though the concentrations are low So we did a fairly
 (25) extensive toxicity testing of the water column

(1) fish a shrimp and phytoplankton
 (2) Q Let me show you DX14006 1 Does this illustrate the
 (3) results of your test?
 (4) A Yes We did two types of tests with these organisms One
 (5) is called an acute test where what we're measuring is the
 (6) survival of the animal during a long period of - actually four
 (7) days of exposure That's not necessarily long but if your
 (8) life cycle is six days four days is half your life cycle or
 (9) more And what we found in every case was there was no effect
 (10) on survival And we analyzed this data every way we could
 and
 (11) basically we took hundred percent Prince William Sound water
 (12) taken right out of - offshore at our sampling station took
 (13) that into the laboratory put these organisms in it and watched
 (14) them for four days and there was no difference in the survival
 (15) of those organisms compared to what we call controls in
 (16) seawater that they were raised in
 (17) Q And that would be the same for offshore and nearshore?
 (18) A That was the - the nearshore samples were taken off
 (19) beaches that were being cleaned The offshore samples were
 (20) part of our Offshore Water Quality Program in early April to
 (21) mid April 1989 right after the spill and the same results
 (22) were obtained with both types of tests right
 (23) Q All right, let me show you DX14006 2
 (24) What does this show?
 (25) A Okay It's what's called acute toxicity is never really

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- (1) enough to predict what really is going to happen in the
 (2) environment because sometimes there can be what are called
 (3) sublethal effects. Those are things less than killing the
 (4) animal that could effect the long term health of the population
 (5) in the natural environment. So we did EPA approved sublethal
 (6) effects tests and what we were measuring here is either growth
 (7) or reproduction in the phytoplankton on the sheepshead
 (8) minnows. And in the case of the phytoplankton again they re
 (9) single cells so they grow by splitting in two that's called
 (10) reproduction in the case of the plants and we measured the
 (11) rate at which they reproduced and we saw no effect - oops -
 (12) anyway we saw no effect on reproduction
 (13) In the case of the fish we take the fish just after they
 (14) hatch out of the eggs and then we measure the growth for a
 (15) period of a week or so in the fish. And again in this case
 (16) we saw no effect of the Prince William Sound water on the
 (17) growth of these fish either from nearshore waters or offshore
 (18) waters
 (19) Q What are your scientific - scientific conclusions from the
 (20) results of these tests?
 (21) A Well I interpret both the water quality test - that is a
 (22) the chemistry data and the toxicity tests together - and the
 (23) two the results of the two types of testing are completely
 (24) consistent in showing that the quality of the water in Prince
 (25) William Sound even in April 1989, was very good

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- (1) Q All right Your Honor I would move the admission of
 (2) DX14006 1 and DX14006 2
 (3) (Exhibits DX14006 1 and DX14006 2 offered)
 (4) MR STOLL Same basis Your Honor
 (5) THE COURT They re admitted on the same basis
 (6) (Exhibit DX14006 1 and DX14006 2 received)
 (7) BY MS SMITH
 (8) Q Let's talk about mussels
 (9) A Okay The other kind of mussels
 (10) Q Oh okay Are mussels another barometer of the health of
 (11) the water?
 (12) A Yes Mussels live in the intertidal zone and can
 (13) accumulate chemicals out of the water and so the government
 (14) of this country and many other countries has used mussels to
 (15) gauge the quality of water. Because they can go out and sample the
 (16) mussels and the mussel will tell in a way by analyzing the
 (17) mussel chemically there tell a person how much of a certain
 (18) chemical is present in the water column over the last few weeks
 (19) before the sample was taken. And so mussels are used as a
 (20) very good indicator of longer term water quality basically the
 (21) average water quality over a period of time
 (22) MS SMITH Your Honor we re going to go into mussels
 (23) now Should we just keep going or do you want to take a quick
 (24) stop?
 (25) THE COURT I tell you what I'd like to do I'd like

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- (1) you to go till 1:15 and we'll quit for the day is that
 (2) acceptable?
 (3) MS SMITH Sure I think we'll finish
 (4) THE COURT Oh good then we'll just take break when
 (5) you're finished
 (6) MS SMITH All right
 (7) BY MS SMITH
 (8) Q I show you DX5736AA Tell the jury what this shows
 (9) A Okay This is a cartoon - maybe I could -
 (10) Q Sure come on down
 (11) A This chair doesn't slide but - this is a cartoon
 (12) basically comparing a mussel to an air filter that might be in
 (13) the furnace in your home and the air filter is designed - you
 (14) pump air through it and it's designed to take particles of
 (15) dust, and so forth out of the air and then the dust
 (16) accumulates on the filter
 (17) Well a mussel behaves sort of the same way but there's a
 (18) major difference and I'll explain that in a moment. A mussel
 (19) pumps water through its gills and the gills of course are
 (20) used for respiration but also for collecting food and a
 (21) mussel is a really very good a very efficient pumper. I mean
 (22) a small mussel that you see on the shore in Prince William
 (23) Sound can pump something like three gallons of water an hour
 (24) so it's a - it's basically a biological pump and it pumps
 (25) that water through its gills and can remove compounds that are

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- (1) dissolved in the water or can remove small particles just like
 (2) the air filter condition
 (3) The difference is that the mussel, when the water gets
 (4) cleaner and those chemicals go away the mussel will release
 (5) those chemicals back into the water column and so by
 (6) analyzing what's in the mussel we can tell what was in the water that it
 (7) sampled by pumping for the previous few days or maybe a
 (8) week
 (9) And so we can use this sort of as a meter say okay in the
 (10) last week before I wrenched this poor mussel out of the bed he
 (11) was exposed to this amount of hydrocarbons or this amount of
 (12) some other chemical by measuring the concentrations in the
 (13) tissues. So the mussel is very much like an air filter except
 (14) that it can release these chemicals when the environment gets
 (15) cleaner so we can use them as a gauge of water quality over
 (16) time
 (17) Q Dr Neff maybe you should just stay down
 (18) A Okay before I get completely tangled here
 (19) Q All right let me just ask you a couple questions I'm
 (20) going to show you -
 (21) A Okay
 (22) Q If there are minute amounts of PAHs in the water would
 (23) they accumulate in the mussels?
 (24) A Yes they would. As I say the mussel is a very efficient
 (25) accumulator and he can accumulate these chemicals to very
 high concentrations compared to the water

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- (1) Q Were you part of a group of scientists that studied mussels
 (2) after the spill?
 (3) A Yes I was involved in several mussel studies
 (4) Q And tell me Dr. Neff how many mussels live in the Sound?
 (5) A Well we - we tried to estimate this based on our
 (6) Shoreline Ecology Program and also some specific studies we
 (7) did in places like Herring Bay and Ingot Island in 1993 and we
 (8) calculated that there are something like 45 billion mussels in
 (9) Prince William Sound
 (10) Q Is that a million or a billion?
 (11) A Billion
 (12) Q Billion okay And how many - where do those mussels
 (13) live?
 (14) A Well mussels live in the intertidal zone that's between
 (15) the low and high tide mark They live there because if they go
 (16) deeper they get eaten by starfish and snails and so forth so
 (17) they live where they can survive, and that's in the intertidal
 (18) zone And most of the mussels in Prince William Sound in fact
 (19) more than 80 percent live on bedrock and boulders these big
 (20) rock outcroppings that are so common in Prince William Sound
 (21) We carefully calculated the number of per unit area of
 (22) different types of substrates and as I say more than 80
 (23) percent live on these bedrock boulder outcrops
 (24) Q All right. Let me show you DX13291 1 And why don't you
 (25) swing around and we'll bring a poster out. George Brown

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- (1) doesn't have to do this today Tom Warren is helping me
 (2) George is exhausted
 (3) MR WARREN Better not do a bad job
 (4) MR STOLL Your Honor could I take a matter up with
 (5) the Court at the bar?
 (6) THE COURT Sure
 (7) (At side bar on the Record)
 (8) MR STOLL Your Honor I'd like to have these boards
 (9) back a little bit. I really object to - I know it's effective
 (10) advocacy to get into the jury box but it - I just don't think
 (11) it's proper to get these boards so wrapped around so only
 (12) counsel for the plaintiff - or the defendant and the witness
 (13) can get right up against the bar of the jury bar it's
 (14) happened - I talked to Ms. Smith about this yesterday and you
 (15) know it's effective advocacy but I don't think it's -
 (16) THE COURT Counsel everybody in this case has been
 (17) all but backing through that jury box it's not -
 (18) MR STOLL Well we have not had the -
 (19) MS SMITH Well I think I can eliminate this We
 (20) only have two charts and they're not going up at the same
 (21) time
 (22) THE COURT It'll occur again unless I deal with it
 (23) and the fact is -
 (24) MR STOLL It's three feet from the bar
 (25) THE COURT When you have an exhibit like that

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- (1) counsel - and I know it's a big exhibit - and there isn't
 (2) anything inappropriate or the witness isn't cozying up to the
 (3) jury then there's absolutely nothing wrong with it so I'm
 (4) going to allow it
 (5) MR STOLL Okay that's fine
 (6) (Sidebar concluded)
 (7) BY MS SMITH
 (8) Q Why don't you come on over here
 (9) A This side?
 (10) Q Whichever side
 (11) Okay tell the jury what this is
 (12) A This is some of that bedrock outcrop I talked about in
 (13) Prince William Sound The high tide line is up here just above
 (14) where - these white dots are barnacles and they're able to
 (15) live very high in the intertidal zone The low tide line is
 (16) down just off this picture and all these black dots you see
 (17) are clumps of mussels adhering to the rock surface You can
 (18) see there are very dense mussels throughout from just below
 (19) the upper intertidal zone almost down to the low tide zone and
 (20) this is very typical throughout Prince William Sound this type
 (21) of substrate the bedrock outcrops and the big boulders are
 (22) very common in Prince William Sound and more of the mussels
 (23) in
 (24) the Sound live along these types of substrate
 (25) Q All right. And did these mussels in the spill area
 (26) accumulate oil in 1989?

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- (1) A Yes in those shore - on those shorelines bedrock outcrop
 (2) shorelines that were heavily oiled or oiled to different
 (3) degrees this whole area was coated in oil and the mussels
 (4) living there actually did accumulate hydrocarbons
 (5) Q All right How are they - how were they doing by 1990?
 (6) A Well these types of shorelines cleaned up very quickly
 (7) either from water washing or from natural storm events natural
 (8) cleaning And by 1990 many of the mussels survived and
 (9) were - had very - basically released most of the hydrocarbons
 (10) that they had accumulated in 1989 so by 1990 most of these
 (11) mussels were quite clean
 (12) Q All right. And why is it that they release - that they
 (13) don't bioaccumulate for longer periods of time?
 (14) A Well as you remember in the cartoon that I had before I
 (15) said when the chemical in the water that they've been
 (16) accumulating goes away the mussels are able to release the
 (17) hydrocarbons Now they're not like - fish can actually chew
 (18) it up and make it into different chemicals The mussels can't
 (19) do that but they can passively just release the chemical back
 (20) into the environment so when the shoreline got clean like
 (21) this either as I say through storm action or through water
 (22) washing then the mussels didn't have any source for more
 (23) hydrocarbons to take up and they released them back into the
 (24) water column
 (25) Q All right And the thing you explained to me which helped

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- (1) me understand this is that these are on bedrock they're not
 (2) on a soft sediment?
 (3) A That's right
 (4) Q And what is that -
 (5) A So basically this kind of substrate can clean up very
 (6) quickly because the oil even though it sticks initially will
 (7) wash off this as I say with wave action and so forth So
 (8) the shore this kind of substrate cleans very quickly through
 (9) natural processes and so forth If it's a soft substrate
 (10) some oil can be retained in that substrate and mussels living
 (11) adjacent to that soft substrate you have a continuing source of
 (12) hydrocarbons so it's a different situation from here This
 (13) cleans up naturally very quickly
 (14) Q Out of the 45 billion mussels in the Sound how much are on
 (15) bedrock?
 (16) A As I say more than 80 percent are on bedrock.
 (17) Q I guess you might as well stay there I've got another
 (18) chart for you in a minute Let's look at the mussels that are
 (19) growing in soft sediment What percentage of the mussels in
 (20) the Sound live on soft sediment?
 (21) A Well the classic mussel bed which you may have heard
 (22) about before is a dense aggregation of mussels sometimes
 (23) several mussels thick sitting on top of fine grained muddy
 (24) sediments basically fine sand and mud and these kind of
 (25) mussel beds in Prince William Sound are very rare Again

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- (1) through our surveys we've estimated between one and two
 percent
 (2) of the mussels in Prince William Sound are on these soft-type
 (3) beds Then there's another group of mussels maybe three to
 (4) five percent or more that are on mixed gravel/cobble type
 (5) sediments and sort of mixed in between the grains of you know
 (6) little rocks on the shore and these are as I say three to
 (7) five percent. So the classic mussel bed is very rare in Prince
 (8) William Sound
 (9) Q So the one to two percent of the mussels that live on soft
 (10) sediment what percentage of those mussels were in the spill
 (11) area?
 (12) A Well the spill area affected about 16 percent of Prince
 (13) William Sound so possibly you know a similar amount, a
 (14) similar percentage of these soft mussel beds would have been
 (15) affected
 (16) Q Okay Did you go to the mussel beds that were identified
 (17) by NOAA as the worst of the worst?
 (18) A Yes In 1991 I believe it was and into '92 NOAA did a
 (19) very detailed survey of Western Prince William Sound and
 (20) another group did it in the Gulf of Alaska area of mussel beds
 (21) that have been reported as being heavily contaminated and they
 (22) identified more than 60 mussel beds that still retained
 (23) petroleum hydrocarbons two years after the spill and did
 (24) detailed surveys of those and we then picked the worse of
 (25) those mussel beds to go and survey in 1993 (worst)

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- (1) Q Let me show you DX13292 Where is this?
 (2) A This is Herring Bay on the north shore of Knight Island
 (3) and this was one of the bays facing north that was very heavily
 (4) impacted by the oil spill Basically as you can see it
 (5) almost looks like a catcher's glove and the oil was streaming
 (6) south after it went around the Naked Island group and sort of
 (7) streamed into this bay
 (8) Q All right And what are we seeing here?
 (9) A That's just natural wave ripples This picture I believe
 (10) was taken fairly recently last year or so and there are no
 (11) sheens here This is natural surface ripples from air currents
 (12) and so forth
 (13) Q Does Herring Bay have the mussel bay on soft sediment that
 (14) is the worst of the worst?
 (15) A Yes Both NOAA and - and our group
 (16) MR STOLL Excuse me excuse me Doctor Your Honor
 (17) may I approach the bench please?
 (18) THE COURT Uh-huh
 (19) (At side bar on the Record)
 (20) MR STOLL I think he's going to testify about what
 (21) he found I don't mind his testifying -
 (22) MS SMITH I can't hear you Bob
 (23) MR STOLL I think he can testify about what he
 (24) found I don't think he can testify about what NOAA found or
 (25) what anybody else found

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- (1) THE COURT Why? Isn't that - if it's the basis of
 (2) his opinion -
 (3) MR STOLL Basis of his professional opinion? Is
 (4) that - I think he's just saying what NOAA found I think
 (5) that's all he's saying is what NOAA found
 (6) THE COURT Isn't he entitled to take that into
 (7) consideration in his opinion as an expert?
 (8) MR STOLL He can take that into consideration I
 (9) agree with that.
 (10) THE COURT Is the objection hearsay?
 (11) MR STOLL The objection's hearsay
 (12) THE COURT Okay overruled
 (13) (Sidebar Concluded)
 (14) BY MS SMITH
 (15) Q Does Herring Bay contain the mussel bed on soft sediment
 (16) that NOAA found was the worst of the worst?
 (17) A Actually NOAA found one so-called dirtier bed and when we
 (18) went there there were no mussels in it. This is the second
 (19) This is one that actually has mussels in it
 (20) Q All right Show us where it is
 (21) A It's on the shore of this little island here over - over
 (22) right about here
 (23) Q Can you guys see or is he blocking you?
 (24) A Sorry right about here in this picture
 (25) Q What's the name of that mussel bed?

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- (1) A Well it has a -- a segment designation of KN 133
 (2) Q Let's see DX13229
 (3) Is this a closer look?
 (4) A Yes this is a closer look of that island I just pointed
 (5) out a minute ago. Now we're getting close to panning in and
 (6) here's the island and there's a little island off it and
 (7) there's a little spit of land which is actually below between
 (8) the tides connecting this little island to this slightly
 (9) larger island and that's where the KN 133 mussel bed is. It's
 (10) right between these little islands the low pocket there.
 (11) Q I show you DX15347. All right are we there?
 (12) A We're there.
 (13) Q Show us.
 (14) A Get any closer and you're going to have to put down the
 (15) helicopter. In fact last week I landed right there on that
 (16) which was a little bit tense for a moment. That's a very small
 (17) island. And this little area here as I said is between the
 (18) high and low tide lines, this little patch here and that's
 (19) where the mussels live. You can't see them clearly on here
 (20) but these darker areas here are all solid mussels throughout
 (21) that bed and it's a very small area. The darker patches here
 (22) are actually mussels that, in better light, you could see it
 (23) clearer but there are mussels there, quite a few. I was there
 (24) last week. There are still mussels there.
 (25) Q Why don't you resume the stand.

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- (1) A Okay.
 (2) MS SMITH Your Honor I bet I have between five and
 (3) ten more minutes. Should we go or stop?
 (4) THE COURT I'd like you to finish yes.
 (5) MS SMITH Okay.
 (6) BY MS SMITH
 (7) Q Do you have a chart that shows us how big KN-133 is?
 (8) A Yes I do.
 (9) Q Let me show you DX5497AA. What does this tell us?
 (10) A This shows the size of KN-133 in relation to a football
 (11) field and as you can see the bed is actually about 45 feet
 (12) long. In other words between the two islands the long
 (13) distance is 45 feet and the width of the bed is 15 feet, so
 (14) it's a very small bed. Quite a few mussels in it though but
 (15) it's a small bed.
 (16) Q Now you told us there are 45 billion mussels in the
 (17) Sound. How many of them are at Herring Bay?
 (18) A Well Herring Bay has about half a billion mussels in it
 (19) the whole of Herring Bay.
 (20) Q Half a million?
 (21) A Billion in the whole of Herring Bay?
 (22) Q Yes You tell me You're the expert.
 (23) A It's 400 million in the whole of Herring Bay. This one bed
 (24) has about 93,000.
 (25) Q All right let me show you DX6868AA 1.

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- (1) A Got the numbers right? Yeah I was right. Half a
 (2) billion. No that's 500 million mussels in Herring Bay with
 (3) 93,000 in that one bed.
 (4) Q All right. So we've got 45 billion mussels in the Sound a
 (5) half a billion mussels in Herring Bay and 93,000 mussels in
 (6) KN 133?
 (7) THE COURT Try that again counsel.
 (8) MS SMITH I got it.
 (9) THE COURT That first one was wrong.
 (10) BY MS SMITH
 (11) Q Are the KN 133 mussels safe for birds and ducks to eat?
 (12) A Yes Basically -- again that -- the mussels in that bed
 (13) are the only ones we did fairly extensive monitoring in 1993
 (14) and there are a few other mussel beds with traces of
 (15) hydrocarbons in them but these are the mussels with the
 (16) highest levels and the levels of hydrocarbons in these mussels
 (17) are completely safe for wildlife like birds that might eat the
 (18) mussels.
 (19) Q And if wildlife eats these mussels, the worst of the worst
 (20) mussel at KN 133 they won't die or feel any sublethal effects?
 (21) A No Even if say an oyster-catcher went here and this was
 (22) his favorite lunch spot in all of Prince William Sound and he
 (23) ate there every day he would not suffer any long-term adverse
 (24) effects from eating mussels there.
 (25) Q Are the mussel beds at KN 133 the worst of the worst,

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- (1) getting better?
 (2) A Yes they are. We sampled the same mussel bed in both
 (3) 1993 and '94 and concentration of hydrocarbons in the mussel
 (4) tissues
 (5) went down by 30 percent between 1993 and 1994.
 (6) Q All right. I show you DX4983AA. Okay we do have a
 (7) chart. I was just going to say, I'm not sure if people could
 (8) see it, but let's use the chart. Come on down.
 (9) A Okay.
 (10) Q What does this chart show?
 (11) A Okay shortly after the spill a group was set up called
 (12) the Oil Spill Health Task Force and it has been monitoring
 (13) subsistence foods since shortly after the spill and most
 (14) recent samples I'm aware of are late in 1993. And this
 (15) summarizes some of the data for mussel beds in areas for
 (16) subsistence harvests basically where the people of Chenega
 (17) Village or Karluk or so forth go to catch mussels. In fact
 (18) these mussels were collected by the people who live in these
 (19) communities.
 (20) And also clams were collected and the clams show the same
 (21) thing as the mussels do and actually the people there eat more
 (22) clams than mussels but again the mussels are always the most
 (23) contaminated so I'm showing you the example of the mussels.
 (24) And in all cases the concentrations of total PAH in the
 (25) mussels from these subsistence mussel collecting areas are
 very
 low. These are averages but even the highs for instance

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- (1) here probably your highest value may have been 11 so these are
- (2) very representative of what is in these mussels now
- (3) And based on work I've done for the national mussel watch
- (4) program and review of other data these are about as clean
- (5) mussels that you can get They're absolutely pristine
- (6) Q And this is as of 1993?
- (7) A That's 1993 They're even - well again we have - I
- (8) think that was late fall of 1993 I don't know if there are
- (9) more recent samples but certainly they wouldn't be going up
- (10) The trend has always been downward so these are very clean
- (11) mussels I would have no problem eating mussels from any of
- (12) these areas as long as I was assured there was no paralytic
- (13) shellfish poisoning associated with it.
- (14) As far as the Health Task Force - should I go on?
- (15) Q Let me ask you a question If I hear one more thing about
- (16) smoked salmon which I love I'm going to just - where is the
- (17) lightly smoked salmon in this chart from?
- (18) A That's from Old Harbor
- (19) Q And where is the heavily smoked salmon in this chart from?
- (20) A That's Tatitlek.
- (21) Q And what does it show?
- (22) A Well as part of the Oil Spill Health Task Force the
- (23) village elders of these two communities actually asked the
- (24) Health Task Force to please sample and analyze some smoked
- (25) salmon because it's a common ingredient in their diet. It's

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- (1) important culturally and gastronomically and these are the
- (2) results of those analyses and they show quite high levels of
- (3) total PAH in the smoked salmon that comes from the smoking
- (4) process The smoke contains PAH and by the same token one of
- (5) my favorite foods grilled charcoal broiled steaks contain high
- (6) levels of PAH I still eat steaks It's a common process that
- (7) when you grill or smoke meats you get PAH in the meat.
- (8) Q Are the smoked salmon safe to eat?
- (9) A The Food and Drug Administration did a human health risk
- (10) assessment for Native foods It didn't include the salmon per se
- (11) the smoked salmon per se but it did include all the
- (12) natural foods and based on that there is - if someone ate
- (13) say the Tatitlek smoked salmon for his whole life there would
- (14) be a very slight chance he might get cancer as a result of
- (15) that And again we live a risky life Everything we do has
- (16) certain risks Driving in downtown Anchorage probably has a
- (17) much greater risk so it's sort of a judgment call for the
- (18) people who like smoked salmon whether they want to take that
- (19) risk As I say I eat charcoal broiled steaks I'm willing to
- (20) take that risk And actually the risk of eating
- (21) charcoal-broiled steaks is about half the risk of eating these
- (22) salmon It's a comparable thing As far as the other natural
- (23) foods like clams and mussels these are completely safe
- (24) There's no chance of cancer from eating these animals at least
- (25) based on the PAH in them in the tissues

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- (1) Q And you said you would eat these mussels?
- (2) A Yes I've eaten lots of clams from Prince William Sound
- (3) Q Would you feed them to your sons?
- (4) A Yes Because the risk - again if I was assured there was
- (5) no paralytic shellfish poisoning around at the time These
- (6) based on the chemical analysis these mussels are safe to eat
- (7) Q Would they eat them?
- (8) A My sons have strange dietary preferences I doubt that
- (9) they would I like mussels but I don't think they do
- (10) Q All right And you mentioned this before but is the story
- (11) for clams essentially the same?
- (12) A The same story for clams Many of these locations -
- (13) actually sometimes it's harder because of weather to get the
- (14) clams but in several of these communities they also collected
- (15) clams The numbers the PAH concentrations in the clams were
- (16) comparable to those in the mussels
- (17) Q Why don't you resume the stand I have a few more
- (18) questions
- (19) Dr Neff did you take a look at a piece of testimony from
- (20) one of plaintiffs witnesses a Pamela Bridgen?
- (21) A Yes I did
- (22) Q And she was talking about FDA conclusions with respect to
- (23) salmon and fin fish that salmon with PAHs of 4 parts per
- (24) billion were safe and fin fish with 7 parts per billion were
- (25) safe is that right?

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- (1) A No she apparently misinterpreted the FDA guidance
- (2) Q All right What happened?
- (3) A Well I don't know what happened to her but I can explain
- (4) what the FDA guidance actually said They recognized that
- (5) petroleum contains only a few chemicals that potentially could
- (6) cause cancer if you ate petroleum contaminated food for your
- (7) whole life And the most important of these is a compound
- (8) called benzo(a)pyrene I apologize for all the big names So
- (9) the FDA based on the food consumption products of the
- (10) people
- (11) of the Chenega Village estimated the intake of benzo(a)pyrene
- (12) equivalent chemicals from eating oil natural contaminated
- (13) foods
- (14) and they came - they also recognized that an oil spill goes
- (15) away after a period of time so no one would be exposed to oil
- (16) contaminated food for his whole lifetime so they set a
- (17) guideline based on consumption of oil-contaminated foods for
- (18) ten years which is again very conservative Most of the oil's
- (19) gone It's only five years after the spill and those
- (20) guidelines were for salmon three parts per billion
- (21) benzo(a)pyrene equivalence For other fin fish it was five
- (22) parts per billion benzo(a)pyrene equivalence and for clams
- (23) and
- (24) mussels it was 120 parts per billion benzo(a)pyrene
- (25) equivalence High number for clams give you an idea how it
- (26) works people in Chenega Village don't eat a whole bunch of
- (27) mussels It's a small part of the diet They can be a little
- (28) higher you might say on the roster

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- (1) Now I calculated - for this KN 133 I calculated the
 (2) benzo(a)pyrene equivalence in mussels from the worst of the
 (3) worst mussel bed and found that in 1993 one mussel sample
 had a
 (4) value of benzo(a)pyrene equivalence of 125 so it would be
 (5) unacceptable by the FDA requirement. In 1994 the highest
 (6) level was about 60 benzo(a)pyrene equivalence All the
 mussels
 (7) in the worst of the worst mussel bed were completely safe to
 (8) eat according to the FDA guidelines and those are very
 (9) conservative guidelines That's one additional cancer in a
 (10) million people and what that means for the Chenega villagers
 (11) is one additional cancer every 33 000 years So it's a very
 (12) conservative guideline and basically is trying to inform the
 (13) people of these villages that there's a slight chance of a
 (14) problem if you eat these foods for a long long period of time
 (15) but it's a very low low risk
 (16) Q Let's turn to salmon and herring What's the population
 (17) level impact what does that mean?
 (18) A Usually what that means particularly with respect to a
 (19) fishery is an impact that is reflected in a reduced commercial
 (20) fishery catch In other words, it's the fact that some stage
 (21) or some part of the population some stages of the life cycle
 (22) that is reflected in reduction in the adult catch the
 (23) commercial catch in the case of salmon it would be the adults
 (24) returning to the natal stream In the case of herring it
 (25) would be the herring spawning and the spawn catch the

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- (1) commercial harvest.
 (2) Q Did Exxon Valdez oil in the water column have a population
 (3) level impact on either the salmon or herring population of
 (4) Prince William Sound?
 (5) A Well based on the water quality data that I've reviewed
 (6) with you already the concentration of hydrocarbons in the
 (7) water column were never high enough to cause serious impacts
 to
 (8) salmon or herring and based on the commercial catches in
 1990
 (9) and '91 and so forth the animals that actually could have
 (10) been exposed to the spill If they were returned in very good
 (11) numbers and so no I don't think there was any population
 (12) level impact to the spill
 (13) Q There were record salmon runs and herring runs in 1991?
 (14) A That's right.
 (15) Q In addition to your own testing activity and your direct
 (16) experience have you reviewed the literature of other
 (17) scientists around the world who've studied oil spills and their
 (18) impacts on fisheries?
 (19) A Yes I've done extensive literature reviews of other
 (20) studies of other oil spills and particularly on fishery impacts
 (21) of previous oil spills
 (22) Q Are you aware of any instance in the scientific literature
 (23) that would indicate that there's a population level impact to a
 (24) commercial fishery from an oil spill?
 (25) A No I'm not aware of any instance where there was a

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- (1) population impact on the fishery species themselves There
 (2) have been closures because of oiling of nets and boats and so
 (3) forth but never an effect on the population as a whole In
 (4) other words the number of fish available for harvest
 (5) Q I've been waiting to quote Mr. Petemenos for a long time
 (6) in opening statement plaintiffs told us and I quote hundreds
 (7) of thousands of fish couldn't breathe for the oil in their
 (8) gills their gills clogged and they drowned Did you ever
 (9) hear about this happening?
 (10) A No I never did
 (11) Q And is it likely that it happened?
 (12) A Very unlikely
 (13) Q Now it's been suggested by witnesses who testified in this
 (14) case that the effect of the oil spill was to plant a seed that
 (15) didn't have any effect in '89, didn't have any effect in '90
 (16) didn't have any effect in '91 and then in '92 or '93 suddenly
 (17) that seed caused an impact to fish from oil so that there would
 (18) be something that showed up two three four years after the
 (19) spill Do you know of any mechanism that could cause this?
 (20) A No I do not.
 (21) Q All right. In the Amoco Cadiz situation you talked about
 (22) studying the impact of an oil spill on the plaice fish?
 (23) A That's right.
 (24) Q And the plaice fish really got clobbered during the Amoco
 (25) Cadiz spill, didn't it?

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- (1) A Yes The two small bays that I studied were within a few
 (2) miles of the spill which happened within sight of land and a
 (3) tremendous amount of oil came into these bays and stuck there
 (4) because there were fine grained muddy sediments at the head
 of
 (5) the bay and so the oyster mariculture operations that were in
 (6) these bays as well as the fisheries were very heavily impacted
 (7) the oil stayed around a lot longer than we've seen in Exxon
 (8) Valdez and so the fish were exposed for a long earth Much
 (9) worse than we've seen with the Exxon Valdez
 (10) Q Did the plaice fish get better or worse over time?
 (11) A We identified a varieties of the histopathological lesions
 (12) in the plaice shortly after the spill. Some of these continued
 (13) for a short period of time Each time we went back we did five
 (14) or seven sampling periods over a two-year period Plaice were
 (15) healthier by the last sampling period the plaice had a few
 (16) problems but they were much healthier than they were
 (17) initially French scientists continued their studies and
 (18) showed after three years they were better so after they -
 (19) they got hit and then they got better and better
 (20) Q Was there any symptoms in the plaice fish when they got
 (21) whorped that didn't show in 1989 that appeared - excuse me
 (22) 1978 when it occurred that appeared two three four five
 (23) six years later?
 (24) A No It was just the opposite There were serious effects
 (25) right after the spill and they got better with time

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- (1) Q And the fishery today is fine?
- (2) A Yes It's a very small fishery but the fish are healthy
- (3) Q Is there any data that you're aware of here to support the
- (4) theory that this oil spill wiped out the food sources for fish
- (5) that live in the water column?
- (6) A No There's been a lot of work in other spills on the
- (7) effects of oil spills on phytoplankton and zooplankton. Those
- (8) are the little critters I talked about earlier that support the
- (9) food chain and the fish like salmon and herring and sometimes
- (10) you do get an effect on the phytoplankton because they grow
- (11) fast and reproduce so fast usually they reproduce and back to
- (12) normal numbers within a few days or a few weeks after a spill
- (13) In the case of zooplankton again they reproduce maybe
- (14) once a week and so you hit a patch and you may kill some of
- (15) the zooplankton but within a few weeks they're back to normal
- (16) numbers and all the evidence we have for Exxon Valdez is that
- (17) the phytoplankton and zooplankton populations were very rich
- (18) and abundant in 1989
- (19) Q Dr. Neff do you believe the Exxon Valdez oil spill had a
- (20) substantial continuing effect on plants and animals that live
- (21) in the water column?
- (22) A No I believe there probably were some effects immediately
- (23) after the spill for a short period of time but those - all
- (24) those effects in the water column went away very quickly and
- (25) the water column was completely recovered by mid or late summer

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- (1) of 1989
- (2) MS SMITH Thank you
- (3) THE COURT I'm going to let the jury go. Don't talk
- (4) to anybody about the case and don't form or express any
- (5) opinion
- (6) on it until it's submitted to you for deliberation. We'll see
- (7) you tomorrow at 8:30
- (8) (Jury out at 1:32 p.m.)
- (9) THE COURT Okay counsel what are we going to talk
- (10) about now if anything?
- (11) MR DIAMOND I'm hungry
- (12) MR PETUMENOS My favorite part of the day Talk to
- (13) the Judge in 80 degrees at 1:30
- (14) THE COURT It tends to make you efficient
- (15) sometimes
- (16) MR STOLL Your Honor I do intend to ask this
- (17) witness some questions with respect to findings of other
- (18) scientists. Some of those other scientists happen to be
- (19) retained by the Trustees. Some of their findings are contained
- (20) in some reports by the Trustee Council and you asked if we
- (21) would tell you if that was going to happen before we did it
- (22) I'm telling you
- (23) THE COURT Well yeah see the problem is that I
- (24) have to know when it's coming and essentially what it's going
- (25) to be. The findings of other scientists is no problem. It's
- (26) when the Trustees Council gets mentioned that it becomes the

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- (1) problem. If in fact there's a - there's a bias in the
- (2) scientific population because they see money out there on the
- (3) horizon then I think that that subject can be explored without
- (4) talking about the Trustees Council because the only issue is
- (5) is there money out there for research and it - can't - might
- (6) that bias the findings should be easily examined on and
- (7) quickly too
- (8) MR DIAMOND Your Honor I loath to take a position
- (9) inconsistent with that which Ms. Smith might take but -
- (10) MS SMITH You're dead meat
- (11) MR STOLL I'm going to stand up in a minute - this
- (12) is domestic relations court normally
- (13) THE COURT I do that in the afternoon
- (14) MR DIAMOND What I suggested to Mr. Petumenos is the
- (15) insinuation issue here is number one a settlement which I
- (16) don't think you want in front of this jury unless it comes in
- (17) for proper purposes or Exxon funding of any settlement. Those
- (18) are what create the problem and that's what we tried to steer
- (19) Dr. Page away from talking about.
- (20) With respect to the fact that these are part of the
- (21) Trustees studies that - that is an important issue because
- (22) the scientists who've testified on behalf of the plaintiffs are
- (23) Trustee scientists the cross-examination that's going to be
- (24) made is Trustee science and we would like to contend that our
- (25) witnesses will testify if given the opportunity that the way

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- (1) the science is being administered under the Trustees program
- (2) creates an inducement to find effects and creates a bias. And
- (3) they will to the extent they disagree that's one of the
- (4) reasons they base their disagreement on
- (5) What I would propose we do is instruct our witnesses to
- (6) stay away from settlement funding the source of funding any
- (7) mention of Exxon in connection with the Trustees but that they
- (8) be permitted to testify if appropriate otherwise appropriate
- (9) that they have a problem with a particular report on which -
- (10) which was the basis for cross-examination in part because they
- (11) think that the inducement for that scientific research was in
- (12) fact influenced by the way the Trustees have set it up
- (13) And that I think avoids all of the problems that the
- (14) plaintiffs think are unduly prejudicial. It still gives us
- (15) latitude in doing the direct and gives us an ability to put on
- (16) evidence that we would probably want to put on even in the
- (17) absence of redirect in response to Dr. Peterson's testimony
- (18) THE COURT Okay
- (19) MR PETUMENOS Judge Mr. Diamond and I did discuss
- (20) that and while enforcing it can have a sort of a gray area to
- (21) it I suppose - I think it's a good solution
- (22) THE COURT Yeah I do too I think it's a good
- (23) solution but I've had one bad experience I don't want to
- (24) have another one because the next one I'm going to lay it on
- (25) this jury I'm going to tell them that it's improper for you

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- (1) to have raised it So your witnesses have to be very careful
 (2) MR DIAMOND They are - will not mention
 (3) settlement They will not mention any Exxon funding To the
 (4) extent they talk about this It will be criticism of the way
 (5) the Trustees science program is administered that led to the
 (6) report on which they were cross-examined
 (7) THE COURT Okay
 (8) MR PETUMENOS Next matter
 (9) THE COURT Has to be a certain level of trust here
 (10) counsel I'll trust you for now I'm talking about counsel
 (11) as we say it in - in Maine in the plural
 (12) MR DIAMOND Now I tremble because Mr Petumenos has
 (13) his book open
 (14) MR PETUMENOS I do have my book open I have a
 (15) concern about an issue of evidence Could I take the podium
 (16) for just a bit?
 (17) MR DIAMOND Sure
 (18) MR PETUMENOS That is coming up in the defense case,
 (19) and I'm not sure when, but I think it is probably the biggest
 (20) evidentiary issue the plaintiffs have with defense case and
 (21) it's a rather complex issue And it is briefed along with a
 (22) blizzard of paper that you got - no one's fault, I guess -
 (23) towards the beginning of the trial
 (24) I am requesting a hearing that I think will take some time
 (25) some afternoon before the testimony under Evidence Rule 104

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- (1) as to a preliminary question of fact of admissibility with
 (2) respect to a report that has been done by the Clarion Group
 (3) which was the subject of the motion in limine in which this
 (4) Court denied the motion and said that you thought that there
 (5) may be portions of the report that were inadmissible but as we
 (6) got there we needed to address it. The report is a voluminous
 (7) report that - hundreds of pages long and I think I probably
 (8) filed as much paper in connection with the motion as I dared in
 (9) connection with that motion in limine as well as deposition
 (10) testimony and a whole bunch of back-up material The Clarion
 (11) Group has done basically three things that I can - I can sort
 (12) of divide up One is they've written a report about whether
 (13) there's a market for natural lands about which there's no
 (14) objection
 (15) Two they have done a report about whether or not there is
 (16) evidence in the real estate market to support an impact on real
 (17) estate in Alaska market about which I have no objection
 (18) But they've done another report which is a report of real
 (19) estate impacts of other oil spills across the United States as
 (20) far east as Falmouth Massachusetts and as long ago as 1969
 (21) and under rules both under the Fry Test for purposes of the
 (22) scientific basis for it whether that passes the Fry Test as a
 (23) scientifically accepted approach and for Evidence Rule 403 I
 (24) have substantial problems with that entire report and that
 (25) entire area of inquiry

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- (1) It puts at issue in the case 15 or 16 oil spills and the
 (2) surrounding real estate communities from across the country
 and
 (3) across the years I take that in contrast with the Court's
 (4) position with respect to damage to archaeological sites in this
 (5) spill on land that was not owned by these plaintiffs for which
 (6) in your discretion you ruled that the summary charts could not
 (7) come into evidence but we could just have some abbreviated
 (8) testimony on redirect This testimony is way far afield will
 (9) consume enormous time and I think is - is way past the issue
 (10) of admissibility and I think I can demonstrate that
 (11) THE COURT You don't have to now counsel If I'm
 (12) going to have an evidentiary hearing I hate to hear this
 (13) argument twice
 (14) MR PETUMENOS Okay The other issue I'd like to get
 (15) some notice from counsel on is in their papers part of the
 (16) report was they were going - the report discusses other
 (17) litigation other settlements other verdicts other judgment
 (18) in other oil spill cases and in their papers, they stated that
 (19) they weren't going to attempt to introduce that material when
 (20) they opposed the motion then the order simply said I'm going
 (21) to deny it for now We'll see - I'd like to hear whether from
 (22) the defendants whether they persist in that proof because that
 (23) was narrowed by the objection
 (24) MR DIAMOND Hopefully Mr Oppenheimer was going to
 (25) address this I thought this was simply a request for hearing

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- (1) THE COURT It is counsel but I want to hear whether
 (2) or not it's a tempest in the teapot or a real issue
 (3) MR OPPENHEIMER Well I think some of this comes
 (4) from Mr Petumenos agreement with me He'll bring me out
 from
 (5) the Barco once every day
 (6) Your Honor as to the latter point I'd like an opportunity
 (7) to talk with Mr Petumenos which I haven't had to see if
 (8) that's in fact, the test but procedurally I was under the
 (9) impression that this matter had been ruled upon as an in limine
 (10) matter I can revisit those papers with Mr Petumenos I'd be
 (11) happy to discuss with him the specific objections
 (12) It sounds to me as if we have - well I share his view in
 (13) general terrain We have three reports two of which are
 (14) unobjectionable I'm sure they'll be intensely
 (15) cross-examined One of which parts of it are bothersome and
 (16) most bothersome part to Mr Petumenos appears to be the
 aspects
 (17) of it that pertain to other litigation around other oil
 (18) spills I'll be happy to talk to him about that I think we
 (19) can advise the Court in the morning two things One if we
 (20) have a tempest in a teapot of something to resolve if not in
 (21) terms of scheduling issues when we think that witness is coming
 (22) up so if a hearing is requested and Court deems necessary we
 (23) can tell you when it is
 (24) THE COURT I must tell you counsel I felt this
 (25) issue was going to be resolved sometime during the trial I'm

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- (1) willing to resolve it I think the issue about the other
 (2) spills and land values is - is a big issue and - and I think
 (3) it's suspect evidence So we - you can take that knowledge
 (4) into your conference with Mr Petumenos maybe you can
 resolve
 (5) the problem and maybe we won't need the evidentiary hearing
 (6) all right?
 (7) MR OPPENHEIMER Understood Your Honor
 (8) THE COURT Anything else?
 (9) MR GARGAN Your Honor I'd like to offer some of
 (10) those exhibits that we used with Dr Page and I've given the
 (11) list to Ms Smith
 (12) MS SMITH We have serious objections to a couple of
 (13) them Can we try to work this out?
 (14) THE COURT As opposed to frivolous objections?
 (15) MS SMITH No as opposed to ambivalent objections
 (16) THE COURT Let me hear the serious ones
 (17) MS SMITH I'm just looking at his list right now
 (18) We object to the curve that we had in terms of -
 (19) THE COURT Just show me the exhibits because there
 (20) are some that I can deal with immediately and the number
 (21) MS SMITH We don't have to approach we can stand
 (22) here Your Honor It's this one Can I bring them up to you?
 (23) THE COURT No I can see them and I remember them
 (24) MS SMITH Okay You know they can cross-examine on
 (25) it but that isn't prepared by anybody by Page or anybody on

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- (1) our side
 (2) THE COURT I agree with that I won't let it in
 (3) now To the extent that it might come in later a foundation
 (4) has to be laid for it.
 (5) MS SMITH The same thing for this some of the
 (6) numbers are derived from Jahns the rest are not, and we
 (7) disagree with it.
 (8) THE COURT Same ruling
 (9) MS SMITH Your Honor this is another exhibit where
 (10) they put together the - the thing on the - that's an
 (11) interpretation by plaintiffs of what they think
 (12) MR GARGAN Copied out of a book Copied out of the
 (13) report of Wolf
 (14) THE COURT Well I know exactly counsel Didn't you
 (15) do your own comparison and do the right hand diagram?
 (16) MR GARGAN No I drew the right hand diagram but I
 (17) copied it off page 53 of the Wolf report and Dr Page verified
 (18) that I had copied it correctly
 (19) MS SMITH Can you show - it wasn't a barrel it was
 (20) a chart right?
 (21) MR GARGAN It was a chart
 (22) THE COURT What he said was this was a misleading
 (23) exhibit and I - it's the same ruling
 (24) MR GARGAN He said it was - he said it was
 (25) misleading because he had said that the - that the oil was in

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- (1) a different form
 (2) MR PETUMENOS Can I make a suggestion Judge on
 (3) this one? Why not attach the table to this exhibit as - as
 (4) the table that this came from so the jury can see both what
 (5) was copied onto the barrel and what the chart came from
 (6) THE COURT Because I want to hear a sponsoring
 (7) witness testify about it otherwise it's just not going to come
 (8) in period
 (9) MS SMITH All right Your Honor we have no
 (10) objection to the others except they used as a cross
 (11) examination a 50-page review draft - sorry read fine to me -
 (12) that I think was fair game for cross-examination but it's
 (13) not - I mean it's a draft and it's not anything that we
 (14) prepared or sponsor
 (15) MR GARGAN Well it's a draft of the NOAA papers
 (16) THE COURT Same thing as Mr Wolf
 (17) MR GARGAN Latest version of the paper that I could
 (18) find and he also said he relied on it
 (19) THE COURT How many pages is it?
 (20) MR GARGAN It's a voluminous document I only
 (21) referred to several pages I certainly can take the pages out
 (22) and attach them to a cover sheet
 (23) THE COURT Take the pages out and put them in a
 (24) separate exhibit and I'll talk about it It's not admitted at
 (25) this time What's the number? Excuse me I'm sorry I'm

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- (1) letting people down here
 (2) MS SMITH 8070
 (3) THE COURT 8070
 (4) MS SMITH Yes
 (5) MR GARGAN Yes 8070
 (6) MR GARGAN What was stipulated then is plaintiffs
 (7) 1949 plaintiffs 3217 and plaintiffs 6081
 (8) THE COURT All right they're admitted
 (9) (Exhibits PX1949 PX3217 and PX6081 received)
 (10) MR GARGAN And what is not admitted but offered was
 (11) 8011 8010 8069 and 8070
 (12) (Exhibits 8011 8010 8069 and 8070 offered)
 (13) THE COURT Okay
 (14) MS SMITH All right I've got a few from Neff If
 (15) the Court Clerk could tell me I think I only put in the first
 (16) four Did I get to 8886AA?
 (17) THE CLERK Yeah AA?
 (18) THE COURT Yes
 (19) MS SMITH That's in? Maybe I better check 14005 2
 (20) and 3 those are the last - okay so I would ask the Court to
 (21) admit 14006 1 14006 2 - okay sorry 5736AA 13291 1 13292
 (22) 13229 15347 5497AA 6868AA 1 4983AA and that's it
 (23) (Exhibits DX13291 1 13292 13229 15347 5497AA 6868AA 1
 (24) and 4983AA offered)
 (25) MR STOLL Your Honor I don't have any objection to

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- (1) them subject to what comes out in cross-examination terms of
- (2) voir dire of this witness But I didn't want - I don't want
- (3) to now take the time to voir dire him on it
- (4) THE COURT That s fine They re admitted and you can
- (5) raise the issue to take them out of evidence if there s a valid
- (6) reason
- (7) (Exhibits DX13291 1 13292 13229 15347 5497AA 8868AA.1
- (8) and 4983AA received)
- (9) MS SMITH Thank you
- (10) MR STOLL I understand thank you
- (11) THE COURT Anything else?
- (12) MR DIAMOND No Your Honor
- (13) THE COURT Good I'll see you tomorrow
- (14) THE CLERK. Please rise This court stands in
- (15) recess
- (16) (Recess at 1 49 p m)

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- (1) INDEX
- (2) CROSS-EXAMINATION OF DAVID S PAGE (Resumed) 5122
- (3) BY MR GARGAN 5122
- (5) CROSS-EXAMINATION OF DAVID S PAGE 5166
- (6) BY MR STOLL 5166
- (8) REDIRECT EXAMINATION OF DAVID S PAGE 5176
- (9) BY MS SMITH 5176
- (11) RECROSS-EXAMINATION OF DAVID S PAGE. 5186
- (12) BY MR STOLL 5186
- (14) DIRECT EXAMINATION OF JERRY M NEFF 5203
- (15) BY MS SMITH 5203

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- (1) EXHIBITS
- (2) DX15489 offered 5122
- (3) 888 (pages 218 219 221 222 720 727 and 728) offered 5124
- (4) DX14004 offered 5223
- (5) DX5658B DX5657 and DX5732 offered 5230
- (6) DX8886AA and DX14005 2 offered 5239
- (7) DX14005 3 offered 5242
- (8) DX14006 1 and DX14006 2 offered 5249
- (9) 8011 8010 8069 and 8070 offered 5283
- (10) DX13291 1 13292 13229 15347 5497AA 8868AA.1 and
- (11) 4983AA offered 5283
- (13) DX15489 received 5122
- (14) 888 (pages 218 219 221 222 720 727 and 728) received 5125
- (15) DX14004 received 5223
- (16) DX5658B DX5657 and DX5732 received 5230
- (17) DX8886AA and DX14005 2 received 5240
- (18) DX14005 3 received 5242
- (19) DX14006 1 and DX14006 2 received 5249
- (20) PX1949 PX3217 and PX6081 received 5283
- (21) DX13291 1 13292 13229 15347 5497AA 8868AA.1 and
- (22) 4983AA received 5284

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- (1) STATE OF ALASKA)
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA)
- (6) I Joy S Brauer RPR a Registered Professional
- (7) Reporter and Notary Public
- (8) DO HERBY CERTIFY
- (9) That the foregoing transcript contains a true and
- (10) accurate transcription of my shorthand notes of all requested
- (11) matters held in the foregoing captioned case
- (12) Further that the transcript was prepared by me
- (13) or under my direction
- (14) DATED this day
- (15) of 1994
- (21) JOY S BRAUER RPR
- Notary Public for Alaska
- (22) My Commission Expires 5-10 97

Look-See Concordance Report

 UNIQUE WORDS 2,945
 TOTAL OCCURRENCES
 13,037
 NOISE WORDS 385
 TOTAL WORDS IN FILE
 37,491

SINGLE FILE CONCORDANCE**CASE SENSITIVE**

 NOISE WORD LIST(S)
 NOISE NOI

 INCLUDES ALL TEXT
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- (1) IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (2) THIRD JUDICIAL DISTRICT
 (4) In re) Case No JAN 89 7533 Civ11
) Anchorage Alaska
 (5) The EXXON VALDEZ) Thursday August 11 1994
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 (13) BEFORE THE HONORABLE BRIAN C. SHORTELL
 Superior Court Judge
 (16) APPEARANCES
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- (1) PROCEEDINGS
 (2) (Jury in at 8 57 a m)
 (3) (Call to Order of the Court)
 (4) MR STOLL Good morning Your Honor
 (5) CROSS-EXAMINATION OF JERRY M. NEFF
 (6) BY MR STOLL
 (7) Q Dr. Neff my name is Bob Stoll I represent the Kodiak
 (8) Island Borough and municipalities in this lawsuit We've never
 (9) met before?
 (10) A That's correct
 (11) Q And I've read a lot of what you've said on other occasions
 (12) but we've never met
 (13) I'd like to first of all sort of discuss with you some of
 (14) the way I'd like to proceed and I'd like to ask a question
 (15) and then yesterday I did some cross-examination of Dr. Page I
 (16) don't know whether you were present when -
 (17) A Yes I was
 (18) Q And sometimes Dr. Page wanted to answer -
 (19) MS SMITH Your Honor He doesn't need a tutorial
 (20) he can ask his questions and get his answer
 (21) THE COURT That's the objection counsel I think
 (22) it's true you don't need to do that.
 (23) MR STOLL Okay I'll just ask the question
 (24) BY MR STOLL
 (25) Q Now during the course of your testimony yesterday I

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- (1) was - because I had read some other testimony quite a bit of
 (2) other testimony given on other occasions I was struck by the
 (3) similarity of your testimony yesterday and the similarity to
 (4) testimony that you'd given about a month ago I think in
 (5) federal court?
 (6) A That's correct
 (7) Q In fact a little joke about plugging the book that you
 (8) wrote as being a best seller that Ms. Smith used here for the
 (9) jury's benefit that was the same joke the Exxon lawyer used in
 (10) the federal court. Is that true?
 (11) MS SMITH Your Honor -
 (12) THE COURT Counsel there's no evidentiary benefit to
 (13) that Ask a question please
 (14) BY MR STOLL
 (15) Q Now Batelle and Arthur D. Little both of whom you've been
 (16) associated with in the course of this case is that correct?
 (17) A That's correct
 (18) Q Both of those organizations received millions of dollars
 (19) from Exxon for the work that they've done in this lawsuit here
 (20) is that right?
 (21) A Well Batelle as I said yesterday is a contract research
 (22) organization They underwrite contracts with clients to do
 (23) work Obviously they are compensated for that work
 (24) Q And in this case it's been millions of dollars from Exxon?
 (25) A That's correct

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- (1) Q And the same thing is true of Arthur D Little is that
 (2) correct?
 (3) A That is correct
 (4) Q And both the Batelle and Arthur D Little over the years
 (5) have received many millions of dollars from the oil industry
 (6) isn't that correct for various consulting and other work?
 (7) A Don't know about Arthur D Little I've done very little
 (8) work for the oil industry Most of my research has been in the
 (9) environmental atmosphere
 (10) As far as Batelle is concerned we have had some contracts
 (11) with the oil industry but there's a very small fraction of the
 (12) total contract base for the company
 (13) Q Well in 1989 Batelle's Duxbury Lab did a lot of work on
 (14) this case is that right?
 (15) A Yes and I just said we did
 (16) Q And they were paid about three and a half million dollars
 (17) out of a total of six or seven million dollars in Duxbury Lab
 (18) in 1989 is that right?
 (19) A That is approximately correct I'm not sure what the total
 (20) volume of the business for the lab was six or seven million
 (21) dollars
 (22) Q And within - I think you said that you arrived in Alaska
 (23) March 29?
 (24) A Approximately
 (25) Q And you had worked in other oil spills I think you

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- (1) testified about a few of them in your testimony Correct?
 (2) A That is correct
 (3) Q And so Exxon or through this American North Exxon brought
 (4) you in right immediately after the spill?
 (5) A Within a few days yes
 (6) Q And then it was made clear to you right away that the work
 (7) that you were to - that was to be done for Exxon would be used
 (8) by Exxon in support of its litigation efforts is that correct?
 (9) A That is wrong That's incorrect
 (10) MS SMITH Would you give me the page please?
 (11) MR STOLL Page 18
 (12) MS SMITH Could you wait until I see it?
 (13) MR STOLL Surely
 (14) MS SMITH There
 (15) MR STOLL Can you tell us the volume? There were
 (16) eight days and apparently they started renumbering over
 (17) several
 (18) MR STOLL Volume one first day page 18
 (19) MS SMITH All right I'm there
 (20) THE COURT Before you go I'm getting kind of a bad
 (21) record Would you tilt up the microphone a little bit?
 (22) MR STOLL Surely is that better?
 (23) THE COURT Beats me They can tell you
 (24) MR STOLL Better?
 (25) Line eight

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- (1) MS SMITH There are actually two Volume 1's but
 (2) we've got it I think it's the September 23rd 1993?
 (3) MR STOLL September 23 1993
 (4) MS SMITH Thanks
 (5) BY MR STOLL
 (6) Q I didn't take your deposition but I think this is what you
 (7) said Do you recall having your deposition taken on
 (8) September 23 1993 last year?
 (9) A As indicated earlier there were eight days of deposition
 (10) so I believe that was one of them one of those days
 (11) Q Okay And were you asked the following question Now
 (12) this initial engagement - and I'm referring let's say to the
 (13) first two or three days - were you advised by anyone that the
 (14) work that you were doing was to be used in anticipation of
 (15) litigation?
 (16) Answer That was made clear to us right away that
 (17) potentially this would - the initial impetus was to determine
 (18) where the oil was and so forth the potential damage and this
 (19) would evolve into the long term NRDA studies that would
 (20) obviously be in support of litigation
 (21) Was that question asked and did you give that answer sir?
 (22) A Okay that question was asked and I gave that answer The
 (23) limit of my knowledge at the time was that there would be an
 (24) NRDA study - that is Natural Resource Damage Assessment
 The
 (25) federal trustees - at the time we were working in

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- (1) collaboration with the trustees so the nature of any
 (2) forthcoming litigation was unclear to me I've clarified that
 (3) several times after that initial deposition and my seven or
 (4) eight other depositions that we weren't made aware of
 (5) the litigious nature and certainly not civil claims until 1992
 (6) or so So I was referring there to the NRDA trustee case
 (7) because the federal law requires that you do an NRDA study
 (8) after an oil spill
 (9) Q But you said in your plans - this was the first day you
 (10) were fresh I assume you hadn't prepared and so on for what
 (11) you later were going to say You said that this would evolve
 (12) into a long term NRDA study that would obviously be in support
 (13) of litigation Didn't you say that?
 (14) A The NRDA litigation -
 (15) Q Oh the NRDA -
 (16) A - with the federal trustees I'm trying to clarify
 (17) MS SMITH Just so your record is clear it's not the
 (18) first day of his deposition
 (19) A It's the third even though it's Volume 1
 (20) BY MR STOLL
 (21) Q And you later testified I think in your deposition that
 (22) you knew that your work would be your Exxon's litigation
 (23) support rather than a collaborative damage assessment Do
 you
 (24) recall giving that testimony?
 (25) A Yes And as I just indicated Initially on the initial

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- (1) phase of the spill and a few days afterwards Exxon anticipated
 (2) collaborating closely with the federal and state trustees but
 (3) by the end of the summer of 1989 it became very clear that
 (4) there would not be a collaboration and therefore at that
 (5) point it became obvious that the NRDA studies being performed
 (6) by Exxon would be in defense against the trustee claims
 (7) Q And so what you're referring to here is that there was
 (8) initially cooperation by Exxon with the Alaska Department of
 (9) Environmental Conservation and that the - the cooperation
 (10) gradually diminished and that by August the cooperation had
 (11) disappeared?
 (12) A That is correct
 (13) Q And in July of 1989 you and the other Exxon consultants
 (14) began to have meetings with the Exxon lawyers about their
 (15) work
 (16) on the spill - about your work on the spill isn't that
 (17) correct?
 (18) A I don't recall having any meetings with attorneys in July
 (19) I do in the October time frame but not in the July
 (20) Q Do you recall having a meeting in Seattle in July of 1989
 (21) and another meeting in Houston in October of 1989 where -
 (22) A Okay I've just referred to the October meeting The July
 (23) meeting I arrived at the meeting and had dinner and was
 (24) shuttled off to San Diego on other business so I never
 (25) attended the meeting
 (26) Q I see

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- (1) And were you told to be cautious about keeping notes and
 (2) memos because any documents that you wrote or prepared
 (3) could be
 (4) discoverable in litigation?
 (5) A The reference to keeping notes and documents referred to a
 (6) memoranda being circulated among the different contractors
 (7) and
 (8) so forth it had nothing to do with any scientific notes or
 (9) obviously anytime during scientific study you have to keep very
 (10) detailed - in fact it's very important in a litigation case
 (11) that very careful notes be taken so this referred to
 (12) memoranda you know accusations discussions on paper
 (13) about
 (14) different studies and so forth but not in anything to do with
 (15) the science per se
 (16) Q Well they have notes about other people's studies you
 (17) were told not to - to limit those notes isn't that correct?
 (18) A Well among a fraternity of scientists you always have
 (19) disagreements on how to do certain things and what was
 (20) recommended if we had a disagreement with someone else
 (21) discuss it with him this person not shuttle notes back and
 (22) forth
 (23) Q That is because the notes could be discoverable in
 (24) litigation isn't that right?
 (25) A Yes standard procedure in any case
 (26) Q You know that from being involved in lots of litigation?
 (27) A That's right
 (28) Q And Exxon actually put a ban on release of information from

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- (1) its consultants isn't that true?
 (2) A I wouldn't say a ban Every contract I've had would be -
 (3) by a company was either with the government or private
 (4) commercial companies - includes a clause about the
 (5) ownership
 (6) you might say of the data in other words when I do work for
 (7) Proctor and Gamble they own the data and they have to have
 (8) prior approval of any release of that data So when I entered
 (9) into a contract with Exxon that language was in my contract
 (10) I had no problem with it It's standard practice that the
 (11) client basically contracts with Batelle to generate data the
 (12) data belongs to the client and requires prior approval to
 (13) release It's nothing unusual about that at all
 (14) Q And actually Exxon fired a consultant named Houghton and
 (15) Lees for - after Exxon disapproved the release of data by
 (16) them is that?
 (17) MS SMITH Objection no foundation
 (18) THE COURT Sustained
 (19) BY MR STOLL
 (20) Q Are you familiar with Houghton and Lees?
 (21) A I know both yes Yes
 (22) Q And they had published data and conclusions that described
 (23) a large decline in the population of clams as a result of the
 (24) spill and the cleanup isn't that correct?
 (25) A They didn't publish that for example in 1989 I think
 (26) subsequently it has been published

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- (1) Q But they - you knew about that information isn't that
 (2) right that data?
 (3) A Yes I was a reviewer on it
 (4) Q And the conclusions that they reached?
 (5) A I was aware of the conclusions of Dennis Lees had reached
 (6) about clams yes
 (7) Q And Lees observed large number of dead clams is that
 (8) correct?
 (9) A At one location
 (10) Q And Houghton and Lees predicted that it would be a period
 (11) of many many years before those clam populations would
 (12) recover isn't that correct?
 (13) A I think that was an initial prediction subsequently shown
 (14) not to be true but recovered more quickly
 (15) MS SMITH I'm sorry Are you finished?
 (16) A Yes I am
 (17) BY MR STOLL
 (18) Q I didn't mean to cut you off
 (19) Do you believe that Lees is an excellent marine ecologist
 (20) who used appropriate scientific methods?
 (21) A That is to me a convoluted question Sounds like a simple
 (22) one but there were concerns about the design of their
 (23) shoreline programs and actually one of my jobs in 1989 was to
 (24) normalize or basically try to get all the different shoreline
 (25) ecologists to do the same kinds of studies so he's a

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- (1) well known scientist but I can't really talk to whether he did
- (2) exactly what he - the best scientific design for the studies
- (3) he was doing in 1989
- (4) Q And he was one of Exxon's main investigators of shoreline
- (5) impact?
- (6) A He was one of several investigators
- (7) Q But he was one of the main ones?
- (8) A What do you mean by main? There were five or six
- (9) different investigators. He was one among equals
- (10) Q And didn't Houghton and Lees release some of their data?
- (11) A I'm not aware that they did. No. At least not in written
- (12) form or -
- (13) Q Well, maybe not in written form but didn't they release
- (14) some of their findings -
- (15) A I'm not sure
- (16) Q - to outside the Exxon umbrella?
- (17) A I'm not sure exactly. I know the discussion of that but I
- (18) don't know as of firsthand whether they did or not
- (19) Q You're aware there was a discussion of that?
- (20) A Yeah
- (21) Q And you submitted a report at one time in Atlanta isn't
- (22) that right?
- (23) A At the ASTM conference yes I had three papers in that
- (24) symposium
- (25) Q And you released that at that time because that fell within

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- (1) Exxon's timing for this litigation or the federal litigation?
- (2) A I was not made aware that that had any relevance to this
- (3) litigation
- (4) Q And the reports that you did for Exxon were all reviewed
- (5) and subject to editing by Exxon's employees isn't that right?
- (6) A I've already told you that that's a requirement of all my
- (7) contracts the client reviews any data and approves its
- (8) release. So it's standard practice
- (9) Q Your reports were reviewed by Exxon's lawyers and public
- (10) affairs people in Houston before they were published isn't
- (11) that correct?
- (12) A I have no idea who they were released - who they were
- (13) reviewed by. I submitted my reports to the technical
- (14) representatives of Exxon. They determined who reviewed the
- (15) reports
- (16) Q Now you know Mr. Prince John Prince of Exxon?
- (17) A Yes I know him
- (18) Q And didn't he tell you in August of 1989 that your reports
- (19) would be reviewed by Exxon's lawyers including your shoreline
- (20) ecology reports prior to their publication?
- (21) A He told me they would be reviewed internally. I don't
- (22) recall that he said they would be reviewed by my lawyers
- (23) Q And as of August of 1989 you were aware that one of the
- (24) purposes of your being hired was to assist Exxon in its
- (25) litigation efforts isn't that correct?

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- (1) A With respect to the natural resource damages assessment
- (2) as
- (3) I've testified several times already
- (4) Q And with respect to your reports they went through as many
- (5) as six drafts sometimes each one reviewed and edited by
- (6) Exxon
- (7) isn't that correct?
- (8) A Again that's not unusual. There were - minor
- (9) difference - yes yes. They went through several reviews. I
- (10) don't know if six was a magic number or not.
- (11) Q I think that's a - that's the figure that you gave at one
- (12) time I think in deposition
- (13) A Quite possible
- (14) Q Okay
- (15) And Exxon sometimes made modifications to the language that
- (16) you put in your reports
- (17) MR DIAMOND Your Honor may I have a moment to
- (18) consult with co-counsel?
- (19) (Pause)
- (20) MR DIAMOND May we approach?
- (21) THE COURT Yes
- (22) (Bench Conference off the Record)
- (23) BY MR STOLL
- (24) Q It was your belief was it not Dr. Neff that the peak
- (25) concentrations of hydrocarbons immediately after the spill were
- (26) high enough to kill some marine organisms?
- (27) A It's possible that some marine organisms were killed

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- (1) immediately after the spill I don't know how many or how
- (2) high - well it's possible if they were there. The question
- (3) is what organisms were there under the slip at the time of the
- (4) spill
- (5) Q And your reports for Exxon have never mentioned your belief
- (6) that the exposures between the spill and your first samples
- (7) were high enough to kill marine organisms have they?
- (8) A No my reports were published in 1990 and then in a
- (9) revised form in 1991 deal with the water quality data that we
- (10) collected throughout Prince William Sound and the Gulf of
- (11) Alaska and that the report of that data and that's what I -
- (12) since we didn't have data before I took samples I didn't
- (13) report on that
- (14) Q So you're talking about what the water column data is as
- (15) opposed to what the effects on the - on the organisms is is
- (16) that what you're saying?
- (17) A That was the main focus of the water quality course is what
- (18) the hydrocarbons were concentrations were in the water
- (19) column
- (20) in the Gulf of Alaska
- (21) Q So when you testified yesterday I notice that you were
- (22) very particular about how you testified yesterday or maybe it
- (23) was the question that you said the water column you thought
- (24) was essentially back to normal five years you know right?
- (25) A It was back to normal in the summer of 1989
- (26) Q The water column that's from the top of the surface all

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- (1) the way down to the bottom the average of the column?
- (2) A No no not the average the whole water column and any
- (3) individual point in the water
- (4) Q The water column was back to normal?
- (5) A That s correct
- (6) Q Right And you were not making a statement then as to what
- (7) deaths had occurred to marine organisms or other wildlife as a
- (8) result of hydrocarbon concentrations that may have previously
- (9) existed?
- (10) A In the water column?
- (11) Q Yes
- (12) A Okay Since I wrote my reports I have reviewed the work of
- (13) Dr Douglas Wolf from NOAA and he has estimated what the
- (14) concentration of hydrocarbons were in the water column in
- (15) basically the week before we got there and before NOAA got
- (16) there to take samples and his estimates are well within the
- (17) range of the concentrations I reported And I ve still - so
- (18) the numbers I reported are consistent with his numbers
- (19) In other words he s estimated that the maximum
- (20) concentration is about four to five parts per billion and
- (21) that s what I reported And he even said they were consistent
- (22) with my results Even there I admitted that there s a
- (23) possibility that - of isolated instances where animals near
- (24) the water surface might have been affected if in fact they
- (25) were present under the slip

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- (1) Q And we ll come back to that in a minute
- (2) And it is your belief that significant damage must have
- (3) occurred before any significant recovery could take place
- (4) isn t that true?
- (5) A That is - it s a very strange way to put things No
- (6) the - there s no relationship between the amount of damage
- (7) and
- (8) the degree of recovery I mean any disturbance to the
- (9) environment will result in a change in the biological change
- (10) and the various features of the environment The processes
- (11) that occur after that disturbance are called recovery because
- (12) they tend toward the predisturbance conditions so the
- (13) magnitude
- (14) of the disturbance has very little relationship to the nature
- (15) of the recovery
- (16) Q Now yesterday you testified about these some of these
- (17) other spills that you ve been hired in Amoco Cadiz and I
- (18) think you testified there was concern about the oysters in
- (19) plaice p l a t-c-e?
- (20) A That is correct Those are two concerns There were many
- (21) concerns about the damages
- (22) Q There were a lot of concerns there?
- (23) A Right Sure Just like Exxon Valdez
- (24) Q In the Nechez River there was concerns about shrimp?
- (25) A That s correct
- (26) Q Pittsburgh oil spill there was a major concern because it
- (27) flows into the Ohio River There s a lot - there could be a

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- (1) lot of environmental problems?
- (2) A That s correct
- (3) Q And in this one you were working on now - I whispered to
- (4) my associate that I wish I was there - Milan Italy?
- (5) A Right
- (6) Q In that one there s a concern about the effect on rice
- (7) fields and plants and animals there?
- (8) A That s right
- (9) Q So in - and there s other spills that you ve been hired
- (10) on isn t that right?
- (11) A That s correct
- (12) Q And in all these spills there is - people have real life
- (13) concerns about what s going to happen to the environment
- (14) isn t
- (15) that right?
- (16) A Yes
- (17) Q And it s a substantial concern by these people that s why
- (18) people bring in all these scientists isn t that right?
- (19) A That s right The scientists are brought in to investigate
- (20) the spill characterize any injury to the environment and in
- (21) some cases quantify that
- (22) Q And with respect to bottom fish which is what you studied
- (23) in the Amoco - I think Dr Page was involved in the Amoco
- (24) Cadiz is that right?
- (25) A Yes We didn t work in parallel
- (26) Q I understand

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- (1) And you proposed that was the bottom fish study that you
- (2) did for Amoco Cadiz?
- (3) A That s right
- (4) Q And you proposed that Exxon conduct a study regarding
- (5) bottom fish in this case is that right?
- (6) A That is correct
- (7) Q And Exxon declined isn t that correct?
- (8) A Well my study was not approved and several elements of
- (9) what I proposed were involved in studies done by Armstrong in
- (10) deep bottom fish so far as elements of it were done but not
- (11) by me
- (12) Q In the Amoco Cadiz report that you issued you found that
- (13) the plaice - that is the bottom fish although not heavily
- (14) contaminated with oil showed evidence of serious and
- (15) progressive histopathological and biochemical damage isn t
- (16) that correct?
- (17) A That is a quotation but you need to take it in the context
- (18) of the previous paragraph to that
- (19) Q All right And isn t that right?
- (20) A As I just said It was correct
- (21) Q Didn t you find the significant damage to plaice
- (22) immediately following the Amoco Cadiz spill?
- (23) A Yes Immediately following the spill and after two or
- (24) three years the plaice had recovered
- (25) Q In your study on the Amoco Cadiz on the bottom fish that

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- (1) was the basis of your recommendation to Exxon to do a study
 (2) isn't that right?
 (3) A That's correct
 (4) Q And you agree incidentally that organisms response to
 (5) pollutant stress take away from the viability of the organisms
 (6) by reducing their energy for other life activities?
 (7) A I would take exception to that as stated Any stress
 (8) whether it's chemical or environmental will decrease the
 (9) amount of energy available to the animal for other things like
 (10) reproduction and so forth The point at which that becomes
 (11) excessive and basically decreases the ability of the animal to
 (12) survive in the environment is what we biologists and
 (13) physiologists try to determine
 (14) Humans go through the same thing Stressful environments
 (15) decrease our you know our overall well being but at what
 (16) point does that become debilitating And that's the question
 (17) we try to answer
 (18) So as a generalization that's slightly true but the
 (19) important thing is what level of stress we're talking about
 (20) whether it's debilitating or not
 (21) Q And a - the large amount of oil mousse going onto an
 (22) animal can be very debilitating would you agree with that?
 (23) A Where is this animal?
 (24) Q Let's say in Prince William Sound Let's say an otter that
 (25) is in Prince William Sound is covered by oil That can lead to

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- (1) a hypothermia is that right?
 (2) A That's correct If an otter becomes heavily oiled it will
 (3) have problems and that actually occurred in 1989 in the early
 (4) part of the summer
 (5) Q And in fact many otters were killed as a result of the
 (6) Exxon Valdez oil spill isn't that correct?
 (7) A The total count was just over a thousand I think a
 (8) thousand one something like that
 (9) Q That may be your figure but there's other figures isn't
 (10) that right?
 (11) A There's figures that span an order of magnitude yes
 (12) Q You mean that there were a thousand that were - actually
 (13) the carcasses that were actually recovered?
 (14) A Recovered
 (15) MS SMITH This is beyond the scope of direct
 (16) THE COURT No it isn't counsel Your objection is
 (17) overruled
 (18) BY MR STOLL
 (19) Q You don't mean that just because there were a thousand
 (20) dead
 (21) otters recovered that that indicates that was all the dead
 (22) otters that existed in Prince William Sound they recovered
 (23) every last dead otter as a result of the spill?
 (24) A No that's not what I intended to say
 (25) Q You proposed that Exxon carry out another study called How
 Clean is Clean isn't that right?

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- (1) A That is correct
 (2) Q And they canceled that project also isn't that right?
 (3) A Just like the bottom fish study By the time Exxon in -
 (4) reviewed the study it was too late to do what we had proposed
 (5) to do However many elements of that study were incorporated
 (6) into the Shoreline Ecology Program for 1989 and 90 So
 (7) basically most of that work that I proposed was done but not
 (8) under the guise of that study
 (9) Q Let's review that The purpose of the How Clean is Clean
 (10) Program was to show what level of hydrocarbons in the
 sediments
 (11) was low enough that there weren't - that there wouldn't be
 (12) continuing biological damage isn't that right?
 (13) A That's correct
 (14) Q And you developed a detailed work plan for that program
 (15) isn't that correct?
 (16) A That's correct
 (17) Q And you planned to study the wide variety of local
 (18) organisms including shrimp mussels barnacles crabs salmon
 (19) eggs and hemming is that correct?
 (20) A As I say many elements in that study were actually done in
 (21) other studies
 (22) Q And you worked very hard for several months to put together
 (23) the design of that study is that right?
 (24) A I work hard all the time
 (25) Q I'm sure you do

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- (1) And the lab for this study was actually built is that
 (2) right?
 (3) A There was a lab built at Alyeska
 (4) Q And several large tanks were actually installed in this
 (5) building that was built for this study isn't that right?
 (6) A The lab was built yes That includes tanks and equipment
 (7) everything
 (8) Q And you conducted initial toxicology tests for the program
 (9) is that right?
 (10) A I did not but other contractors did yes
 (11) Q And you had actually progressed fairly far with three or
 (12) four drafts of the concepts of the program is that right?
 (13) A That is correct
 (14) Q And you had a definite belief that the How Clean is Clean
 (15) Program would have provided information that would have
 been
 (16) useful to advance the interests of science isn't that correct?
 (17) A Yes But in the context of the Exxon Valdez spill it
 (18) became apparent that it would not be useful for sending
 (19) criteria for shoreline cleanup which was the ultimate
 (20) objective and that's why it was dropped
 (21) Q Just a minute Didn't Exxon decide late in the summer of
 (22) 1989 that the How Clean is Clean Program was quote two
 (23) controversial?
 (24) A I disagree with that There were comments about the
 (25) controversial nature -

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- (1) MS SMITH Well let me clarify before you -
 (2) MR STOLL Okay I'll let him
 (3) MR STOLL That's fine Go ahead
 (4) MS SMITH You go ahead and answer your question and
 (5) he can -
 (6) A I already alluded to the professional nature and that was
 (7) not whether the results would be you know controversial but
 (8) how the results were used And the original objective at this
 (9) time of the How Clean is Clean Study - and that's why we call
 (10) it by that name - is at what point can we set criteria for
 (11) cleanup of shorelines so we don't do more damage than good
 (12) and
 (13) when is - establishing when the shoreline when the toxicity
 (14) of the oil was decreased enough that natural recovery can take
 (15) place We don't need to intrude more on the environment but
 (16) in order to do that you have to have consensus among all the
 (17) parties And by the fall of 1989 it was Exxon trustees EPA -
 (18) the whole bunch of parties involved in shoreline cleanup and
 (19) damage assessment - and it was concluded that we could not
 (20) get
 (21) a consensus on a criterion value therefore the study would not
 (22) be useful in the context of the Exxon Valdez it would have
 (23) provided very useful scientific information yes
 (24) Q Thank you
 (25) A Sorry
 (26) Q And there's a fellow named Al Macki at Exxon right?
 (27) A Yes Dr Maki

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- (1) Q And you mentioned about John Prince who was also an
 (2) Exxon
 (3) employee
 (4) A That's correct
 (5) Q And didn't he tell you that quote John Prince was opposed
 (6) to going forward with the study because the data could be used
 (7) against the best interests of Exxon in litigation end quote?
 (8) A I don't recall saying that But -
 (9) Q Okay
 (10) I'm sorry Maybe I - this is deposition November 9 1993
 (11) and it's called Volume III I think that's - and it's on page
 (12) 472 line 22
 (13) Let me ask you this question Doctor Is that the sum and
 (14) substance of what Mr Maki told you?
 (15) A I thought you were referring to John Prince
 (16) Q I mean what John Prince told you
 (17) A I just said I didn't think that was Again I'm - I may
 (18) have - I may have misrecalled what I said
 (19) MS SMITH May the witness see the testimony?
 (20) MR STOLL Oh sure
 (21) MS SMITH Thanks
 (22) MR STOLL I'm at the bottom of page 472 the top of
 (23) page 473
 (24) BY MR STOLL
 (25) Q Does that refresh your recollection?
 (26) A Okay that was a question that was - that was the question

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- (1) that was asked to me and basically I said not exactly in those
 (2) terms That was the gist of what he said
 (3) Q That was the gist of what he said?
 (4) A Yeah but as I affirmed earlier the main reason was the -
 (5) was felt that the data would not be useful in the context of
 (6) the clean-up effort This was a study that was proposed for
 (7) the operations of the clean-up activities that were going on in
 (8) Prince William Sound and how to get it cleaning up as much oil
 (9) as possible without doing additional damage to the
 (10) environment
 (11) Q When your deposition was taken which was prior to you
 (12) being prepared for testimony in court did you say that the sum
 (13) or substance that John Prince said was he was opposed to
 (14) going
 (15) forward with the study because the data could be used against
 (16) the best interests of Exxon in litigation?
 (17) A You just asked me that question
 (18) Q And the answer is yes?
 (19) A My answer in that deposition which is dated November 9th
 (20) was that that was the general gist of what Al Maki told me
 (21) THE COURT Who? There's John Prince and there's Al
 (22) Maki Which one?
 (23) A I believe the question was that - what did Al Maki tell me
 (24) that John Prince said
 (25) THE COURT No his question -
 (26) A Then I'm confused Could you -
 (27) THE COURT Hold it. Don't move that The question

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- (1) was Did you say that the sum and substance of John Prince
 (2) said he was opposed to going forward with the study because
 (3) the
 (4) data could be used against the best interests - the - that
 (5) was to what John Prince said
 (6) BY MR STOLL
 (7) Q That was what you were told that John Prince said?
 (8) A Not exactly but that was the general gist of what I
 (9) recollected that Al Maki told me about John Prince
 (10) Does that clear up everything?
 (11) Q Mr Maki and Mr Prince are both Exxon employees is that
 (12) right?
 (13) A That is correct
 (14) Q And Mr Otto Harrison who is sitting back here in the
 (15) courtroom he was involved in the decision of senior
 (16) management
 (17) at Exxon to cancel the How Clean is Clean Program isn't that
 (18) correct?
 (19) A I have no firsthand knowledge of whether he was involved or
 (20) not
 (21) Q That's what you thought though isn't that right?
 (22) A He was involved very heavily in the operations so I assume
 (23) that he was involved in decisions relating to the operations
 (24) That's the shoreline clean up activities I do not from
 (25) firsthand knowledge he didn't personally tell me he was
 (26) involved or I didn't see any memo or anything like that that
 (27) said he was involved but I made that assumption based on the

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- (1) fact that he was in charge of operations activities
 (2) Q Now you were not intellectually satisfied with this
 (3) answer were you - the decision not to proceed with this
 (4) proposal that you made?
 (5) A Well from the scientific point of view it would have
 (6) provided very useful scientific information as I say but I
 (7) understood the problem with - its usefulness in the shoreline
 (8) cleanup activity so you know sometimes we have to accept
 (9) things that aren't quite the way we want them to be
 (10) Q The client makes the final decision?
 (11) A That's right
 (12) Q And the client here Exxon made the final decision not to
 (13) proceed with this cleanup even though you thought it would be
 (14) useful?
 (15) A Whether it would be useful for the NRDA program that was
 (16) the question
 (17) Q Or for litigation?
 (18) A I don't see how this related to litigation at all
 (19) Q Well I hate to go over this again but didn't Mr. Maki say
 (20) that Mr. Prince said that it could be that they thought it
 (21) could be used against Exxon in the litigation?
 (22) A Well -
 (23) MS. SMITH Asked and answered
 (24) A That's secondhand type stuff and I have no idea what -
 (25) what Al - I mean what John Prince was thinking When
 someone

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- (1) tells you that someone said such and such and so-and so
 (2) there's only so much I can attribute from that
 (3) BY MR. STOLL
 (4) Q Okay
 (5) Now you agree with Mr. Wolf's estimate that 40 to 45
 (6) percent of the oil from the Exxon Valdez washed up on the
 (7) shorelines of Prince William Sound?
 (8) A That's a reasonable estimate yes Yeah
 (9) Q And some of the oil some of the other oil picked up
 (10) particulate matter and then settled to the bottom of the ocean?
 (11) A I would disagree with him on the magnitude of that
 (12) Q And the upper layer of mousse or slick tends to slow down
 (13) the evaporation and dissolution because a thin sort of crust
 (14) forms in the mousse which inhibits diffusion Would you agree
 (15) with that statement?
 (16) A After the initial weathering which is the evaporation of
 (17) the so-called mollusks which we talked about yesterday which
 (18) happened very quickly then as weathering happens the rate
 (19) does
 (20) digress which we're talking about short time spans here
 (21) matter of days or weeks
 (22) Q Now you first traveled to Prince William Sound in
 (23) mid April 1989?
 (24) A Mid March 1989
 (25) Q Mid March okay?
 (26) A March 29th I think is the day we've all agreed on

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- (1) Q And you saw intertidal organisms including mussels which
 (2) were dead?
 (3) A Yes and mussels that were obviously alive Yes I saw
 (4) some I saw the impacts of the oil spill
 (5) Q And during the clean up phase very few mussels were
 (6) actually moved during the cleanup because the moving of the
 (7) mussels and the cleaning underneath the mussel beds would
 (8) kill
 (9) the mussels isn't that right?
 (10) A I'm not sure that it would kill mussels It's certainly a
 (11) very intrusive cleanup approach yes and reluctance on both
 (12) sides to dig up mussel beds on a large scale
 (13) Q And as a result the oil that was underneath the mussel
 (14) beds remained isn't that correct?
 (15) A Some oil remained It's going away as we speak
 (16) Q I understand it's going away Five years after?
 (17) A Yes Some oil in soft mussel beds Now mussel beds are a
 (18) very small fraction of the mussel population in the Sound
 (19) Under those soft sediment mussel beds in a few locations there
 (20) is some oil
 (21) Q In 1989 immediately following the oil spill and the oiling
 (22) of these mussel beds it was then unsafe to eat the mussels
 (23) isn't that correct?
 (24) A In 1989 heavily oiled mussel beds I would not recommend
 (25) you eat the mussels that's true In 1989
 (26) Q And the Food and Drug Administration never sent out an

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- (1) advisory in 1989 or 1990 for that matter saying that it was
 (2) safe to eat mussels did they?
 (3) A They said to use judgment and that if the mussels smelled
 (4) or visibly appeared oiled you should not eat them - or other
 (5) invertebrates too so they basically did provide advice on
 (6) consumption of mussels If they appeared oiled or smelled
 (7) oily you weren't to eat them but if they were clean from oil
 (8) with no visible oil and they were probably safe to eat.
 (9) Q Did they say it was probably safe to eat or that they
 (10) didn't express an opinion?
 (11) A I believe they said they were probably safe to eat
 (12) and their advisory became a benzo(a)pyrene equivalency
 (13) number
 (14) for mussels so they provided a guideline for that if you
 (15) wanted to go out and determine through the chemical analysis
 (16) Q So if this is a test that determines how many parts per
 (17) billion of hydrocarbons are in the -
 (18) A Of benzo(a)pyrene equivalent which is a very very small
 (19) fraction in crude oil
 (20) Q So if you had the laboratory or you could send it to the
 (21) laboratory and if the mussels were still fresh by the time
 (22) they get back from the laboratory then you could figure out
 (23) whether you wanted to eat the mussels?
 (24) A Yes More appropriate way to do it would be to sample
 (25) harvest areas and determine if the mussel populations in those
 (26) harvest areas were acceptable That's the standard practice

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- (1) They do it for PSP for instance
 (2) Q Do you know of any Native villages or municipalities or
 (3) communities or just folks in the Prince William Sound or Kodiak
 (4) that went out and sent out any mussels to your lab or somebody
 (5) else's lab to find out if they had the right number of parts
 (6) per billion that they could eat the mussels in that bed?
 (7) A The Oil Spill Health Task Force that has been monitoring
 (8) the subsistence since 1989 and they sample mussels every
 now
 (9) and then The number I gave came from that very sampling -
 (10) and they use local people to collect the samplings They did
 (11) take responsibility for getting them analyzed and I believe
 (12) most of the mussels in that were by an NOAA laboratory in
 (13) Seattle which have very high quality labs so we get good
 (14) results from them so that basically that work is being done on
 (15) behalf of these villages by the government
 (16) Q You agree that it's possible that there were some areas
 (17) where the hydrocarbon concentrations from the Exxon Valdez
 oil
 (18) spill were higher than the results that were obtained by the
 (19) sampling teams?
 (20) A What are you referring to specifically water column
 (21) sediments animals?
 (22) Q I'm talking about the - the water column the water
 (23) column
 (24) A Okay We took - as I said yesterday we took more than
 (25) 3 000 samples from throughout Prince William Sound the Gulf
 of

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- (1) Alaska That's pretty broad coverage We also have reviewed
 (2) NOAA's extensive data both their water sampling and the cage
 (3) mussel studies but there's always a possibility that - you
 (4) know that's a very large sample It's very representative of
 (5) what was present in the water column in the Sound and in the
 (6) Gulf of Alaska but there's always a possibility that you
 (7) missed a spot in time and so forth
 (8) The overall conclusion though is that we very well
 (9) represented what was in the water column over the period of
 (10) 1989 and 90 so yes there was a possibility that there were
 (11) some isolated cases where slightly higher concentrations were
 (12) presented
 (13) Q Well let's talk about the water column
 (14) Can I have a blank page please?
 (15) I'm going to draw and this is going to be bad -
 (16) A You better watch it
 (17) Q - going in
 (18) So here's going - let's see This is going to be the
 (19) surface of the water okay?
 (20) A Right
 (21) Q And this will be - if I can do it
 (22) MS SMITH Touch it Touch it again right on the -
 (23) BY MR STOLL
 (24) Q There we go Lost the top There's my top
 (25) That's the bottom (indicating)

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- (1) A Okay Still with you
 (2) MS SMITH So far so good
 (3) UNIDENTIFIED VOICE Can you label that Bob?
 (4) MR STOLL I don't know about that
 (5) BY MR STOLL
 (6) Q Now the water column is that - that area there right?
 (7) A Well it's from the water surface to the bottom going up
 (8) into the air
 (9) Q Okay I - unfortunately I can't erase this with this
 (10) thing
 (11) A I understand
 (12) Yes it's from the surface to the bottom
 (13) Q I think it's pretty good right now Doctor I don't want
 (14) to push my luck here
 (15) Now right at the very top here (indicating) there's a
 (16) little area there What's that area called?
 (17) A Called the water surface
 (18) Q But isn't there a - isn't that - is there a surface film
 (19) area there?
 (20) A Sometimes it's been referred to as a surface microlayer
 (21) Q And all these charts that you showed of the water column
 (22) that you had on yesterday -
 (23) Joel if I put - can I switch from one to the other? I
 (24) don't want to erase my beautiful picture here okay?
 (25) You had three or four charts I just flashed on them up

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- (1) here - whoops - this type of a chart
 (2) And you had three or four of them?
 (3) A That's correct yes
 (4) Q Now these charts these are samples - let's go back to
 (5) the other
 (6) It worked
 (7) Those are taken from - those are samples from this entire
 (8) area am I correct there?
 (9) A Not completely They were taken mainly in the upper water
 (10) column but also particularly the Prince William Sound data
 (11) set which is 1500 and some-odd samples includes water
 samples
 (12) taken from the water surface So there were surface samples
 (13) Q There were surface samples Were there samples taken in
 (14) the microlayer?
 (15) A Well basically that would include the microlayer yes the
 (16) surface film on the ocean plus about a half meter or so below
 (17) Q Let me ask this question Were there samples that were
 (18) taken only of the microlayer?
 (19) A No because that's very hard to do but there weren't no
 (20) Q So the upper part there was some that was done - now this
 (21) is not going to be to scale okay?
 (22) A Okay
 (23) Q But there was some that were taken that may have ranged -
 (24) I'm going to draw - some air up there at the very top
 (25) That is more than simply the microlayer is that right?

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- (1) A That's right slightly more
 (2) Q Okay And there was some that were taken at you know
 (3) various points and this I'm going to just arbitrarily -
 (4) again this is not to scale
 (5) They were taken at different depths isn't that right?
 (6) A That is correct
 (7) Q And how far down did those samples go?
 (8) A Most simply was one in the upper hundred feet of the water
 (9) column but we did have some samples that were 200 feet or so
 (10) just to confirm there was nothing lurking way deep in the
 (11) water
 (12) Q So we got up to 100 feet plus we got them going deeper
 (13) A Yeah
 (14) Q And now I'm going to try to put the microlayer in a
 (15) different color - oh this didn't show up
 (16) I think I've exhausted my colors
 (17) That's my microlayer
 (18) So your samples when you tested for these - these - you
 (19) gave this report this - these nice graphs these are from an
 (20) average aren't they of all these different samples isn't
 (21) that correct?
 (22) A The bar graphs I gave included all samples in the ranges
 (23) but - so they're not averages In other words the bar graph
 (24) on the left had a thousand samples in it and there were a
 (25) thousand dots Those are - were the range of concentrations

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- (1) we had fair ranges of That didn't reflect averages at all
 (2) Q And the - none of these samples included the extreme top
 (3) of the surface which is the microlayer?
 (4) A Yes I just said they did
 (5) Q I'm sorry I included it as part of another sample of the
 (6) area It was just below the microlayer That's my first
 (7) little - you look on the screen there Doctor that's my -
 (8) not to scale but that's that first little area there Isn't
 (9) that right?
 (10) A Many samples included the microlayer
 (11) Q I didn't mean that they didn't but they were not simply of
 (12) the microlayer correct?
 (13) A I think we're confusing some confusion A sheen we know
 (14) exactly how much oil is in the sheen because we can measure
 (15) thickness by the way it refracts light The microlayer -
 (16) well different scientists disagree on how thick it is but
 (17) maybe a hundred times or 50 times thicker than a sheen So
 (18) it's becoming very academic you know were we measuring
 (19) microlayers or sheens or what
 (20) Our intent was to measure the composition of hydrocarbons
 (21) in sheens when they occurred And so it was academic
 (22) whether
 (23) we had simply the microlayer or the sheen in the upper water
 (24) column or whatever Just got very confusing
 (25) Q Are you familiar with Dr Kosan Richard Kosan?
 (26) A I believe I met him once

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- (1) Q He's the professor at the University of Washington?
 (2) A That's right That's my understanding
 (3) Q He's testified here - whoops - this page There you go
 (4) Dr Kosan published a report in 1986 long before there was
 (5) any litigation And I've just handed you a copy which is
 (6) marked PX8107 and in that report would you agree with the
 (7) statement The sea surface microlayer is an important
 (8) biological habitat principally for the reproductive stages of
 (9) many fish and shellfish Would you agree with that statement?
 (10) A Now this is the first time I've ever seen this document
 (11) I have not had a chance to examine it and see what it contains
 (12) and the context therefore is lost on me in other words what's
 (13) the overall story
 (14) My personal knowledge of the microlayer is yes it's a
 (15) thin layer There are a group of plants and animals that live
 (16) in that microlayer And as we've already indicated
 (17) occasionally chemicals - particularly in urban areas like the
 (18) Puget Sound like where he's done his studies - chemicals do
 (19) come right on the surface of the water and therefore are
 (20) measured in the microlayer
 (21) But I have no idea what the text of this paper is all
 (22) about other than I can read the title and the first sentence
 (23) that you have just quoted
 (24) Q So you essentially agree with that first sentence?
 (25) A I agree that the surface microlayer is the upper 15

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- (1) microliters of the surface And it's an important biological
 (2) habitat but I'm not convinced that it's that important for
 (3) reproductive stages of shellfish
 (4) Q And Dr Kosan since writing his paper back in 1986 has
 (5) done studies for the - and at the request of the trustees of
 (6) the Exxon Valdez oil spill Isn't that right?
 (7) A That's my understanding
 (8) Q And those studies have been in - not in Puget Sound but
 (9) up here in Alaska isn't that right?
 (10) A Both of his studies are done in his lab but I believe he
 (11) has done one or two studies in Prince William Sound
 (12) Q Would you agree with the last sentence on this first page
 (13) that the studies suggest that exposure to contaminated sea
 (14) surface microlayer can severely injure developing marine life
 (15) and fish embryos?
 (16) A In order for me to disagree with that I would have to
 (17) examine and read this whole paper and as I said it's the
 (18) first time I've seen it so I cannot agree with that because I
 (19) don't know what the basis of that statement is I'm not going
 (20) to take it on -
 (21) Q Have you read studies that indicated that?
 (22) A I've read other studies about microlayer and its chemical
 (23) composition and I've read studies that were done in our
 (24) Batelle Northwest laboratories on the so-called toxicity of the
 (25) microlayer and basically near surface living organisms are

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- (1) quite resistant to chemicals present in the microlayer That s
 (2) why you have the microlayer critters living in places like
 (3) Puget Sound where they re in microlayers with toxic metals and
 (4) so forth present all the time so these animals appear to be
 (5) able to tolerate the microlayer
 (6) That s why I have serious questions about how Dr Kosan did
 (7) that work and arrived at that conclusion
 (8) Q Well did you in - you inserted the word near surface
 (9) organisms living near surface
 (10) A I m talking about microlayer That s near surface of the
 (11) water the upper 50 micro meters
 (12) Q There are a lot of organisms that do live in that
 (13) microlayer are there not?
 (14) A There are many microscopic organisms few plants and
 (15) animals yes
 (16) Q Let s not talk about - if you think that Doctor you
 (17) don t agree with some things that Dr Kosan -
 (18) A I haven t had a chance to examine it
 (19) Q You re not necessarily disagreeing you just haven t had a
 (20) chance to look at this article?
 (21) A That s correct
 (22) Q And you re familiar with Paul Boehm?
 (23) A Yes
 (24) Q He s a colleague of yours actually at Arthur D Little
 (25) company isn t that right?

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- (1) A Yes I actually used to work for him
 (2) Q And Dr Boehm - or Mr Boehm -
 (3) A Dr Boehm
 (4) Q - Dr Boehm wrote a - an article long before there was
 (5) any litigation and before he was working for Exxon in this case
 (6) in 1980 and this is Exhibit 8068 and I only have one copy
 (7) unfortunately but can I approach the witness Your Honor?
 (8) THE COURT (Nods head)
 (9) (Mr Stoll approaches witness)
 (10) BY MR STOLL
 (11) Q This is the same fellow?
 (12) A Yes I m familiar with that
 (13) Q Okay Oh here s another copy Sorry
 (14) And he did some tests on the surface film microlayer of
 (15) hydrocarbons didn t he off of New England?
 (16) A Yes he measured hydrocarbon concentrations in the water
 (17) column on particles suspended in the water column and in the
 (18) air around the water column
 (19) Q And I want to - here s the - it s a long title At any
 (20) rate I want to concentrate on this
 (21) And he found - he reported at least as far as microlayer
 (22) that surface film microlayer hydrocarbons are found in greater
 (23) concentrations than the dissolved fractions which in turn is
 (24) greater than the particulate hydrocarbon quantities in the
 (25) water column Didn t he find that hydrocarbons essentially

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- (1) stuck more in the microlayer further on down in the water
 (2) column?
 (3) A That is a common finding yes Concentration in microlayer
 (4) is higher than in the water column We all agree on that
 (5) That is why the - well surface sampling -
 (6) Q And in fact he had a graph in back of his report -
 (7) MS SMITH Do you want to give us a page?
 (8) MR STOLL Page 278
 (9) MS SMITH Thank you
 (10) MR STOLL Sorry
 (11) BY MR STOLL
 (12) Q And what it says - SM there that stands for surface
 (13) microlayer Isn t that right?
 (14) A I believe that s his terminology
 (15) Q And then NS stands for near surface isn t that right?
 (16) A That s what it says here
 (17) Q Not right at the microlayer but just below that right?
 (18) A That s in the upper water column yes
 (19) Q And you referred to a little bit ago about the near
 (20) surface you gave that answer to me when I asked you about
 (21) the
 (22) microlayer but anyway there s a little difference there
 (23) between the near surface and the microlayer Isn t that right?
 (24) A Well yeah I - again I can t remember at what depth they
 (25) measured the water column but it s under the microlayer I
 think we agree

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- (1) Q What he found was a bunch of this column over here are
 (2) various testing sites isn t that right?
 (3) A That s right
 (4) Q And the concentration that he found - again this is long
 (5) before there s any litigation - but the concentration he found
 (6) of hydrocarbons for instance in the micro- - the surface
 (7) microlayer was 76 4 versus in the near surface 24 I m just
 (8) taking that one as an example and you and the jury can look at
 (9) the other
 (10) A That s right Okay
 (11) Q There s a substantial difference according to Dr Boehm s
 (12) findings between the concentration of hydrocarbons in this one
 (13) area the microlayer versus the near surface isn t that
 (14) correct?
 (15) MS SMITH I m going to object to this question on
 (16) relevancy He s talking about Georges Bank off of New
 (17) England
 (18) and I m not sure what this has to do with the microlayer in the
 (19) sound of Alaska
 (20) THE COURT Perhaps you d like to ask the witness
 (21) about that
 (22) MR STOLL Sure I d be happy to
 (23) BY MR STOLL
 (24) Q He s doing a study of the microlayer in saltwater isn t
 (25) that right?
 A Georges Bank

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- (1) Q Georges Bank My first question was wasn't this off of
 (2) New England?
 (3) A That's right
 (4) Q Right
 (5) A Major fish area
 (6) Q Right. And it's not the same as - it's not the same
 (7) location as Prince William Sound correct?
 (8) A Well it's in the Atlantic Ocean if that's what you mean
 (9) Q Right right They're both in saltwater though aren't
 (10) they?
 (11) A Right
 (12) Q And they both - the effect of hydrocarbons that these
 (13) testing results that are on the screen here are at - I'm not
 (14) suggest that - as long as you understand I'm not suggesting
 (15) that these are the same character - the exact same numbers are
 (16) going to come out in Prince William Sound as came out in
 (17) Georges Bank?
 (18) A I understand that
 (19) Q But you agree do you not that the comparison of surface
 (20) microlayer to the near surface water hydrocarbon concentration
 (21) would be the amount of water hydrocarbon concentration
 (22) be much greater at the surface microlayer level than the near
 (23) surface water level isn't that right?
 (24) A As he shows in this table what he calls the enrichment
 (25) factor that's the EF factor there varies a great deal And he

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- (1) Seems to be clear A large part of our offshore quality water
 (2) program included samples taken from the surface there were in
 (3) addition to the October study that included all surface
 (4) samples
 (5) Q How many studies were taken in the surface microlayer
 (6) solely -
 (7) A That included?
 (8) Q No not included it but solely in the surface
 (9) A You're splitting hairs here I don't think there's any
 (10) meaning to it.
 (11) Q I'm just referring back to before there was any litigation
 (12) Mr Boehm did this study and he looked at the comparison of
 (13) the surface microlayer in the Georges Bank - granted that's
 (14) Georges Bank wasn't for any lawsuit.
 (15) And what I wanted to know is How many tests did you do
 (16) that were limited to the surface microlayer that is in the
 (17) comparable space that Dr Boehm did back there in 1977 to - to
 (18) 1980?
 (19) A Well basically the thesis of Dr Boehm's paper was that
 (20) there was no relationship between the concentration in the
 (21) microlayer and the concentration in the water column Now
 (22) we're talking with a different situation here It's an oil
 (23) spill I wasn't trying to analyze the microlayer I was trying
 (24) to analyze the composition of oil in sheens which are related
 (25) related to what's in the water column It's a very different

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- (1) says in the text it can even be a fraction which means it's
 (2) concentration but it varies anywhere maybe from one up to ten
 (3) in other words there can be up to ten times more
 hydrocarbons
 (4) Q Right So it's going to be a multiple?
 (5) A Or a multiple of one which means no difference or even
 (6) less so it's a full range of a wide range
 (7) Q Of all his samples I think maybe - I think he found -
 (8) well here's this one down here there's some similarity All
 (9) the rest of these are quite a bit different?
 (10) A Oh yes I agree with that yes
 (11) Q And you agree with that Okay
 (12) THE COURT Counsel we're going to take a break Is
 (13) this a good time?
 (14) MR STOLL I'm just about done Let's go back to
 (15) our - my bad drawing
 (16) BY MR STOLL
 (17) Q Now I'm back here on your tests when you did your nice
 (18) graphs That looks like there's not very much there that show
 (19) all this Your testing was from all these different points
 (20) (indicating) and do you know how many were taken right - I'm
 (21) sorry None of them were right at the -
 (22) A Yes a large number were right at the water surface I've
 (23) said that several times
 (24) Q In the near surface?
 (25) A No they were at the surface I've said it several times

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- (1) situation and so I - I did not set out in the studies that I
 (2) did do to actually quantitatively sample the microlayer
 (3) Q You just -
 (4) A So I didn't do it But many of my samples included
 (5) microlayer material
 (6) Q I understand they included it as part of the sampling
 (7) A That's correct yes
 (8) Q But I think I got the answer there There's no - there's
 (9) no test that is simply of the surface microlayer such as
 (10) Dr Boehm did in this study Isn't that right?
 (11) A That's correct
 (12) MR STOLL So thank you very much This is a good
 (13) time to take a break
 (14) THE COURT All right
 (15) (Jury out at 10 12 a m)
 (16) (Recess)
 (17) (Jury in at 10 27 a m)
 (18) BY MR STOLL
 (19) Q Okay Doctor?
 (20) A Ready to go
 (21) Q I'm going to try to wind this up
 (22) Another study that you proposed that Exxon conduct was a
 (23) study of oil sheens isn't that correct to determine whether
 (24) or not sheens were important and whether this was a
 (25) toxicological problem?

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- (1) A I did propose to study sheens yes
 (2) Q And didn't you propose that Exxon do a quantitative sheen
 (3) study with specifically -- with specially designed layers to
 (4) determine whether the sheens were a potential hazard to
 aquatic
 (5) animals?
 (6) A Yes The main focus was to determine the composition of
 (7) the sheens but I did propose doing it quantitatively
 (8) Q And Exxon decided not to do that study and instead did a
 (9) nonquantitative study that did not quantify amounts of -- the
 (10) amount of hydrocarbons per kilometer of the sea surface isn't
 (11) that right?
 (12) A That is correct but we can calculate that from physical
 (13) laws of sheens so we didn't really need that quantitative
 (14) data What I obtained was useful for determining the
 (15) weathering of the sheen term
 (16) Q And it wouldn't have cost very much to actually pick up the
 (17) PAHs on the water surface and measure them because the
 sheen so
 (18) that the samples was already available to Batellie isn't that
 (19) right?
 (20) A The sheen was available yes
 (21) Q It was just a matter of dedicating a field crew to take any
 (22) samples right?
 (23) A Basically but that's not without cost
 (24) Q In the millions of dollars that was spent by Exxon in
 (25) testing this that is the cost of the field crew to go out and

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- (1) actually get the samples Is a relatively small amount?
 (2) A It wasn't a big budget process that's for sure
 (3) Q Right And they decided not to run that test?
 (4) A That is correct
 (5) MS SMITH Objection asked and answered at least
 (6) twice
 (7) THE COURT Counsel sustained Unfortunately the
 (8) words are out
 (9) BY MR STOLL
 (10) Q And in August and September of 1989 when this question of
 (11) sheens was a serious question you could find lots of sheens in
 (12) Prince William Sound isn't that correct?
 (13) A There were sheens in Prince William Sound and in fact
 (14) Exxon operations did a very detailed sheen sampling study --
 (15) started in September 1989 and going to 1990 -- to document
 (16) whether the sheens being seen were actually Exxon Valdez
 sheens
 (17) or were sheens from other oil sources
 (18) Q Well didn't most people think that the sheens in 1989 were
 (19) Exxon oil spill sheens?
 (20) MS SMITH Object calls for speculation
 (21) THE COURT Sustained
 (22) MR STOLL I'm asking him Your Honor whether most
 (23) people thought that
 (24) THE COURT Yes you're trying to get him to search
 (25) into other people's minds categorically Speculative

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- (1) BY MR STOLL
 (2) Q Have you stated that there are whole surtes of organisms
 (3) plants and animals that live right there on the surface?
 (4) A Below the surface
 (5) Q Right --
 (6) A On the surface Or a few things like jellyfish that float
 (7) on the surface Most of them below the surface And some
 (8) microlayer some just below the microlayer yes
 (9) Q And right in the microlayer isn't that right?
 (10) A I've just said that
 (11) Q And larger animals that use the water surface like the sea
 (12) otters or the birds they come in contact or can come in
 (13) contact with sheens isn't that correct?
 (14) A That is correct
 (15) Q And you agree that the majority of mortality to sea birds
 (16) and marine mammals was inflicted by floating oil following the
 (17) Exxon Valdez grounding?
 (18) A It was caused by floating oil slicks which is a much
 (19) thicker layer of oil than a sheen
 (20) Q When we're talking about the -- the slicks that's the --
 (21) that's the slick of the oil as opposed to water below the slick
 (22) of the oil isn't that right?
 (23) A That's right A slick is oil floating on the water surface
 (24) usually in a thick layer at least a quarter of an inch or more
 (25) thick

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- (1) Q And there were slicks following the Exxon Valdez oil spill?
 (2) A Well the release caused a giant slick that later broke up
 (3) for a period of a few weeks Certainly there were many slicks
 (4) and they decreased in time after the spill
 (5) Q And the slicks moved around isn't that right?
 (6) A Yes and mostly drifted southwest from the accident site
 (7) and then eventually out in the Gulf of Alaska and down along
 (8) the Kenai and Shelikof Strait and out in the open Pacific
 (9) Q And onto the shores of Kodiak isn't that right?
 (10) A A small amount of oil beached on Kodiak yes
 (11) Q And well -- I may quarrel with your definition as to
 (12) small to the people of Kodiak it wasn't small
 (13) But you agree that floating oil kills sea birds by
 (14) contaminating and coating their feathers?
 (15) A That is the -- one of the recognized mechanisms by which
 (16) the oil can kill sea birds on the water surface yes
 (17) Q And it reduces their insulation and their floatability is
 (18) that what happens?
 (19) A Yes The main problem is the insulation Obviously the
 (20) environment of southern Alaska is kind of cool and if you
 (21) can't insulate yourself you have hypothermia
 (22) Q And the sea otter was the most heavily oiled mammal as a
 (23) result of the spill is that correct -- the mammals?
 (24) A That's correct
 (25) Q And the sea birds In addition to getting smothered

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- (1) they - they can die by ingesting the oil because they do a
 (2) lot of preening is that correct?
 (3) A I disagree with your initial statement that they were
 (4) smothered I don't believe any birds were smothered by the
 (5) oil We talked about a loss of heat If they preen and ingest
 (6) large amounts of oil the oil isn't that toxic It's amazing
 (7) how much oil a bird can swallow without causing any effect
 (8) The problem is especially when the oil is fresh that
 (9) sometimes he aspirates the oil and gets it in its lung and
 (10) that causes problems - same thing but realize oil is not that
 (11) toxic to birds
 (12) Q By preening we mean they like to clean their feathers And
 (13) sea otters like to clean their fur and seals like to clean
 (14) their fur?
 (15) A Well the seals in Prince William Sound don't have fur but
 (16) yeah the other examples are correct
 (17) Q And you believe that as a reasonable hypothetical
 (18) hypothesis that otters suffered lung damage after the spill by
 (19) preening and ingesting the oil then throwing up and inhaling
 (20) hydrocarbons into their lungs isn't that correct what you've
 (21) testified to?
 (22) MS SMITH Your Honor I'm objecting as beyond the
 (23) scope of his direct He didn't even talk about otters
 (24) THE COURT You talked about species counsel It's
 (25) not beyond the scope

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- (1) BY MR STOLL
 (2) Q Do you remember the question?
 (3) A Could you repeat it? It was very convoluted and -
 (4) Q I was just trying to do this as close as I can to what you
 (5) said At least I think you said
 (6) It's correct is it not that you believe it is a
 (7) reasonable hypothesis that otters suffered lung damage after
 (8) the spill by preening ingesting the oil then throwing up and
 (9) inhaling hydrocarbons into their lungs?
 (10) A That is one mechanism that probably occurred in the -
 (11) about the month after the spill yes For a short time after
 (12) the spill
 (13) Q And you've heard that about 3500 otters it's estimated
 (14) that 3500 otters - in addition to the thousand that were
 (15) actually carcasses that were actually located - that about
 (16) 3500 otters died as a result of the Exxon Valdez oil spill?
 (17) A The latest publication I read that's in the scientific
 (18) peer reviewed study which gives a number approximately that
 (19) yes
 (20) Q And that's about a third of the total otter population in
 (21) Prince William Sound prior to the spill isn't that correct?
 (22) A Wait a minute You're doing a double count here That
 (23) 3500 includes all otters affected by the spill Actually a
 (24) great many of the otters were in the Gulf of Alaska The
 (25) authors of this paper I refer to mention that perhaps one-third

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- (1) of the otters in Prince William Sound - western Prince William
 (2) Sound were affected by the spill leaving two-thirds that
 (3) survived the spill and are still there today
 (4) Q One out of three We may argue about whether that's big or
 (5) small I guess Is that basically what you're saying?
 (6) A I'm not trivializing it at all There were a lot of otters
 (7) that were killed there's no doubt That was a tragic
 (8) consequence of the spill
 (9) Q Now you agree that the deaths of otters in Prince William
 (10) Sound had effects on other aspects of the marine food chain?
 (11) A The extent to which the death of one-third of the otters in
 (12) western Prince William Sound had effects on the food chain is
 (13) highly questionable The degree of the effects there probably
 (14) were small differences because otters are important parts of
 (15) that community
 (16) Q Sometimes they are referred to as keystone mammals in the
 (17) whole ecological system?
 (18) A I've heard Dr Peterson mention it that way
 (19) Q He's not the only one that has used that term Is that
 (20) right?
 (21) A There are others that have used that term
 (22) Q Yes And you've testified though that the death of
 (23) otters in Prince William Sound had effects on other aspects of
 (24) the food chain?
 (25) A Yes And I - all I'm questioning is the degree to which

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- (1) that effect pervaded the environment
 (2) Q It might have been another small effect?
 (3) A It may have been a small effect
 (4) Q And you've read estimates that the bird population the
 (5) kill of birds may have been up to three-quarters of a million
 (6) birds in the Exxon Valdez oil spill?
 (7) A I've heard a great many estimates I think the estimates
 (8) of bird mortalities is a much wider span than that of - of
 (9) otters because it's much more difficult to count the number of
 (10) birds but I've heard estimates that high but I think the
 (11) reliable ones are much lower than that
 (12) Q I don't think we talked about - we talked about organisms
 (13) in the microlayer food chain and food web and mammals I
 (14) don't recall other than the reference to the plaice study
 (15) that study you did in the Amoco Cadiz about bottom-dwelling
 (16) fish - you found that bottom-dwelling fish suffered damage
 (17) following an oil spill as a result of the presence of toxic
 (18) metabolites in their systems Isn't that correct?
 (19) A That's really a misrepresentation of what I said The
 (20) plaice were in a very heavily contaminated environment much
 (21) worse than anything we've seen in the Exxon Valdez They feed
 (22) mainly on bottom living worms and - and crabs and so forth
 (23) And did become contaminated but - and possibly - and I
 (24) conjectured that possibly they converted some of the
 (25) hydrocarbons they ingested into toxic metabolites but that

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- (1) could have contributed to the histopathology they experienced
 (2) in the year or so after the spill
 (3) Q Now there's a notion of bioaccumulation isn't that -
 (4) that is a term where the system accumulates certain matters
 (5) over a period of time?
 (6) A Yes I testified yesterday that the marine mammals can
 (7) bioaccumulate chemicals from their environment
 (8) Q And fish with very high fat content tend to retain more
 (9) toxic PAH metabolites than very lean fish Would you agree
 (10) with that?
 (11) A No not really because most metabolites are hydrophilic
 (12) that so most are excreted very rapidly There might be a very
 (13) heavy and a very lean fish that don't but that's more often the
 (14) case
 (15) Q But we're talking about very subtle differences?
 (16) A Basically most of the metabolites are excreted very rapidly
 (17) from the tissues of the fish
 (18) Q If I can have a moment Your Honor
 (19) Dr Neff in your deposition taken February 23 of this
 (20) year - and in the page 881 of that deposition were you asked
 (21) the following question and did you give the following answer
 (22) Are there some species that tend to retain metabolites in
 (23) fat and muscle species of fish in particular?
 (24) Answer Well all species all species do to some extent
 (25) But I - as I said the ability of the animals to convert the

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- (1) PAHs to material that are rapidly excreted varies somewhat on
 (2) the tendency to retain the metabolites varies somewhat from
 (3) one species to another Certainly fish with very high fat content
 (4) will tend to retain more than fish that are very lean and so
 (5) forth
 (6) Did you say that?
 (7) MS SMITH Would you read the last sentence?
 (8) Q But again even that generalization is an over
 (9) simplification
 (10) But isn't it true that fish - generally speaking fish
 (11) with a very high fat content will tend to retain more
 (12) metabolites than fish that are very lean?
 (13) A As I said just previously there is some tendency but I'm
 (14) not sure quantitatively how growth - that is how much
 (15) difference it would be between the lean and the fat fish but
 (16) there is some tendency yes
 (17) Q All right And some of the fish with high fat content that
 (18) would tend to retain more metabolites include salmon and
 (19) herring isn't that correct?
 (20) A Certainly the herring are very fat but the salmon is
 (21) intermediate - depends on the species of salmon some are
 (22) more
 (23) lean and some are more fat
 (24) Q Do you call salmon a moderately oily fish?
 (25) A That's what I said
 (26) Q And some of the toxic of metabolites of PAHs have been

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- (1) demonstrated to bind to the DNA of salmon isn't that correct?
 (2) A Well those in the fatty tissues wouldn't because they
 (3) wouldn't be in association with the cells but certainly
 (4) metabolites of PAHs can bind the proteins or other cellular
 (5) molecules such as DNA that's been established in the
 (6) literature yes
 (7) Q Some of the effects that could occur as a result of the
 (8) binding of the toxic metabolite to DNA would include cancer
 (9) tumors liver damage cell death lesions in the digestive
 (10) tract and reproductive impairments such as a reduced number
 (11) of eggs or young produced or abnormal development of those
 (12) eggs or
 (13) poor survival of the eggs Would you agree with that statement
 (14) stated that you have previous made?
 (15) A No You've mentioned a whole litany of effects Some of
 (16) those effects have demonstrated Some of them have not Of
 (17) the PAHs that occur in petroleum only a very few are present
 (18) and those present at very low concentrations that can cause
 (19) mutations and cancer
 (20) The other PAHs can cause a variety of histopathologic
 (21) lesions similar to the ones I saw in place in France These
 (22) include problems in the liver problems in the digestive tract
 (23) and so forth The so-called genetic damage has never -
 (24) demonstrated following an oil spill or cancers for that
 (25) matter
 (26) Q Now you had this nice graph that you prepared for this

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- (1) litigation And it says no effect on survival And the tests
 (2) that you ran for this conclusion these are shrimp and minnows
 (3) right?
 (4) A For the acute toxicity test as set here yes
 (5) Q Right And the same - well this other one is minnow and
 (6) phytoplankton right?
 (7) A Right
 (8) Q And you didn't do this test for salmon or herring isn't
 (9) that right?
 (10) A We followed standard EPA protocols which EPA says can be
 (11) applied or extrapolated to what are called indigenous species
 (12) local species No we didn't do it for salmon
 (13) Q That was what I - that was the answer No this is just
 (14) sort of an aside but I notice we already talked about mussels
 (15) and I'm not meaning the mussel beds and so on following the
 (16) spill You referred yesterday to the - or maybe you did or
 (17) your counsel did - that - about the catcher's mitt This was
 (18) the catcher's mitt in Herring Bay?
 (19) A Herring Bay
 (20) Q Right Now we've heard - how many catcher's mitts are
 (21) there in Prince William Sound? I've heard - we've heard
 (22) about - I think I've heard about catcher's mitts in Point
 (23) Helen Sleepy Bay Herring Bay Northwest Bay and Windy
 (24) Bay
 (25) Are there any other catcher's mitts?
 (26) MS SMITH Your Honor objection Argumentative and

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- (1) he s testifying not Mr Stoll
 (2) THE COURT Well I don't know if it s argumentative
 (3) but it s certainly convoluted Let s start again
 (4) Define catcher s mitt would you please counsel? We re
 (5) not talking about softball right?
 (6) MR STOLL I don't think so
 (7) THE COURT So have him define what catcher s mitt
 (8) is
 (9) BY MR STOLL
 (10) Q Well this was your term
 (11) What is a catcher s mitt?
 (12) A Well I used it in reference to Hemmg Bay because it s a
 (13) bay and you can see from the aerial picture that it has sort of
 (14) a rounded bay facing north We know the oil came in from the
 (15) north and we know it basically collected the oil floating by
 (16) and that was - it was a simple analogy We can use that
 (17) analogy for any other locations in Prince William Sound it
 (18) doesn t detract or add to the analogy Several people have
 (19) used it that s all
 (20) Q I d like to talk about what we mean by Doctor - or what
 (21) you mean by recovery the word recovery after the Exxon
 (22) Valdez oil spill
 (23) And as I understand what Dr Page said yesterday he does
 (24) not agree I want to ask you if you agree that recovery does
 (25) not mean all the oil from the Exxon Valdez oil spill is gone?

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- (1) A That is correct That s not a necessary requirement for
 (2) recovery
 (3) Q In your definition?
 (4) A In my definition
 (5) Q And in your - so there s - and you agree that there is
 (6) still oil out there?
 (7) A Yes
 (8) Q From the Exxon Valdez oil spill?
 (9) A Exactly Yes there is
 (10) Q And you don t agree along with these - with Dr Page
 (11) maybe other people that have been hired by Exxon - that
 (12) recovery does not mean that the affected area is back to the
 (13) way it would have been but for the Exxon Valdez oil spill?
 (14) A Could you repeat that? It got very convoluted Almost
 (15) double negatives there I think
 (16) Q I was just trying to read what I think you said
 (17) That recovery does not mean that the affected area is back
 (18) to the way it would have been but for the Exxon Valdez oil
 (19) spill
 (20) A Well the problem with that question is what would it have
 (21) been like in the absence of the Exxon Valdez oil spill We
 (22) have no solid information about that The Prince William Sound
 (23) and the Gulf of Alaska and the marine waters there are very
 (24) variable very harsh environment The animals and plant
 (25) communities on the shore and in the water column are -

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- (1) constantly changes in response to natural environment
 (2) variables so to say it should look exactly like it did the day
 (3) before the spill or hypothesize what it might look like today
 (4) is very hard
 (5) And that s why these natural resource damages assessments
 (6) are so difficult because we re studying something that is
 (7) changing all the time through natural processes That s the
 (8) nature of the environment nature of nature you might say to
 (9) change So it s very hard to determine at what point the
 (10) environment is functioning normally
 (11) And my definition really is that that the environment is
 (12) functioning normally in a manner that it would in areas that
 (13) were not affected by the spill or by any other disturbance that
 (14) we re looking at
 (15) Q Now you re of course familiar with the Exxon Valdez Oil
 (16) Spill Trustee Council?
 (17) A I ve heard of them I don t know the people
 (18) Q Okay
 (19) And you know that they hired various scientists to do
 (20) various studies?
 (21) A Just as Exxon did yes
 (22) Q All right And they weren't - but they weren't defending
 (23) any lawsuit were they?
 (24) A I disagree They were hired specifically to support the
 (25) NRDA the Natural Resource Damage Assessment resource
 program

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- (1) They were definitely hired to quantify damage from the oil
 (2) spill and in support of that NRDA process It s mandated by
 (3) federal law so they were definitely out there trying to do
 (4) that
 (5) Q Okay What they were trying to do was a damage
 (6) assessment
 (7) A Exactly what Exxon was trying to do
 (8) Q And would you disagree with the statement by the trustees
 (9) made in the draft of restoration plan last November which they
 (10) listed resources not recovering - I ll just put this up on
 (11) the -
 (12) A Kind of hard to read Thank you
 (13) Q There we go
 (14) MS SMITH Your Honor a lot of this goes beyond the
 (15) scope of his direct
 (16) THE COURT That s true counsel Some of it doesn t
 (17) so are you going to ask specific questions?
 (18) MR STOLL I m just going to ask him about the
 (19) recovery
 (20) THE COURT All right in other words this is to
 (21) show - define what recovery is and best limitation?
 (22) MR STOLL That s right Your Honor
 (23) THE COURT The objection is overruled
 (24) BY MR STOLL
 (25) Q Now do you disagree with the statement that the trustees

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- (1) found the following resources - this is November of 1993 last
- (2) November about eight months ago nine months ago -
- (3) following
- (4) recovery show little or no sign of recovery in nearly five
- (5) years after the spill The list is expected to change as the
- (6) injured resources change and the knowledge about them
- (7) improves
- (8) Common murre's harbor seals Harlequin ducks intertidal
- (9) ecosystem marbled murrelets Pacific herring pigeon - I
- (10) don't know how to pronounce that -
- (11) A Guillemots
- (12) Q - guillemots pink salmon sea otters sockeye salmon
- (13) Kenai River subtidal ecosystem
- (14) Do you disagree with that?
- (15) A I strongly disagree with that
- (16) Q All right.
- (17) And do you also disagree with the statement on the
- (18) subsequent page that full psychological recovery will have
- (19) been
- (20) achieved when the population of flora and fauna are again
- (21) present at former or pre spill abundances healthy and
- (22) productive and there is a full complement of age classes at the
- (23) level that would have been present had the spill not occurred
- (24) A recovered ecosystem provides the same functions and
- (25) services
- (26) as would have been provided had the spill not occurred
- (27) Do you disagree with those statements?
- (28) A I disagree very strongly with the first sentence since I

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- (1) agree did with the second sentence That comes right out of
- (2) the FRDA regulations the system is recovered when it has the
- (3) functions of the pre-spill population
- (4) Q And are you familiar with a report called Five Years
- (5) Later? That was report by the executive director and then
- (6) the - there is a letter from a Dr Spies who is the chief
- (7) scientist for the trustees?
- (8) A I've heard of the document I have not read it
- (9) Q The Exxon lawyers never showed you the five-year letter?
- (10) A I haven't seen it I've seen the cover that's all I
- (11) have not had an opportunity to read it
- (12) Q Would you agree with this statement page?
- (13) MS SMITH What page are you on?
- (14) MR STOLL On page 4
- (15) BY MR STOLL
- (16) Q Many species of wildlife living in or near the sea are
- (17) susceptible to the toxics in petroleum or to the viscous coating
- (18) effect of crude oil Consequently thousands of sea birds sea
- (19) otters shellfish and other marine life in the path of oil from
- (20) the Exxon Valdez were killed by exposure to the oil
- (21) Scientists say exact mortalities for many species will never be
- (22) known because the corpses sank were washed to sea or were
- (23) eaten by scavengers which may have then also died from
- (24) ingesting oil
- (25) Do you agree with that statement?

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- (1) A Well I agree that many animals particularly in the months
- (2) immediately after the spill were in fact killed by toxicity
- (3) or by coating with oil and so forth But - but whether -
- (4) you know we can't count the corpses any more we can only
- (5) estimate the numbers
- (6) Q Now there was a Mr Selby who happens to be the mayor of
- (7) Kodiak Island Borough You probably never met Mr Selby
- (8) A I have never met Mr Selby
- (9) Q And he had testified - and he also among other things
- (10) testified about a trip that he went on that was apparently paid
- (11) for by Exxon in 1993 of a tour of Prince William Sound and he
- (12) was given a nice red brochure with a bunch of material in it
- (13) that is in evidence as DX15488 And in the back of that among
- (14) the material that was given was a - I just want to ask you
- (15) this This is a nice brochure here (indicating) Is this a
- (16) document that you - you prepared Dr Neff?
- (17) A I'm one of the four authors of that document yes
- (18) Q And these other four people were hired by Exxon also?
- (19) A Yes They're all contractors for Exxon
- (20) Q Who is Woodard Clyde Consultants?
- (21) A They're a local environmental research firm in Anchorage
- (22) Q They were hired by Exxon also?
- (23) A They have been - they have assisted Exxon from day one
- (24) with the spill mostly in the shoreline clean-up operations
- (25) which that document refers to

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- (1) Q That is your piece or you and these three other people?
- (2) A I was a coauthor yes
- (3) Q Now you know Dr Rice?
- (4) A Dr Dan Rice yes At the Auke Bay Laboratory
- (5) Q Yes the National Marine Fisheries Service
- (6) A That's right
- (7) Q And you have a high regard for him I believe?
- (8) A We've known each other for about 15 years yes He's done
- (9) some very good work
- (10) Q And you know that Dr Rice wrote a report for a restoration
- (11) science in which he thought that the state levels - State of
- (12) Alaska standards for hydrocarbon concentrations might be too
- (13) low?
- (14) A Could you give me the name of that document?
- (15) Q Yes
- (16) A He's written a lot
- (17) Q Interim Report for Restoration Science Study November 93
- (18) -003 that's an interim report He was reporting on studies of
- (19) alewives or salmon young salmon in gravel and some column
- (20) experiments he did in the lab And he measured the
- (21) concentration of PAH in the water flowing through the gravel
- (22) as well as in the gravel itself And suggested that because
- (23) the concentrations in the water were quite low that maybe the
- (24) standard was inappropriate
- (25) A The point he missed - and I think you will correct it in

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- (1) his filing report - is that the alevins and eggs were actually
 (2) exposed physically to oil in the gravel They were in direct
 (3) contact with oil so their mode of exposure was not through the
 (4) column water so the State of Alaska standard does not apply at
 (5) all
 (6) Q There s no question in your mind is there really that
 (7) there were salmon eggs that were directly exposed to oil as a
 (8) result of the Exxon Valdez oil spill?
 (9) A There were some salmon streams and alevin environments in
 (10) the area of the oil spill and there has been documentation
 (11) the areas where the pink salmon spawn in some cases - in a few
 (12) cases were actually oiled and there s no doubt about it if
 (13) there was heavily oiling of those areas some of those salmon in
 (14) 89 may have died about that time
 (15) Q You agree that the intertidal zone is where many living
 (16) things grow?
 (17) A No doubt about it I've been there many times
 (18) Q And it s also where many animals feed from the plankton and
 (19) grass and from the fish?
 (20) A The importance of the intertidal zone in the overall you
 (21) might say food budget of Prince William Sound is problematic
 (22) but it s important particularly for the lower intertidal zone
 (23) which is not very productive In most of the Prince William
 (24) Sound the upper tidal zone - that is what we call the pauper
 (25) very few species very few numbers because it s such a harsh

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- (1) thread out of a sweater and the whole thing unravels when you
 (2) damage one thread
 (3) Well modern recent reinvestigations of food webs have in
 (4) fact shown that the more complex they were the more
 (5) interactions the more lines you re - perhaps Dr Peterson s
 (6) drawings the more of those arrows and interactions there are
 (7) the stronger the food web is the more resilient it bounces
 (8) back more readily
 (9) So in a complex food web like that in Prince William Sound
 (10) if you remove - if you were to remove one species it would
 (11) have very little effect because all the animals that concerned
 (12) is that species have multiple foods That s what all the
 (13) different arrows mean Salmon doesn't eat just one thing he
 (14) has a broad spectrum of things to eat
 (15) But the converse of that is in all our investigations of
 (16) the shorelines in Prince William Sound we never saw the
 (17) extinction in other words the - a complete wipeout of
 (18) complete species even on heavily oiled shores So there
 (19) weren't any organisms eliminated completely even if there are
 (20) critters that relied on them have other alternate food
 (21) sources
 (22) So I disagree with Peterson s characterization if you harm
 (23) or remove one species the whole thing falls apart. That's
 (24) old-fashioned science We've learned a lot about this in the
 (25) last 30 years

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- (1) environment that nothing can live there So the lower area in
 (2) the lower intertidal zone is probably very important in the
 (3) overall food web you might say of Prince William Sound
 (4) Q Food web is a common term right?
 (5) A Yes It s been around for about 30 years
 (6) Q And the comments you re making about the intertidal zone
 (7) being important in the food is - applies to other areas that
 (8) were affected for instance in southern Kenai and Kodiak
 (9) Those were all the intertidal zones - is important to the food
 (10) chain in those areas just as it is in Prince William Sound?
 (11) A Yes It depends on the nature of the shoreline Sandy
 (12) beach is not very important to the food chain but a rocky
 (13) shore with rich productive grasses and marine animals in the
 (14) lower intertidal zone is important so it depends on the nature
 (15) of the shoreline but since we have similar shorelines in Kenai
 (16) and Kodiak to those of Prince William Sound yes the
 (17) generalization holds
 (18) Q Thank you
 (19) And the food web If you kill off one part of the food web
 (20) it can have ramifications in other parts of the food web isn't
 (21) that right?
 (22) A It depends very much on the nature of the food web under
 (23) investigation That was a very old-fashioned concept in the
 (24) 70s and so forth that the more complex the food web the
 (25) more sensitive it was to harm And it s sort of like picking a

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- (1) Q And you - you think that if the herring herring are
 (2) damaged or eaten that the prey that eat on those herring -
 (3) what you re saying they re going to go to some other -
 (4) something else to eat isn't that right?
 (5) MS SMITH Calls - is there a hypothetical
 (6) question? Because otherwise there s no foundation
 (7) MR STOLL Yes Yes
 (8) MS SMITH Thanks
 (9) BY MR STOLL
 (10) Q If the herring are eaten the predators of herring are
 (11) going to go eat something else You agree with that?
 (12) A That would - yes
 (13) Q They might go to eat small salmon?
 (14) A They might
 (15) Q Now whether you think Dr Peterson is old fashioned or
 (16) not or you disagree with the findings of the Trustee Council
 (17) or you disagree with Dr Kusan or anybody else - you would
 (18) agree that there is a science out there that has raised a
 (19) number of very significant issues about whether Prince William
 (20) Sound has recovered whether you use your definition of
 (21) recovery or anybody else s definition of recovery isn't that
 (22) correct?
 (23) MS SMITH If - I object as convoluted If the
 (24) witness -
 (25) THE COURT Do you understand the question?

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- (1) MS SMITH I don't want to make him do it again I
 (2) just -
 (3) A It is extremely convoluted Obviously there are findings
 (4) or scientists have suggested that some components of the
 (5) ecosystem haven't recovered or scientists with equal or greater
 (6) credentials have said that many of those systems have fully
 (7) recovered and the data I have seen which is mostly Exxon
 (8) data confirms in my - in most cases of that - those list of
 (9) animals and ecosystems that those ecosystems have
 recovered
 (10) but I don't have the firsthand knowledge of guillemots or
 (11) murrelets or things of that I'm talking about mainly about the
 (12) fish and the shoreline
 (13) Q There's disagreement (sic) to the fish and the shoreline
 (14) also though isn't that correct?
 (15) A There's less and less all the time The more recent
 (16) trustee documents that I have seen say that many of these
 (17) ecosystems in as late as 1993 that were apparently impacted
 (18) seemed to be returning to normal Like the upper intertidal
 (19) mollusks beds and stuff like that
 (20) Q You just referred to some of the recent trustee material
 (21) when you said 1993 and I just had on the screen - I didn't
 (22) want to go back to it - I want to put it up on the screen but
 (23) you talked about or we had up there what the trustees found in
 (24) a report that was issued in November - that's pretty close to
 (25) the year end of 1993 isn't that right?

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- (1) A Yes but you're reading the summary documents and what
 you
 (2) find - again I haven't read - as I said before I haven't -
 (3) I've looked at the restoration document I think it's called
 (4) but I haven't looked at Spies' document or the others That if
 (5) you go - definitely back to the databases on which these
 (6) studies are based or go actually talk to the investigators
 (7) you find in many cases they say yeah this system has pretty
 (8) much recovered and so I rather believe the scientist that did
 (9) it rather than a summary done by a third party That's all
 (10) Q And within the Trustees Council - let me ask you a
 (11) question first of all
 (12) You mean you haven't read the reports of the - of the
 (13) Trustees Council on the - their Environmental Impact Statement
 (14) that was issued in June of this year?
 (15) A That's correct I haven't had a chance to read that
 (16) Q And you hadn't read the draft the restoration plan report
 (17) that was - excuse me
 (18) A Sorry
 (19) Q We'll make a deal I get to finish the question and I'll
 (20) let you finish the answer How's that?
 (21) You hadn't read the restoration plan of November 1993?
 (22) A Yes I did read it
 (23) Q And the other document you hadn't read was the March 1994
 (24) report of called Five Years Later that is issued by Dr. Spies?
 (25) A That is correct I haven't read that document

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- (1) Q And so you don't know that the - in June of 1994 the
 (2) Trustees issued a report that called for a long-term - that
 (3) said there was going to be long term recoveries that may take
 (4) yet still decades?
 (5) A I've heard that statement but I didn't read it in that
 (6) document
 (7) Q Since you haven't read it I guess I won't show it
 (8) Now Doctor you're not an expert are you on what all
 (9) this uncertainty - that may not be uncertain as far as the
 (10) Exxon scientists but I mean uncertainty in the broader
 (11) sense - are you an expert on what this uncertainty between the
 (12) Exxon scientists and these other scientists view how they view
 (13) recovery what the effect of that is on real estate property
 (14) values?
 (15) A I have no expertise on real estate guidance whatever
 (16) Q And you're not an expert on whether the Exxon Valdez oil
 (17) spill interfered with the use and enjoyment by the property
 (18) owners and their bundle of rights they have as property owners
 (19) in - after the oil spill are you?
 (20) MS SMITH Your Honor beyond the scope of his
 (21) direct way beyond
 (22) THE COURT That objection is overruled counsel
 (23) BY MR. STOLL
 (24) Q You're not an expert in that area are you?
 (25) A I thought it was just overruled

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- (1) Q Overruled means you get to answer
 (2) MS SMITH You have to answer
 (3) A Oh I'm sorry I'm not a lawyer either
 (4) No but I can't imagine how conditions as they occur right
 (5) now in Prince William Sound would impair in any way the use of
 (6) the shoreline by the owners of that property
 (7) Q That's all Thank you
 (8) MS SMITH Unless you wanted to take a break I just
 (9) have a short redirect
 (10) THE COURT Do you want to go ahead?
 (11) MS SMITH Sure Everyone is glaring over at me over
 (12) here
 (13) REDIRECT EXAMINATION OF JERRY M. NEFF
 (14) BY MS SMITH
 (15) Q Dr. Neff Batelle is a not-for-profit organization isn't
 (16) it?
 (17) A That's correct as I said yesterday
 (18) Q What does that mean?
 (19) A That means that we have no stockholders There are no
 (20) people out there looking for us to make a big profit
 (21) Obviously we have to stay viable and so our profits are by the
 (22) will of Gordon Batelle who set up Batelle - half of the
 (23) profits or approximately that much have to go to charity and
 (24) the other half go to building new buildings building new -
 (25) getting new scientific instruments and so forth and so there

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- (1) are no outside interests that are controlling our profit
 (2) margins or who are worried how much money we're making
 (3) Q Are you salaried?
 (4) A Yes I'm a full time salaried employee of Battelle
 (5) Q You've studied oil spills around the world as we discussed
 (6) in your direct?
 (7) A That's one of the many things I've been doing yes for the
 (8) last 23 years
 (9) Q And you've written three books and 130 articles?
 (10) A Something like that It keeps growing but more like 120
 (11) Q I know I've read most of them
 (12) Ninety percent of Battelle's work is for the government?
 (13) A Something like that yes
 (14) Q All right Are you a flunky of Exxon's?
 (15) A No that would be the kiss of death if I actually you
 (16) know took a strong advocacy position for any of my clients I
 (17) do work for the government I do work for a wide variety of
 (18) commercial clients and the only way I can do that is if I'm
 (19) completely honest in what I do if all my research is
 (20) completely objective That means I'm not taking sides one way
 (21) or the other and if the research is of the highest quality and
 (22) if I do that if I can be objective and produce high quality
 (23) research as much then the clients don't care whether you - you
 (24) know EPA doesn't care if I also have a job with Exxon so
 (25) forth and that's the only way a company like Battelle can work

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- (1) otherwise we would have to be solely commercial or solely
 (2) government
 (3) Q Exxon ever ask you to change any of your science?
 (4) A No And all these reviews mostly were editorial and
 (5) anytime Exxon asked me to change any wording in the text it
 was
 (6) a discussion matter It wasn't You change this or else it
 (7) was Wouldn't it be clearer if you said this this way and so
 (8) forth And we discussed back and forth
 (9) In some cases I said No I think I've said it the way I
 (10) wanted to say it and other times I said Yes it would be
 (11) clearer if I said it that way Those are the kind of changes
 (12) Exxon has never asked me to hide any numbers or forget data
 (13) that I generated or suppress it or anything like that
 (14) Q If Exxon asked you to do that would you?
 (15) A No Again that would impinge on my integrity Then I
 (16) couldn't go out and work for government clients or other
 (17) clients I would become as I say a lackey of the commercial
 (18) sector so I have to become remain completely objective
 (19) Q All right Let's talk about Mr. Stoll's microlayer
 (20) A Okay
 (21) Q Does the EPA recommend that you test the microlayer?
 (22) A Well EPA and ADEC in their Ten Harbor million-dollar water
 (23) quality standard specifically recommends that you avoid
 (24) sampling through any surface sheens or microlayers and they
 (25) even provide a method for how to take authentic water samples

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- (1) So EPA and ADEC recognize that the surface microlayer is not
 (2) the same as the water column
 (3) Q All right Did NOAA sample the microlayer?
 (4) A As it turns out as far as I know - I don't know
 (5) everything that was done after Exxon Valdez As far as I know
 (6) no one sampled the surface microlayer at least in Exxon
 (7) Valdez We went out and tried to As I say the operations
 (8) program did a very detailed sheen monitoring program in late
 (9) 89 through 1990 and the reason was there were lots of oil
 (10) slicks out there and sheens and so forth even in late 89 and
 (11) Exxon wanted to determine are those Exxon Valdez oil or are
 (12) they someone else's oil So that's the only one I'm aware of
 (13) Q Let's talk about otters - I hate talking about otters
 (14) There were a lot of otters oiled in 1989 right?
 (15) A That's correct
 (16) I hate talking about otters too because they're my
 (17) favorite critters
 (18) Q Everybody - okay are otters alive and well now in the
 (19) spill area?
 (20) A Yes As I indicated earlier the publication I just
 (21) recently received - it's a 1993 publication - indicated that
 (22) perhaps one-third of the otters in Prince William Sound were
 (23) killed by the spill Since that time there's - the otters
 (24) have returned to many areas and population is increasing
 Even
 (25) the Trustee studies say that the early indication of

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- (1) reproductive impairment are completely gone and otters are
 (2) reproducing at the same rate in the oil spill area as they do
 (3) outside the oil spill area
 (4) Q I know this sounds like a stupid question but after the
 (5) spill passed in 1989 did the otters get oiled any more?
 (6) A No If you look at the time line for the oiling - the
 (7) otter oiling excuse me that is a mouthful - it all occurred
 (8) in the first month to two months after the spill and then
 (9) declined very rapidly as the surface slicks got off the water
 (10) surface because the otters rarely got oiled on the shore they
 (11) got oiled offshore and that stopped after about May of 1989
 (12) Q All right Would the same be true for the sea birds?
 (13) A Yes In fact there were no sea birds or otters found
 (14) that - dead and the deaths attributed to the oil spill after
 (15) 1989 so everything happened the first month or so after the
 (16) spill
 (17) Q Are the sea birds alive and well in the area of the oil
 (18) spill?
 (19) A Yes a very large population of sea birds in the area
 (20) Q One question on toxicity tests You used the mice and the
 (21) zooplankton and the minnows Is that because under FDA
 (22) protocol those are the guys who were very sensitive to
 (23) hydrocarbons and that's why they were used?
 (24) A Under EPA protocols yes They're recommended by EPA
 (25) because they've been established that they've been used

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- (1) frequently We get reliable results and EPA has shown that
 (2) they're the most sensitive or among the most sensitive species
 (3) in toxicity tests And in fact when you compare the toxicity
 (4) of oil to say the minnow versus the salmon it turns out the
 (5) salmon is much more tolerant and the herring are even much
 more
 (6) tolerant than those the crustaceans as the commercial shrimp
 (7) that you eat are even more tolerant than the little shrimp they
 (8) use
 (9) So they're a good surrogate as I say and they can be
 (10) maintained in the laboratories so they are recommended by
 EPA
 (11) Q Do you have any uncertainty as to whether the water column
 (12) in the spill area is cleaned up?
 (13) A I have no uncertainty at all Our data the largest
 (14) database ever generated of this type shows very conclusively
 (15) by mid to late summer of 1989 the water column is clean It's
 (16) been cleaned Since then we continue to measure into 1990
 and
 (17) beyond and it's still clean
 (18) Q Does NOAA have any uncertainty about whether the water
 (19) column is cleaned up?
 (20) A I'm not aware of any Their water quality programs
 (21) basically concluded that yes by mid summer of 1989 the water
 (22) was clean It was acceptable for fish and wildlife and so
 (23) forth
 (24) Q Thank you
 (25) MR STOLL I just have a couple questions

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- (1) RE-CROSS-EXAMINATION OF JERRY M. NEFF
 (2) BY MR STOLL
 (3) Q If the water column - the water column is now back to
 (4) normal and at some time before now it was back to normal the
 (5) killing that occurred from the oil spill happened according to
 (6) your testimony originally in the first few weeks or days
 (7) following the spill Is that -
 (8) A Yes that's correct
 (9) Q Okay And so the effect of killing a lot of organisms and
 (10) marine mammals or fish or eggs or birds or whatever that may
 (11) not affect the water column in the future but it could affect
 (12) those populations in the future couldn't it?
 (13) A Yes but it was basically a single event and all those
 (14) populations are recovering or have recovered
 (15) Q Well they're not all recovered isn't that true?
 (16) A I said are recovering or have recovered
 (17) Q And some of the recovery - you mentioned the trustees
 (18) reports which are unclear as to what you read and what you
 (19) haven't - but I take it you know enough from reading these
 (20) trustee reports that some of these recoveries in some species
 (21) may take as long as 35 years?
 (22) A Would I argue about those numbers?
 (23) Q Well that is what they say so isn't that correct?
 (24) A If you say so
 (25) Q Well you've read at least some of those isn't that true?

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- (1) A I haven't seen that number
 (2) Q And you mentioned talked about the EPA protocol That's a
 (3) national protocol right?
 (4) A That is correct
 (5) Q There's nothing - there was nothing keeping Exxon from -
 (6) instead of having this graph up here for this litigation of
 (7) this national protocol with shrimp and minnows - of doing an
 (8) acute toxicity test on salmon similar test on salmon and
 (9) herring isn't that correct stopped them from doing that?
 (10) A Nobody stopped them but there was no reason to do it
 (11) either
 (12) Q Okay
 (13) And if - counsel asked you about not changing words Exxon
 (14) not changing words
 (15) Now when you did a report on the Amoco Cadiz you reported
 (16) there - you used the word a large kill of plaice Do you
 (17) recall that?
 (18) A Those could be my words yes
 (19) Q And you recall I believe testifying in your deposition
 (20) that Exxon in doing the review of your papers could have
 (21) deleted the word kill from some of your drafts?
 (22) A I most strongly objected to that line of questioning in my
 (23) deposition and clearly stated that Exxon never asked me not to
 (24) use the word kill And that foolish argument went on for
 (25) hours And I'm not aware of any instance where Exxon asked
 me

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- (1) to change a word like that and I said that I said that even
 (2) my - subconsciously I was not aware of that if that's
 (3) possible
 (4) Q I'm sorry I wasn't at your deposition I don't want to
 (5) get in a foolish discussion with you so I'll -
 (6) A Okay
 (7) Q Thank you
 (8) THE COURT You may step down sir Thank you very
 (9) much
 (10) Did you want to say anything?
 (11) MS SMITH No thanks
 (12) THE COURT We'll take a break
 (13) (Jury out at 11 24 a.m.)
 (14) (Recess)
 (15) (Jury in at 11 40 a.m.)
 (16) THE COURT Counsel?
 (17) MS SMITH Exxon calls as its next witness Dr Edward
 (18) Gilfillan
 (19) THE CLERK Would you attach the microphone to your
 (20) tie remain standing for the oath
 (21) (The Witness is Sworn)
 (22) THE CLERK Please be seated
 (23) Sir for the record would you please state your full name?
 (24) A My name is Edward Smith Gilfillan
 (25) THE CLERK Could you please spell your last name?

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- (1) A Gilfillan
 (2) THE CLERK And your occupation?
 (3) A I'm a marine biologist
 (4) THE CLERK Thank you
 (5) MS SMITH I didn't know you had such a distinguished
 (6) middle name until right now
 (7) DIRECT EXAMINATION OF EDWARD S GILFILLAN III
 (8) BY MS SMITH
 (9) Q Dr Gilfillan are you the biology guy that Dr David Page
 (10) kept referring to?
 (11) A Yes I am
 (12) Q And what are you here to talk to the jury about today?
 (13) A What I'm here to talk to you about today is basically those
 (14) little slimy things that live in the intertidal zone and how
 (15) they relate to one another and how they relate to their
 (16) physical environment and how the Exxon Valdez oil spill - the
 (17) oil from the Exxon Valdez oil spill affected them
 (18) Q And let's go through the qualifications Where did you go
 (19) to school?
 (20) A I went to Yale University where I got a Bachelor of Arts
 (21) degree in zoology
 (22) Q All right And did you get a Ph D ?
 (23) A I did from the University of British Columbia in 1970 in
 (24) biological oceanography
 (25) Q After you received your doctorate where did you go to

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- (1) of 1970 I was a young physiologist right out of graduate
 (2) school I had an opportunity to examine the physiological
 (3) effects of oil on marine animals and plants It was very
 (4) interesting to me I took the job and about a year and a half
 (5) later there was an oil spill in a place called Casco Bay in
 (6) Maine and I became involved in that investigation
 (7) Q All right And that was the first oil spill you ever
 (8) worked on?
 (9) A Yes it was on a tanker called Tamano
 (10) Q When you work on an oil spill what do you do?
 (11) A The first thing you do is to go to the location where the
 (12) spill has occurred find out what kind of environments have
 (13) been impacted and figure out how those environments work
 (14) because before you can discover how oil affects an
 (15) environment
 (16) you have to know how it functions naturally And having
 (17) decided or figured out how the environment functions naturally
 (18) then you can design a program and investigation which will let
 (19) you see the extent to which the oil spill has affected that
 (20) environment
 (21) Q Everybody get that?
 (22) Okay How did you and David Page hook up?
 (23) A I was in - investigating a spill of jet fuel in a place
 (24) called Long Cove which is about halfway along the coast of
 (25) Maine with a man named Dana Mayo (ph) who is a chemistry
 professor at Bowdoin College He went on sabbatical would

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- (1) work?
 (2) A I went to work at the University of Massachusetts Marine
 (3) Lab in Gloucester Massachusetts
 (4) Q All right Now do you teach at Bowdoin College?
 (5) A I do
 (6) Q And what courses do you teach?
 (7) A I teach three courses I teach a course in the effect of
 (8) human activity on the marine environment I teach a course in
 (9) methods of environmental science how do we find things out
 (10) about the environment and I teach a senior seminar which
 (11) varies in content from year to year but the constant theme is
 (12) how can we humans regulate our impact on the environment so
 (13) that it will be minimized
 (14) Q Do you work in a marine research laboratory?
 (15) A I do
 (16) Q What's your position there?
 (17) A I am the director of it
 (18) Q What do you do there?
 (19) A I do research on basically human impact on the marine
 (20) environment
 (21) Q Okay You specialize in oil spills and what they do to
 (22) marine plants and animals?
 (23) A Yes I have
 (24) Q And how did you get interested in oil spills?
 (25) A When I went to the University of Massachusetts in the fall

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- (1) have been probably fall of 1975 and two weeks before he left
 (2) he brought his partner in said Here's David Page he will be
 (3) replacing me for the next year
 (4) Q And that was the beginning of a beautiful relationship?
 (5) A Well a relationship that's lasted more than 20 years
 (6) Q Do you always work together on spills?
 (7) A Usually Each of us has worked alone I've done three
 (8) spills three pieces of investigation basically all of it for
 (9) the government of Canada where David and I did not work
 (10) together
 (11) Q Did you work on the Arrow spill?
 (12) A I did That was one of the three spills
 (13) Q All right What did you do?
 (14) A I was invited to go to Nova Scotia at the Bedford Institute
 (15) of Oceanography and the purpose was to look at the effects of
 (16) the spill from the tanker Arrow which had occurred if my
 (17) memory serves me in 1970 on the soft shelled clam -
 (18) soft shelled clam populations in Chedabucto Bay which is the
 (19) bay between - not between it's on the northeast coast of Nova
 (20) Scotia
 (21) Q Did you work on the Searsport spill?
 (22) A Two of them actually We did work David and I on the
 (23) effect of a spill of jet fuel from an Air Force fuel handling
 (24) facility on the soft shell clam population living in Long Cove
 (25) which is as I say about halfway up the coast of Maine Later

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- (1) on David and I did a pair of experimental spills oil spills
 (2) in that same location
 (3) Q All right
 (4) A Or near that same location
 (5) Q And I know the jury is waiting for this question Did you
 (6) work on the Amoco Cadiz spill?
 (7) A Yes I did
 (8) Q And tell the jury what you did
 (9) A I went to France in April of 1978 which is about six weeks
 (10) after the Amoco Cadiz had run aground and my charge was to
 (11) look at the effects of the oil spill on the oyster aquaculture
 (12) industry along the north coast of France which was a very
 (13) important aquaculture industry
 (14) Q Did you work on a spill off the coast of Puerto Rico?
 (15) A I did I worked on a spill from a tanker called the Zoe
 (16) Colocotroni that ran aground discharged oil which went into a
 (17) mangrove forest ecosystem and I say mangroves are
 (18) salt resistant trees which grow in wetlands in the tropics and
 (19) fulfill the same ecological role that marsh grasses do in
 (20) marshes in the temperate region
 (21) Q Did you work on a spill in Nigeria?
 (22) A I did It was a spill from a laboratory platform The
 (23) people drilling the well lost control of the well They were
 (24) unable to prevent oil and gas from flowing out of the well a
 (25) condition known as a blowout And that oil came out of the

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- (1) an update called Oil in the Sea published in 1985
 (2) Q All right Were you invited to be a contributor to that
 (3) study?
 (4) A Yes I was
 (5) Q Did your report have as its title Effects of Petroleum on
 (6) Primary Productivity Animal Growth Preservation Feeding and
 (7) Intermediary Metabolism?
 (8) A Yes It did
 (9) Q Catchy
 (10) Is there an oil spill conference every other year supported
 (11) by the U S Coast Guard the EPA and the American Petroleum
 (12) Institute?
 (13) A Yes there is
 (14) Q Are you invited to present papers at these oil spill
 (15) conferences?
 (16) A Yes I have
 (17) Q Have any of your oil spill research been sponsored by
 (18) governmental agencies?
 (19) A Yes Three pieces of work that I did in Canada including
 (20) the work in Chedabucto Bay work on oil seep near the northern
 (21) tip of Baffin Island and an oil spill that occurred also but
 (22) not in the same location near the northern tip of Baffin
 (23) Island were sponsored by the Canada government, I believe
 (24) specifically the oceans The work on the Searsport and
 Tamano
 (25) spills were supported by the state of Maine

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- (1) ground very hot it evaporated and as it was blown toward the
 (2) shoreline by the wind it condensed and it basically rained
 (3) oil
 (4) Q Did you work on a spill involving a ship owned by the
 (5) Uruguayan Navy?
 (6) A I did That ship was called the Presidente Rivera and who
 (7) I presume was some President of Uruguay It was coming up
 (8) the Delaware River I believe on the weekend of July 4 1989 It
 (9) was preparing to anchor and somehow the ship dropped one
 (10) of its anchors and the channel was insufficiently deep to allow
 (11) the ship and the anchor to both be in the same place at the
 (12) same time and it punctured a hole
 (13) Q How many years have you been studying oil spills?
 (14) A At least 22
 (15) Q Have you published articles in scientific journals and
 (16) governmental reports discussing the results of your oil spill
 (17) research?
 (18) A Yes more than 40
 (19) Q Dr Gilfillan what is the National Research Council?
 (20) A It's an arm of the U S National Academy of Sciences which
 (21) from time to time will investigate some problem which is
 (22) perceived to be important to the nation
 (23) Q All right Has the NRC published any studies on the fate
 (24) and effect of oil in oil spills?
 (25) A Yes they have published two volumes one in 1975 and then

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- (1) I've been asked on many occasions to talk about work that
 (2) we had done with oil spill dispersants to workshops of Coast
 (3) Guard and EPA and local officials who will be making decisions
 (4) regarding dispersant use in the event of a spill And most
 (5) recently I prepared a set of guidelines for the state of Maine
 (6) as to when and how dispersants should be used oil spill
 (7) dispersants should be used in the event of an oil spill in
 (8) Maine
 (9) MS SMITH I tender Dr Gilfillan as an expert on the
 (10) fate and effects of oil from marine oil spills and as a marine
 (11) ecologist
 (12) THE COURT He is qualified to give opinions in those
 (13) areas
 (14) BY MS SMITH
 (15) Q Dr Gilfillan tell the jury about the ecosystem in the
 (16) Sound and the Gulf of Alaska Is this a tough place for
 (17) critters to live?
 (18) A We Mainers like to think we have a stern and rock-bound
 (19) beach coast in the main area but - and they get better up
 (20) there but they don't the critters that live on the shore of
 (21) Prince William Sound and in the Gulf of Alaska have a much
 (22) tougher time the storms are stronger there are more missiles
 (23) in the waves it gets colder It's a very difficult place for
 (24) critters to live
 (25) Q Once again Professor Brown is going to be my lovely

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- (1) assistant.
 (2) I'd like to show you DX3213AA 9
 (3) You brought your own? Tell the jury what this is a picture
 (4) of
 (5) A This is a picture of a sheltered bedrock environment. It's
 (6) along the shoreline of Ingot Island and what it shows is what
 (7) we marine ecologists call the intertidal zone which is that
 (8) distance between the lowest point that the water will reach in
 (9) a year's time and the highest point. It also shows some of the
 (10) critters rather clearly that live in that part of the
 (11) ecosystem.
 (12) Q Show us where the tide zone is?
 (13) A Up around here (indicating). Basically critters can only
 (14) live in roughly the bottom 80 to say 85 percent of the tide
 (15) zone, the bottom two-thirds.
 (16) Q Is this what they call sheltered bedrock?
 (17) A Yes, it is.
 (18) Q And are a lot of the shorelines of Prince William Sound
 (19) sheltered bedrock?
 (20) A More than half are sheltered, classified as sheltered
 (21) bedrock.
 (22) Q Do you have to know about the shoreline to know about the
 (23) ecosystem?
 (24) A It's important because what kind of shoreline you have will
 (25) determine what kind of animals and plants you can expect to

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- (1) this far and then these things and these things and these
 (2) things. Is this typical of coastline on the -- on the Sound?
 (3) A No, this is a little on the atypical side in that things
 (4) are so orderly. It -- basically these animals and plants have
 (5) sorted out the intertidal zone amongst themselves and it's
 (6) important to realize that the major competition amongst these
 (7) animals and plants that live in the intertidal zone is for
 (8) space to live, to hold onto the rock and persist.
 (9) And so what you typically see is if these animals and
 (10) plants are undisturbed, is that they will sort things out and
 (11) you'll find that the black lichen lives in this band and
 (12) typically the animals will arrange and plants will arrange
 (13) themselves in bands. And typically the top of a band will be
 (14) determined by how -- how well that animal or plant can resist
 (15) the drying and the heating of the sun at low tide.
 (16) The bottom of the band will be typically set by either the
 (17) maximum height at which a superior competitor for space can
 (18) exist or the maximum height at which a predator which will prey
 (19) on the animals can exist. For example, the barnacles live in
 (20) this band right here. This upper part of the band is set by the
 (21) resistance to drying out. The lower part, the lower, lower
 (22) limit of the band is set by the upper limit of the -- of the
 (23) snail that eats them, and you're going to see some of those
 (24) snails in a little bit.
 (25) Q But we're not going to pass them around

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- (1) find living there.
 (2) Q Okay. And who lives here?
 (3) A Who lives here? We start at the top of the part of the
 (4) intertidal zone. The critters actually living in this black
 (5) lichen, which I know you would have heard a lot about in the
 (6) last couple of days. Then as you go further down you see this
 (7) whitish material here, those are barnacles. Further down yet
 (8) you have --
 (9) Q The only thing -- come this way for a second, don't want to
 (10) get your microphone underneath the chart.
 (11) Now Ed, what you could do is -- I'll move you, come over
 (12) here.
 (13) A Okay.
 (14) Here are your black lichens. You can see there's a band
 (15) here where the rock appears very white, that's barnacles living
 (16) there, a very broad band. This yellowish-brown stuff, which is
 (17) rockweed and commonly called fucus by scientists. I know
 (18) you would have heard a lot about fucus. Down below the rockweed
 (19) there's some stuff that looks a little different and I will
 (20) tell you that it is what plant ecologists call red algae. I
 (21) know they don't appear to be red, but that's what they call
 (22) them based on what the mechanism of photosynthesis that they
 (23) use, which is different from these, which are called the brown
 (24) algae.
 (25) Q This looks incredibly neat and orderly. These things live

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- (1) Dr. Gilfillan, what is disturbance?
 (2) A Disturbance is basically what ecologists would call --
 (3) disturbance is basically anything that happens in the
 (4) environment that causes plants and animals to be killed and the
 (5) space that they're sitting on to become available to be used by
 (6) other critters at Ingot Island.
 (7) Q Is there a lot of disturbance?
 (8) A Very little disturbance at Ingot Island and that's why
 (9) these animals and plants have sorted out the environment
 (10) amongst themselves to form these very nice bands.
 (11) Q I want to show you DX1130.
 (12) Tell the jury what this shows.
 (13) A This shows a section of shoreline in which disturbance
 (14) ecologists call very important and what you should see is the
 (15) rockweed and mussels and these darker barnacles, which are
 (16) older, are only living on the tops of these boulders. You see
 (17) this nice white band here (indicating), those are young
 (18) barnacles that have come in -- this is a picture that was taken
 (19) early summer. They've come in and attached themselves to the
 (20) rock and they will attach themselves to any free surface they
 (21) can find.
 (22) Down here we see a -- a portion of the rock where nothing
 (23) lives, nothing is visible and that's because as the waves come
 (24) in, these little rocks here that are on the foreshore are
 (25) picked up by the waves and they're used as missiles and they

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- (1) batter the shore You can see how rounded and smooth these
 (2) rocks are that they've been rounded and smoothed by the
 (3) scouring action of these little missiles these rocks for a
 (4) long time
 (5) And even in the summertime those missiles move enough to
 (6) kill the young barnacles that settle at a lower point in this
 (7) line right here (indicating)
 (8) Q Are these guys going to last very long?
 (9) A No they will not survive the coming winter The winter
 (10) storm waves are stronger and the missiles will impact further
 (11) up on the rock That's why you only find rockweed and mussels
 (12) on the top of the rock or sometimes in cracks where they are
 (13) protected from the action of these stones being thrown around
 (14) by the waves
 (15) Q Are these stones an example of disturbance?
 (16) A They sure are
 (17) Q Is disturbance just an ecologist's fancy word for saying
 (18) there are things that clobber plants and animals?
 (19) A That's correct And sometimes I like to refer to things
 (20) like these stones things we're going to see as batterers the
 (21) things that batter the shoreline and cause disturbance
 (22) Q Let me show you DX13235
 (23) MR McCALLION Could I get a date and location before
 (24) we go on?
 (25) BY MS SMITH

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- (1) Q Ed do you know the date and location here?
 (2) A The location escapes me I believe it was taken by me in
 (3) the summer of 1993
 (4) MS SMITH All right We'll get you a location
 (5) BY MS SMITH
 (6) Q However I can competently say that this is North
 (7) LaTouche Could you tell the jury what this shows?
 (8) A What you're seeing here are ice cakes sitting on the north
 (9) shore of LaTouche Island This was taken late this spring and
 (10) what we want to see it's not just pebbles and rocks being
 (11) thrown around in the waves that cause disturbance here we
 (12) have
 (13) these ice cakes And as the tide moves them around or more
 (14) particularly if storm waves should carry them around they're
 (15) going to grind against the rocks and kill animals and rocks and
 (16) make space available for other animals and plants to live in
 (17) Q So the ice cakes clobber critters?
 (18) A Uh huh
 (19) Q All right I want you - go back up to the stand or if
 (20) you want you can stand over by the Barco if you like And
 (21) I'm going to put up DX1018
 (22) Chuck can you take a look and see if the jury can see? We
 (23) pushed the Barco way back where he can stand and showed
 (24) them
 (25) something so the jury - if he's - is that going to work?
 (26) Okay
 (27) A This is a picture of a log taken in the spring of 1990

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- (1) You can see that this log is well rounded off It has been
 (2) drifting in the waves beating against the shoreline for a long
 (3) time and every time it strikes the shoreline it will have the
 (4) possibility of killing critters and making space available
 (5) As I say this log is by no means unique Now in most
 (6) shorelines that you visit in Prince William Sound there are
 (7) large quantities of logs in the upper intertidal zone Some
 (8) places I've seen them a pile of logs 30 and 40 feet high
 (9) Q And do the logs batter critters?
 (10) A They sure do
 (11) Q Let me show you DX101
 (12) MR McCALLION Could we have a location for that?
 (13) BY MS SMITH
 (14) Q Ed do you have a location?
 (15) A Not off the top of my head We do have a location
 (16) Q Do you know the year?
 (17) A It was 1990 I believe
 (18) Q All right What is this?
 (19) A Okay what you are seeing here is a piece of shoreline
 (20) where we're looking at another mechanism whereby space gets
 (21) recycled These folks here (indicating) are ocher sea stars
 (22) They may not look like much but they are very very voracious
 (23) predators They live in the intertidal zone They make their
 (24) living by eating things and when they eat them they leave open
 (25) space around and you can see there's open space here I

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- (1) believe are places I believe where a barnacle has been torn off
 (2) that the action of these predators has left behind so this is
 (3) another way that space can be recycled
 (4) MR McCALLION That's in Prince William Sound
 (5) presumably?
 (6) A Yes it is
 (7) MR McCALLION Do you happen to know the date or the
 (8) location?
 (9) A I believe it's 1990 I'm not sure of the location
 (10) MS SMITH Why don't we agree to supply you -
 (11) BY MS SMITH
 (12) Q They're illustrative only and they're all from the spill
 (13) area is that correct?
 (14) A They certainly are And these critters particularly - the
 (15) ocher sea stars from Baja California from the upper - they're
 (16) a very common animal along the west coast of the United
 (17) States
 (18) Q Let me show you DX13300 2 Tell the jury what that is
 (19) A This is a so-called sunflower sea star Also it's
 (20) together with the ocher sea star are two very voracious
 (21) predators in the intertidal zone and they basically make their
 (22) living by eating things killing them and making the space that
 (23) they have available
 (24) Q All right What do they eat?
 (25) A They eat everything from sea urchins to barnacles to
 (26) mussels to snails

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- (1) Q All right
 (2) Let me show you DX6301 2?
 (3) A Okay What we have here (indicating) is a group of sea
 (4) otters I believe there are seven of them in this location
 (5) The reason I'm showing it to you - I believe this one is a
 (6) female with a pup The reason I'm showing you these pictures
 (7) is that the sea otters as Dr. Neff has testified earlier
 (8) relied on its fur for insulation from the cold water The fur
 (9) is not all that effective and the sea otter has a tremendous
 (10) need for energy to stay warm So a sea otter an adult sea
 (11) otter has a requirement of something like 25 pounds of seafood
 (12) per day per animal to stay alive So these folks are basically
 (13) spending a lot of their life rummaging around in the intertidal
 (14) zone and is in the subtidal zone that area below the
 (15) intertidal zone right offshore looking for food
 (16) Q What do they eat?
 (17) A They eat clams sea urchins they eat fish they eat
 (18) mussels amongst many other things
 (19) Q Do you know when this picture was taken?
 (20) A It was taken in the spring of this year I'm not sure
 (21) where
 (22) Q I thought there weren't any more sea otters?
 (23) A There are a lot of sea otters in Prince William Sound
 (24) Q Let me show you DX14003 1
 (25) All right what are those?

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- (1) A Ah these two folks - I believe we have a blowup that
 (2) shows this a lot better These two folks are snails and I
 (3) talked to you earlier about barnacles and the problems they
 (4) have with predators that eat them These are the major
 (5) predators on barnacles And the way they feed on barnacles
 (6) and other animals that they eat is that they have something like a
 (7) file as a tongue and they drill - not really a tongue but it
 (8) works in that way and they use it to drill holes in the shells
 (9) of things and to eat them So here we have what we call a
 (10) barnacle drill or sometimes they're called a whelk and here
 (11) is a mussel that's been drilled There's two more on this
 (12) picture somewhere
 (13) Here there's one there and another one there
 (14) So these animals I say don't look like very much they're
 (15) about that long and they're real big They're important
 (16) (indicating) I've seen places in Prince William Sound where
 (17) the population of mussels have been basically wiped out by the
 (18) abundance of these snails
 (19) So they eat a lot as well and it's another way in which
 (20) space gets recycled
 (21) Q DX13242?
 (22) MR McCALLION Just on that last one that's not
 (23) 1989 is it?
 (24) A This one? This is I believe 1993
 (25) Q Okay Can you tell the jury what this is?

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- (1) A This is a picture of an exposed rocky shoreline a place
 (2) called Long Island It was taken in the spring of this - the
 (3) spring of this year and what it shows is an exposed rocky
 (4) shore basically coming into the springtime after having been
 (5) exposed to winter storm And what you can see there's a lot
 (6) of open space a lot of patches on this shoreline that are
 (7) being temporarily at least occupied by this green algae This
 (8) is a place where as a result of the action of the wind storms
 (9) and the batterers there's space available for colonization
 (10) Q And this doesn't have the nice neat banding across it like
 (11) we saw on the Ingot Island picture does it?
 (12) A No that's because to get that nice neat banding pattern
 (13) there has to be time for competition and for predation to cause
 (14) a species basically to be squeezed into the place where they
 (15) quote are to live If you have disturbances in a place that's
 (16) very important then that happens that these species the plant
 (17) or animal that are - have larvae out in the water at the time
 (18) space becomes available take it and these are effectively
 (19) composed of a patchwork of species rather than a band
 (20) Q Tell the jury where the high tide is
 (21) A It will be somewhere you said around here (indicating)
 (22) Q Is disturbance important here?
 (23) A You bet It's a major feature on the exposed rocky
 (24) shoreline of the rocky shorelines in general of Prince William
 (25) Sound It's a more major feature on the exposed one

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- (1) Q Do the critters that live here have to be very resilient to
 (2) survive?
 (3) A To persist in an ecosystem where disturbance is important
 (4) the animals and plants that live there have fought to be
 (5) very - when we call recruiters they have to be very good as
 (6) re-populating places that have been made bare when a winter
 (7) storm comes or sea otters or some of the other predators that
 (8) would be coming along
 (9) Q Are winter storms a disturbance?
 (10) A Yes
 (11) Q Is winter a disturbance?
 (12) A It sure is There's nothing that these critters hate
 (13) worse - presuming of course that they can hate - than a
 (14) real low tide at four o'clock in the morning or a bitter cold
 (15) morning because they - they stand a very real chance of
 (16) freezing
 (17) And the same is true of summer Summer is a disturbance
 (18) here because the last thing in the world they want is a nice
 (19) low tide at two o'clock on a sunny summer afternoon These
 (20) are
 (21) both things that will maximize effects from the exposure to the
 (22) atmosphere
 (23) Q Suppose a bunch of fucus gets disrupted Is what's going
 (24) to take his place on a shoreline like that necessarily fucus
 (25) again?
 (26) A Fucus is this rockweed here as you can see some of it has

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- (1) been wiped out You can see the open spaces being colonized by
- (2) green algae in this instance and red algae - actually appear a
- (3) little redder in this picture in this - and mostly we have
- (4) barnacles basically through throughout the upper part of the
- (5) intertidal zone here
- (6) Q Was the oil spill a disturbance albert not a natural one?
- (7) A It certainly was
- (8) Q You showed us two types of shoreline exposed bedrock and
- (9) shelter bedrock How much of the spill area do these two types
- (10) of shoreline account for?
- (11) A Very roughly three-quarters of the shoreline
- (12) Q What types of shoreline are there?
- (13) A There are what we call boulder beaches boulder-cobble
- (14) beaches where the rocks are sort of from this size to maybe
- (15) this size in diameter on the - in the Kenai are more
- (16) exposed I've seen them rocks this big which basically move
- (17) in the waves
- (18) Q This picture shows boulder-cobble I'll show you DX9398
- (19) Thank you
- (20) Tell the jury what this shows
- (21) A This shows a view from the bottom part of a boulder-cobble
- (22) beach - which you've all heard probably more than you want to
- (23) know about from a place called Point Helen And what you will
- (24) see is there are occasional bedrock outcroppings that don't
- (25) move in the waves like this here - these two rocks here and

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- (1) this rock over here and that rock (indicating) - but most of
- (2) the beach surface are these boulders that move around and
- (3) you
- (4) can tell they move around a lot because they're rounded and
- (5) they're constantly knocking into one another and being thrown
- (6) around by the waves and knocking up against these beaches of
- (7) bedrock And as a result the only place that you see
- (8) barnacles or other animals or plants growing are in crevasses
- (9) in these rocks where these batterers can't get to them And
- (10) this is an example of a location where disturbance is so
- (11) important that species really can't exist there except in a
- (12) special location like in the cracks or in these crevasses
- (13) Q Where is the high tide plane?
- (14) A Be in this region right here You can see the line of sea
- (15) wood that was left by the last high tide
- (16) Q Okay
- (17) You talked about exposed bedrock sheltered bedrock and
- (18) boulder-cobbles What is left?
- (19) A What we call the pebble gravel lab at that time which is
- (20) sort of things from pea size up to ping pong ball size
- (21) Q Dr Gilfillan in your opinion in the intertidal zones of
- (22) the Gulf of Alaska and Prince William Sound do critters have
- (23) to be very resilient in order to survive?
- (24) A In order to persist critters have got to be very good at
- (25) making good their losses because there are going to be losses
- (26) where you have disturbances and where disturbance is as

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- (1) important as it is in these environments the animals and
- (2) plants are going to lose individuals They've got to be good
- (3) at making them up
- (4) Q And disturbance or change is a way of life for them?
- (5) A It certainly is
- (6) MR McCALLION That last one is that this year
- (7) Doctor?
- (8) A Yes It was taken the second week in July
- (9) MR McCALLION Thank you
- (10) MS SMITH All right you can resume the stand
- (11) BY MS SMITH
- (12) Q All right Dr Gilfillan this is all very interesting
- (13) but what does it have to do with the oil spill?
- (14) A A great deal The processes whereby the animals and plants
- (15) living on rock surfaces in Prince William Sound recovered from
- (16) the effects of the Exxon Valdez oil spill which was a
- (17) disturbance the same processes by which they would
- (18) recover
- (19) from any other sort of disturbance
- (20) Q Who employed you to work on the oil spill?
- (21) A Exxon did
- (22) Q And what work did you do?
- (23) A I was asked together with Dr Page and Dr Boehm to design
- (24) a sampling program that would allow us to predict the condition
- (25) of the oil spill impacted zone in Prince William Sound
- (26) accurately

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- (1) Q All right How did you divide up the work with Drs Page
- (2) and Boehm?
- (3) A I am an ecologist and I designed the psychological parts
- (4) of the program And working closely with Drs Page and
- (5) Boehm
- (6) we designed a complimentary chemistry sampling program
- (7) Q Were you also asked to do field investigations on certain
- (8) Bush sites?
- (9) A Yes I was
- (10) Q Overall Dr Gilfillan approximately how many days since
- (11) 1989 have you spent working on various aspects of the
- (12) research concerning the Exxon Valdez oil spill?
- (13) A Approximately 545
- (14) Q Dr Gilfillan did I ask you to come and watch Dr Peterson
- (15) testify?
- (16) A Yes you did
- (17) Q Now he sat and reviewed other people's studies didn't he?
- (18) A That's what he did
- (19) Q Is that what you did?
- (20) A No I - based on the knowledge that I had gained over the
- (21) previous 20 years or so I designed a program and went out into
- (22) the field and carried it out myself
- (23) Q How many days did you spend in the field conducting on-site
- (24) research in the oil spill area?
- (25) A Roughly 133
- (26) Q And how many shorelines segments have you inspected
- (27) since

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- (1) 1989?
 (2) A Roughly 150 in Prince William Sound and about 45 in the
 (3) Gulf of Alaska
 (4) Q All right I show you DX13205A 1 and 13205A 2 Come on
 (5) down
 (6) Shall I just keep these two - I -
 (7) A I know how my dog feels (indicating)
 (8) MS SMITH Chuck we need a holder Remember the
 (9) testimony about highest and best use?
 (10) MR DIAMOND Your Honor do I have to take this?
 (11) BY MS SMITH
 (12) Q Dr Gilfillan what do these show? Let's start with the
 (13) DX13205A 1
 (14) A This one?
 (15) Q I think it's this one
 (16) A Each of these red-orange dots represents a location in
 (17) Prince William Sound that I have visited Many of these
 (18) locations I have visited on several occasions but are only
 (19) represented by one circle here for a place
 (20) Q All right And how about two?
 (21) A The same is true here All of these orange dots represent
 (22) locations that I have visited oftentimes on many occasions
 (23) Q Let's talk about the Shoreline Ecology Program We've
 (24) already heard from Dr Page that you did a random sample of
 (25) 64
 (25) shoreline sites What did you do at each of those sites?

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- (1) A What I did was to basically collect samples of plants and
 (2) animals that occurred at each of those sites along three
 (3) so-called transits which I think Dr Page has explained to
 (4) you at these locations in the intertidal zone One of them
 (5) near the upper boundary where animals and plants can live
 (6) one
 (7) in the middle of the intertidal zone and one in the lower end
 (8) of the intertidal zone
 (9) Q What did you do with those samples once you collected
 (10) them?
 (11) A We accounted and enumerated and identified the plants and
 (12) animals and then analyzed the resulting data
 (13) Q All right
 (14) Did you also conduct field research at these 12 nonrandom
 (15) sites what we call the worst of the worst sites?
 (16) A Yes because we knew that those sites existed we knew they
 (17) were few in number and far between and we knew that our
 (18) random
 (19) sampling scheme would not sample them reliably That's why
 (20) we
 (21) went out and said Let's go to these worst impacted sites and
 (22) look at them
 (23) Q Were all of the sound in the Kenai and the Kodiak area
 (24) oiled?
 (25) A Certainly not Only a relatively small proportion of each
 (26) of those areas was oiled Roughly if my memory serves me
 (27) correctly 15 - roughly 15 percent
 (28) Q How do you know that when you did the random sampling
 (29) the
 (30) 64 site sample how do you know that that was enough to be
 (31) able

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- (1) to conclude anything about this?
 (2) A Because of the randomness of the picking of the sites
 (3) The - they re - they represent fairly those combinations of
 (4) oiling and habitat that they stand for much in the same way
 (5) that a public opinion poller will identify groups of people
 (6) that they want - whose opinion they want to sample and then
 (7) they will randomly select individuals from each of those
 (8) identified groups and will question them A public opinion
 (9) poller can - can examine the opinions of a few hundred
 (10) properly chosen Americans and predict accurately the behavior
 (11) of the electorate as a whole It's the same principle that
 (12) apply to say what we did
 (13) Q Why don't you stay down I'm going to put something on the
 (14) Barco your favorite exhibit
 (15) I show you DX5213
 (16) What is this?
 (17) A This is an exhibit which we put together to try to show why
 (18) we did random sampling - and you all heard the fable of the
 (19) blind persons each of them near an elephant each of them
 (20) trying to figure out what they were standing next to
 (21) So this person is close to the ear and is feeling well
 (22) this must be a big plant because it feels like a leaf This
 (23) person is over here by the trunk and feeling boy this thing
 (24) must be a big snake And this person is standing by the leg
 (25) sort of feeling around said wow the trees out here in this

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- (1) forest must really be big And the person back here with the
 (2) tail feeling the hair at the end of the tail and says well
 (3) gee I must be dealing with a paint brush here so that none -
 (4) each of them are sampling as we would say in an ecological
 (5) sense are sampling different parts of the environment but only
 (6) one part And by that they - all of them are getting the
 (7) wrong impression about what the environment is really like
 (8) Q Let me show you DX4814 What does this show?
 (9) A This is an elephant and if you randomly sampled each of
 (10) these blind persons went and felt of the elephant at all of
 (11) those locations they would know well I have something that
 (12) looks like trees in some places something that looks like a
 (13) snake in some places something that looks like leaves in some
 (14) places and something that feels like a paint brush in some
 (15) places What the heck kind of thing is it that looks like a
 (16) tree a snake a leaf and a paint brush? And if they re
 (17) really smart they say right an elephant
 (18) Q All right Is it your view that you and Dr Page figured
 (19) out the whole elephant?
 (20) A We sure do
 (21) Q Okay Why don't you go back up if you can
 (22) Dr Gilfillan I asked you to come here today to talk to
 (23) the jury about the recovery of the critters on the shoreline
 (24) How do you define recovery?
 (25) A We defined recovery as there being no statistically

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- (1) detectable differences between never-oiled sites and the oiled
- (2) sites that we visited
- (3) Q All right Do you agree with the trustees requirement
- (4) that all age groups have to be represented for there to be
- (5) recovery?
- (6) A No I don't That I believe represents a - an adequate
- (7) view of ecology that there is some ideal community Ecologists
- (8) often talk or used to talk in years past about the equilibrium
- (9) community and if you just let the community of plants and
- (10) animals out there sit long enough you would get that
- (11) community
- (12) which would have all the age classes and all that sort of
- (13) thing Now I think most ecologists would agree that there is
- (14) really no such thing as an equilibrium community and we'll
- (15) talk in a little bit I and others view the ecosystem as a
- (16) process more than a place or a thing
- (17) Q Let's talk about some of your results
- (18) By the summer of 1990 did you find that some of the oiled
- (19) sites that were lightly oiled were indistinguishable from
- (20) unoiled sites?
- (21) A Yes we did
- (22) Q All right How about moderately oiled did you find
- (23) that - summer of 1990 did you find that the moderately oiled
- (24) sites were indistinguishable from the unoiled sites?
- (25) A Yes we did
- (26) Q Heavily oiled summer of 1990 what did you find?

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- (1) A We found that some of the oiled - some of the formerly
- (2) heavily oiled sites were in fact indistinguishable from sites
- (3) that had never been oiled
- (4) Q And did you also find anything else with respect to the
- (5) critters in the heavily oiled sites?
- (6) A What we found was that in those locations where there were
- (7) differences in the intertidal zone between our oiled sites and
- (8) our reference sites that at our oiled sites we had our
- (9) critters more species of critters or more of what ecologists
- (10) would call biodiversity It's a derived - you know a
- (11) property of the community
- (12) Q Hold it hold it hold it You expect us to believe that
- (13) in the heavily oiled sites you found more critters than in the
- (14) unoiled sites? Come on
- (15) A I in fact had a lot of trouble convincing myself that
- (16) that was in fact my result And the first thing that I did
- (17) was the young woman that was working with me at the time
- (18) came
- (19) to me and said these are what we said I said Cecile are you
- (20) sure that you loaded the data right? We went back and looked
- (21) at our files and made darned sure we had things the way they
- (22) were supposed to be and we confirmed that that was in fact
- (23) our result
- (24) Q What was the overall conclusion of your study?
- (25) A Our overall conclusion was that using a variety of measures
- (26) the shoreline of the Sound was somewhere between 81 and 73

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- (1) percent recovered by the summer of 1991
- (2) Q Did you give us a range of recovery?
- (3) A Well like most prudent scientists you don't just look at
- (4) one way of looking at something you like to do at - at least
- (5) two ways of looking at a result, and when they agree you have
- (6) more confidence that you have gotten the correct result
- (7) Q If 73 to 91 percent had recovered by the summer of 1990
- (8) how were the unrecovered sites doing?
- (9) A In the intertidal zone where there were differences across
- (10) the board where there were differences we had more
- (11) individuals more species or more diversity at our formerly
- (12) oiled sites
- (13) Q So they were on the way to recovery?
- (14) A They certainly were
- (15) Q Now your 64 random sites that was in the sound right?
- (16) A That's correct
- (17) Q Do you have an opinion as to how the critters were doing in
- (18) the Gulf of Alaska?
- (19) A Well we did not have the information to do a stratified
- (20) random sampling program in the Gulf of Alaska so we went out
- (21) and did the next best thing which was to pick sites
- (22) representative of the types of environments found in the Gulf
- (23) of Alaska and sample there
- (24) Q All right Now some of your study sites as you said
- (25) were heavily oiled in 1989 is that right?

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- (1) A That's correct
- (2) Q I'm going to slow you DX3213AA 48 - make sure we don't
- (3) give away anything
- (4) This is a quiz We thought you guys might be ready to go
- (5) home
- (6) And this is exposed bedrock in 1990 Why don't you tell us
- (7) who lives in exposed bedrock?
- (8) A All of those critters that live on the hard surface of the
- (9) rock - see we've got rockweed barnacles When we get a
- (10) little closer there you'd see snails you'd see mussels you'd
- (11) see starfish all of the kinds of things you expect in these
- (12) two sites Are both exposed bedrock sites they are both from
- (13) our 64 random sampling program in the summer of 1990
- (14) Q And you have to remember that one of these sites had a
- (15) band
- (16) of oil in excess of 20 feet wide across the top of the
- (17) intertidal zone in the summer of 1989 right?
- (18) MR McCALLION Could we have an identification of the
- (19) location?
- (20) MS SMITH Not yet it's underneath the boards
- (21) Wait wait wait I want to (indicating) -
- (22) Which of these sites was heavily oiled in 1989? Want to
- (23) guess?
- (24) BY MS SMITH
- (25) Q All right you do the top I'll do the bottom?
- (26) A (indicating)

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- (1) Q Okay And what does that show?
- (2) A This shows a site at the northeast tip of LaTouche Island
- (3) which was heavily oiled in 1989 There was a band of oil
- (4) 20-foot wide here at the top of the tide zone and this picture
- (5) was taken at the time that we sampled that location in the
- (6) summer of 1990 And in fact these people here (indicating)
- (7) are the samplers and you can see the surveyors transect here
- (8) We knew it was very important to determine to sample from the
- (9) same height in the intertidal zone at each place because what
- (10) kind of critters you get depend very strongly how high you are
- (11) in the tide zones So we used the surveyors transect to
- (12) locate precisely each of our locations
- (13) Here here s the sampling team in northeast LaTouche and
- (14) here again they are in Bass Harbor at Naked Island site that
- (15) was never oiled
- (16) Q By 1990 was northeast LaTouche recovering?
- (17) A It sure was And as you can see that - there are a lot
- (18) of plants and animals here there are a lot of plants and
- (19) animals down here and I can tell you that - as an ecologist I
- (20) can tell you that these individuals of rockweed and other weeds
- (21) that are growing here are too large to have grown up in the
- (22) spring of 1990 so these folks survived the oil spill
- (23) Q Let s look at sheltered bedrock DX3213AA 49
- (24) THE COURT Let s take a break pretty soon
- (25) MS SMITH We can do it after the next picture if

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- (1) that in spite of the fact there was this 20-foot wide band of
- (2) oil there those critters survived
- (3) And here is McPherson Bay on Naked Island a location that
- (4) was never oiled
- (5) Q All right And by 1990 was Danger Island on its way to
- (6) recovery?
- (7) A You bet It sure was
- (8) Q All right
- (9) MS SMITH Your Honor if you like this is a good
- (10) time
- (11) THE COURT Sure
- (12) (Jury out at 12 35 p m)
- (13) (Recess)
- (14) (Jury in at 12 48 p m)
- (15) THE COURT Go ahead
- (16) MS SMITH Your Honor for the record I misspoke
- (17) The name of the exhibit the number it s DX3213AA 25
- (18) THE COURT Got you
- (19) MS SMITH Okay
- (20) BY MS SMITH
- (21) Q This is our third kind of beach boulder-cobble 1990 And
- (22) tell us what lives here
- (23) A There are - as we saw when we were at Point Helen there
- (24) are relatively few critters that can live on the surface of
- (25) this beach and they tend to be ones that recruit very fast

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- (1) you like
- (2) BY MS SMITH
- (3) Q George I m going to slip by you
- (4) Who lives on sheltered bedrock?
- (5) A Many of the same kinds of critters that live on the
- (6) composed bedrock They re the kind of plants and animals that
- (7) you expect to see growing on a hard rock surface You ve got
- (8) rockweed barnacles you ve got some mussels rockweed
- (9) mussels barnacles many of these typical animals that you see
- (10) Q And this is 1990 right?
- (11) A This is the summer of 1990 These pictures were taken when
- (12) the sampling crew visited each of those two locations you can
- (13) see our transect line here and again there
- (14) Q And one of these was heavily oiled and one was never
- (15) oiled?
- (16) A One of these sites had a band of oil in excess of 20 feet
- (17) wide at the top of the tide zone and one of them never had any
- (18) oil on it at all
- (19) Q You go high and I ll go low
- (20) A (Indicating)
- (21) Q Okay
- (22) A This is a site called - at a place called Danger Island
- (23) which is at the south tip offshore of the south tip of
- (24) LaTouche Island You can see there is a log of the rockweed
- (25) barnacles mussels The size of those individuals tells me

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- (1) but the major action on this beach is that the critters that
- (2) live inside it that live in the sediments of the curve between
- (3) those boulders
- (4) Q All right And this is DX3213AA 51 And I bet you guys
- (5) are thinking it s the one on the top since the last two were
- (6) so we re going to trick you this time
- (7) All right and tell us about these shorelines
- (8) A This shoreline here is in a place called Storey Island It
- (9) was a location in the Sound that was never oiled in 1989 or
- (10) subsequently This site is on the northwest side of LaTouche
- (11) Island and in your mind s eye you should have a strip of oil
- (12) 20 feet or wider at the top of the intertidal zone which was
- (13) there in 1989 clearly not there in 1990
- (14) Q Was northwest LaTouche Island on its way to recovery in
- (15) 1990?
- (16) A Sure was
- (17) Q All right And our last one pebble-gravel what lives
- (18) here?
- (19) A Many of the same kinds of critters They re living inside
- (20) the surface of this beach You can see that they re relatively
- (21) few critters some barnacles and a little bit of rockweed on
- (22) the larger particles here and here but the major group of
- (23) animals that lives here are those that live down inside the
- (24) beach
- (25) Q All right And which of these sites was heavily oiled?

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- (1) A Top one - this is a place called Drier Bay It's sort of
 (2) the antithesis of a catcher's mitt It was facing the other
 (3) way and oil went by and never got in to oil this bay
 (4) And this is a place called Eshamy Bay And again you
 (5) should be thinking of a band of oil at the top of the tide zone
 (6) that was 20 feet wide or more in the summer of 1989 This
 (7) picture is taken in the summer of 1990 at the time that our
 (8) sampling teams were there taking their samples
 (9) Q And was Eshanty Bay well on its way to recovery by the
 (10) summer of 1990?
 (11) A Yes it was
 (12) Q I'm going to show you DX3213AA 8
 (13) This is a 1990 picture of Passage Point What does it
 (14) show?
 (15) A It shows a sheltered bedrock shore which is very similar
 (16) to the shore that you saw on Ingot Island when we began Here
 (17) your black lichen zone a woman named Sandra Tate who is
 (18) doing - using the surveyor's levels to make sure we went to
 (19) the right place in the tide zone to sample You've got a
 (20) barnacle a little below then there are mussels you have
 (21) rockweed and down below you have red algae which in this
 (22) picture all - actually appears lightly red
 (23) Q Was this oiled in 1989?
 (24) A Yes the sheltered bedrock lightly oiled category provides
 (25) if my memory serves me correctly a bit more than 200 miles of

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- (1) the shoreline that was oiled in the sound was typical - was
 (2) sheltered bedrock
 (3) Q Was this back to normal as of 1990?
 (4) A It certainly was well on its way there if it wasn't there
 (5) already
 (6) Q Was it recovered as of 1994?
 (7) A I certainly would expect so
 (8) Q How would you know?
 (9) A Because when we were there in 1990 the differences that we
 (10) saw between the communities at Passage Point and at places
 (11) that
 (12) had never been oiled were matters of being more species and
 (13) more individuals so that for the recovery to occur we have to
 (14) let some time go by for the biological interaction to cause
 (15) some of the those critters to be excluded from the community
 (16) either through predation or through competition Since these
 (17) are biological processes and don't depend on anything else I
 (18) don't see any reason why this place shouldn't be recovered as
 (19) of 1994 and in fact when I went there about three weeks ago
 (20) I found a kind of plants and animals that I would expect to
 (21) find at a place like this that had recovered
 (22) Q All right And did you take pictures of the critters?
 (23) A I did
 (24) Q All right I show you DX13298 1 through 23
 (25) A Okay this is a picture of Passage Point that was taken by
 me in 1994 and as you can see it is very very very similar

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- (1) to the way the Passage Point looks in 1990 15 months after the
 (2) spill
 (3) Now I'd like to show you up close some of the critters
 (4) that we found living there
 (5) Q Know what I don't know how close people want to get to
 (6) some of these crawly things but I can't see that well myself
 (7) so - okay
 (8) A Okay This is a picture taken up here near the top of the
 (9) rockweed zone and what you have here are rockweed plants
 (10) you've got blue mussels and you've got barnacles And you
 can
 (11) see there is some open space here If you have really good
 (12) eyes you can see - oh thank you You can see that between
 (13) these larger barnacles there are little teeny white spots and
 (14) these little teeny white spots are the larvae the juvenile
 (15) barnacles people talk about people getting into place and
 (16) they're going to grow up
 (17) MR BROWN This is page 18
 (18) A This is down a little bit further down in the tide zone
 (19) And what we're seeing is some rockweed more rockweed over
 (20) here some barnacles and some mussels and this mussel has
 a
 (21) problem And the problem is that one of those barnacle drills
 (22) that I spoke to you about and showed you the picture and the
 (23) hole it had bored in the mussel And this fellow sitting right
 (24) here and looking for his breakfast and is boring a hole in the
 (25) shell of this mussel

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- (1) MR BROWN This is page 21
 (2) A This is a picture taken more toward the top of the
 (3) intertidal zone It shows some mussels It shows a couple of
 (4) barnacle drills You can see some young barnacles that have
 (5) settled into this place and a mussel and you can see the -
 (6) these snails these are called littorian snails or penwinkle
 (7) and the way they make their living is to crawl along a rock
 (8) they have a big fleshy foot and using a drill-like thing that
 (9) I told you about that the barnacle drills because they scrape
 (10) microscopic algae off the plant and rock and eat them
 (11) MR BROWN This is page 2
 (12) A This thing is a - another mussel's worst dream This is a
 (13) sunflower sea star is that we found down near the bottom of the
 (14) intertidal zone and it's sitting on a bed of red algae that we
 (15) found also down here near the bottom of the intertidal zone
 (16) probably four or five pieces of red algae down there
 (17) MR BROWN This is page 3
 (18) A This is another kind of sea star so-called leather sea
 (19) star and it is found also down here in the bottom of the tide
 (20) zone These sea stars don't really like to dry out very much
 (21) at low tide so they can't do too much up here That is what a
 (22) lot of the critters that live up here do but here it is
 (23) sitting on this bed of red algae that we found at the bottom of
 (24) the tide zone
 (25) MR BROWN This is page 4

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- (1) A This is another kind of sea star that we found at this
 (2) location also sitting on a bed of the red algae
 (3) MR BROWN Page 5
 (4) A Here is another sea star one I showed you earlier on
 (5) This is a very voracious predator as the sea star in this
 (6) ecosystem
 (7) MR BROWN Page 19
 (8) A Another sea star another species It was sitting in the
 (9) tide pool over here and is sitting on a bunch of the red
 (10) algae which since the tide pool is full of water they have
 (11) expanded and they're the way they're going to be when the
 (12) tide comes up over the rest of this place
 (13) MR BROWN Page 11
 (14) MS SMITH Start another row Yeah
 (15) A This is what you find loose rocks over here on the site
 (16) You turn them over and what you find are some sea urchins
 (17) That is the top view of the sea urchins Looks like these guys
 (18) are about an inch in diameter They have got little spines on
 (19) them This is the top view this is the bottom view and this
 (20) is its mouth And these guys are very strong predators and
 (21) sea urchins is what they basically eat
 (22) Also in this picture is an animal here called a limpet
 (23) It's a relative of the snails It too has that big foot that
 (24) crawls along the rock and it eats the micro algae over the
 (25) surface The micro algae are those little fragments that grow

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- (1) in the rock and make it slippery to walk on at low tide
 (2) Also we have some shells of the barnacle drill here which
 (3) have been inhabited The barnacle drills are dead and they
 (4) shed their shells have been taken over by crabs that don't
 (5) have real strong outer shells themselves and must live in the
 (6) crabs shells of other animals These are hermit crabs and
 (7) there are probably five of them in this picture
 (8) MR BROWN This is page 13
 (9) A This is a crab that we found down here near the bottom of
 (10) the tide zone and a peanut worm which we also found
 (11) underneath
 (12) one of those mobile rocks
 (13) MR BROWN Page 9
 (14) A Here is about as close as I could get to a barnacle drill
 (15) shell which was being inhabited by a hermit crab and you see
 (16) he was upset by my presence and has closed off the opening in
 (17) the shell with his big claw and this is the way he prevents
 (18) himself from being eaten
 (19) MR BROWN Page one
 (20) A This is another kind of crab called a sea spider group of
 (21) spider crabs that was found right down here the bottom of the
 (22) tide zone and he was so well camouflaged that I didn't take
 (23) his picture against the background because you'd never see
 (24) him So I got a piece of kelp the blade of a kelp and put it
 (25) out and took pictures
 (26) It was raining the day I took these pictures that's why

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- (1) the kelp appears to be shiny
 (2) MR BROWN Page 15
 (3) A This is a view of the rock surface in the upper part of the
 (4) intertidal zone and here's one of these limpets gliding across
 (5) the surface and it will be eating the algae
 (6) MR BROWN Page 14
 (7) A These ones are hard to tell if you got them right side up
 (8) This is another type of animal It's called a chiton and
 (9) it's a relative of the limpet a relative of the snails It's
 (10) a very primitive animal These are animals that evolved from
 (11) mollusks which is what these guys are They're basically
 (12) learning how to grow shell - and that is an experiment that
 (13) didn't grow all that well although these people have been
 (14) around for a long time they've been around a while
 (15) MR BROWN This is page 7
 (16) A This is another chiton The typical determining
 (17) feature of chitons is that instead of having a solid shell like
 (18) the limpet or the snail they've got a series of plates that
 (19) overlap like of kind of an armor It was an experiment that
 (20) worked great for the chitons but not for very many other
 (21) folks This is the type of chiton that people who are
 (22) subsisting off of the intertidal zone would eat
 (23) MR BROWN Page 12
 (24) A This is a picture I took of a rock that's probably that big
 (25) around (indicating) and what's important about it is it's got

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- (1) this - what looks like green hair going on it and this is
 (2) what marine ecologists would call filamentous green algae It
 (3) grows out in elements and when you put this in the water it
 (4) will stand up like hair and what you will see - I hope you're
 (5) going to see - is there are a lot of these black dots in the
 (6) algae and what each of them is is a juvenile young mussel
 (7) which has just arrived in this environment and is attaching
 (8) itself to these filamentous algae When it grows a little
 (9) bigger mussels can truly crawl and will crawl off the algae
 (10) and crawl somewhere else to attach to the rocks But I wanted
 (11) you to get the idea that there are probably a thousand of these
 (12) young mussels on this one rock Give you an idea of the
 (13) reproductive potential of some of these animals and plants that
 (14) live out there
 (15) MR BROWN Page 10
 (16) A Common feature of the intertidal zone here in Alaska as
 (17) well as where I live in Maine and is that there are fish that
 (18) live underneath the rocks in the intertidal zones the rock
 (19) gunnels and you can see this one is very cleverly camouflaged
 (20) to look as much like a piece of rock as he possibly can and
 (21) these fish live in the cool wet place under the rocks all
 (22) through the low tide period and then when the tide comes up
 (23) they come out and eat
 (24) MR BROWN Page 16
 (25) A This is another kind of animal that really hates low tide

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- (1) This is an animal which is related to the jellyfish It's a
 (2) sea anemone and you see it's in a very protected place
 (3) underneath a big boulder a place where it's nice and moist
 (4) The humidity is high during low tide but the poor fellow has
 (5) dried out pretty much anyway This is very common in Prince
 (6) William Sound
 (7) MR BROWN This is page 23
 (8) A And what I would say is those critters that I saw are
 (9) typical of those I would expect to see in a location like
 (10) this And that fact is reinforced the fact that by the summer
 (11) of 1990 the recovery of shore-oiled shorelines in Prince
 (12) William Sound was 73 to 91 percent complete
 (13) BY MS SMITH
 (14) Q I'm going to try to pick this up and move it but we'll
 (15) see
 (16) Dr Gilfillan do you have an example of a very heavily
 (17) impacted location that is now recovering?
 (18) A Yes I do
 (19) Q I show you exhibit DX13299 What is this?
 (20) A This is a picture of a small and as far as I know unnamed
 (21) island in Northwest Bay on Eleanor Island And what you
 (22) wanted to know about Northwest Bay is that it's very near the site of
 (23) the accident It is a place a bay which is oriented toward
 (24) the north and it's received a very large amount of oil in the
 (25) early days of the spill

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- (1) The folks who were doing the spill cleanup decided that
 (2) they would retain as much of this oil in Northwest Bay as they
 (3) could to prevent it from going somewhere else and oiling other
 (4) shorelines so they retained the oil in this place
 (5) Q How did they do that?
 (6) A With a boom across the mouth of the bay
 (7) Q Okay
 (8) A So you have a place here that experienced extremely heavily
 (9) oiling because of the retention of the oil in the system
 (10) Q All right Do you have a picture of what this area looked
 (11) like in 1989?
 (12) A Yes I could
 (13) Q All right Let me show you DX1074AA
 (14) What are we looking at here?
 (15) A We're looking at a close-up picture of one of the three
 (16) rock-small rocky points that were on the right hand side of
 (17) that little island that you saw a moment ago And what you
 (18) have here is your rockweed down here your red algae This
 (19) picture was taken I believe May 7th 1989 This place was at
 (20) that point very very heavily oiled but at-and here is a
 (21) marine scientist taking samples of the critters that live
 (22) there But at that point many of the animals here and plants
 (23) have survived the oil spill the same way as many of the ones
 (24) that are at our random sites have survived the oil spill
 (25) Q So even at this heavily hammered beach some things lived

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- (1) through it?
 (2) A That's-that's correct
 (3) Q Let me show you DX1074A
 (4) MR BROWN We just finished that
 (5) MS SMITH I'm sorry DX-
 (6) MR BROWN 1403
 (7) BY MS SMITH
 (8) Q Yeah I got it I want to ask him something before I put
 (9) it up
 (10) Did this area get washed with hot water?
 (11) A Subsequent to this date yes it did
 (12) Q Now are-thank you George
 (13) Can I show you DX1403 tell the jury what this is?
 (14) A This is a view of the-I believe my memory serves me
 (15) correctly-the westernmost of the two-they're the three
 (16) rocky points on this north end of the island And what you are
 (17) looking at-excuse me a picture of the-you saw of the
 (18) marine scientist he was right here about here taking a
 (19) sample What you're looking at is the rock surface of this
 (20) location after the oil had been cleaned off by the application
 (21) of hot water
 (22) Q This is clean?
 (23) A You have to understand that the aim of the cleanup was not
 (24) to remove all the oil from the environment It is rarely
 (25) possible for clean-oil spill cleanup to do that What their

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- (1) aim was was to remove as much oil as possible from this place
 (2) so that it would not serve as a source for reoiling of
 (3) somewhere else And to remove enough oil from this place so
 (4) that should a sea otter crawl up across the rock or should
 (5) there be a bird land in this place that it would not be
 (6) soiled That was the aim of the cleanup And in fact the
 (7) way they referred to these shores was that they had been
 (8) ecologically stabilized
 (9) Q Now you said this was a particularly hard hit area Did
 (10) this place start to recover?
 (11) A Sure did
 (12) Q And when did the recovery begin?
 (13) A Probably in the fall of 1989 but I wasn't there But by
 (14) the spring and summer of 1990 other marine scientists were
 (15) there and took pictures of a rock the same rock that you saw
 (16) the guy sitting on knee deep in oil It's in this area right
 (17) here
 (18) Q All right Let me show you a July 10th 1990 photo and
 (19) it's DX14003 4 What does this show?
 (20) A This shows a piece of the rock surface and what you can
 (21) see is oil basically bare rock there before now has a lot of
 (22) these little yellow things on them and those little yellow
 (23) things are young rockweed plants that probably settled out in
 (24) the fall but maybe in the spring of 1990 and have grown about
 (25) that high since that time

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- (1) Down here is where the red algae live and what you are
 (2) looking at here isn't the same type of red algae that you saw
 (3) at Passage Point you see it's mainly springy and hairy and
 (4) this is what we called a filamentous red algae some filamentous
 (5) brown and these are typical species that first invade a bare
 (6) area in the intertidal zone
 (7) Q So this is after the oiling and after the treatment?
 (8) A It's about a year after the treatment
 (9) Q All right And what's this down here is that oil?
 (10) A That's water
 (11) Q Why does it look black?
 (12) A Because of the shadow of the rock and it's very difficult
 (13) particularly because it looks like it was a rainy or cloudy
 (14) day it's very difficult to take pictures of the water and not
 (15) make it look like there's sheen on it It's a difficult
 (16) photographic thing to do
 (17) Q July 2 1993 picture DX1077AA Tell the jury what this
 (18) shows
 (19) A This is that same spot You can see a little lump on the
 (20) spot where all those little rockweed plants were at They've
 (21) grown up and they have become numerous They have
 (22) covered the
 (23) shore We've got mussels we've got barnacles we've got most
 (24) but not necessarily all of the red algae down here at the
 (25) bottom of the tide zone This is a place that for all intents
 (26) and purposes is back to normal

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- (1) Q And I still see black I see black here and here and here
 (2) and here and here (indicating) is that oil?
 (3) A In some instances you are seeing the shadow of the
 (4) rockweed and in others you're looking at blue mussels
 (5) Q So in your opinion this heavily oiled location had
 (6) recovered by July of 1993?
 (7) A For all practical purposes yes
 (8) Q All right I show you a July 12 1994 picture after we
 (9) get down all of these DX13300 1
 (10) Is this what it looks like today?
 (11) A This is a picture that I took about three weeks ago from as
 (12) close as I could The vantage point of the picture that was
 (13) taken in July of 1989 to show that area today as opposed to
 (14) what it was like in 1989
 (15) Q Is there still oil at this site?
 (16) A This is some sheen that we saw under - coming out from
 (17) under a large rock there approximately this location When I
 (18) was looking for critters to take the picture I turned over a
 (19) lot of rocks in the lower parts of beaches around here the
 (20) only place I saw any sheen was right there
 (21) Q Does the fact that there was a little oil here mean that
 (22) the plants and animals did not proffer?
 (23) A Not at all There's some oil some very small amount
 (24) that's being released at a very slow rate and in an amount
 (25) that's not going to cause any difficulties for these plants or

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- (1) animals that live around here
 (2) Q As the years go by and what oil is left where it is does
 (3) it have the same effect?
 (4) A No As I'm sure Dr Page told you the toxicity of oil is
 (5) reduced steadily through various natural processes that the
 (6) things that occur to it as it exists in the environment and
 (7) this oil whatever amount there is still present on this little
 (8) rocky island is a lot less toxic than it was in 1989 and a
 (9) heck of a lot less of it So that any effects that - that
 (10) this little bit of sheen coming out here might have basically
 (11) in an ecological sense are inconsequential
 (12) Q When you visited this place in 1994 was it back to normal?
 (13) A As far as I'm concerned it was
 (14) Q And why do you say that?
 (15) A Again because we found the kinds of critters and in the
 (16) kind of abundances that we would expect to find in a sheltered
 (17) bedrock location like this
 (18) Q Did you go to this heavily oiled then cleaned then left
 (19) alone area in 1994 and try to take pictures of critters?
 (20) A I did
 (21) Q I'm going to show you DX13300 2 through 35 Tell the jury
 (22) what you found at this location
 (23) MR BROWN This is page 6
 (24) A What I found - sorry
 (25) This picture is taken right over here and it shows a very

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- (1) healthy growing
 (2) BY MS SMITH
 (3) Q Everybody pack up all their stuff
 (4) Go ahead
 (5) A Shows a very healthy growth of rockweed occurring in this
 (6) location
 (7) Q This -
 (8) MR BROWN This is page 9
 (9) A This picture was taken somewhere in this region and it
 (10) shows blue mussels shows barnacles and these are very
 (11) young
 (12) rockweed plants growing up here only about this high These
 (13) mussels are probably an inch longer or little bit more so I
 (14) got pretty close to them
 (15) And also if your eyes are very good you will see some
 (16) smaller black dots which are juvenile limpets these that crawl
 (17) across the surface and eat algae
 (18) MR BROWN This is page 25
 (19) A Here we have another blue mussel having a bad afternoon
 (20) And we have this - this barnacle drill sitting on him
 (21) drilling a hole in his shell And you can see that on the
 (22) shell of that the barnacle drill who himself is no more than
 (23) say an inch and a half long are a couple of hitch-hikers and
 (24) these are young snails that have just recruited into the
 (25) environment
 (26) These little dots oval dots here the black probably 20

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- (1) of them in this picture are young limpets that are probably a
 (2) quarter of an inch long or smaller that have settled into this
 (3) area in very large numbers
 (4) MR BROWN This is page 28
 (5) A This was taken in this region the top of this ridge We
 (6) see rockweed we see barnacles and what we should be seeing
 (7) is
 (8) that there are some of these barnacles are brownish and they re
 (9) small That s as big as they re ever going to get They re a
 (10) barnacle that s typical of the uppermost part of the tidal
 (11) zones These are barnacles that are more typical of the lower
 (12) part of the barnacle zone (indicating) and you can see there
 (13) are both small brown barnacles and small whitish barnacles
 (14) These are the larvae of those two species that have
 (15) reconstituted into this area And it s important that we
 (16) notice that these larger barnacles are there because they are
 (17) the barnacles that are typical of undisturbed or recovered
 (18) rocky shores whereas these little brown barnacles are brown -
 (19) are more opportunistic You can think of them as the weeds of
 (20) the ocean They are very resistant They reproduce very
 (21) fast This is why they can occupy the uppermost part of the
 (22) tide zone They aren t as good competitors for space as these
 (23) bigger barnacles so as they recovered these little brown guys
 (24) got pushed up into the upper part of the tide zone
 (25) MR BROWN This is page 30
 (26) A This is a picture also taken in this region which probably

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- (1) MR BROWN Page 32
 (2) A And two more species of stars got a barnacle drill We ve
 (3) got a lot of young limpets in this picture and the eggs of
 (4) some kind of snail very probably are attached to the rock in
 (5) this location
 (6) MR BROWN Page 35
 (7) A This is yet another species of starfish attached - sitting
 (8) on the rock surface with a lot of young limpets in this
 (9) picture
 (10) MR BROWN Page 24
 (11) A This is a chiton that we found back in here right down
 (12) near the bottom of the tide zone
 (13) MR BROWN Page 21
 (14) A Peanut worm also found underneath one of these rocks and
 (15) down here is a little critter that you wanted to see It s
 (16) very small It s about the size of a grain of rice If you
 (17) turn over decaying sea wood at the top of the beach sometimes
 (18) you ll see all sorts of little bugs things humping around
 (19) They re beach fleas all anthropods They tend to be very
 (20) sensitive to the effects of oil spills
 (21) And here we have - there were a lot of anthropods present
 (22) at the location In this picture is one
 (23) MR BROWN Page 19
 (24) A Some crabs we found around under a rock and another
 (25) anthropod that happened to be here when he took this picture

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- (1) shows an area quarter of the size of a dollar bill And as you
 (2) can see the adult barnacles they look sort of brownish
 (3) yellowish and that s because these microscopic algae that are
 (4) growing on their surface you can see the little guys in there
 (5) have recruited into this place you can see a very large number
 (6) of young snails and a - that s another snail okay
 (7) MR BROWN This is page 17
 (8) A Here is a sunflower star that we found oh probably ten or
 (9) 15 yards behind where I m standing when I took this picture
 (10) And you notice that he s missing one arm This isn t on
 (11) account of there was oil there or it did have a mutation or
 (12) anything it had a close encounter of the uncomfortable kind
 (13) with a seagull and though seagulls are very fond of star
 (14) flowers and if he s lucky and is left alone will grow a new
 (15) arm
 (16) MR BROWN This is page 5
 (17) A This is a weathered sea star that we found approximately
 (18) this location (indicating) The occurrence of this star is
 (19) important because in trustees studies carried out in 1990
 (20) this was one of the species that was declared as yet
 (21) unrecovered and what I have to tell you is that at this
 (22) location this was by far the commonest of all the sea stars
 (23) that we found in 1994
 (24) MR BROWN Page 16
 (25) A This is again an ocher sea stars

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- (1) I didn t realize he was there until we blew it up
 (2) MR BROWN This is page 20
 (3) A This is other type of crab found underneath the rocks and
 (4) one of these intertidal fish And I have to tell you that
 (5) this - if you want intertidal fish this is the place to go
 (6) As you turn over these rocks there s at least two of them
 (7) under every one and sometimes three and four
 (8) MR BROWN This is page 33
 (9) A Picture of another part of the rock surface All these
 (10) little oval things are young limpets and this critter here
 (11) is - has no common name It s called an isopod and I think
 (12) of it as a crustacean that kind of got squished from top to
 (13) bottom and they re flat and hold onto the rock real good
 (14) Very common but no one was gotten around to giving them a
 (15) common name
 (16) MR BROWN Page 34
 (17) A Again we have barnacles a big old limpet here some
 (18) smaller limpets and some younger barnacles that have set
 (19) somewhere up near the top of the intertidal zone
 (20) MR BROWN Page 22
 (21) A Picture of a small shrimp like animal we found underneath
 (22) the rock I believe it s called a broken back shrimp for
 (23) obvious reasons
 (24) MR BROWN Page 23
 (25) A I told you about hermit crabs that occupy the shells of

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- (1) other animals This is another species and this one occupies
- (2) periwinkle shells
- (3) MR BROWN Page 7
- (4) A This is a jellyfish
- (5) BY MS SMITH
- (6) Q It's a fried egg?
- (7) A No it's a jellyfish It is floating on top of a neo (ph)
- (8) grass bed which occurs off the shore of the island right about
- (9) here (indicating)
- (10) MR BROWN Page 3
- (11) A This is another type of sea anemone that also occurs in
- (12) that neo grass bed and shows you how important water is to
- (13) anemone
- (14) MR BROWN Page 15
- (15) A Here is a picture of the filamentous green algae and you
- (16) can see it looks like it's got little black acne Every one of
- (17) those is a larval mussel
- (18) MR BROWN Page 27
- (19) A And I have a picture of a rockweed plant and you see
- (20) there's little it looks like it has black acne These are
- (21) tiny snails that have recruited out of the water onto this
- (22) rockweed
- (23) MR BROWN Page 26
- (24) A You have a close-up picture of some mussels some small
- (25) snails but the best - most important part of this picture is

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- (1) that this rockweed looks like it's got pimples and each one of
- (2) these is a sexual organ of the rockweed and it is - what it
- (3) shows is it is reproductive and is producing young rockweed
- (4) plants
- (5) MR BROWN Page 11
- (6) A And the view looking down into the subtidal zone in another
- (7) portion of this little rocky islet and you can see there's a
- (8) very dense kelp bed living down there
- (9) BY MS SMITH
- (10) Q You've showed us what critters you found in a lightly oiled
- (11) place and you've shown us what critters you found in a heavily
- (12) oiled place What's the difference?
- (13) A Very little About the only major critter that we couldn't
- (14) find on the rocky islet was this sea spider And the reason we
- (15) couldn't I'm confident is the fact that the tide was a little
- (16) bit higher when we got here and we couldn't get at the lower
- (17) part of the intertidal zone where these folks live
- (18) MS SMITH This would be a good place
- (19) THE COURT I'll let you go for the day Remember
- (20) don't talk to anybody about the case and don't form or express
- (21) any opinion about the case See you tomorrow
- (22) MR STOLL Could we take something up with the Court
- (23) for just a second at the bar
- (24) (Bench Conference off the Record)
- (25) THE COURT Is there anything you're going to want to

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- (1) take up with me this afternoon?
- (2) MR DIAMOND I was going to read into the record some
- (3) exhibits
- (4) THE COURT You can do that later We can do that at
- (5) a later time
- (6) MR DIAMOND Yes but we have - well -
- (7) MR PETUMENOS We were not able to resolve in the
- (8) least the Clanton report We will require a hearing I don't
- (9) know when counsel is expecting the witness to testify but if
- (10) the material that is covered by the - by the witness that I am
- (11) seeking an occlusion of is voluminous and enormous I had
- (12) tentatively talked to Mr Oppenheimer about going it tomorrow
- (13) afternoon but I'd like to do it as quickly as possible because
- (14) there is so much material there and so much preparation time
- (15) THE COURT When is the witness going on?
- (16) MR OPPENHEIMER I anticipate he will go on at the
- (17) beginning of the week
- (18) THE COURT Do you know what I have tomorrow
- (19) afternoon? Find out what cases
- (20) By the beginning of the week you mean Monday?
- (21) MR OPPENHEIMER I think we anticipate Monday We'll
- (22) have the date tomorrow
- (23) (Jury out at 1 28 p m)
- (24) THE COURT The two of you are going to do it
- (25) Mr Petumenos and Mr Oppenheimer

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- (1) I have to talk to the jury about the federal verdict and
- (2) tell them not to consider it or look at consider any
- (3) information So I'm going to do that and I don't want you
- (4) there when I do that So if you'll wait for about - well
- (5) wait until you see the jury is gone and then you can come back
- (6) in we'll talk about when I can schedule this
- (7) MR OPPENHEIMER Wait outside?
- (8) THE COURT Yes you'll see when they go So you can
- (9) come up
- (10) THE CLERK Please rise This court stands in
- (11) recess
- (12) (Recess at 1 30 p m)

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- (1) STATE OF ALASKA)
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA)
- (6) I Marianne Y Lindley RPR CM a Registered
- (7) Professional Reporter and Notary Public
- (8) DO HERBY CERTIFY
- (9) That the foregoing transcript contains a true and
- (10) accurate transcription of my shorthand notes of all requested
- (11) matters held in the foregoing captioned case
- (12) Further that the transcript was prepared by me
- (13) or under my direction
- (14) DATED this 11th day of August 1994
- (20) MARIANNE Y LINDLEY RPR CM
- Notary Public for Alaska
- (21) My Commission Expires 8-21 95

Look See Concordance Report

UNIQUE WORDS 2,665
TOTAL OCCURRENCES
10,570
NOISE WORDS 385
TOTAL WORDS IN FILE
31,371

SINGLE FILE CONCORDANCE**CASE SENSITIVE**

NOISE WORD LIST(S)
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(1) IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (2) THIRD JUDICIAL DISTRICT
 (4) In re) Case No JAN 89 2533 Civil
) Anchorage Alaska
 (5) The EXXON VALDEZ) Friday August 12 1994
) 8 35 a m
 (6))
 (8) VOLUME 35 Pages 5434 through 5553
 (10) TRANSCRIPT OF PROCEEDINGS (Continued)
 (11) TRIAL BY JURY
 (13) BEFORE THE HONORABLE BRIAN C. SHORTELL
 Superior Court Judge
 (16) APPEARANCES
 (17) FOR THE PLAINTIFF
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 (9) JOY S. BRAUER RPR
 Registered Professional Reporter
 (10) Midnight Sun Court Reporters
 2550 Denali Street Suite 1505
 (11) Anchorage Alaska 99503
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(1) PROCEEDINGS
 (2) THE CLERK Please rise
 (3) (Call to Order of the Court)
 (4) MS SMITH Good morning Your Honor
 (5) THE COURT Going to be nice and cool today counsel
 (6) with no people in here
 (7) MS SMITH I had two things One s a procedural
 (8) matter one s a heads up And the heads up is that I intend to
 (9) ask Dr. Gilfillan about the Trustee s draft Restoration Plan
 (10) That s the list of unrecovered species that s been designated
 (11) for his cross and that the other two were asked about
 (12) THE COURT Could you please be quiet?
 (13) MR FORTIER Excuse me Your Honor
 (14) THE COURT Thank you
 (15) MS SMITH And I simply wanted to let you know that I
 (16) was doing that that he - the witness is in the room and that
 (17) he understands very carefully that he - and he is going to say
 (18) that scientists cannot participate in funding - I don t know
 (19) if these are - if there is no continuing Exxon Valdez oil
 (20) spill impact
 (21) THE COURT I see all right
 (22) MS SMITH And then I m going to read but not show
 (23) him a quote from Plaintiffs Exhibit 8003 and I just wanted to
 (24) advise counsel and the Court that I m deleting and I will not
 (25) indicate that I am deleting the word settlement so that it just

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(1) reads no impact no funding as opposed to no settlement
 (2) funding And I think that complies and my colleague
 (3) Mr. Diamond tells me that I didn t even have to come in and
 (4) tell you that but I didn t want everybody s antennae to jump
 (5) out.
 (6) THE COURT Mr. Diamond is not very often wrong but
 (7) he s wrong on this one You were right to bring it up
 (8) MS SMITH Well he s often wrong in other areas
 (9) MR DIAMOND I ll go with the Judge s ruling
 (10) MS SMITH And the other point is the procedural
 (11) point and I just wanted the Court to indicate its preference
 (12) The plaintiff designated 90 documents for Dr. Gilfillan s
 (13) cross and we have the usual objections to some of them and
 (14) very strong objections to a handful of them the kind that
 (15) would occasion a bench conference I - I propose that instead
 (16) of taking them up ahead of time we wait to see what they
 (17) actually use I don t think they re going to use 90 They
 (18) designated 63 for Neff and used five So my - I would just
 (19) like to indicate to the Court that we ve got a couple where we
 (20) will want to rush up before they go on and talk to you about
 (21) them but it doesn t seem to make sense to do them ahead of
 (22) time
 (23) THE COURT Yeah I think you re right All right
 (24) counsel it s on the record Is there any objection to the
 (25) proposed procedure?

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- (1) MR McCALLION Your Honor only to the issue of -
 (2) with regard to the portion of 8003 perhaps we could have a
 (3) page reference to that and perhaps the Court should view that
 (4) particular quote because -
 (5) THE COURT Yeah let's see it
 (6) Let the record reflect that Mr Oppenheimer is in the
 (7) courtroom I see that now the screen is gone
 (8) MR OPPENHEIMER And has been in the courtroom
 (9) MR DIAMOND Now he'll have to remain awake though
 (10) MS SMITH It's all expenditures of settlement funds
 (11) not to be limited to resource services and I'm just going to
 (12) say all expenditures of funds must be limited to resources and
 (13) services
 (14) THE COURT We can speak up Are you going to read
 (15) this whole paragraph?
 (16) MS SMITH No I'm just going to read that - I'm
 (17) just going to read - I'm going to say isn't it a fact that
 (18) the draft Restoration Plan provides that all expenditures of
 (19) funds must be limited to -
 (20) THE COURT The resources is that it -
 (21) MS SMITH That's all I'm going to read
 (22) THE COURT Counsel?
 (23) MR McCALLION Well Your Honor It raises the issue
 (24) of the funding of the Trustee Council matters which we thought
 (25) was an issue that would not be gone into We've been carefully

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- (1) here before the Court I think is - would lead to
 (2) inadmissible evidence or at least -
 (3) THE COURT Have you got a case for that proposition?
 (4) MR McCALLION - confusion of issues
 (5) THE COURT Do you have a case for that proposition?
 (6) MR McCALLION Not immediately available Your Honor
 (7) THE COURT I understand the issue counsel I'm
 (8) going to allow the questioning
 (9) Do you have anything else to put on the record? I think
 (10) this is a waste of time counsel This is clearly admissible
 (11) MR PETUMENOS All right Then I won't say
 (12) anything I can hear you
 (13) MS SMITH Thank you Your Honor
 (14) THE COURT Now do I have to do anything else before
 (15) we bring the jury in? I don't know if they're ready yet
 (16) MR PETUMENOS I saw them coming up in the elevator
 (17) Judge I think they are
 (18) THE COURT We have some time
 (19) MR STOLL I wasn't here yesterday when we had an in
 (20) chambers I thought we were done for the day and I -
 (21) THE COURT Counsel your side has to talk together
 (22) if you wanted to be here -
 (23) MR STOLL I understand that Your Honor I'm not -
 (24) but I waited for about 15 or 20 minutes and then everybody
 (25) said well he's not coming out again meaning you and so you

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- (1) limiting our examination to scientific findings by the Trustee
 (2) Council in order to contrast it impeach or compare it to that
 (3) of the Exxon - various Exxon scientists and experts This
 (4) would be opening up the area as to the funding of the program
 (5) which is while the dollar figure is not mentioned is an area
 (6) which we think has substantial possibility or probability of
 (7) confusion of issues under Rule 403
 (8) This is not related to impeachment or bias obviously
 (9) income of witnesses on the stand This is a - Ms Smith would
 (10) seek to offer to impeach Trustee Council scientists government
 (11) scientists both at the Federal and the State level through a
 (12) documentary entry I would think that that would be
 (13) inadmissible certainly on - on Ms Smith's or Exxon's -
 (14) Exxon's case
 (15) If there was a Trustee Council -
 (16) THE COURT On what theory counsel?
 (17) MR McCALLION Well if there was a Trustee Council
 (18) scientist for example on the stand I think that might be a
 (19) proper area for impeachment. However -
 (20) THE COURT You mean one scientist is not allowed to
 (21) comment on the credibility of another scientist's report?
 (22) MR McCALLION One scientist I think - and there
 (23) has been a healthy debate over the various scientific issues
 (24) and methodologies engaged in by the scientists but for one
 (25) scientist to impeach the credibility of scientists who are not

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- (1) might as well leave so I left
 (2) THE COURT I see In other words you didn't get to
 (3) raise something you wanted to raise?
 (4) MR STOLL Well I didn't know you were going to get
 (5) into all this business about all these other spills and I
 (6) guess there's going to be a hearing on Monday about that
 (7) THE COURT Yes
 (8) MR STOLL So I can just wait till Monday on that
 (9) But -
 (10) THE COURT Yes
 (11) MR STOLL - was a decision - just curious I'm not
 (12) advocating anything right now Has a decision been made as
 (13) to
 (14) whether your - Ms Swangler's going or -
 (15) THE COURT Well my position is I think we'll have
 (16) 12 jurors at the end of this case so I'm going to let her go
 (17) MR PETUMENOS Judge I have a request in that
 (18) regard I don't know - I understand the issue we're going to
 (19) go forward next week is decided Do we know or is it worth
 (20) inquiring of Ms Swangler whether or not in view of the Court's
 (21) concern that we go and get the case done for the other jurors
 (22) whether her current plans are different or whether she's able
 (23) to serve?
 (24) THE COURT It is worth inquiry and I certainly will
 (25) do that
 (26) MR PETUMENOS Thank you Judge

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- (1) THE COURT Was there some exhibit problem or are we
 (2) ready?
 (3) MS SMITH We re ready
 (4) THE COURT Just see if they re there Can t you call
 (5) Scarlet?
 (6) THE CLERK She s not there
 (7) THE COURT Call JoAnna They re on their way down
 (8) MR STOLL Your Honor could I be heard on this?
 (9) MS SMITH No we argued this In fact I ll go back
 (10) and get the record at length We reached an agreement -
 (11) MR STOLL You re the Judge?
 (12) MS SMITH No I m not
 (13) THE COURT Counsel speak to me please
 (14) MS SMITH How many times are we going to argue this
 (15) thing?
 (16) MR STOLL Your Honor I did a little inquiry on my
 (17) own on this -
 (18) THE COURT Marianne don t let them in
 (19) MR STOLL - on this Trustee thing when this came up
 (20) earlier in the week I didn t know it was going to be argued
 (21) this morning apologize to the Court I made some inquiry on
 (22) this There arguably could be an argument made that a
 (23) particular scientist who was going to conduct a study in the
 (24) field could have an interest a bias because he - if he is
 (25) going to - he s going to ask for money and, therefore he s

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- (1) going to do it
 (2) The problem is with the position as I understand the
 (3) position that the defendants are taking is that the
 (4) implication is that everybody that has anything to do with the
 (5) Trustee Council is biased And I don t think - that clearly
 (6) is not the case I first of all question first premise but
 (7) even assuming that they can show that which I think that they
 (8) probably could if they could show that some guy was - in the
 (9) case of the reports the reports are written by the Trustees
 (10) They re not written by the scientists with the exception of
 (11) the five year plan letter which is written by Dr Spies Dr
 (12) Spies gets paid whether there is a laboratory test going on
 (13) about X or Y or anything else He is a peer reviewer
 (14) reviewing other studies Same thing with Dr Peterson and
 (15) Dr Mundy They are not out there in the field doing things
 (16) Now Dr Kocan on the other hand is a person that is in
 (17) the field doing laboratory stuff and he goes and he says I
 (18) propose a program, and under their theory they could say,
 (19) well Dr Kocan is biased because if he finds a problem then
 (20) he s going to get - he may get paid He makes an application
 (21) for a proposal and then if the Trustee Council makes a
 (22) determination that they should do that then he can get -
 (23) he ll get some pay But none of the other people are in that
 (24) category And the Trustees which is what the report says
 (25) it s not the individual scientists it s the Trustees The

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- (1) Trustees are government employees It doesn t matter whether
 (2) they re studying herring or studying rock fish or any other
 (3) particular item and I think that when you - to permit
 (4) evidence that suggests without any basis that all - anything
 (5) touched by the Trustee Council is therefore - that there s
 (6) evidence of bias there s no basis for that I mean no basis
 (7) at all
 (8) THE COURT You don t think that it s a basis for
 (9) impeachment of an expert that there s a pot of money out there
 (10) and the expert is pursuing it?
 (11) MR STOLL Oh no I think that there is for an
 (12) expert My - my - and I - I think that if they wanted to
 (13) say that an expert if the experts that we ve called I believe
 (14) that the only one this would fit the category for would be
 (15) Dr Kocan who has been funded by them
 (16) THE COURT So you draw a distinction between -
 (17) MR STOLL It s a foundation
 (18) THE COURT Wait wait counsel You draw a
 (19) distinction between an expert who s on the stand and an expert
 (20) report which is a product of a number of different minds but
 (21) may have been influenced by a pot of money that s out there?
 (22) MR STOLL Well I think that it is so
 (23) tangential (sic) Here s what you have to -
 (24) THE COURT That conjures up a picture
 (25) MS SMITH Tangential

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- (1) THE COURT Did you get that? No not tan-general
 (2) The court reporter is a diplomat but I don t want her to be in
 (3) this instance
 (4) MR STOLL Your Honor we ve got a report written by
 (5) the Trustees The Trustees talk to obviously a lot of people
 (6) In the first place find that there is any kind of bias maybe
 (7) I could - could I just draw something here?
 (8) THE COURT No no counsel Get to it quick I m
 (9) getting tired of this
 (10) MR STOLL Okay Your Honor the fact that there is a
 (11) field scientist down in the - on one project down here that
 (12) is taking a position that there is a big problem out there
 (13) because he s going to get paid or he may get paid that s
 (14) basically the argument if he finds a big problem then he
 (15) may - he may get paid that s one issue If they can - if
 (16) they have evidence of that I don t think they do But let s
 (17) assume that that s the case That is a different situation
 (18) than having a group of government people that are two levels
 (19) later because between that person there is a - a bunch of
 (20) peer reviewers scientists and they get paid not whether that
 (21) project is going or not going they get paid to advise the
 (22) Trustee Council They re there it s not - it doesn t effect
 (23) whether this person down here finds something so then you ve
 (24) got the Trustee Council above that So the Trustee Council
 (25) the reports that we ve been quoting from are reports from the

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- (1) Trustee Council they're not reports from this guy down here
 (2) If they want to say there's some report from Dr. Kocan or Dr.
 (3) Kocan or some other person I don't mean to pick on Dr. Kocan
 (4) I don't think it's applicable to him either let's just for the
 (5) sake of discussion say it applies to him
 (6) The fact that if they want to pick on some report of
 (7) Dr. Kocan to say he's biased and the reason he's doing this is
 (8) because he's trying to get some money from the Trustee
 Council
 (9) have at it But that is a completely different situation than
 (10) saying that the Trustee Council as a council has some bias
 (11) because Dr. Kocan might I mean that is so far removed there
 (12) is no - no basis of any - of making that suggestion There's
 (13) got to be -
 (14) THE COURT So your objection is a Rule 403 objection
 (15) right?
 (16) MR. STOLL Yes
 (17) THE COURT The objection is overruled I can't say
 (18) it any more strongly than I already have You have two -
 (19) counsel, please when I am talking, you listen to me
 (20) MR. PETUMENOS I apologize
 (21) THE COURT Because the last time you didn't listen
 (22) and I had to listen to this extra argument
 (23) MR. PETUMENOS Judge I apologize
 (24) THE COURT Both of you look right straight at me
 (25) I've had two opportunities to listen to this argument

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- (1) Mr. McCallion made it and Mr. Stoll didn't listen to it now
 (2) Mr. Stoll has made it It's not a winner I'm going to allow
 (3) the questioning You have to live with that ruling
 (4) Now are we ready?
 (5) MR. PETUMENOS I'm going to live with the ruling
 (6) Judge We have not properly articulated the objection and I
 (7) think we failed the Court I don't want to get you yelling at
 (8) me but I think the objection has not been properly framed
 (9) even though two lawyers have spoken to you I can do it in a
 (10) sentence just so I can - for the record to preserve the
 (11) record even if you slap me down
 (12) The objection is foundation They had the opportunity to
 (13) examine the Trustee witnesses who could have explained the
 (14) exhibit and explained all of the things that Mr. Stoll stated
 (15) when they had those witnesses on the stand This document
 was
 (16) not created by these witnesses That explanation can't be
 (17) given and it's - you have sustained repeatedly examinations on
 (18) documents like this when the - when the witness was on the
 (19) stand talking about them could not lay the foundation so we
 (20) can't get the explanation to the jury that we could have gotten
 (21) had the - had the document been properly -
 (22) THE COURT You can't get the explanation to the
 (23) jury?
 (24) MR. PETUMENOS This witness is not going to concede
 (25) the points that Mr. Stoll made because this witness can't lay

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- (1) the foundation for the exhibit that's being used which is a
 (2) Trustee document where the witness could explain if it was a
 (3) proper foundation
 (4) THE COURT I understand your objection The
 (5) objection is overruled
 (6) (Jury in at 8:50 a.m.)
 (7) THE COURT All right the jury is present
 (8) MS. SMITH Good morning It's Friday
 (9) DIRECT EXAMINATION OF EDWARD GILFILLAN (Cont'd)
 (10) BY MS. SMITH
 (11) Q Dr. Gilfillan your critter boards with all those cuddly
 (12) chitons amphipods and stars you compared a lightly oiled site
 (13) to a heavily oiled site Is that right?
 (14) A That's correct
 (15) Q And you found that the same critters were present same
 (16) kinds of critters were present in both?
 (17) A That is correct.
 (18) Q All right Now, how do the critters at oiled sites compare
 (19) to critters at never oiled sites?
 (20) A They're the same critters
 (21) Q Okay You've told the jury that by the summer of 1990 73
 (22) to 91 percent of the intertidal zones of the Sound had already
 (23) recovered?
 (24) A Yes I did say that.
 (25) Q And it's all back to normal now?

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- (1) A I believe so
 (2) Q All right What about the Kenai and Kodiak the oiled
 (3) shorelines recovered there?
 (4) A We did not have the resources or the information to carry
 (5) out a study in the Kenai and on the Kodiak area like we did in
 (6) Prince William Sound We just didn't have the mapping So
 (7) what we did was to fall back to the next best thing which is
 (8) to pick sites that are as comparable as possible to areas - to
 (9) the surrounding areas and study them
 (10) And what we found was that the oil that went out to the
 (11) Kenai was a lot less toxic and - into Kodiak and the Alaska
 (12) Peninsula was a lot less toxic than the oil that was in Prince
 (13) William Sound because it had been on the sea surface for a time
 (14) and much of the toxic component had evaporated
 (15) What we also found was that the distribution of oil out on
 (16) the Kenai and in Kodiak was much spottier than it was in Prince
 (17) William Sound
 (18) Q All right - I'm sorry go ahead
 (19) A And by the summer of 1990 when we did - carried out our
 (20) investigation we could find no differences between our
 (21) references on exposed areas with regard to the number of
 (22) species present, the number of individuals present and this
 (23) derived concept of diversity that the ecologists talk about
 (24) Q Derived concept of diversity that ecologists talk about?
 (25) A Yes It is a measure of what we call biodiversity

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- (1) Q All right And you scientists always use the term
 (2) reference site Just tell the jury what that means
 (3) A A reference site - I'm sorry sometimes I sort of slip
 (4) into scientific-ese Our reference site is an area similar
 (5) to the area that we were studying but it had never been oiled
 (6) Q If the intertidal zone is healthy can it supply the food
 (7) and services that other critters need?
 (8) A It certainly can
 (9) Q Now the initial effects of an oil spill are pretty
 (10) terrible aren't they?
 (11) A They sure are You go out to a place that's just been
 (12) oiled and it's a very humbling experience You go out there
 (13) and there are these animals that you care about that I care
 (14) about that we humans have a lot of empathy for like the
 (15) otters and the birds that are dead and dying and it would
 (16) take a very very calloused person indeed not to be moved by
 (17) that experience
 (18) In fact when I went to the Sound in July of 1989 and I
 (19) went to the rescue centers I was moved and I thought this was
 (20) a terrible tragedy that had occurred to these animals I think
 (21) that it's important to know - to know that those animals that
 (22) died either have been replaced or are in the process of being
 (23) replaced
 (24) Q How is it that recovery happens so fast here?
 (25) A I think recovery happens so fast because this group of

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- (1) animals and plants that lives in Prince William Sound and out
 (2) along the Gulf of Alaska coast is one which has evolved in the
 (3) face of disturbance and so therefore it was a community of
 (4) animals and plants that was prepared through its evolutionary
 (5) history to deal with disturbance and the oil spill was a
 (6) disturbance and it dealt with it the same way as it does a bad
 (7) winter
 (8) Q Are you familiar with James Mielke's theory of the two
 (9) lives of an oil spill?
 (10) A Yes I am
 (11) Q And is he a marine specialist with the congressional
 (12) research service of the Library of Congress?
 (13) A He is
 (14) Q What's his theory?
 (15) A His theory is that basically there are two phases to an oil
 (16) spill and the first phase is the one that I just spoke to you
 (17) about When you're there it's a major media event there are
 (18) tragic scenes all around you and it is a very humbling and
 (19) moving experience
 (20) After that what I would call the acute phase of the oil
 (21) spill passes and you get into what both he and I would call the
 (22) scientific phase then you start investigating the ecosystem
 (23) that was affected and you determine the rate of - and
 (24) processes whereby it is recovering
 (25) Q Okay and has your experience borne out his theory?

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- (1) A Yes I can recall going to the coast of France in April of
 (2) 1978 It was about five weeks after the Amoco Cadiz ran
 (3) aground and going to a marsh that was about a hundred acres
 in
 (4) area the only large marsh in the area and it looked like the
 (5) surface of the moon and it was almost impossible to believe
 (6) that that place was going to recover but I've seen places like
 (7) that before that did recover and it did too
 (8) Q Who are the scientists for the Trustees?
 (9) A These are people that are contracted with by the Trustee
 (10) Council and who propose work to the Trustee Council and
 receive
 (11) funding from the Trustee Council
 (12) Q And they do their science and they put together data and
 (13) reports?
 (14) A They do
 (15) Q And you've reviewed the data from their studies of critters
 (16) who live in the intertidal zone?
 (17) A Yes I have
 (18) Q And you've spoken directly to some of these scientists?
 (19) A I have
 (20) Q Now, the Trustees draft Restoration Plan that Mr Stoll
 (21) showed to Jerry Neff is that a scientific study?
 (22) A No That is a document that was put together by the
 (23) Trustee Council in which they are soliciting proposals to
 (24) perform work by scientists
 (25) Q All right Is that what's known as an RFP?

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- (1) A Yes, it is a request for proposal
 (2) Q All right And it asks scientists -
 (3) MS SMITH Does anybody hear a whistling?
 (4) THE COURT Yeah
 (5) MR PETUMENOS I'm on it Judge
 (6) MS SMITH Yeah Thank you Come back in a minute
 (7) I thought we were summoned to the brink
 (8) THE COURT Well we are frequently so -
 (9) MS SMITH Sorry Back to the RFP
 (10) BY MS SMITH
 (11) Q The RFP asks scientists to submit proposals Is that right?
 (12) A Yes It does
 (13) Q Is it a contest?
 (14) A If the intentions of the people issuing the RFP are
 (15) fulfilled yes It is Because what you want to do is you like
 (16) to have a choice between various persons or organizations to
 (17) carry out any particular piece of work And basically, if you
 (18) have some choice the chances are good that you'll be able to
 (19) pick the best person to do the job
 (20) Q All right Have you seen the list in the draft plan of
 (21) what hasn't recovered?
 (22) A Yes I have
 (23) Q The Trustees Council lists the intertidal zone as not
 (24) recovered?
 (25) A They do

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- (1) Q Do you agree with that?
- (2) A I do not
- (3) Q Why not?
- (4) A Firstly I disagree with their definition of recovery
- (5) Q Let me show it to you Oops I do that all the time Let
- (6) me see if I can zoom out just a little bit
- (7) A Okay in the -
- (8) Q All right this - this is Plaintiffs Exhibit 8003 page
- (9) 27 Tell the jury about the Trustees definition of recovery
- (10) A In general resources -
- (11) Q I m sorry can I correct something? It s page B-4
- (12) MR McCALLION I m sorry?
- (13) MS SMITH It s page B-4 PX8003
- (14) A The definition of recovery starts on the second full
- (15) paragraph that I can see on the screen here And I would agree
- (16) with the first sentence in general resources and services
- (17) will have recovered when they return to conditions that would
- (18) have existed had the spill not occurred This basically is the
- (19) same definition that is used by the U S Federal Government
- (20) and
- (21) is the basic definition that we used in our shoreline study
- (22) Now the second sentence and subsequent sentences, I really
- (23) can t agree with what they say because it s difficult to
- (24) predict conditions that would have existed in the absence of
- (25) the spill Recovery is usually defined as return to pre-spill
- (26) conditions or to conditions comparable to those of non-oiled

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- (1) areas
- (2) It s kind of hard to understand what they re trying to say
- (3) here No good ecologist thinks that a community has some
- (4) preferred state and if it was in some state say on March
- (5) 23rd 1989 that today it would be in that same state this is
- (6) an outmoded theory which is commonly called the equilibrium
- (7) theory of communities and I have read reviews where
- (8) Dr Peterson was extremely critical of people who were wanting
- (9) to return to pre-spill conditions because in his words no
- (10) competent ecologist would expect that to occur and I certainly
- (11) agree with him
- (12) For resources that were in decline before the spill like
- (13) marbled murrelets say that fast three times recovery may
- (14) consist of stabilization of a population at some lower level
- (15) than before the spill
- (16) Well if you have a population of animals that - like the
- (17) marbled murrelets or other animals that are labeled as
- (18) unrecovered by the Trustees that are declining before the
- (19) spill they re declining after the spill I don t think it s
- (20) reasonable to expect them to stop declining just because we
- (21) had
- (22) an oil spill
- (23) Finally the factors to be considered when assessing
- (24) recovery include reproductive success growth survival rates
- (25) and the age and sex composition of the injured population
- (26) Again expecting to find that same distribution of age classes

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- (1) after the spill that was present before is not a reasonable
- (2) expectation You re going back to the equilibrium theory of
- (3) ecology that says you got to have some stable age distribution
- (4) and populations just aren t like that
- (5) Q Give us an example
- (6) A Okay People who ve been studying clams in Prince William
- (7) Sound have found a bed of clams and there are many beds of
- (8) clams that were uplifted by the great earthquake in 1964 and
- (9) all the clams died Now you can go to these ancient clam beds
- (10) and you can dig them up and you can find out what age
- (11) distribution of clams there was in that bed in 1964
- (12) Q All right in scientific-ese or whatever what s aged?
- (13) How old they are?
- (14) A I m sorry how many clams that were age one age two age
- (15) three up to however long clams live So you expect to find
- (16) the same number By this definition you would expect to find
- (17) if you had ten clams that were one year old and five clams that
- (18) were two years old and three clams that were three years old
- (19) and you come back and you don t see that the place is
- (20) unrecovered I don t think that s reasonable
- (21) And to take the example of the earthquake people go and
- (22) look at the - at the distribution of ages in the clams that
- (23) died as a result of the earthquake and then they go and they
- (24) look at the distribution of ages in clams in Prince William
- (25) Sound in the oil spill zone and they find that they re not the

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- (1) same And the claim is made well 30 years have passed and
- (2) these clams haven t recovered And I m a marine scientist and
- (3) I m thinking about this and what - what can effect the age
- (4) distribution of clams One thing is predation things eating
- (5) them There weren t sea otters in the Sound in 1964 It s not
- (6) reasonable to expect that the clam population would have the
- (7) same distribution of ages today that it did in 1964
- (8) Q Okay I go to a beach with my little boy and I see two sea
- (9) stars and being a bad person I take both of them and they re
- (10) 20 year old sea stars Does that mean that that beach is not
- (11) recovered under this definition until there s two more 20
- (12) year old sea stars at the beach?
- (13) A That s correct Under that definition you would have
- (14) damaged the beach and it would not recover until those 20 year
- (15) old sea stars were replaced with other 20 year old sea stars
- (16) Q All right I won t ask you to talk about whether I m a bad
- (17) person Are there any other reasons why you disagree with the
- (18) Trustees when they list on their list of what is and isn t
- (19) recovered particularly on the intertidal zone?
- (20) A I think there s a very serious issue here There is a
- (21) large amount of money available to do research on animals and
- (22) plants and services of the ecosystem that have been damaged
- (23) by
- (24) the Exxon Valdez oil spill The only way that this money can
- (25) be spent is for programs that have to do - or for scientific
- (26) research that has to do with resources that are suffering from

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- (1) continuing damage from the oil spill
 (2) Q Okay So in order to participate in the funding a
 (3) scientist has to show continuing injury from the oil spill?
 (4) A That's correct
 (5) Q All right Are you aware that the draft Restoration Plan
 (6) at page 10 provides that all expenditures of funds must be
 (7) linked to injured resources and services?
 (8) A Yes I am
 (9) Q And that's what you were just commenting on?
 (10) A That's what I was talking about
 (11) Q Are you aware that Dr. Peterson wrote the suggested
 (12) guidelines for intertidal restoration projects in 1992 and 93?
 (13) A Yes I am
 (14) Q And did he say and I quote continuing damages are
 (15) required as justification for 1992 1993 restoration funding?
 (16) A He did so say
 (17) Q And so he's saying no continuing injury no participation
 (18) in funding?
 (19) A That's correct
 (20) MR McCALLION Could I have a citation on that?
 (21) MS SMITH Let me give you two citations actually
 (22) His deposition January 11th 1994 at page 761 and DX14011
 (23) which I'm not offering but it's paragraph 4
 (24) BY MS SMITH
 (25) Q And do you have any other reasons why you disagree with
 the

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- (1) Trustees list of the intertidal zone as not recovered?
 (2) A Several reasons Firstly the extensive research that I've
 (3) carried out myself with others in Prince William Sound found
 (4) that 15 months after the oil spill from 73 to 91 percent of
 (5) the area originally in fact the area was indistinguishable
 (6) from reference In those other areas in the intertidal zone
 (7) where there were differences we had more critters more
 (8) species or higher biodiversity This is clearly a situation
 (9) whereby 15 months later the ecosystem had largely recovered
 (10) and what was left to have happen was for natural biological
 (11) processes and competition and predation to bring about a
 (12) balancing of the species of distributions And looking at the
 (13) work of other scientists who were working in some of the worst
 (14) areas such as Northwest Bay that we saw yesterday, they've
 (15) reached the conclusion that even in those most heavily
 (16) damaged areas that the recovery was virtually complete by 1993
 (17) Q And do you feel that based on your own research and work in
 (18) the Sound and Kenai and Kodiak that the intertidal zone has
 (19) recovered?
 (20) A I believe so
 (21) Q You know intertidal zones?
 (22) A I think so
 (23) Q All right Let's go - let's turn to something else
 (24) Let's talk about natural variability and what I want to talk
 (25) is fucus Let's talk fucus

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- (1) In the pictures of Northwest Bay that we saw the
 (2) critter - the second critter board there was less fucus in
 (3) 1994 than 1993 Is this a delayed oil spill effect?
 (4) A I certainly don't believe so
 (5) MR McCALLION Objection Your Honor leading
 (6) THE COURT Okay
 (7) BY MS SMITH
 (8) Q Okay was there less fucus in 1994 at Northwest Bay than in
 (9) 1993?
 (10) A Yes there was
 (11) THE COURT Counsel that was more leading than the
 (12) first one But I'm going to give you those two all right? No
 (13) more leading
 (14) BY MS SMITH
 (15) Q All right Is this a delayed oil spill effect?
 (16) A I don't think so
 (17) Q And why not?
 (18) A Because there's a perfect - examining the fucus that was
 (19) present at Northwest Bay three weeks ago when I was there I
 (20) observed that there were plants that were blackened there
 (21) were
 (22) plants that had kind of shriveled up and plants that had
 (23) basically lost the fleshy blade that they have and this I know
 (24) from experience is an indication that the plants are becoming
 (25) senescent Just like you and I get old probably I faster than
 you then maybe lose some vigor seaweeds have - rockweed has

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- (1) a finite lifetime and when it's lived that lifetime it
 (2) becomes senescent and it dies and it is replaced by other
 (3) rockweed And what I am seeing what I was seeing at
 Northwest
 (4) Bay three weeks ago were a lot of very small young rockweed
 (5) plants coming in in the barer areas and the remains of
 (6) senescent older plants that were there This is a natural
 (7) phenomena and it happens all the time in areas that were not
 (8) affected by oil
 (9) Q All right I'd like to show you an exhibit It's
 (10) DX861AA You come down I'll get the - did we end up with a
 (11) pointer Ed after all this?
 (12) A We did
 (13) Q What is this?
 (14) A This is a photograph of a section of rock in the upper part
 (15) of the rockweed zone in a place called Crab Bay that was taken
 (16) in 1989 Now there's two important things you want to know
 (17) One is that Crab Bay was never oiled Secondly that the way
 (18) marine scientists oftentimes look at the amount of critters
 (19) that are present in a place is to take a photograph of a
 (20) particular place on the rock that you can - you can relocate
 (21) accurately and compare successive photographs with one
 (22) another And that was the aim of the investigators that took
 (23) this picture
 (24) And what you can see in this picture is that a lot of the
 (25) rockweed looks pretty healthy It's nice and yellow it's

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- (1) fleshy you can see the leaves - not leaves it's called a
 (2) thallus - is fine Other rockweeds here you can see are dark
 (3) in color and the fleshy part is beginning to decay away and
 (4) these are senescent plants They're plants that are dying of
 (5) old age
 (6) Q All right I show you DX0862AA
 (7) MR McCALLION Your Honor if the last exhibit is
 (8) being offered I would wish to voir dire on the foundation
 (9) Your Honor
 (10) MS SMITH They all will be offered at the end of -
 (11) at the end of the segment And -
 (12) MR McCALLION I would wish to question as to the
 (13) foundation really for all the photographs Your Honor
 (14) Particularly those not taken by the Doctor
 (15) THE COURT You want to do it now?
 (16) MR McCALLION If I could just ask a couple of
 (17) questions
 (18) THE COURT You got five minutes
 (19) MR McCALLION Doctor referring to - let me just
 (20) get the number here that's 861AA?
 (21) MS SMITH Ken we have one more should we put it up
 (22) so you can do them all?
 (23) THE COURT That's probably a good idea
 (24) MS SMITH It's a sequence It's 863AA
 (25) MR BROWN Did you want to finish your discussion?

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- (1) MS SMITH No, I think the Judge is permitting
 (2) cross - voir dire on these three
 (3) MS SMITH Chuck could you change that one with this
 (4) one so they're in age time order? No the one in the middle
 (5) It's hard to get good help
 (6) VOIR DIRE EXAMINATION OF EDWARD GILFILLAN
 (7) BY MR McCALLION
 (8) Q Doctor did you take these photographs?
 (9) A I did not
 (10) Q Did you conduct any investigation in Prince William Sound
 (11) in 1989?
 (12) A I visited the shore - shorelines in Prince William Sound
 (13) I carried out no detailed scientific investigation
 (14) Q You visited there when was that?
 (15) A Would have been toward the end of July and again in
 (16) August
 (17) Q You did not conduct any scientific tests in 1989?
 (18) A I'm not sure I'd agree with that
 (19) MS SMITH Are you referring to Crab Bay? You don't
 (20) want to hear about the Shoreline Ecology Program you're
 (21) limiting your questions to Crab Bay
 (22) BY MR McCALLION
 (23) Q Did you visit Crab Bay?
 (24) A I don't know if I did or not I'd have to consult my
 (25) notes

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- (1) Q Where did these photographs come from?
 (2) A These photographs came from investigators that were in
 (3) 1989
 (4) working for Exxon and in subsequent years were working for the
 (5) National Oceanic and Atmospheric Administration amongst
 (6) others
 (7) Q That's Dr Houghton is that correct?
 (8) A And Dr Lee
 (9) Q They're with the Pentec organization?
 (10) A Yes
 (11) Q And do you know where these photographs were taken in
 (12) Crab
 (13) Bay specifically?
 (14) A I know that I have a map that shows where they are I'm
 (15) not sure I could put a spot on the map right this second What
 (16) I do know is that these photographs were taken by investigators
 (17) using normal scientific means for relocating their positions
 (18) the kind of things that scientists do all the time These
 (19) folks went out there they located this place in 1989 they
 (20) located their so-called transect they located the position of
 (21) this thing called a quadrant and they went back to the exact
 (22) same place put the quadrant in the same place took a picture
 (23) in 1991 and went back in the exact same place and took
 (24) another
 (25) picture in 1993
 (26) Q Did you yourself perform any tests in Crab Bay in any
 (27) year?
 (28) A I don't think so

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- (1) Q Now you yourself have no personal information as to
 (2) whether Crab Bay was oiled in 1989 is that correct or not?
 (3) A Certainly I do
 (4) Q You visited Crab Bay in 1989?
 (5) A No I have the oiling maps and none of the oiling maps by
 (6) any of the parties show that there was ever any oil in Crab Bay
 (7) at any time
 (8) Q Well are you aware Doctor that the plaintiffs have
 (9) information that Crab Bay was oiled in 1989?
 (10) A Not that I've seen
 (11) Q You have not reviewed then anecdotal information of
 (12) oiling at Crab Bay in 1989 is that correct?
 (13) A Well I think I'd like to talk to you about what
 (14) Dr Peterson had to say about anecdotal evidence in some of
 (15) the
 (16) reviews
 (17) Q Well that -
 (18) MS SMITH You asked
 (19) THE COURT No I'm not going to get into an argument
 (20) between witness and counsel at this point Prefer that he
 (21) simply respond to counsel's questions sir
 (22) THE WITNESS I do not believe that anecdotal evidence
 (23) is acceptable scientific evidence of things that have
 (24) occurred
 (25) BY MR McCALLION
 (26) Q The question Doctor is whether you're aware or have you

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- (1) reviewed anecdotal information of the plaintiffs relating to
 (2) the oiling of Crab Bay in 1989?
 (3) A I would think the question if you want to go to the
 (4) substance is if anecdotal evidence is not acceptable
 (5) scientific evidence by my view and many others then why
 would
 (6) I review it
 (7) MS SMITH So your answer to the question is no?
 (8) THE WITNESS No
 (9) BY MR McCALLION
 (10) Q So these photographs were taken by Dr Houghton and Lee s
 (11) investigative team is that correct?
 (12) A That s correct
 (13) MR McCALLION No further questions Your Honor
 (14) THE COURT Go ahead counsel
 (15) DIRECT EXAMINATION OF EDWARD GILFILLAN (Cont g)
 (16) BY MS SMITH
 (17) Q All right let s go back 1989 you ve already described?
 (18) A Yes
 (19) Q All right let s go to the same location in 1991 at Crab
 (20) Bay and it s DX662AA What does that show?
 (21) A This shows that same exact location on the rocky shore It
 (22) shows remnant dying fucus plant another one down here and
 it
 (23) shows repopulation by new young fucus plants new young
 (24) rockweed plants here here you see the yellow spots in the
 (25) cracks here And these are plants that have just arrived and

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- (1) they are going to grow up and, in fact by 1993 they had grown
 (2) up
 (3) Q All right Why did the fucus die here?
 (4) A It got old
 (5) Q And this looks black and gookey Is this oil?
 (6) A No it s rain water
 (7) Q And in 1993 which is DX663AA new plants have grown up?
 (8) A They certainly have and have completely covered this area
 (9) Q You scientists use the term natural variability?
 (10) A They certainly do
 (11) Q Is this it?
 (12) A This is it
 (13) Q What does it mean?
 (14) A It means that if you go to any given place Suppose you
 (15) went to this place in 1991 There is no reasonable expectation
 (16) of going back there again and finding this amount of open
 (17) space You re very likely to find this Or if you came to
 (18) this place in 1989 and you found fucus cover albeit some of it
 (19) was old and senescent, there is no reasonable expectation that
 (20) you re going to see that very same situation two years later
 (21) These kind of things happen
 (22) Q And it says here the source is NOAA 1993 Where did these
 (23) pictures come from?
 (24) A These pictures were taken - were given to us by the -
 (25) Houghton and Lees the investigators and were used in a

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- (1) presentation at a conference in Houston Texas last fall
 (2) Q Do you remember Dr Peterson s food web?
 (3) A Yes I do
 (4) Q Let me show you PX1510 All right Now what we did is we
 (5) took a picture of the exhibit remember Dr Peterson this is a
 (6) long time ago but he drew this thing That s not the actual
 (7) chart It is a picture of the chart
 (8) All right do you think that we should add anything to this
 (9) chart?
 (10) A Well Dr Peterson testified it is incomplete
 (11) necessarily I think there s one major omission that should be
 (12) on here and these - that should be somewhere a circle that
 (13) says predatory bottom fish halibut cod fish the pollocks
 (14) rockfish and the ling code all should really be in this diagram
 (15) because they re major players in the ecosystem
 (16) Q All right but Dr Peterson himself said he couldn t draw
 (17) everything?
 (18) A Yes
 (19) Q So he just did a lot of it and - right? Is this an
 (20) ecosystem the intertidal zone ecosystem Is this in a delicate
 (21) balance?
 (22) A No I would say not As Dr Neff testified to yesterday
 (23) all of these many interconnections between the species mean
 (24) that basically something that say happens to sea urchins
 (25) isn t going to propagate through the ecosystem Say the

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- (1) critters that eat them sea otters are just going to go find
 (2) something else to eat
 (3) Q All right so on this idea that if you pull a thread the
 (4) whole sweater unravels if something happens to this doesn t
 (5) matter does the whole thing collapse?
 (6) MR McCALLION Objection to the leading nature of the
 (7) question and the foundation for the unraveling sweater I
 (8) don t believe there s been any testimony on that other than Ms
 (9) Smith
 (10) MS SMITH Dr Neff yesterday
 (11) THE COURT The objection s overruled
 (12) BY MS SMITH
 (13) Q If you touch this does the whole - if something happens
 (14) to this or any other thing here does this whole ecosystem
 (15) collapse?
 (16) A No This is a very robust ecosystem It has to be to live
 (17) where it does and ecosystems are - I like to think of them as
 (18) a process not a place and not a thing It s all of these
 (19) interconnections you can think of all of these arrows as pipes
 (20) and they re in a factory and material in this case food is
 (21) flowing through those pipes and eventually it wants to get up
 (22) here to these upper level consumers Well as you can see
 (23) there are a lot of ways to get there and the ecosystem can
 (24) adapt to changes in - in its surrounding conditions and it
 (25) constantly does

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- (1) I mean we've talked about the severity of the storms
 (2) We've talked about you know bad winters we've talked about
 (3) sea otters This ecosystem is constantly being impacted and
 (4) constantly reacting to these impacts
 (5) What makes major changes in ecosystems is a persistent
 (6) change in the boundary conditions or the conditions around it
 (7) that is sustained for a long period of time And a good
 (8) example would be the sea otters The sea otters are important
 (9) because they eat a lot of different things clams mussels sea
 (10) urchins and particular the sea urchin is a preferred prey of
 (11) the sea otter When the sea otters were wiped out in the last
 (12) century there was a very profound change in the ecosystem
 and
 (13) it shifted because these critters here the sea urchins were
 (14) no longer being controlled by the otters They grew up and
 (15) they ate a lot of these algae these rockweeds and changed the
 (16) ecosystem But that was because this major player had been
 (17) eliminated
 (18) So you've got a big change and it's occurring for a long
 (19) period of time Over the last hundred years the sea otters
 (20) have been coming back and when they come back into an
 area
 (21) the ecosystem shifts back to the way it's going to be Now
 (22) the difference between say something that's caused by a
 major
 (23) long term change in a major player like the sea otter and an
 (24) oil spill is that the oil spill is - is basically in the
 (25) context of say the sea otter situation is an ephemeral

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- (1) event It happened it was bad in 1989 It was a lot better in
 (2) 1990 It's all better now So whatever the ecosystem is going
 (3) to do as a result of the oil spill it has done
 (4) Q If fucus is a half meter shorter on south facing beaches in
 (5) the Sound is that going to effect the intertidal ecosystem?
 (6) A Not materially Those beaches are - that are being
 (7) referred to account for according to the Trustees about 12
 (8) miles of shoreline out of the 3 000 miles in the Sound
 (9) Q All right If eelgrass took two years to recover is that
 (10) going to materially effect the intertidal zone in the Sound?
 (11) A Not now
 (12) Q Mother Nature made sure that living things have a lot of
 (13) different ways to get the food they need right?
 (14) A Sure Look at all the interconnections
 (15) MR McCALLION Objection
 (16) THE COURT Hold on there's an objection
 (17) MR McCALLION Would you like the basis Your Honor?
 (18) THE COURT What's the objection? The word objection
 (19) is not enough counsel
 (20) MR McCALLION Leading leading nature Your Honor
 (21) THE COURT Yes and it's sustained Don't lead
 (22) counsel It just makes things rougher
 (23) BY MS SMITH
 (24) Q Do these things have a lot of things to eat?
 (25) A Sure they have all these animals and have a lot of

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- (1) choices as far as prey Normally what animals will do is to
 (2) make those choices in ways that maximize their food intake but
 (3) if say the event of the sea urchins are gone then the sea
 (4) otters are going to be dealing with clams and with mussels and
 (5) particularly with crabs that they would find to eat
 (6) Q All right When a critter comes to eat are there lots of
 (7) different foods for it to eat?
 (8) A When the critters come in to the - to the intertidal zone
 (9) they have a lot of choices of things that they can eat and for
 (10) example say the barnacle drill it can drill any of the hard
 (11) surfaced animals in the intertidal zone Birds can come in and
 (12) pick up pretty much any of the smaller animals that are in the
 (13) intertidal zone At high tide fish come into the intertidal
 (14) zone and feed
 (15) Q Okay If the otters don't have crabs do they stop
 (16) eating?
 (17) A No They're going to go to sea urchins if they've got
 (18) them They're going to go to clams they're going to go to
 (19) mussels In some instances they're going to go to fish
 (20) Q And the sea urchins do they just have to worry about
 (21) otters?
 (22) A No the sea urchins are preyed upon by sea stars they're
 (23) preyed upon by crabs they're preyed upon by birds and they're
 (24) preyed upon by fish
 (25) Q Have you ever heard of a food chain that could suffer a

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- (1) major cascading effect from the elimination of one food?
 (2) A Yes I have and that would be a very simple food chain
 (3) Food chains in which there aren't all these arrows There
 (4) aren't all the alternative ways that energy can flow through
 (5) the ecosystem
 (6) Q Tell the jury
 (7) A Well about several hundred miles north of here the trees
 (8) give out and you're into what's called the tundra environment
 (9) which is a very simple environment You have a mixture of
 (10) grasses what feeds on the grasses are some small rodents
 (11) called lemmings and what feeds on the lemmings are arctic
 (12) foxes and arctic owls so it's a very very simple system
 (13) So you see there aren't any interconnecting links If
 (14) something happens to the grass the lemmings will have
 nothing
 (15) to eat They have no alternative prey They're going to die
 (16) And when that happens the foxes and the owls which also
 have
 (17) no alternative prey are going to starve And this happens on
 (18) a regular basis every three to five years up in the arctic
 (19) And what happens is that the lemmings manage to consume all
 the
 (20) grass They basically ate themselves out of house and home
 (21) And when that happens the lemming population collapses
 most
 (22) of them starve to death some of them will migrate looking for
 (23) food and you've probably heard about lemming migrations
 And
 (24) in the winter after that happens if I look out in my back
 (25) yard in Maine I'm very likely to see an arctic owl that has

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- (1) come south looking for something to eat
 (2) Q In this kind of an arctic ecosystem once the lemmings eat
 (3) the - eat themselves out of house and home is that it for the
 (4) ecosystem? Is it over?
 (5) A No a few lemmings will survive and those very few lemmings
 (6) will not be able to eliminate the grass the grass will come
 (7) back the lemmings will increase and the cycle will begin all
 (8) over again It's a typical very simple food chain and
 (9) ecologists talk about it in terms of a boom and bust
 (10) situation You have a lot of lemmings you don't have any
 (11) Q Okay In the intertidal food chain Dr Peterson testified
 (12) that there was a sea urchin explosion Do you agree with
 (13) that?
 (14) A Not at all
 (15) Q Why not?
 (16) A Firstly I've been out in the Sound and I've looked around
 (17) and while you can find sea urchins they're mainly hiding
 (18) under rocks and they're mainly small
 (19) Secondly I have talked to the investigators at the
 (20) University of Alaska who actually went out and observed the
 (21) sea urchins and I asked them was there an explosion of sea urchins
 (22) in the Sound in the summer of 1993 And they looked at me
 (23) kind of funny and said what do you mean? And I said well I've
 (24) been told that there was a sea urchin explosion in Prince
 (25) William Sound in 1993 and folks still looked kind of puzzled

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- (1) and said oh okay We were out there we had a lot of divers
 (2) out in the Sound and we think that we saw more sea urchins
 (3) than normal
 (4) I said where did you see them And they said you see
 (5) them underneath rocks underneath pieces of kelp They're
 (6) basically hiding from the sea otters And the investigator
 (7) told me that while he had no quantitative no scientific
 (8) evidence that there was an explosion of sea urchins that it
 (9) was his gut feeling that there were some more
 (10) He also told me that since in 1993 they had a lot more
 (11) divers in the water and they were searching harder that it was
 (12) possible that they just found more urchins because they were
 (13) searching
 (14) Q Do you know of any sea urchin barrens in the Sound?
 (15) A No I do not
 (16) Q Let's talk about clams
 (17) A Okay
 (18) Q Dr Peterson testified that 90 percent of the clams were
 (19) wiped out and hadn't recovered by 1991 Do you agree with
 (20) that?
 (21) A No
 (22) Q Why not?
 (23) A Dr Peterson is relying on a study carried out by Messrs
 (24) Houghton and Lees at basically oiled sites never oiled sites
 (25) and oiled plus hot water washed sites and the three sites that

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- (1) were oiled and hot water washed were Sleepy Bay Shelter Bay
 (2) and Northwest Bay and these are names that you've heard
 (3) before These are places that were really heavily impacted
 (4) Now if you look at the clam populations at the oiled but
 (5) not washed sites they were back to normal densities by 1991 I
 (6) believe also If you look at the foraging behavior of sea
 (7) otters how they go out and feed see people who study sea
 (8) otters go out and sit in blinds with strong telescopes and
 (9) watch the sea otters feeding and try to determine what it is
 (10) that they eat and these studies have been carried out in the
 (11) Sound prior to the Exxon Valdez oil spill and were carried out
 (12) by both Trustees scientists and Exxon scientists after the oil
 (13) spill and what they found was that the otters were getting the
 (14) same number of clams of the same size with the same
 (15) searching effort after the spill as before it which tells me that the
 (16) clam population available to those otters was the same as it
 (17) was before
 (18) Q Let me show you DX8940 Is this a view of Point Helen?
 (19) A It certainly is
 (20) Q And what year?
 (21) A This was taken in the spring of this year
 (22) Q And why do you want the jury to see this?
 (23) A What I want the jury to see about this is that you can see
 (24) that the high tide line is right here You can see that this
 (25) is where logs have been carried up by storms This is where

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- (1) the storm tides get to and you can see that up here above the
 (2) storm tide there is what appears to be a beach
 (3) Q All right And I show you DX13250
 (4) A Okay
 (5) Q What is this?
 (6) A Well it's some more of my silly friends
 (7) Q All right can you locate this on this?
 (8) A This picture -
 (9) Q Wait, let me just - for the record can you locate 13250
 (10) on 8940?
 (11) A Yes This picture was taken in this area right here
 (12) Q Ed I think you're blocking the jury over here and the
 (13) Judge
 (14) A Was taken this spine of bedrock is that piece of bedrock
 (15) right there
 (16) Q All right and what are we seeing here?
 (17) A What you are seeing there is an awful lot of plants and
 (18) animals There's a leather star right here That are growing
 (19) in this location They're exactly what you'd expect to find at
 (20) an exposed bedrock location and you can see it's a lovely
 (21) example of what we talked about yesterday the role of
 (22) disturbance
 (23) Q Only you think this is lovely but go ahead I don't want
 (24) to -
 (25) A What can I say?

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- (1) Q Go ahead tell us about it
 (2) A Okay I say it's a lovely example of the role of
 (3) disturbance in the distribution of marine animals
 (4) Q Is this oil?
 (5) A No it's not These are kelp plants that are growing up
 (6) here and have just been laid down on the rock surface by the
 (7) low tide
 (8) Q Are these the kind of critters you would expect to see at
 (9) this kind of a beach?
 (10) A They sure are
 (11) Q All right let me show you DX13207 Is this also from
 (12) Point Helen?
 (13) A It is
 (14) Q Can you locate us on the other map? And it's on DX8940
 (15) A The photographer that took that picture was standing
 (16) approximately this location
 (17) The photographer that took that picture was standing
 (18) approximately in that location
 (19) Q All right And what do you want to tell the jury about
 (20) this?
 (21) A I want to tell you that in this location there is a good
 (22) deal of buried oil that it is in a place and where it is not
 (23) being released rapidly to the environment and that it is not
 (24) having any adverse effect on the critters that are living down
 (25) here on the bedrock which is only about 50 yards away

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- (1) Q All right where's the high tide line here?
 (2) A High tide line is right about here as I said before
 (3) Q Has the high tide line changed over the years?
 (4) A The high tide line changed very suddenly in March of 1964
 (5) when during the great Alaska earthquake this part of Prince
 (6) William Sound was raised by eight feet That is to say the
 (7) water level went down eight feet Other parts of the Sound
 (8) the water level rose by as much as eight feet or the water
 (9) level declined by as much as 31 and a half feet at the south
 (10) end of Montague Island
 (11) Q Was the earthquake what we would call a major disturbance?
 (12) A Sure was
 (13) Q And what happened to the intertidal zone at Point Helen?
 (14) A What happened to all of these critters living here in the
 (15) intertidal zone at Point Helen is that they were raised up into
 (16) the air and they were raised up to a point where they could not
 (17) exist anymore and they died All of them
 (18) Q Had how'd the mussels do?
 (19) A The mussels in Prince William Sound as a whole this is an
 (20) estimate derived by scientists who were sent to the Sound in
 (21) the summer of 1965 by the U S National Academy of Sciences
 (22) they determined that approximately 90 percent of all the
 (23) mussels in Prince William Sound died as a result of the up
 (24) lift
 (25) Q Did the intertidal zone recover from the earthquake?

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- (1) A It certainly did In those places where the up lift was
 (2) less than roughly 15 feet the investigators found that by
 (3) the following summer or the summer of 1965 that most of the
 (4) shorelines were basically back to normal as they would have
 (5) put it One investigator came back again in the summer of 1968
 (6) to visit the south end of Montague Island where the intertidal
 (7) zone had been raised by 31 and a half feet and where the
 (8) rockweed had not yet recovered by the summer of 1965 and he
 (9) found on that occasion that there was rockweed and basically
 (10) all the animals and plants that he would expect to find in the
 (11) intertidal zone were present at the south end of this site in
 (12) McCloud Harbor at the south end of Montague Island
 (13) Q Can you tell the jury where the old intertidal zone in this
 (14) picture is?
 (15) A Right about here
 (16) Q That used to be where?
 (17) A I'm sorry?
 (18) Q That area used to be where?
 (19) A That used to be down here and was covered by the water at
 (20) high tide
 (21) Q Did the mussels come back?
 (22) A They sure did
 (23) Q After the earthquake?
 (24) A The investigators from the National Academy of Sciences
 (25) discovered that there was a great deal of mussel recruitment

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- (1) and reproduction in the Sound in the summer of 1965 and they
 (2) expected that the mussel population would very rapidly in
 (3) their words recover
 (4) Q Why did the intertidal zone come back so quickly?
 (5) A For the same reasons that it came back quickly from the
 (6) Exxon Valdez oil spill that this is an ecosystem composed of
 (7) critters that are very good at making good their losses
 (8) MS SMITH Okay thank you I have no further
 (9) questions
 (10) THE COURT All right counsel we'll take a break
 (11) THE CLERK Please rise This court stands in
 (12) recess
 (13) (Jury out at 9 40 a m)
 (14) (Recess from 9 40 a m to 9 55 a m)
 (15) (Jury in at 9 55 a m)
 (16) THE CLERK This court now resumes its session
 (17) Please be seated
 (18) MR McCALLION Shall I proceed Your Honor?
 (19) THE COURT Yes please
 (20) CROSS EXAMINATION OF EDWARD GILFILLAN
 (21) BY MR McCALLION
 (22) Q Dr Gilfillan my name is Kenneth McCallion I don't
 (23) believe we've had a chance to formally meet before Good
 (24) morning?
 (25) A Good morning

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- (1) Q It's still this morning Dr Gilfillan before the break
 (2) we were discussing a visit that you took to Point Helen I
 (3) believe in 1994?
 (4) A That's correct
 (5) Q Okay And you don't have to get up for this but let me
 (6) just bring around this photograph that I think you were talking
 (7) about earlier Let me get the number here it's 13207 And
 (8) this was a 1994 photograph at Point Helen?
 (9) A It is
 (10) Q No that's okay - I think I - I think the jury may have a
 (11) problem The jurors will recall it was the - what kind of
 (12) beach type is this?
 (13) A A boulder-cobble beach
 (14) Q And is that a sedimentary type?
 (15) A A type of sediment yes
 (16) Q Now Doctor I believe you mentioned that there is in fact
 (17) in 1994 oil on or under this beach did I hear you correctly?
 (18) A That's correct
 (19) Q Okay And how much oil is underneath this beach?
 (20) A I do not know I know that on the segment that includes
 (21) that beach which is much larger than that beach much longer
 (22) I believe that my colleague Dr Page told me that it was
 (23) something like 50 percent of the buried oil that remained in
 (24) the Sound was there
 (25) Q Okay So would it be fair to say that there's a

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- (1) substantial amount of oil under the surface at Point Helen but
 (2) we - you are uncertain as to the specific amount?
 (3) A I'm a marine biologist not a chemist
 (4) Q Well are you aware Doctor as to whether any scientist
 (5) has precise figures as to the amount of oil remaining in Prince
 (6) William Sound from the Exxon Valdez oil spill today in 1994?
 (7) A Well I don't know what you mean by precise Some must -
 (8) and I know that Dr Page must know about that
 (9) Q Well let me revise my question If I change the word
 (10) precise to an estimate do you or your team of Exxon scientists
 (11) have any estimate as to the amount of oil which remains from
 (12) the Exxon Valdez oil spill in 1989 which remains in the -
 (13) I'll call it the oil spill impact area which has been defined
 (14) as Prince William Sound Kenai and going down to the Kodiak
 (15) area?
 (16) A Well I know that there is some oil remaining and I know
 (17) that by and large it's where critters are not and I know that
 (18) by and large it's not really available to them I've been
 (19) dealing with the ecological side of this case Mr Page and
 (20) Mr Boehm and others have been dealing with the chemical side
 (21) and I'm just - I took part in no such estimates I know they
 (22) exist and I don't know much about them
 (23) Q Well let me see if I understand that Do you have an
 (24) understanding Doctor that there are estimates with regard to
 (25) the amount of oil which remains in the oil spill impact area?

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- (1) A I know that there are estimates I know that Mr Page told
 (2) me that - that roughly half of what was left in the Sound was
 (3) on this particular segment which is much larger than what you
 (4) see in that picture
 (5) Q Well did Dr Page tell you how much oil was left in the oil
 (6) spill impact area?
 (7) A I don't recall him telling me that
 (8) Q Well would it be fair to say Doctor that there is a
 (9) degree of uncertainty as to how much oil remains from the
 (10) Exxon
 (11) Valdez oil spill in the oil spill impact area although we are
 (12) certain that there is such oil?
 (13) THE COURT Don't answer it
 (14) MS SMITH I'm not sure why I object I think the
 (15) objection is compound
 (16) THE COURT Compound?
 (17) MS SMITH Vague as to uncertainty What'd you say
 (18) Chuck?
 (19) THE COURT The objection is overruled Uncertainty
 (20) is necessarily vague
 (21) MS SMITH You still have the question
 (22) THE COURT You may answer sir
 (23) A I'm sorry, counsel could you please restate your
 (24) question?
 (25) Q Yes I'd be pleased to Perhaps it was compound
 (26) Doctor would it be fair to say that there is a general

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- (1) understanding in the scientific community a general
 (2) consensus
 (3) that oil from the Exxon Valdez oil spill does still remain in
 (4) the oil spill impact area is that correct?
 (5) A Certainly
 (6) Q And would it be also fair to say, Doctor that within the
 (7) scientific community there is uncertainty as to how much oil
 (8) still remains in the oil spill impact area from the Exxon
 (9) Valdez?
 (10) A Well I - when you talk about the scientific community
 (11) there are an awful lot of folks out there who are not really
 (12) too concerned about the particular problem but if you mean
 (13) those folks who are studying this bill I'm sure that there
 (14) are - there are estimates various estimates
 (15) Q Would you agree Doctor that it is difficult if not
 (16) impossible to specifically quantify the amount of oil
 (17) remaining in the oil spill impact area from the Exxon Valdez
 (18) oil spill?
 (19) MS SMITH I'd object to the question as cumulative
 (20) I think he's asked this in different ways about ten times
 (21) THE COURT No I think it's worthy of examination
 (22) counsel The objection is overruled You may answer the
 (23) question sir
 (24) A I think that in my view and this is a view of an
 (25) ecologist the exact amount of oil that remains in Prince
 (26) William Sound is way less important to me than where it is and

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- (1) what form it is and its availability to critters
 (2) Q So it's not a concern of yours is that correct Doctor?
 (3) A I don't think that's a correct characterization of what
 (4) I'm - what I just said
 (5) Q Now Doctor would you agree that your visit and
 (6) examination of a particular shoreline would not suffice to
 (7) replace an in-depth study of the effects of the Exxon Valdez
 (8) oil spill?
 (9) A No I wouldn't agree with that
 (10) Q So it would be your opinion Doctor that a mere visit or
 (11) examination of a particular site within the oil spill impact
 (12) area would suffice to replace an in-depth study and scientific
 (13) testing of a particular beach segment?
 (14) A It depends very much on who's doing the visiting If it is
 (15) a person such as myself who has been to the Sound for 133
 (16) days
 (17) who has carried out a detailed scientific study of the Sound
 (18) who has returned to many of these places year after year
 (19) noting changes as they went along I would say that I would be
 (20) qualified to make those kind of judgments
 (21) A person such as Dr Peterson who spent very little time in
 (22) the Sound hasn't carried out any detailed studies admits
 (23) himself that he can't But he said in his testimony that a
 (24) qualified ecologist who is well trained and was experienced in
 (25) this ecosystem could and I am that person
 (26) Q And you're quite confident as to your opinion aren't you

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- (1) Doctor that the oil spill was an ephemeral event and it's all
 (2) better now is that correct?
 (3) A What I will tell you is that as of the summer of 1990 the
 (4) oil spill accounted for a very small proportion of the
 (5) variability in our data set And that the differences the
 (6) changes that we saw in ecosystems were the kind of changes
 (7) that
 (8) merely allow - require biological processes to under - to
 (9) occur before recovery occurs
 (10) Q Doctor are you saying that if you visit a particular site
 (11) in Prince William Sound in the oil spill impact area and you
 (12) visit that for the first time say in 1994 and see no surface
 (13) oiling are you in a position to know to what extent there is
 (14) subsurface oiling without conducting certain experiments or
 (15) tests of that site?
 (16) A I'm a marine ecologist When I go to a site I'm looking
 (17) at the plants and animals that are there I'm comparing them
 (18) in my mind to plants and animals that I have seen at unoiled
 (19) locations and those are the sorts of things that ecologists
 (20) do
 (21) Q So it would be correct, Doctor to say that if you visited
 (22) a shore in 1994 - question withdrawn
 (23) Now Doctor with regard to Point Helen you know that
 (24) there is subsurface oil at Point Helen which has filtered down
 (25) through this - this cobble beach because certain tests or
 (26) experiments were conducted on that site is that correct?

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- (1) A Perhaps you could be a little more specific?
 (2) Q Well let me ask you Doctor what is the basis for your
 (3) opinion that there is in fact subsurface oil at this site in
 (4) Point Helen as depicted on the photograph?
 (5) A I didn't know that it was in contention whether there was
 (6) oil there or not
 (7) Q There isn't from our view Doctor I'm asking what the
 (8) basis is of your knowledge that there is subsurface oil there
 (9) A My knowledge is discussions I've had with Dr Page and Dr
 (10) Boehm and having been present when holes were dug in the
 (11) beach
 (12) and oil was found
 (13) Q Okay So you were there when certain holes were dug and
 (14) oil was found by digging beneath the surface is that correct?
 (15) A That's correct
 (16) Q So if you just visited a site and walked along this beach
 (17) whether it be a trained scientist or an untrained scientist
 (18) may not be able to tell whether there is in fact subsurface
 (19) oil is that correct?
 (20) A What an ecologist like myself would be able to do would be
 (21) to determine whether or not any oil that might be there would
 (22) be having an ecological effect
 (23) Q So is the answer to my question Doctor that you would not
 (24) know walking along the beach without digging beneath that
 (25) there was oil there? Is that correct?
 (26) A That's correct

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- (1) Q Now Doctor yesterday there were a number of photographs
 (2) shown and various charts and I'd like to speak to you just
 (3) briefly I'll call it the game show section of your
 (4) presentation where you recall that two photographs at a time
 (5) were displayed to the jury and they were asked whether - which
 (6) of these sites was oiled in 1989, do you recall that?
 (7) A I recall showing them a series of very similar photographs
 (8) yes
 (9) Q Now let me put this up on the Elmo Maybe I'll get the
 (10) larger one This photograph here let's see if I can just take
 (11) this down And this was one relating to pebble gravel beach
 (12) do you recall that?
 (13) A That's correct.
 (14) Q And one was Drier Bay Knight Island and the other was
 (15) Eshamy Bay Now did you take these photographs?
 (16) A No These photographs were taken by the sampling crew that
 (17) went to each of these locations And as competent scientists
 (18) we realize that we want to be able to should we see something
 (19) in our data that was out of the ordinary we want to know what
 (20) the site looked like So we instructed the sampling crew to
 (21) take pictures down the transects each of our three transects
 (22) to take pictures up the transects from the bottom at each
 (23) transect and take pictures up the intertidal zone at three
 (24) heights from each side so we would have complete a record as
 (25) possible of our sites and that's the origin of these

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- (1) photographs
 (2) Q Okay Now Doctor in your presentation yesterday - by
 (3) the way with regard to the come-on-down game show of taking
 (4) off the labels with regard to the identity of the sites was
 (5) that your idea Doctor?
 (6) A I thought that it would add a little spice to things
 (7) Q Okay And we had a few humorous moments yesterday
 Doctor
 (8) but would it come as any surprise to you that Native Alaskans
 (9) and the Native corporations consider the 1989 oil spill to be
 (10) an extremely serious matter - extremely serious matter?
 (11) MS SMITH Objection argumentative
 (12) THE COURT Objection sustained The jury is to
 (13) disregard the question
 (14) BY MR McCALLION
 (15) Q Now Doctor did you go to Eshamy Bay in 1990?
 (16) A I believe I did yes
 (17) Q Are you sure?
 (18) A Without referring - referring to my notes from that time
 (19) I cannot be sure
 (20) Q Well do you recall clearly recall ever visiting Eshamy
 (21) Bay?
 (22) A Certainly
 (23) Q And when was that?
 (24) A Once I believe in the summer of 1992 for sure and I
 (25) believe that we were close if not onto our site this summer

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- (1) this spring
 (2) Q That s in 1994?
 (3) A Yes
 (4) Q Okay And in 1994 did you do any biological testing with
 (5) regard to any sites at Eshamy Bay?
 (6) A What I did at all of the sites that we visited was to look
 (7) at the community of animals and plants that was present there
 (8) and ask myself with respect to unoiled sites am I seeing the
 (9) kinds of plants and animals that I would expect to see in
 (10) approximately the right numbers
 (11) Q So if I understand correctly Doctor in 1994 you went out
 (12) to these various sites and you basically eyeballed the sites
 (13) and felt that they were okay is that correct?
 (14) A I think that s a very unfair characterization of what it
 (15) was that I did I feel that to take a trained ecologist who
 (16) has worked in the system now for five years who has done a
 (17) very detailed scientific study a highly rigorous study and who
 (18) has followed many of these sites over time and to call that an
 (19) eyeball I just can't see that as a characterization
 (20) Q Well Doctor why don t you tell us exactly what you did at
 (21) Eshamy Bay other than to walk along the beach and - and take a
 (22) look at what was there? Did you take some photographs?
 (23) A I did And I took field notes and if I had those to refer
 (24) to I could tell you exactly what I did
 (25) Q Well as you sit there do you recall doing anything other

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- (1) than walking the beach making certain observations and
 taking
 (2) photographs?
 (3) A I believe that we also dug some holes
 (4) Q Well to come back to my question did you do any
 (5) biological testing? Did you take any samples which were taken
 (6) back to a laboratory to determine whether any of the plant or
 (7) animal life at Eshamy Bay contained any - any oil or
 (8) components of oil such as PAHs?
 (9) A I would characterize what I was doing as more looking for
 (10) the ultimate effects of any such things that might have been
 (11) there I m not a chemist I don t analyze things for oil
 (12) content
 (13) Q Is the answer to the question no then?
 (14) A Yes
 (15) Q Now during your study - question withdrawn
 (16) During 1994 when you were out in the field just this
 (17) year - and you showed us a number of photographs from 1994
 is
 (18) that correct?
 (19) A Yes I did
 (20) Q Did you take any samples at all of any biota or critters
 (21) as you call them plant or animal life to run it through the
 (22) lab to determine whether there was any traces of oil any
 (23) possible carcinogens in the biota at the locations that you
 (24) visited?
 (25) A Samples were taken at KN 133 which is that very heavily

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- (1) oiled mussel bed that we've all been talking about for so long
 (2) and I know the results as Dr Neff reported them to you
 (3) yesterday were that those mussels pose no threat to humans
 (4) that ate them and they pose no threat to animals that ate
 (5) them and those mussels were from in my opinion the most
 (6) heavily oiled bed in the Sound
 (7) Q Well we ll get back to that test but other than - than
 (8) that test with regard to any of your visits to Prince William
 (9) Sound in 1994 and your site inspections you've told the jury
 (10) about did you take - do any sampling or conduct any tests to
 (11) determine whether any of the plant or animal life contained
 (12) hydrocarbons?
 (13) A I didn't really think it was necessary The Oil Spill
 (14) Health Task Force has done extensive testing in the Sound and
 (15) has found that the hydrocarbon levels in those items which are
 (16) consumed by subsistence gatherers are in background levels
 We
 (17) found that the mussels from KN 133 which was a definite worst
 (18) case place posed no threat to anyone I didn't see any reason
 (19) to take any others
 (20) Q So it would be correct to say that you conducted no
 (21) biological tests?
 (22) A I don't think that s -
 (23) Q Other than the Knight Island test you mentioned with
 (24) regard to sites during 1984 -
 (25) MS SMITH 94

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- (1) BY MR McCALLION
 (2) Q 1994 excuse me
 (3) A I m sorry could you - could you restate that? I m not
 (4) certain what you re asking me
 (5) Q Sure Other than the Knight Island mussel tests which you
 (6) just indicated and which I believe Dr Neff testified about
 (7) other than that mussel test during 1994 were any samples
 (8) taken and any samples tested plant or animal life to
 (9) determine whether they still contained any hydrocarbons?
 (10) A As I believe I ve already explained to you the Oil Spill
 (11) Health Task Force has sampled the area extensively They
 have
 (12) found that the levels of hydrocarbons in subsistence items are
 (13) well within the normal limits and these heavily oiled mussel
 (14) beds - originally heavily oiled mussel beds are to a point
 (15) where they re no longer causing any - pose a threat to
 (16) anyone
 (17) Q Okay so the answer would be no?
 (18) A Yes I saw no reason to
 (19) Q Okay And that would be true with regard to mussels
 (20) starfish sea urchins chitons or other biota which - the
 (21) photographs which you showed us yesterday?
 (22) A Once you have got your mussels down to background the
 (23) mussels are very efficient accumulators of material from the
 (24) waters around it Once they are down to background there is
 (25) no reason that any scientist who s familiar with how mussels

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- (1) work would expect there would be anything in other biota on the
 (2) same shore
 (3) Q Now Doctor did you ever investigate with regard to
 (4) Eshamy Bay whether any tests or surveys by others was
 (5) conducted as to the degree of mortality or the degree of death
 (6) of mussel beds at Eshamy Bay?
 (7) MS SMITH I object as just ambiguous By others do
 (8) you mean anyone?
 (9) MR McCALLION Yes counsel anyone
 (10) A I think we only visited that one site in Eshamy Bay but I
 (11) would again have to refer to my field notes to be sure just
 (12) where I went what it was I did
 (13) Q Well did you investigate mussel beds at Eshamy Bay?
 (14) A I know we - we investigated mussel beds in that general
 (15) area I don t recall the exact location and if I - I would
 (16) have to refer to my field notes to - to say exactly where it
 (17) was that I went
 (18) Q Did it ever come to your attention Doctor that on certain
 (19) segments of Eshamy Bay - by the way do you know what -
 what
 (20) segment that photograph depicts that Eshamy Bay?
 (21) A I know roughly where it is I don't know sitting here
 (22) right now what exact segment it s on
 (23) Q Well are you aware Doctor that with regard to certain
 (24) segments where there was found to be light to very light oiling
 (25) that some mussel beds had suffered 70 - 70 to 80 percent

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- (1) mortality?
 (2) MS SMITH Your Honor no foundation
 (3) THE COURT Specify your choice of information
 (4) counsel to the witness
 (5) A There are a lot of -
 (6) THE COURT Hold on sir hold on sir
 (7) Q Doctor are you aware that certain surveys were conducted
 (8) in Prince William Sound of mussel beds?
 (9) A Yes
 (10) Q And who conducted those?
 (11) A The principal survey that I m aware of was carried out by a
 (12) Dr Marlene Babcock from the National Oceanic and
 Atmospheric
 (13) Administration I am presuming that there have been others
 (14) but that is the principal survey that I m aware of
 (15) Q And have you reviewed those findings?
 (16) A Not for a long time
 (17) Q Do you recall that those and other findings generally found
 (18) that there was significant mortality in certain areas with
 (19) regard to mussel beds?
 (20) A I recall that and I remind the jury that there are a lot
 (21) of ways for mussels to die If you go out to a mussel bed you
 (22) find dead mussels you don t want to fall into what I call the
 (23) oil spill syndrome and say well gee it must have been the
 (24) oil that killed them Because we went to one such mussel bed
 (25) which is in Shelter Bay is it Shelter Bay and found that

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- (1) there are a great many mussels that were dead the same is true
 (2) in the setaside site at Herring Bay A great many of the
 (3) mussels were dead and some of the shells still held together by
 (4) the bezzels or that piece of the animal that holds the shell
 (5) together And in well over 90 percent of the cases that one
 (6) of those shells had a hole in it that had been drilled by a
 (7) snail So you cannot go to someplace see dead mussels and
 (8) assume that they were killed by the oil particularly if you
 (9) were in an area as you say and I accept your word on it that
 (10) it was light to very light oiling
 (11) Q Well Doctor just so I understand what your opinion is do
 (12) you hold a view as to whether any mussels in Prince William
 (13) Sound were killed by Exxon Valdez oil?
 (14) A Sure in 1989 I m sure quite a few were That was very
 (15) toxic oil compared to the stuff we re looking at in 1990 and
 (16) subsequent years that was toxic oil You expect to find
 (17) effects in 1989 it s assumed
 (18) But as time goes by the oil - the total amount of oil in
 (19) the Sound whatever that may be declines its state of
 (20) weatheredness increases its toxicity declines and the further
 (21) you get in removing time from the spill the less you expect to
 (22) see in the way of effects
 (23) Q Now Doctor I just want to follow up on your - your
 (24) comment that you saw a snail or results of a snail boring into
 (25) a mussel and decided that the mussel was killed by the snail

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- (1) and not Exxon Valdez oil Let me ask you this Doctor
 (2) Wouldn't it be correct to say that there are sublethal effects
 (3) of oil in other words it might not kill an organism directly
 (4) but it may weaken it or divert energy of that organism away
 (5) from other activities weaken its condition and basically make
 (6) it more susceptible to predators such as snails?
 (7) A First off I would take great exception to your
 (8) characterizing my going out and finding a mussel that had been
 (9) drilled by a snail In places where we observed or I observed
 (10) snail predation the vast majority of the mussels that were
 (11) dead had been drilled
 (12) Secondly I don't know of any work that would substantiate
 (13) that - or even begin to show that having an oiling effect on a
 (14) mussel is going to effect the thickness of its shell
 (15) Q So do I take it Doctor that in your view - well let me
 (16) ask you do you believe that oil has any sublethal effects on
 (17) organisms?
 (18) A Certainly it can but weakening the shell is not one of
 (19) them
 (20) Q Well would you please explain to the jury what sublethal
 (21) effects may be to organisms as a result of contact with or
 (22) ingestion of oil?
 (23) A Sublethal effects are things that occur to animals and
 (24) plants that obviously don't kill them The degree to which the
 (25) sublethal effects are going to exist is going to depend on how

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- (1) much oil is present and how toxic it is and how available it is
 (2) to the animals and plants and I would point out that the
 (3) longer you go after the oil spill the more weathered the oil
 (4) is the less there is of it And the more that it turns up in
 (5) places where it's really not very available to animals then
 (6) the less sublethal biological effects you expect to see
 (7) Q And would it be correct Doctor that - that mussels can
 (8) suffer from sublethal effects?
 (9) A That's correct
 (10) Q Of oil just like other organisms?
 (11) A That's correct
 (12) Q So although their shells may not be - may not be
 (13) weakened - are you saying that you don't believe that the
 (14) weakening of shells is a sublethal effect of oil in any cases?
 (15) A Should you be able to show a relationship between the
 (16) degree of oiling and shell thickness which I don't believe
 (17) anyone has ever shown anywhere in any animal then it would
 (18) be
 (19) a sublethal effect of oiling but I don't think it exists
 (20) Q When you say it doesn't exist you don't believe that any
 (21) study exists?
 (22) A I don't believe that that result has been shown in any
 (23) study of mussels and there have been a lot of study of
 (24) mussels
 (25) Q Well Doctor would you agree that there is a certain
 degree of uncertainty as to what the full extent of sublethal

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- (1) effects of oil is on various organisms?
 (2) A There is a degree of uncertainty but as I said to you
 (3) before that as the amount of oil decreases as it becomes more
 (4) weathered as it becomes in places that are not available to
 (5) animals these sublethal effects whatever they may be are
 (6) going to decline rapidly with time
 (7) Q And other than the thickness of the shell what other
 (8) sublethal effects can oil have on organisms such as - as
 (9) mussels?
 (10) MS SMITH I object to that as - he just testified
 (11) that there are - he knows of no sublethal effect on mussels
 (12) from oil and he said other than what you just - I object to
 (13) it as mischaracterizing the testimony of the witness
 (14) completely
 (15) THE COURT Counsel?
 (16) MR McCALLION I don't believe it's a
 (17) mischaracterization but I'd be happy to reformulate the
 (18) question
 (19) THE COURT Appreciate that Thank you counsel
 (20) BY MR McCALLION
 (21) Q Doctor is it your view that oil from the Exxon Valdez oil
 (22) spill could not have had a sublethal effect on mussels such
 (23) that its condition was weakened and exposed it to the greater
 (24) possibility of mortality as a result of being invaded by
 (25) predators such as snails?

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- (1) A The only thing that the mussel - the only defense that the
 (2) mussel has against predators like snails is its shell and I am
 (3) not aware that anyone has shown anywhere in any animal that
 (4) the shell is decreased in thickness as a result of oiling
 (5) Q Now Doctor are you aware of situations in Prince William
 (6) Sound where substantial amounts of oil were trapped
 (7) underneath
 (8) the mussel beds?
 (9) A I am aware of mussel beds in Prince William Sound that had
 (10) oil beneath them yes
 (11) Q Would it be correct to say that mussel beds can have a
 (12) fairly substantial thickness?
 (13) A Certainly old mussel beds can
 (14) Q Approximately how thick?
 (15) A They certainly can be three or four mussels deep or more
 (16) Q And in certain instances oil can get trapped underneath
 (17) that armor of - of mussels in a mussel bed is that correct?
 (18) A Under some circumstances yes
 (19) Q And it makes it fairly difficult to clean a particular area
 (20) when oil gets trapped underneath the mussels isn't that
 (21) correct?
 (22) A I know that in this instance that the people who were in
 (23) charge of the cleanup took the decision that they would - they
 (24) would not clean underneath those - underneath mussel beds
 (25) Q So would it be correct to say Doctor that there is a
 substantial likelihood that oil still remains in Prince William

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- (1) Sound trapped beneath mussel beds?
- (2) A There is oil beneath mussel beds. Probably the most is
- (3) beneath the bed at KN 133 which is a bed exactly as you have
- (4) been asking me to describe. That oil is down beneath the bed
- (5) It does not appear to be very available to the mussels that are
- (6) living on top of it whose tissues contain levels of
- (7) hydrocarbons well below those required to - to pose a threat
- (8) to humans or others who eat them
- (9) Q Would it be correct to say Doctor that over time that
- (10) oil which is trapped beneath the mussel beds will leach out
- (11) into the environment?
- (12) A Yes that's going to be part of its ultimate fate. The
- (13) rest would be to be consumed by the bacteria that are
- (14) metabolizing it. But I point out to you at the worst site at
- (15) KN 133 the rate at which that leaching is occurring is not
- (16) sufficient to cause the levels in those mussels to be a source
- (17) of concern
- (18) Q Well Doctor, are you aware that the Alaska Department of
- (19) Environmental Conservation has studies and is making plans to
- (20) remediate or attempt to remove certain contaminated mussel
- (21) beds
- (22) in the Prince William Sound area in order to get at and remove
- (23) the oil beneath those beds?
- (24) A I am aware that such a program has been proposed
- (25) Q And are you aware as to the number of sites and the scope
- (26) of that particular study?

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- (1) A No I am not
- (2) Q Now Doctor just so I understand correctly you are not
- (3) contending that the oil from the Exxon Valdez oil spill in 1989
- (4) did not cause harm to the natural processes in the oil impact
- (5) area?
- (6) A There are enough negatives in that one for anybody I am
- (7) sorry could you state that again please?
- (8) Q Would it be correct to say Doctor that you are not
- (9) contending that the Exxon Valdez oil spill in 1989 did not
- (10) cause harm to the natural processes in the oil spill impact
- (11) area?
- (12) A If I understand you correctly I believe my answer is I am
- (13) not contending this
- (14) Q So you would agree Doctor that the Exxon Valdez oil spill
- (15) did in fact cause harm to the natural processes within Prince
- (16) William Sound?
- (17) A Yes it certainly did. But you have to understand that the
- (18) degree of harm which was caused by the Exxon Valdez oil spill
- (19) while large in 1989 was less in 1990 still less in '91 and
- (20) by 1993 practically disappeared for all intents and
- (21) purposes
- (22) Q And Doctor would it be correct to say that that view
- (23) that there is now no significant impact of the Exxon Valdez oil
- (24) spill is a view which is not shared by a substantial number of
- (25) scientists who have studied the effects of the Exxon Valdez oil

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- (1) spill?
- (2) A With respect to the intertidal ecosystem which is the one
- (3) that I deal with and the shallow subtidal I wouldn't accept
- (4) that characterization as correct as all
- (5) Q So are you saying Doctor that there are not a substantial
- (6) number of scientists who believe that there are still
- (7) significant and lasting impacts of the Exxon Valdez oil spill
- (8) within Prince William Sound?
- (9) A Certainly within that portion of the ecosystem within which
- (10) I work I wouldn't agree with that at all
- (11) Q Well let's go back to 1989. Would you agree that the kind
- (12) of oiling which occurred within Prince William Sound in 1989
- (13) that that kind of oiling presents a shock to the ecosystem? Is
- (14) that correct?
- (15) A Perhaps you could define what you mean by shock
- (16) Q Well Doctor would you agree or disagree with that
- (17) proposition?
- (18) A I would have to know what it is I am trying to agree or
- (19) disagree with
- (20) Q So would it be correct to say that the term a shock to the
- (21) ecosystem is not a term which has any meaning to you?
- (22) A I don't recall it being used in scientific literature
- (23) Q Okay Well do you recall at Dr Page - Dr Page is a
- (24) close colleague of yours is that correct?
- (25) A Yes

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- (1) Q For more than 20 years?
- (2) A Correct
- (3) Q And by the way were you present in federal court when Dr
- (4) Page testified?
- (5) A I was not
- (6) Q Would it be fair to say that with regard to the fate and
- (7) effect of oil in Prince William Sound that you and Dr Page
- (8) are - are in agreement?
- (9) A Far as I know
- (10) Q Well let me show you a page from Dr Page's testimony in
- (11) federal court.
- (12) MS SMITH Your Honor, is this an attempt to
- (13) impeach -
- (14) THE COURT Take it off the - take it off the Elmo
- (15) MS SMITH - Dr Gilfillan with someone else's
- (16) testimony
- (17) THE COURT That depends I don't know what it is
- (18) counsel until the question is asked and the witness has had an
- (19) opportunity to see the transcript Show it to him
- (20) MR McCALLION Yes Your Honor
- (21) BY MR McCALLION
- (22) Q Have you had a chance to read Dr Page's -
- (23) THE COURT Do you have a copy for him
- (24) Q - testimony previously?
- (25) A I have not

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- (1) THE COURT Give counsel a copy please Or she can
 (2) come up here and look at it I don't care which
 (3) MS SMITH And I suggest that you show this to the
 (4) Judge Can the witness hand it up to him?
 (5) THE COURT Thank you You're using this simply to
 (6) show what your definition of shock to the ecosystem is?
 (7) MR McCALLION Yes and that it was accepted by a
 (8) reputed member of his team
 (9) MS SMITH Your Honor I don't think this is a big
 (10) deal but it's the questioner who uses the term not the
 (11) answerer and the answerer is not the witness
 (12) THE COURT Thank you counsel You can ask your
 (13) question I don't think it's a big deal either counsel
 (14) MR McCALLION May I use the Elmo Your Honor? Or
 (15) should I just give it to the witness
 (16) MS SMITH I would object to it being published I
 (17) think he can ask him
 (18) THE COURT He's read the transcript Why don't we
 (19) just say this that's Dr Page's testimony
 (20) MR McCALLION Yes
 (21) THE COURT Dr Page said that there was a shock to
 (22) the ecosystem right?
 (23) A Yes he did
 (24) THE COURT Go ahead ask the next question
 (25) BY MR McCALLION

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- (1) Q And do you agree with that Doctor?
 (2) A Do I agree that the Exxon Valdez oil spill represented a
 (3) major perturbation to the ecosystem in 1989 yes
 (4) Q And do you agree that it was like a natural disaster?
 (5) A It was certainly a disaster to the ecosystem It caused
 (6) some very tragic events to occur with regard to the birds and
 (7) the mammals In comparison say to the 1964 earthquake
 (8) which
 (9) killed everything I would say that it was a much smaller
 (10) disaster than the 1964 earthquake
 (11) Q So you would categorize it as something less of an impact
 (12) to the ecosystem than the 64 impact but a disaster,
 (13) nonetheless is that correct?
 (14) A Yes it was a tragic occurrence
 (15) Q And there was a difference between the 64 earthquake and
 (16) the Exxon Valdez spill isn't that correct? The Exxon Valdez
 (17) spill was a man-made disaster is that correct?
 (18) A Certainly the - the source of the disasters were
 (19) different The ecological consequences were very similar
 (20) They were much more severe for the earthquake
 (21) Q Now Doctor would you agree that oil is harmful to plant
 (22) and animal life?
 (23) A If the plants and animals are exposed to oil seasoned if
 (24) that oil is sufficiently unweathered that it contains toxic
 (25) material then it would be harmful
 (26) Q And would you agree with the principal that oil is harmful

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- (1) to plant and animal life in Prince William Sound to varying
 (2) degrees and depending upon the composition of the oil?
 (3) A At what time?
 (4) Q Well can you answer the question as posed Doctor?
 (5) A Well I don't think one can without specifying a time
 (6) Q Do you recall being asked that question in your deposition
 (7) in this case?
 (8) A Not specifically no
 (9) Q Okay
 (10) MS SMITH May I have that -
 (11) MR McCALLION Your Honor I would draw counsel's
 (12) attention to page 380 of Dr Gilfillan's deposition lines 11
 (13) through 18
 (14) MS SMITH Do you have the volume please?
 (15) MR McCALLION Sure volume three Okay counsel?
 (16) MS SMITH I'm not sure it's impeaching
 (17) THE COURT Well let's see it Let's see it
 (18) counsel
 (19) Go ahead counsel ask a question
 (20) BY MR McCALLION
 (21) Q Now Doctor can you see that on your screen?
 (22) A Yes I can
 (23) Q You were asked this question and gave the following
 (24) answer: Question now you have agreed with the general
 (25) principle that oil is harmful to the critters that are found in

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- (1) Prince William Sound isn't that true to varying degrees
 (2) Your answer to varying degrees and depending on the
 (3) composition of the oil
 (4) A I don't really see how that's different from what I just
 (5) said
 (6) Q So you agree with that general proposition is that
 (7) correct?
 (8) A Yes And as I said a little bit earlier the degree of
 (9) injury that there's going to be to these critters is going to
 (10) depend on how much oil there is where it is is it available
 (11) to the critters and in what state is it? Does it have the
 (12) compounds in it that cause damage to critters
 (13) Q Now Doctor, would you agree with the proposition that the
 (14) mere fact that there is some animal or plant life in an area
 (15) does not mean that the ecosystem is healthy or in balance?
 (16) A It would depend on what kinds of plants and animals how
 (17) many there are and what proportions they are to one another
 (18) Q So would you agree Doctor that the mere fact that there
 (19) are living organisms in an area does not necessarily lead to
 (20) the conclusion that the ecosystem is healthy?
 (21) A Well if those living organisms are the ones that are
 (22) typical of unoiled areas that are otherwise similar then it
 (23) does If those plants and animals are not typical of
 (24) previously unoiled area then it doesn't
 (25) Q Now Doctor I believe yesterday you referred to the term

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- (1) opportunistic species do you recall that?
 (2) A Yes I do
 (3) Q And when there has been a disturbance and plant or animal
 (4) life has - has died in an area very often species who were
 (5) not present in the same proportion in a particular area move
 (6) in such as I believe you identified brown barnacles do you
 (7) recall that Doctor?
 (8) A Yes
 (9) Q Okay I believe you referred to brown barnacles as the
 (10) weeds of the sea?
 (11) A Those animals that are capable of taking advantage of
 (12) space, yes
 (13) Q So would it be correct to say Doctor that with regard to
 (14) beaches in areas that were oiled as a result of the Exxon
 (15) Valdez oil spill, that while there may be living animal and
 (16) plant life in those areas that the mix of the communities of
 (17) the species in the communities on those beaches may be
 (18) different than they were prior to the oil spill in 1989?
 (19) A Well I wouldn't agree that the proper reference is to
 (20) prior to the oil spill because I don't think as Dr Peterson
 (21) says any competent ecologist would expect that
 (22) Q So would it be correct to say, Doctor that you don't know
 (23) what the mix of organisms was of animal and plant life in
 (24) Prince William Sound in - in the oil spill impact area prior
 (25) to the time of the oil spill is that correct?

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- (1) A I believe that that is immaterial That is not the proper
 (2) comparison The proper comparison is with areas that were
 (3) never oiled and have been subject to the same general climatic
 (4) conditions as the oiled areas because you do not expect -
 (5) it's a very simplistic view of the world to expect that you're
 (6) going to get back exactly what you had
 (7) MR McCALLION I would move to strike Your Honor as
 (8) nonresponsive
 (9) THE COURT The motion is denied
 (10) BY MR McCALLION
 (11) Q So Doctor do I understand from your answer that you do
 (12) not know what the particular mix of species was within the oil
 (13) spill impact area in general and in specific beaches in
 (14) particular prior to the time of the Exxon Valdez oil spill?
 (15) A I'm telling you that I don't and I'm telling you that it's
 (16) immaterial That's not the proper comparison
 (17) Q And that's your view Doctor isn't that correct?
 (18) A And I believe also Dr Peterson and the scientific
 (19) community in general
 (20) Q Now with regard to - and that's consistent with your
 (21) definition of restoration isn't that correct?
 (22) A And that of the U S Federal Government.
 (23) Q And we have discussed previously differences between your
 (24) definition of restoration and that of the Trustees Council
 (25) isn't that correct?

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- (1) A Yes we have
 (2) Q Now you're aware Doctor that the Trustees - the
 (3) Trustees Council include the attorney general of the State of
 (4) Alaska the commissioner of Alaska Department of Fish and
 (5) Game
 (6) and the commissioner of the Alaska Department of
 (7) Environmental
 (8) Conservation is that correct Doctor?
 (9) A Yes
 (10) Q And you're aware that there are also three federal agencies
 (11) which work in coordination with those three state agencies
 (12) within the Trustee Council?
 (13) A Yes
 (14) Q And those include the United States Forest Service the
 (15) U S Department of Interior and the National Marine Fisheries
 (16) Service is that correct Doctor?
 (17) A That's correct
 (18) Q I believe you and the jury were shown earlier a definition
 (19) of restoration which was arrived at by the Trustees Council
 (20) and would it be fair to say without going through that
 (21) testimony again that you just do not agree with their
 (22) definition of restoration?
 (23) A I thought we were dealing with the definition of recovery
 (24) Q That's correct I revise my question Would it be correct
 (25) to say Doctor that you simply do not agree with the
 (26) definition of recovery as arrived at by the Trustees Council?
 (27) A I don't agree I don't think Dr Peterson would agree and

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- (1) I don't think the general scientific community would agree that
 (2) that is an appropriate definition
 (3) Q Now Dr Peterson was a - is a peer reviewer with the
 (4) Trustee Council is that correct?
 (5) A That's correct
 (6) Q And are you aware of the number of scientists who have
 (7) been
 (8) affiliated with the Trustee Council scientific effort?
 (9) A No I'm not
 (10) Q Would it surprise you that Dr Peterson has peer reviewed
 (11) or reviewed studies by over 200 scientists with regard to the
 (12) Trustee Council effort?
 (13) A It would not surprise me at all and I can tell you from
 (14) having reviewed some of his reviews particularly some of those
 (15) of the shoreline projects that I know about that where those
 (16) scientists in their papers have said that recovery involves a
 (17) return to pre-spill conditions that he says it's simplistic
 (18) it's outmoded and that no competent ecologist would agree
 (19) with
 (20) that and I agree with him
 (21) Q Now Dr Peterson is with the Trustee Council and the
 (22) Trustee Council has produced certain draft work plans EISs
 (23) and
 (24) other publications is that correct?
 (25) A Yes
 (26) Q And the Trustee Council has arrived at a definition of
 (27) recovery which is generally accepted among the scientists
 (28) working with the Trustee Council is that correct?

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- (1) A I don't know that
 (2) Q Well are you saying that you are aware that Dr. Peterson
 (3) has rejected, reneged upon or repudiated any definition of
 (4) recovery set forth by the Trustee Council in its publications?
 (5) A No, I'm not. I'm saying that when individual scientists in
 (6) their reports have used that sort of a definition of recovery
 (7) that Dr. Peterson has been extremely critical of them.
 (8) Q But you are not aware as to the published reports of the
 (9) Trustee Council of any repudiation by Dr. Peterson, isn't that
 (10) correct?
 (11) A That's correct, but again I'll say when he reviews reports
 (12) written by scientists who use similar definitions of recovery
 (13) he's extremely critical of them.
 (14) Q And as far as you know, Dr. Peterson fully accepts the
 (15) definition of restoration as set forth in the Trustee Council
 (16) documents, isn't that correct?
 (17) MS SMITH: Objection. Calls for speculation.
 (18) THE COURT: Do you know, sir?
 (19) A No, sir, I don't.
 (20) THE COURT: Counsel, we're going to take a break
 (21) pretty soon. When do you want to do it?
 (22) MR. McCALLION: This would be an appropriate time.
 (23) Your Honor, thank you.
 (24) THE CLERK: Please rise. This court stands in
 (25) recess.

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- (1) (Jury out at 10:56 a.m.)
 (2) (Recess from 10:56 a.m. to 11:18 a.m.)
 (3) (Jury in at 11:18 a.m.)
 (4) THE CLERK: Please rise. This court now resumes its
 (5) session.
 (6) Please be seated.
 (7) MR. McCALLION: Shall I proceed, Your Honor?
 (8) THE COURT: Yes, please.
 (9) BY MR. McCALLION:
 (10) Q Dr. Gilfillan, did you have a chance to speak to Exxon
 (11) counsel over the break?
 (12) A Yes.
 (13) Q Now, Doctor, would you agree with the proposition that just
 (14) because you can't see the oil out there in certain areas of the
 (15) oil spill impact area doesn't mean it's not there?
 (16) A I think I agree with you.
 (17) Q And Doctor, you yourself over the years have yourself
 (18) published in the area of certain physiological effects of
 (19) pollution at sea on organisms, plant and animal life in the
 (20) intertidal area, isn't that correct?
 (21) A That's correct.
 (22) Q And in fact, in 1980, one of the articles that you
 (23) co-published with others is entitled "Physiological Techniques
 (24) for Measuring the Biological Effects of Pollution at Sea," isn't
 (25) that correct?

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- (1) A That's correct.
 (2) Q It's a mouthful, but it's correct. Now, one of the areas
 (3) that you went into in that article was the -
 (4) MS SMITH: May I have the -
 (5) MR. McCALLION: Oh, I'm sorry, yes. That's
 (6) Plaintiffs' Exhibit 1968.
 (7) MS SMITH: Thank you.
 (8) BY MR. McCALLION:
 (9) Q Now, if I may, on page 93 of that exhibit, 1968, you and
 (10) your colleagues talked in terms of the effect of pollutants on
 (11) certain aspects of the reproductive system. Is that correct?
 (12) A That's correct.
 (13) Q Let me see if I can - and research in the area had
 (14) concentrated upon the question of embryo and larval stages of
 (15) animals as being more sensitive to toxicants than the adult
 (16) stage. Is that correct?
 (17) A Yes, I think that's generally accepted by the scientific
 (18) community.
 (19) Q And in fact, you and your colleagues wrote that the act of
 (20) fertilization, for example, is sensitive to oil and dispersants,
 (21) possibly acting to disrupt the chemosensory system that
 (22) attracts the sperm to the egg. Is that correct?
 (23) A If you say so, I will agree with you. I can't see it and
 (24) it's been a long time since we wrote that.
 (25) Q Okay. I think counsel will let me know if I'm reading it

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- (1) wrong.
 (2) MS SMITH: I have no idea what page you're on, but
 (3) it's okay.
 (4) BY MR. McCALLION:
 (5) Q Why don't we turn it on just for a minute. It's page 94.
 (6) Now, Doctor, would you agree that there is - has been
 (7) substantial study and still a substantial amount of
 (8) investigation and study is still going on among scientists as
 (9) to what the possible long-term effects with regard to possible
 (10) chromosomal damage and carcinogenic effects of various
 (11) pollutants including oil, is that correct?
 (12) A Maybe take that one step at a time.
 (13) Q Sure. Would it be fair to say, Doctor, that there has been
 (14) a substantial amount of study, much of it still on going, as to
 (15) the possible long-term effects of pollutants in the water on
 (16) plants and animals, including pollutants such as hydrocarbons
 (17) oil?
 (18) A That's correct.
 (19) Q Okay. And oil contains certain known carcinogens or cancer
 (20) producing chemicals, is that correct?
 (21) A This is a question you really should have asked of Dr.
 (22) Neff. It being his specialty, I will do the best I can. The
 (23) only known carcinogen that I can think of that is present in
 (24) petroleum is benzo(a)pyrene.
 (25) Q Are you familiar with chrysenes?

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- (1) A I know what it is
 (2) Q And is that a carcinogen?
 (3) A See this isn't an area in which I study and I don't
 (4) know
 (5) MS SMITH Your Honor may I have one second? My son
 (6) had an accident at school and I just want to have my husband
 (7) go out and talk to the school
 (8) MR McCALLION Perhaps we could take a short break
 (9) THE COURT We need a break?
 (10) MS SMITH No I can just send him out
 (11) MR McCALLION I'm sorry about that I have my son
 (12) in the courtroom so I'm going to keep an eye on him If we
 (13) need a break please let me know
 (14) BY MR McCALLION
 (15) Q Now Doctor are you aware that recent studies have been
 (16) done by a Dr Hose H O S-E of St Louis Obispo O-B-I S-P O
 (17) indicating that gross chromosomal applications are appearing
 (18) in herring eggs deposited in oiled sites in Prince William Sound?
 (19) MS SMITH Your Honor I'm going to object as beyond
 (20) the scope of his direct beyond his expertise
 (21) THE COURT Can you answer that question sir?
 (22) A Should I answer it?
 (23) THE COURT Yeah It started out with are you
 (24) aware Can you answer it?
 (25) A No I'm not

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- (1) BY MR McCALLION
 (2) Q Well are you aware generally Doctor that there are
 (3) studies on going as to possible chromosomal damage caused
 (4) by oil or hydrocarbons on various types of organisms?
 (5) MS SMITH Same objection Beyond the scope and
 (6) beyond his expertise
 (7) THE COURT The objection's sustained counsel If
 (8) you're trying to establish the limits of his analysis I think
 (9) you can do it with direct questions
 (10) MR McCALLION Yes Your Honor This also addresses
 (11) the issue as to whether there has been biological and
 (12) ecological recovery in the intertidal area which is an area
 (13) which the Doctor has - has testified about The testimony
 (14) basically that everything's okay
 (15) THE COURT Yeah I know that counsel As I said if
 (16) you want to establish the limitations of his analysis you can
 (17) do it by direct questioning You don't necessarily have to go
 (18) into an area of someone else's expertise to do that Go
 (19) ahead
 (20) MR McCALLION Yes sir
 (21) BY MR McCALLION
 (22) Q Now Doctor would it be correct to say that you yourself
 (23) or members of the Exxon scientific team, have not conducted
 (24) studies as to possible long term damage or chromosomal
 (25) effects of the Exxon Valdez oil on plant and animal populations and

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- (1) species within the oil spill impact area?
 (2) A I guess I'd have to answer that being a very general
 (3) question I'm not sure what everybody on the scientific team
 (4) if you choose to characterize it that way or this group of
 (5) scientists is doing This is not the area in which I work
 (6) I'm not a geneticist I'm an ecologist
 (7) Q But as far as you're aware with regard to Exxon scientists
 (8) and the Exxon scientific team you're not aware of such studies
 (9) being conducted?
 (10) A I guess I'd say I'm not aware
 (11) MS SMITH Can - Your Honor I'm finding that I need
 (12) to be admitted out of the courtroom I can't - I just feel I
 (13) need a minute
 (14) THE COURT No I can see that That's okay
 (15) THE CLERK Please rise This court stands in
 (16) recess
 (17) (Jury out at 11 28 a m)
 (18) (Recess from 11 28 a m to 11 40 a m)
 (19) (Jury in at 11 40 a m)
 (20) THE CLERK This court now resumes its session
 (21) Please be seated
 (22) THE COURT Go ahead counsel
 (23) MS SMITH Your Honor thank you Mr Diamond can be
 (24) excused?
 (25) THE COURT He can be yeah

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- (1) MS SMITH Okay he's gone
 (2) MR McCALLION We're prepared to break at any point
 (3) if necessary Your Honor
 (4) THE COURT So am I
 (5) BY MR McCALLION
 (6) Q Now Dr Gilfillan you were asked some questions yesterday
 (7) about sea otters and I believe there was a photograph of sea
 (8) otters in 1994?
 (9) A Yes
 (10) Q Frolicking somewhere in Prince William Sound?
 (11) A Yes
 (12) Q Do you recall where that was taken?
 (13) A That picture was taken in the northern part of the Sound I
 (14) believe in the region south of Columbia Glacier
 (15) Q Now you were asked I thought there weren't anymore sea
 (16) otters and your answer was there are a lot of sea otters in
 (17) Prince William Sound So the record is clear are you aware of
 (18) any testimony in this case that would indicate that the
 (19) plaintiffs position is that there are no more sea otters in
 (20) Prince William Sound?
 (21) A I don't believe so
 (22) Q Well do you know what the basis of the statement was that
 (23) there - I thought there weren't anymore sea otters?
 (24) A I don't know
 (25) Q Now would it be correct to say though that the sea otter

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- (1) population in 1989 did take a substantial hit is that
 (2) correct?
 (3) A There were otters - definitely otters were killed
 (4) Q And partially as a result of that at least according to
 (5) Dr Peterson and certain other scientists there was an
 (6) explosion or a growth in the community of sea urchins?
 (7) MS SMITH Your Honor I would object as to
 (8) foundation on and certain other scientists There's been no
 (9) foundation established
 (10) THE COURT Confine it to the one man person
 (11) MR McCALLION Yes We'll restrict it to
 (12) Dr Peterson
 (13) BY MR McCALLION
 (14) Q You were here when Dr Peterson testified in that regard?
 (15) A Yes
 (16) Q And when a predatory species such as sea otters the
 (17) population is reduced you may well find that the species which
 (18) it feeds on in this case the sea urchins that they may
 (19) experience a substantial growth is that correct?
 (20) A I'm not aware that anybody has - has demonstrated that a
 (21) substantial growth of sea urchins has occurred and certainly
 (22) any effect like that that would occur if the predators were
 (23) reduced in number would depend very strongly on how much
 (24) they were reduced
 (25) Q Well would it be correct to say Doctor that you and

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- (1) members of your team did not specifically study the - any
 (2) reduction in the sea otter population or its impact upon sea
 (3) urchins or other species is that correct?
 (4) MS SMITH I would object as ambiguous if he's -
 (5) in terms of members of his team if he means the shoreline
 (6) ecology group that's one thing if he means Exxon scientists
 (7) that's another
 (8) MR McCALLION I would include all Exxon scientists
 (9) A Yes I'm aware that there has been such a study
 (10) BY MR McCALLION
 (11) Q Okay And what study is that?
 (12) A Done by a Mr Garshelis
 (13) Q Now Exxon completed its cleanup approximately - or closed
 (14) down its cleanup approximately three years after the end of the
 (15) spill is that correct?
 (16) A I guess I have to tell you I have no direct knowledge of
 (17) what was done and when it was done
 (18) Q Okay Well there's been testimony that the cleanup period
 (19) by Exxon lasted approximately three years
 (20) Doctor after the - after three years after the spill
 (21) there was still oil in Prince William Sound is that correct?
 (22) A Yes there was
 (23) Q And there was a substantial amount of oil isn't that
 (24) correct?
 (25) A I can't speak to how much it's not my area of expertise

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- (1) but I will say there was oil there
 (2) Q Now would it be correct to say that during the cleanup
 (3) period, to the extent that hot water washes were used that
 (4) they impacted and in some cases sterilized certain areas of the
 (5) intertidal area?
 (6) A I'm aware that hot water washing was used I'm aware that
 (7) there are some areas such as the rocky outcrop in Northwest
 (8) Bay which was cleaned up in a period of I believe
 (9) approximately 30 days where there were very great impacts
 (10) I'm also aware that these areas are small in area and few in
 (11) number
 (12) Q You're aware are you not - I'm referring to Plaintiffs
 (13) Exhibit 1974 of a study by Dr Houghton who's been referred
 (14) to earlier, and others with regard to the impact of hot water
 (15) treatments on the biota in the intertidal area are you aware
 (16) of that?
 (17) A Yes I am
 (18) Q I show you 1974
 (19) A Yes
 (20) Q And Dr Houghton and others concluded - by the way this
 (21) is the same Dr Houghton who members of his team took certain
 (22) photographs that you relied upon?
 (23) A Those are the same person
 (24) Q And he concluded that hot water treatments used to remove
 (25) crude oil from the beaches of the Sound in 1989 had - had

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- (1) severe short term impacts on the intertidal epibenthos Some
 (2) of the high pressure hot water treated rocky shores that were
 (3) stripped of biota in 1989 showed little colonization by 1990
 (4) Do you agree with that Doctor?
 (5) A Certainly I showed the jury a picture of one such shore
 (6) from Northwest Bay and there was colonization there and I
 (7) explained to the jury that while there were some things there,
 (8) that there wasn't everything there that there ought to be
 (9) Q Now Dr Houghton's study on Page 2 alluded at the bottom
 (10) of Page 2 that individual hot water wash sites still showed
 (11) altered community structure that is attributed to the
 (12) treatment. However a full recovery of intertidal epibiota is
 (13) still several years away in these areas Do you see that
 (14) Doctor?
 (15) A I do
 (16) Q And do you agree?
 (17) A That may have been what they wrote at the time that they
 (18) wrote that in their subsequent writings and presentations
 (19) they have stated that recovery is virtually complete at our -
 (20) at the rocky site in Northwest Bay and at other very heavily
 (21) treated sites
 (22) Q Do you know when this study which I am showing was
 (23) done?
 (24) A Apparently the last data was taken in 1992 and the data
 (25) which these authorize took in the summer of 1993 which was
 the subject of a publication and a presentation which I attended

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- (1) said that the recovery was proceeding faster than they had
 (2) expected and that virtually all the critters that were supposed
 (3) to be at these heavily affected sites were there and that they
 (4) quibbled a little bit about the exact proportion of some
 (5) species of red algae
 (6) Q Well with regard to this first three-year period from 1989
 (7) through 1992 would you agree with Dr Houghton and his
 (8) colleagues that individual - let me put back Page 2 again -
 (9) that individual hot water wash sites still showed altered
 (10) community structure that is attributed to the treatment
 (11) however a full recovery of intertidal epibiota is still
 (12) several years away in these areas Do you agree with that
 (13) conclusion as of the date that that was published?
 (14) A I agree particularly with the first word individual They
 (15) were studying a small number of sites which had been very
 (16) heavily treated such as the island at Northwest Bay which is
 (17) one of their sites and I will agree with them that the
 (18) conditions at their sites are as they describe What I will
 (19) not agree is that sites like those sites are widespread in the
 (20) Sound or that impacts like this were widespread in the Sound
 (21) Q Well did you take into account the findings of Dr
 (22) Houghton in reaching your conclusions in this case?
 (23) A The conclusions that I've made with regard to recovery
 (24) certainly from our study are based on two methods of analysis
 (25) Both of which would have detected any large scale change had
 it

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- (1) occurred
 (2) Q Now you're aware Doctor as well that beach treatment
 (3) may change the beach morphology or the character of a
 (4) particular beach which is being cleaned is that correct?
 (5) A I have read descriptions by Drs Houghton and Lee about
 (6) their sites yes
 (7) Q Well Doctor in doing your analysis did you take into
 (8) account any changes in beach morphology in other words the
 (9) moving of sand or sediment from one area of a beach to
 another
 (10) the change in the incline and other characteristics of a shore
 (11) did you take that into account in doing your analysis?
 (12) A Had any of those changes firstly occurred at our sites
 (13) and had they had an important ecological effect we would have
 (14) detected it.
 (15) Q Would it be correct to say that you did not specifically
 (16) study or take into account either the impact of hot water
 (17) washing or the moving around of sediments and sand or
 changes
 (18) in beach morphology in your particular study?
 (19) A I would say that had those changes occurred at our sites
 (20) which were typical because they were randomly chosen of the
 (21) Sound as a whole - of the impact area as a whole and had they
 (22) had important ecological effects we would have seen them
 (23) Q But you did not specifically take that into account is
 (24) that correct?
 (25) A I didn't have to

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- (1) Q Okay Now we've talked quite a bit about mussels and you
 (2) have - you have written extensively on the impact of
 (3) hydrocarbons on mussels is that correct?
 (4) A Not sure I agree with extensively but yes
 (5) Q Well back in the 1970s prior to the time that you
 (6) established your - your laboratory you wrote with a number of
 (7) colleagues on various issues relating to carbon flux isn't
 (8) that correct?
 (9) A That's correct
 (10) Q And if I oversimplify it correct me but you found did
 (11) you not that oil or hydrocarbons reduce the carbon flux of
 (12) mussels by as much as 50 percent which led to a reduction in
 (13) size of those mussels is that correct?
 (14) A No that's incorrect
 (15) Q Could you please explain the - well let me see if I can
 (16) simplify this Let me see if I can find one
 (17) A I will say that my disagreement with you is that I don't
 (18) believe you've properly asked the question
 (19) Q Okay If I could just refer to 1984 a study which I
 (20) believe you published in 1976, in marine biology and I think I
 (21) better turn it over
 (22) MS SMITH Your Honor could the witness see the
 (23) document?
 (24) THE COURT He certainly can see the document. Let's
 (25) just see if it needs to -

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- (1) MS SMITH Okay
 (2) BY MR McCALLION
 (3) Q Do you recall this study Doctor?
 (4) A Yes I do
 (5) Q And the abstract at the beginning - by the way that
 (6) abstract is a summary of an article which is for publication in
 (7) scientific journals?
 (8) A That's correct
 (9) Q And the last line reads that however the oiled
 (10) population you're talking about mussels I guess gained
 carbon
 (11) at only 50 percent of the rate seen in the unoiled population
 (12) This difference results from the uptake of hydrocarbons by the
 (13) oiled population
 (14) A That's correct
 (15) Q Now with regard to your studies of sites in Prince William
 (16) Sound with regard to sedimentary sites in other words sites
 (17) which were not bedrock would it be correct to say Doctor
 (18) that you did not specifically study the impact of Exxon Valdez
 (19) oil on those mussel populations?
 (20) A We did study the uptake of oil by those populations And
 (21) have shown that that uptake has diminished to basically
 (22) background levels in the time intervening since the spill
 (23) Q Now did you take samples from mussel populations in
 (24) sedimentary areas and do testing on them?
 (25) A As far as I recall we collected samples of mussels from

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- (1) all of our sites where mussels existed
 (2) Q And when was that?
 (3) A That would have been - I mean by our sites are the 64
 (4) randomly chosen sites that we sampled in 1990 All of those
 (5) sites if there were mussels present we took samples of them
 (6) Q Okay Let me - let me come back to that Doctor when
 (7) did you - when were you first asked to get involved in Exxon's
 (8) effort with regard to scientific study of the effects of the
 (9) Exxon Valdez oil spill in the oil spill impact area?
 (10) A It would have been sometime in mid to late June or early
 (11) July time frame of 1989
 (12) Q Okay And in March of 1990 would it be correct to say
 (13) that you attended a meeting with various Exxon personnel and
 (14) other scientists to develop a game plan for studying the impact
 (15) of the Exxon Valdez oil?
 (16) A I wouldn't particularly characterize it as a game plan
 (17) Persons - the principals in the meeting were myself wearing
 (18) my ecologist hat Dr Page wearing his chemist hat Dr Boehm
 (19) wearing his chemist hat and a man named James Harner who
 (20) was wearing a statistician's hat
 (21) Q Okay And would you agree Doctor in going into a study
 (22) you should not prejudge the outcome of that study?
 (23) A Certainly
 (24) Q And at this particular meeting did you use a meeting
 (25) agenda for this particular meeting?

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- (1) A There was a meeting agenda I'm not sure how well we
 (2) followed it
 (3) Q Well let me show you what is marked as Plaintiffs Exhibit
 (4) 1969 This is entitled 1990 Shoreline Ecology Program
 (5) meeting agenda and ask you if you recall whether that was the meeting
 (6) agenda for that particular meeting?
 (7) A It must have been
 (8) Q Now I'd like to direct your attention to the second page
 (9) of that meeting agenda and under the heading objective is
 (10) demonstrate and document affected nearshore/onshore marine
 (11) communities are recovering Was that the objective of your
 (12) particular study?
 (13) A Obviously it certainly wasn't my objective The objective
 (14) that I had in mind was one two three four bullets down and
 (15) what I wanted to do using a stratified random design was to
 (16) design a rigorous statistically defensible unbiased sampling
 (17) plan and that's what I felt Exxon had asked me to do and
 (18) that's what I did
 (19) Q Well would it be correct to say Doctor that you were
 (20) handed this meeting agenda and this was prepared by certain
 (21) Exxon personnel?
 (22) A Yes
 (23) Q And the objective as set forth for the meeting was to
 (24) demonstrate and document affected nearshore/onshore
 (25) marine communities are recovering?

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- (1) A That's what it says That's not what I took it to mean
 (2) When you go out and you measure impact or you attempt to
 (3) determine if a community is recovered you do precisely the
 (4) same type of scientific studies that you would do in fact to
 (5) determine if there's impact because recovery is basically the
 (6) recovery from impact So you're going to do the same studies
 (7) you're going to do the same sampling design which is rigorous
 (8) and unbiased statistically defensible and you're going to go
 (9) out and find out whatever there is to find out If the place
 (10) is recovered you'll know it If it isn't you'll know that
 (11) And that was the charge that was given to me by Exxon was to
 (12) go out and find out what is the condition - or excuse me
 (13) what was the condition of the Sound in the summer - in the
 (14) oiled part of the Sound in the summer of 1990 I never viewed
 (15) that I had any other charge
 (16) Q Now on Page 3 of the meeting agenda did you read that at
 (17) the time at the particular meeting?
 (18) A Sure I must have
 (19) Q And for Prince William Sound the reason for sampling is
 (20) noted as document recovery treated versus untreated and
 (21) water quality?
 (22) A What I will give you is the same answer as I've just given
 (23) you If you're going to go out and determine whether there's
 (24) been recovery or not then you're going to do the same kind of
 (25) study and if the place is recovered you'll find out And if

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- (1) the place is unrecovered you'll find that out and that was
 (2) what I was asked to do
 (3) Q That is not what the meeting notes say Isn't that correct?
 (4) A I don't think that's true at all I think what - if you
 (5) just after every time they say document recovery put in a
 (6) parenthesis in your mind saying if it has happened that's
 (7) exactly what those meeting notes say
 (8) Q So you would have to add certain wording to the meeting
 (9) agenda notes to get to the meaning that you took it to mean is
 (10) that correct Doctor?
 (11) A I took it to mean that my charge and the charge of the
 (12) other three scientists was to design the best scientific study
 (13) we know how to document because we knew there was going
 (14) to -
 (15) whatever our results were they were going to be subject to
 (16) extraordinary scrutiny I knew someday there would be a
 (17) person
 (18) like yourself out there asking me about how I designed my
 (19) study and I wanted to be in a position and my colleagues
 (20) wanted to be in a position to tell you that we designed the
 (21) most rigorous the most unbiased sampling program that we
 (22) knew
 (23) how to do and if we found recovery fine If we found impact
 (24) fine Our aim in life was to go out there and find out what
 (25) was real what was reality
 (26) Q And that objective was not set forth in the meeting notes
 (27) given to you by Exxon in April of 1990 Isn't that correct?
 (28) A It was set forth to me by George Lock who first engaged me

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- (1) to do this and instructed me that what he wanted to - wanted
 (2) the four of us to do was to design the best and most
 (3) defensible most statistically rigorous study that we knew how
 (4) to do and that's what we did
 (5) Q Let's talk about the study Doctor Now you published a
 (6) report with Dr Page and Dr Boehm and this was published in
 (7) the ASTM conference in Atlanta Georgia last year is that
 (8) correct?
 (9) A I believe we published four papers
 (10) Q Were any of those peer reviewed?
 (11) A As far as I know they've all been peer reviewed
 (12) Q Doctor with regard to the classifications of oiling which
 (13) you used in your particular study -
 (14) MS SMITH The Exhibit Number please
 (15) MR McCALLION 1961 and 1969
 (16) BY MR McCALLION
 (17) Q Now Doctor in classifying oil as heavy medium or light
 (18) oiling you relied primarily on the width of the oil band on
 (19) the beach is that correct?
 (20) A That's correct
 (21) Q And much of your classification depended upon videotaping
 (22) of the spill area from low altitude helicopters, is that
 (23) correct?
 (24) A Yes flying at constant altitude and at a constant distance
 (25) from the shore

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- (1) Q Now in surveying the oil spill area from the air would it
 (2) be correct to say that you could not differentiate between
 (3) thick oiling versus bands of oil which were not thick?
 (4) A Which we did - I didn't do the work but what was done was
 (5) to differentiate between bands that were 20 or more feet wide
 (6) bands that were less wide and bands that were yet less wide
 (7) Q So you based your classification on oiling on the width of
 (8) the bands of oiling is that correct not the thickness?
 (9) A That's correct
 (10) Q And would you agree Doctor, that the bands of oil in the
 (11) oil spill impact area vary in thickness?
 (12) A They did but I'd point out to you that if you examine
 (13) paper, too you'll find that the heavy - what we classified as
 (14) heavy oiling had more oil in it than the moderate oiling had
 (15) more oil in it than the light oiling So it's my belief that
 (16) the oiling categories that we used are reasonable
 (17) Q But they did not take into account thickness is that
 (18) correct?
 (19) A That's true The results of our sampling showed that in
 (20) the oils that had a wide oil band there was a lot of oil in
 (21) the sediments or on the rock surface in the places where
 (22) there was moderate amount of oiling there was less oil places
 (23) where there was light oiling there was still less
 (24) Q And would it be correct to say Doctor that you did not
 (25) study - you did not choose any of your reference sites any

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- (1) locations in eastern Prince William Sound is that correct?
 (2) A That's correct
 (3) Q You strictly limited your study including reference sites
 (4) and study sites to western Prince William Sound and the Kodiak
 (5) area is that correct?
 (6) A Well are we talking about the SRS or are we talking about
 (7) thick sites or are we talking about what we did in the Gulf of
 (8) Alaska? Those are three different programs
 (9) Q Well did any of your studies use sites located in eastern
 (10) Prince William Sound?
 (11) A I think - I believe and I think most scientists will agree
 (12) with me that your reference areas should be as similar in
 (13) that case I took it to mean as close as you can get to the
 (14) affected area
 (15) Q So your answer is no you did not use any reference sites
 (16) in eastern Prince William Sound?
 (17) A I didn't use reference sites in Prince William Sound
 (18) because I thought - in eastern Prince William Sound because I
 (19) thought it was more appropriate to use reference sites that
 (20) were closer to the impact zone
 (21) Q Okay Now with regard to sites in Prince William Sound
 (22) would you agree that there are differences in salt level or
 (23) salinity from place to place is that correct?
 (24) A There may be
 (25) Q And in fact salinity or salt level may be less in certain

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- (1) sites which are impacted by glacial runoff from various -
 (2) various glaciers is that correct?
 (3) A At certain times and in certain places near the glaciers I
 (4) emphasize near the salinity may be reduced the amount of salt
 (5) in the water
 (6) Q Okay And in fact you have done prior research
 (7) indicating that lowered salinity or lowered salt level at a
 (8) site may be a stressor or stress a particular biota plant and
 (9) animal life in a particular location?
 (10) A Yes that's correct
 (11) Q Now in choosing your sites for your study would it be
 (12) correct to say you did not differentiate between sites based
 (13) upon their level of salinity or salt level?
 (14) A I think the good best answer to that question is yes and
 (15) no When we were designing the study in the spring of 1990 I
 (16) was obviously aware that changes in salinity level could affect
 (17) the populations of animals and plants that live in that area
 (18) And I asked my colleague Paul Boehm who had done a water
 (19) quality program in Prince William Sound in the summer of 1989
 (20) and who as a result of having done that collected temperature
 (21) and salinity data if in his opinion as a marine scientist did
 (22) we need to take into account differences in salt content on the
 (23) east and west sides of the Knight Island complex and he told
 (24) me that based on the data that he collected he did not think
 (25) so

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- (1) Q So would it be correct to say that you did not take into
 (2) account differences in salinity?
 (3) A I don't think so. I think it would be correct to say that
 (4) we considered whether such differences were likely to exist and
 (5) having decided that they very probably did not, didn't consider
 (6) them any further. But they were certainly considered while we
 (7) were designing our experiment.
 (8) Q Now, Doctor, did you develop a certain level of confidence
 (9) in your test results of 95 percent?
 (10) A Are you meaning my personal confidence?
 (11) Q Well, let me rephrase the question. You compared certain
 (12) reference sites or control sites to your various test sites. Is
 (13) that correct?
 (14) A That's correct.
 (15) Q And the reference sites in your view were unoiled sites. Is
 (16) that correct?
 (17) A Not only in my view, but actually. They were unoiled
 (18) sites.
 (19) Q And your test sites were oiled sites. Is that correct?
 (20) A That's correct.
 (21) Q Now, in comparing the two, would it be correct to say that
 (22) unless you found that there was a difference between the sites
 (23) between the controlled site or the reference site and the oiled
 (24) site, unless you were 95 percent sure that there was a
 (25) difference between the two, in other words, that there had been

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- (1) lack of recovery on the oiled site, you concluded, for purposes
 (2) of your study, that there was no difference between the sites.
 (3) Is that correct?
 (4) A I'm sorry, I'm not sure that's quite correct. Perhaps you
 (5) could try again.
 (6) Q Okay. Well, let's take a reference site and a test site.
 (7) The reference site is unoiled and the test site is oiled.
 (8) correct?
 (9) A Yes.
 (10) Q And you made certain comparisons between the two, the
 (11) abundance of biota, plant, animal life, between the oiled and
 (12) the unoiled sites. Isn't that correct?
 (13) A Basically, it is very difficult to make comparisons between
 (14) just one oiled site and one unoiled site because you don't have
 (15) what scientists call a replication. That is to say, you
 (16) don't have more than one observation, and when you are
 (17) making
 (18) statistical tests, you are comparing some difference that you
 (19) see to some estimate of the natural variability in the system.
 (20) If you don't have more than one place, you can't estimate
 (21) natural variability, so you can't test it.
 (22) Q Doctor, you compared oiled and unoiled sites. Isn't that
 (23) correct?
 (24) A I compared mean values of, say, the abundance of a species
 (25) at a number of oiled sites with similar oiling levels with the
 average number of that same species at a number of sites that

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- (1) were never oiled.
 (2) Q And if, based upon a comparison and a statistical analysis
 (3) you felt that by a preponderance of the evidence which you saw
 (4) that an oiled site was different or had not recovered, based
 (5) upon that comparison, you would not - you would not consider
 (6) that site to be unrecovered unless you were 95 percent sure
 (7) that there was a difference. Isn't that correct?
 (8) A The way scientists normally express that kind of a result
 (9) is in what is the probability of obtaining a larger difference
 (10) by chance, and by convention, scientists have for many years
 (11) used the probability that a larger difference will occur by
 (12) chance five percent of the time. If it is - if the difference
 (13) you see is large enough so its probability of occurring by
 (14) chance is less than five percent by convention, scientists say
 (15) that the difference is real. It is a statistically significant
 (16) difference. If the probability is less than five percent -
 (17) excuse me, is greater than five percent, then environmental
 (18) scientists will say that the differences are not real.
 (19) Q So when you used a 95 percent confidence or certainty
 (20) level, this means that you would have to be 95 percent certain
 (21) that there is a difference between the two, namely the oiled
 (22) and the unoiled site, for you to conclude that the site has
 (23) recovered. Is that correct?
 (24) A If you were comparing a single observation with an average
 (25) of a number of observations, that might be true. When you are

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- (1) comparing two averages, then the situation is a lot more
 (2) complex.
 (3) Q Would it be correct to say, Doctor, that you had to be 95
 (4) percent sure that there was a difference, namely that an
 (5) unoiled site had not recovered, before you can - came to a
 (6) conclusion that it had not in fact recovered. Isn't that
 (7) correct?
 (8) A It is correct that I would have to conclude that there was
 (9) a probability of less than five percent of such a difference or
 (10) larger difference occurring before I would say that the site
 (11) had recovered. I'll go on to say that this is the universal
 (12) basically, criterion used by scientists, and in reading the
 (13) reviews of various studies that have been carried out by
 (14) Dr. Peterson, he is extremely critical of those studies which
 (15) use any level other than five percent, which he himself, has
 (16) described as the universal level.
 (17) Q So just so we understand, Doctor, if you were 80 percent
 (18) certain or there was an 80 percent probability that an oiled
 (19) site had not recovered, you would not mark that down as an
 (20) unrecovered site because you were not 95 percent sure. Isn't
 (21) that correct?
 (22) A Let's try that again without so many negatives. I'm not
 (23) really certain what it is you're asking me.
 (24) Q Let me put it simply, Doctor. You had to be 95 percent
 (25) sure that a site had not recovered before you would consider it

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- (1) to be an unrecovered site Isn't that correct?
- (2) MS SMITH Your Honor I object as asked and
- (3) answered
- (4) THE COURT Sustained
- (5) MR McCALLION Your Honor could we take a short
- (6) break?
- (7) THE COURT Sure
- (8) THE CLERK Please rise This court stands in
- (9) recess
- (10) (Jury out at 12 19 p m)
- (11) (Recess from 12 19 p m to 12 32 p m)
- (12) THE CLERK This court now resumes its session
- (13) THE COURT Counsel I'm in here without the jury for
- (14) a couple of reasons One is that I told Ms Swangler that she
- (15) could be - you can all seated down One I told Ms
- (16) Swangler that she would be excused at the end of the session
- (17) on
- (17) Monday I asked her - Mr Petumenos is here and I was about
- (18) to speak to what you asked
- (19) I asked Ms Swangler what her schedule was and whether or
- (20) not - and I told her I'd be very sorry for her to leave
- (21) because I thought she would be a good juror and - and could
- (22) there possibly be any modification of her plans and she
- (23) thought about it and it's clear that she wants to stay on this
- (24) jury but she said no there was no possibility that she could
- (25) change her plans So I'm going to let her go at the end of the

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- (1) session on Monday
- (2) MR STOLL Fine Your Honor
- (3) THE COURT Now the second thing I wanted to ask is
- (4) how long are we going to go today on this cross-examination?
- (5) MR STOLL Your Honor the cross-examine - I have
- (6) one or two questions and I'm going to - then we're all done if
- (7) Mr McCallion's done
- (8) THE COURT You're done?
- (9) MR McCALLION I have one question Your Honor
- (10) THE COURT I'll give you two
- (11) MR McCALLION Well just about two minutes Let me
- (12) just see what I can do I think I -
- (13) THE COURT Let me explain something to you I have a
- (14) heavy calendar this afternoon and a big motion that I have to
- (15) deal with and I want time to review it I'm inclined to recess
- (16) now when this witness is done
- (17) MR STOLL Fine
- (18) MS SMITH That's fine I'd like to get him done
- (19) today
- (20) THE COURT Yes I would too
- (21) MR STOLL He's going to be done today Your Honor
- (22) no question
- (23) THE COURT I know he's going to be done today but
- (24) the redirect is not going to take that long is it?
- (25) MS SMITH No Your Honor I have no redirect Let's

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- (1) do it - unless they open a -
- (2) THE COURT Well now that they've heard you they'll
- (3) probably try
- (4) MR STOLL I don't think about that Your Honor
- (5) MR CLOUGH I had some redirect but I'll be quiet
- (6) this time
- (7) THE COURT You get an award for that
- (8) MR CLOUGH Thank you Your Honor
- (9) MS SMITH Your Honor I was going to mount a big
- (10) protest to Mr Stoll doing a whole cross so I'm going to -
- (11) THE COURT Two questions
- (12) MS SMITH I'm reserving the right if his two
- (13) questions go into a half hour I may be back up here
- (14) MR STOLL I didn't do that the other day
- (15) THE COURT You don't have to reserve the right
- (16) counsel you have the right It's an inalienable right you
- (17) retain
- (18) MR STOLL The Judge has made that very clear to me
- (19) in the past
- (20) MR PETUMENOS I was just going to ask the Court has
- (21) to get off the bench soon to handle these matters If I have
- (22) any matters relating to the cross-examination next week I'm
- (23) going to do some crosses next week Judge and so would you
- (24) prefer since we're having a hearing out of the presence any
- (25) way on Monday that any matters I have bring up then?

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- (1) THE COURT I think it would probably be wise to do
- (2) that I don't have any time to explore anything in detail
- (3) today
- (4) MR PETUMENOS Right Right
- (5) THE COURT That's the other thing of course I'll
- (6) tell them as we discussed yesterday that they're coming in at
- (7) 10 00 because I have a hearing that I have to do between 8 30
- (8) and 10 00 okay? All right Are you ready?
- (9) MR STOLL Yeah ready
- (10) THE COURT Good bring them in
- (11) (Jury in at 12 35 p m)
- (12) THE COURT All right You can be seated everybody
- (13) The jury's here so you may continue Mr McCallion's
- (14) questioning is done on cross-examination Mr Stoll will have a
- (15) brief time of supplemental
- (16) MR STOLL Yes I just have just a very few
- (17) questions Your Honor
- (18) CROSS EXAMINATION OF EDWARD GILFILLAN
- (19) BY MR STOLL
- (20) Q First of all early in the week we saw some - I think it
- (21) was Dr Page throwing some Nerf balls on Green Island Were
- (22) you there when he did that?
- (23) A No sir I was not
- (24) Q Green Island you visited Green Island this year?
- (25) A Yes I did It would have been toward the end of May

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- (1) Q And some pits were dug there?
- (2) A They were
- (3) Q And there was oil found in the pits at least some of the
- (4) pits isn't that correct?
- (5) A In two of the pits I believe
- (6) Q And Dames and Moore did you work with Dames and Moore also
- (7) on the Exxon - for - on the Exxon team? Dames and - do you
- (8) know who Dames and Moore is?
- (9) A I don't think the name - we employed them as contractors
- (10) yes
- (11) Q And finally you don't - you're not here testifying as to
- (12) what the effect of the oiling in 1989 had on real estate values
- (13) either in Prince William Sound or Kodiak isn't that correct?
- (14) A What I'm here to testify to is the state of recovery of the
- (15) intertidal ecosystem which was as we say 73 to 91 percent
- (16) recovered by the summer of 1990 and essentially completely
- (17) recovered today
- (18) Q And that's using your definition of recovery as opposed to
- (19) the definition used by the state and federal Trustees in the
- (20) Trustees Council?
- (21) A That's using my definition of recovery which is identical
- (22) virtually to that used by the U.S. Federal Government. It is
- (23) using my definition of recovery and not the Trustees' people
- (24) who have used definitions of recovery like the Trustees have
- (25) been very severely criticized by Dr. Peterson and I completely

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- (1) agree with him in that criticism
- (2) Q You are not, sir, not making any contentions are you as
- (3) to what the perception was in the real estate market or in the
- (4) popular view as to what was happening with these beaches at any
- (5) time since 1989?
- (6) A I'm here to tell the jury about what the conditions of the
- (7) beaches were in 1991 and subsequent years
- (8) MR STOLL Thank you
- (9) THE COURT Counsel?
- (10) MS SMITH Your Honor I have no redirect
- (11) THE COURT You can step down, sir. Thank you. And
- (12) I'm going to recess the trial today. The reason is because I
- (13) have a very heavy afternoon calendar and have to deal with that
- (14) today so I'm going to let you out an hour early which I'm
- (15) sure you'll be very sorry about. I have a couple things to
- (16) tell you because I know you're uncertain about the schedule of
- (17) this trial so I'll try and clear up as much as I can about
- (18) that any way
- (19) Ms. Swangler has to be excused at the end of Monday. And
- (20) I've tried to work around that every way I could and I've tried
- (21) a few creative approaches including I thought about
- (22) recessing for - so she could stay on the jury. But it seems
- (23) to me that this case is so close to its end - I mean close
- (24) enough to its end that even if I let Ms. Swangler go I'm going
- (25) to have 12 jurors at the end of the case and so I don't want

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- (1) to recess for the week because the break in the testimony would
- (2) not be a good idea. I'm sure I want you to get it all as
- (3) closely in time as - related in time as I can get it to you
- (4) So she will be gone on Monday. That leaves us of course
- (5) with one alternate left. And believe me it's going to take a
- (6) bomb for me to let another juror off this jury but we will be
- (7) done in a relatively brief amount of time if you consider the
- (8) whole length of the trial. So not only do I appreciate Ms
- (9) Swangler staying here for all this time but I really
- (10) appreciate the fact that I've got the rest of you here so that
- (11) I can submit this case to the right number of jurors and I
- (12) appreciate your attention to the case during the case. I can
- (13) assure you that I'll work to make the - make the case flow
- (14) efficiently and the parties will too
- (15) The next thing is about Monday's session. I have an
- (16) evidentiary hearing to do in the morning between 8:30 and 10
- (17) o'clock so I will not need you here until ten. So don't come
- (18) at 8:30 because all you will do is drink a whole lot of coffee
- (19) and get real nervous before you come to the jury room. All
- (20) right? So 10:00 is the time to report on Monday
- (21) We will not recess that was a possibility but we will not
- (22) be recessing for a week because Ms. Swangler will be excused
- (23) So we'll be going - I hope I certainly hope that we'll be
- (24) going straight on to conclusion in this case without any kind
- (25) of a substantial recess

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- (1) Schedule changes like this 10:00 maybe but no days off
- (2) until we get to the - to the time when you go out to
- (3) deliberate and make your decision
- (4) Okay? That's it. I'll let you go and remember don't
- (5) talk about the case with anybody and don't form or express any
- (6) opinion on it until it's submitted to you for deliberation
- (7) Thanks a lot
- (8) (Jury out at 12:42 p.m.)
- (9) MS SMITH Judge I'm going to read the exhibits for
- (10) Giffilian in on Monday
- (11) THE COURT Okay that's fine
- (12) MS SMITH You don't want to do it now?
- (13) THE COURT No I don't
- (14) MR DIAMOND I know you want to run. One matter in
- (15) an attempt to help you speed things along. There is a
- (16) controversy brewing which I think is a tempest in a teapot
- (17) and I simply want your guidance. We will do it the way you
- (18) want to do it
- (19) We designated a brief excerpt of deposition testimony back
- (20) in March of a witness who works for a third party in Kodiak
- (21) It turns out according to Mr. Stoll's colleagues that
- (22) witness if he does not reside in the Anchorage area has an
- (23) office here and is therefore amenable to service of process
- (24) I've been told that and accept that representation as true
- (25) This is a real peripheral witness. This is a very short

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- (1) deposition segment The plaintiffs appear as of today to tend
- (2) on forcing us to bringing him in as a live witness prolonging
- (3) the misery I simply think that s unnecessary and I want to
- (4) move things along as well as you do I would like a suggestion
- (5) how to proceed with Mr Stoll
- (6) THE COURT Well what authority do I have to require
- (7) that the witness not be - that to require that it be presented
- (8) by deposition
- (9) MR DIAMOND You don't have any authority to require
- (10) it I think you have the authority to permit it Some measure
- (11) of discretion
- (12) THE COURT To permit it I certainly permit it if
- (13) there was an agreement
- (14) MR DIAMOND Well I gather there is not - there is
- (15) not necessarily agreement I think you have the authority
- (16) under the circumstances given the fact that this is a very
- (17) short segment of testimony and you have discretion to let it
- (18) come in by way of deposition
- (19) THE COURT How do you figure that if it doesn't meet
- (20) the requirements of the rule?
- (21) MR DIAMOND I seem to recall case law which says in
- (22) this area you have evidentiary discretion as to how it comes
- (23) in simply managing the conduct of the trial
- (24) THE COURT I think I have to follow the rules
- (25) counsel If you can show me authority I'll do that But my

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- (1) understanding of the rule is that there are specific things
- (2) requirements that have to be met before a witness can be
- (3) presented by deposition as opposed to live testimony Now
- (4) that doesn't mean that it isn't wiser for the parties to come
- (5) to a reasonable resolution of a problem like this especially
- (6) in view of the fact that a witness may be sort of a peripheral
- (7) witness Of course a peripheral witness - I mean if the
- (8) witness is on the periphery the witness can be over the
- (9) horizon, too maybe the jury shouldn't see the witness at all
- (10) or hearing anything from him So my only - the only authority
- (11) I can think of for allowing me to go outside of the rule would
- (12) be the rule that allows relaxation of the rules and I don't
- (13) see that that s applicable
- (14) MR DIAMOND Okay
- (15) THE COURT Okay? Is there anything else?
- (16) MR STOLL Thank you Your Honor Have a nice
- (17) weekend
- (18) MR PETUMENOS Can we talk about that exhibit we
- (19) talked about this morning?
- (20) THE CLERK. Please rise This court stands in
- (21) recess
- (22) (Recess at 12 45 p m)

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- (1) I N D E X
- (2) DIRECT EXAMINATION OF EDWARD GILFILLAN
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- (3) BY MS SMITH 5448
- (5) VOIR DIRE EXAMINATION OF EDWARD GILFILLAN
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- (1) STATE OF ALASKA)
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA)
- (6) I Joy S Brauer RPR a Registered Professional
- (7) Reporter and Notary Public
- (8) DO HERBY CERTIFY
- (9) That the foregoing transcript contains a true and
- (10) accurate transcription of my shorthand notes of all requested
- (11) matters held in the foregoing captioned case
- (12) Further that the transcript was prepared by me
- (13) or under my direction
- (14) DATED this day
- (15) of 1994
- (21) JOY S BRAUER RPR
- Notary Public for Alaska
- (22) My Commission Expires 5-10-97

Look-See Concordance Report

UNIQUE WORDS 2,075
TOTAL OCCURRENCES 8,585
NOISE WORDS 385
TOTAL WORDS IN FILE 26,077

SINGLE FILE CONCORDANCE**CASE SENSITIVE****NOISE WORD LIST(S)
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- (1) IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (2) THIRD JUDICIAL DISTRICT
 (4) In re) Case No JAN 89 2533 (Civil)
) Anchorage Alaska
 (5) The EXXON VALDEZ) Monday August 15 1994
) 8 37 a m
 (6))
 (8) VOLUME 36 Pages 5554 through 5733
 (10) TRANSCRIPT OF PROCEEDINGS (Continued)
 (11) TRIAL BY JURY
 (13) BEFORE THE HONORABLE BRIAN C. SHORTELL
 Superior Court Judge
 (16) APPEARANCES
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- (1) PROCEEDINGS
 (2) THE CLERK. Please rise
 (3) (Call to Order of the Court)
 (4) (Jury not present)
 (5) THE COURT Counsel we are on the record and the jury
 (6) is not present
 (7) MR. PETUMENOS Good morning Judge
 (8) We set forth a hearing that I have requested pursuant to
 (9) Evidence Rule 705(b). 705(b) states that an adverse party may
 (10) request a determination whether the requirement of Rule 703 is
 (11) satisfied before an expert offers an opinion or discloses facts
 (12) or data. And I also rely on Evidence Rule 104 which requires
 (13) that the Judge where - in issues where relevancy needs to be
 (14) conditioned on a fact or questions of admissibility need to be
 (15) determined based upon factual findings a hearing in advance
 of
 (16) the testimony out of the presence of the jury should take
 (17) place and this is such a hearing
 (18) I have two issues to present to the Court today. One
 (19) relates to the fact that with respect to the other oil spill
 (20) testimony that is going to be proffered through Mr. Roddewig
 (21) that there are two issues
 (22) One is that this is material that is not scientifically
 (23) accepted and that the facts or data relied upon are not
 (24) reasonably related to the issues relevant in this trial and
 (25) that they are harmful and prejudicial. They confuse and waste

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- (1) time under Evidence Rule 403 and that not only do they
 confuse
 (2) and waste time in this context but that they also will be
 (3) extremely prejudicial to the Court
 (4) I also take the position that this testimony is
 (5) inconsistent with the rulings of this Court that you've made
 (6) thus far both relating to some of the archaeological claims
 (7) and so forth where the Court has limited our proof and
 (8) abbreviated our proof substantially with respect to damages to
 (9) lands that would tend to prove our land was damaged in this oil
 (10) spill lands that belong to the state and federal government
 (11) which you in limine d until the cross-examination then allowed
 (12) us to discuss in testimony but did not permit us to put into
 (13) evidence the underlying summaries or data. And as I
 understand
 (14) the Court's ruling that that was a ruling also under rule 403
 (15) for purposes of its collateral nature and so forth
 (16) The second aspect of this hearing is a little different
 (17) In the direct examination exhibits that we received there is
 (18) a group of exhibits that relate to the analyses done by Doctors
 (19) Green and Mundy. With respect to Mr. Green's case you recall
 (20) that Dr. Green had an attribution scheme or schedule in which
 (21) he applied attributes to certain land to determine its value or
 (22) it was related to value. In the exhibits that we have received
 (23) from the defendants there are calculations and opinions drawn
 (24) about how that attribution scheme would be applied to other
 (25) properties in Anchorage and elsewhere. I move to exclude
 those

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- (1) for a different reason and I wish to approach the Court with
 (2) the orders that I think it violates
 (3) I give the Court highlighted portions of Order 38 a
 (4) recommendation to the Court by Master Ruskin dated the 14th
 of
 (5) September Pretrial Order Number 81 in this case and the
 (6) expert witness discovery order in both cases I have copies
 (7) for counsel I have those with the Court so that as we proceed
 (8) with the hearing the Court can be apprised of those portions
 (9) of the orders that I think are being violated by the offer of
 (10) proof Essentially what it amounts to is this material exists
 (11) nowhere in the expert reports of this witness He was never
 (12) deposed upon it He was asked what positions he - what
 (13) opinions he intended to give and none of those opinions and
 (14) calculations were disclosed to the plaintiffs
 (15) MR OPPENHEIMER May I see a copy?
 (16) Your Honor we re not on notice that this was a part of
 (17) today s hearing We did discuss Mr Petumenos and I one
 (18) exhibit which I am prepared to address today but let me take
 (19) a look at the orders and see if I -
 (20) THE COURT Sure
 (21) MR PETUMENOS In aid of my objections I would like
 (22) to call Mr - Dr Richard Roddewig
 (23) THE COURT That will be fine counsel I still need
 (24) to understand the theory behind your second - your second
 (25) point What - go over it again so that I can understand what

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- (1) THE COURT I have it right here
 (2) MR PETUMENOS That would be the impact of Exxon
 (3) Valdez oil spill on real estate markets?
 (4) THE COURT (Indicates affirmatively)
 (5) MR OPPENHEIMER Tim I m not sure Are these
 (6) actually cross exhibits or -
 (7) MR PETUMENOS Cross exhibits? No those are all
 (8) your exhibits
 (9) MR OPPENHEIMER As I suspected I believe only two
 (10) of these will be used with Mr Roddewig
 (11) THE COURT Read the ones into the record that are not
 (12) going to be used I just need the numbers
 (13) MR PETUMENOS Let me just clarify it. Mr Papke -
 (14) there are co-authors to this report I want to make sure we re
 (15) on the same wavelength There are co-authors to this report
 (16) Does that mean neither Mr Papke nor Mr Roddewig are going
 to
 (17) use them
 (18) MR OPPENHEIMER I m not prepared to make that
 (19) representation I m prepared to confer with you Mr Papke is
 (20) not up until the end of the week and frankly I did not just
 (21) address these issues As you can appreciate It s been a
 (22) fairly hectic schedule
 (23) THE COURT I m sure it has counsel All I want is
 (24) the exhibits you re not using and I ll issue an order that you
 (25) not use them until you give me notice outside the presence of

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- (1) you re saying
 (2) MR PETUMENOS I think probably the best thing that I
 (3) could do is show the Court some of the exhibits that I am
 (4) referring to That I think will make it crystal clear
 (5) Counsel I m showing 10537A -
 (6) MR OPPENHEIMER Your Honor It might short-circuit
 (7) this a little bit What concerns me about this is that one of
 (8) the handicaps of not being on notice this was coming up today
 (9) is Mr Petumenos had not followed our normal course of having
 a
 (10) dialogue of what actually is or isn't an issue I am not sure
 (11) of the number of these we re about to see implicated in
 (12) Mr Roddewig s testimony In fact I believe the only exhibit
 (13) which is implicated is one that we ve discussed quite a bit
 (14) previously which is a so-called take away chart which we used
 (15) In opening statement and so I guess - I m perfectly happy to
 (16) do whatever the Court wishes but I m concerned we may be
 (17) wasting some time
 (18) THE COURT Tell me look through those things and -
 (19) MR OPPENHEIMER I will I ll do that right now
 (20) MR PETUMENOS Take a look at these if you would
 (21) too
 (22) While I m on it Judge the motion that we filed I think
 (23) contained copies of the report and so forth but would it be
 (24) helpful to the Court if I placed that in front of you as we
 (25) went along

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- (1) the jury
 (2) MR OPPENHEIMER This is with respect to
 (3) Mr Roddewig DX13160 - see this is why I asked whether
 (4) these were cross They have no DX on them
 (5) MR PETUMENOS It s what was served on me
 (6) MR OPPENHEIMER DX13092 DX10492B DX10483D
 (7) DX10482D DX10481D DX10480D -
 (8) THE COURT 10480D okay
 (9) MR OPPENHEIMER Correct Your Honor D DX10231A
 (10) DX10624A 3 DX10625A 28 -
 (11) THE COURT Do that one again
 (12) MR OPPENHEIMER Yes sir DX10625A 28 DX10624A 1
 (13) DX10626A 1 DX10626A 4 DX13306 DX13053A 1 DX13053A 4
 (14) DX10496A DX10495A DX10494B DX10493A DX10537A
 DX10533
 (15) DX10532 DX10531 DX10530 DX10484C DX1025 -
 (16) THE COURT 257
 (17) MR OPPENHEIMER DX10254
 (18) THE COURT Okay got it Is that it?
 (19) MR OPPENHEIMER That s it
 (20) THE COURT None of those exhibits can be used before
 (21) notice is given out of the presence of the jury to opposing
 (22) counsel and to me
 (23) MR OPPENHEIMER Understood Mr Petumenos is
 (24) withdrawing his objection to DX13073B
 (25) THE COURT Okay

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- (1) MR PETUMENOS That leaves 13072C and I don't know
 (2) what your position is on that
 (3) MR OPPENHEIMER Your Honor maybe we should show
 (4) it Your Honor I don't know if you have a copy of this in
 (5) front of you
 (6) MR PETUMENOS He doesn't yet
 (7) MR OPPENHEIMER If I may Your Honor may recognize
 (8) this exhibit We've discussed it at some length previously
 (9) This is an exhibit that was used in opening statement It was
 (10) the subject of a hearing prior to the opening statement You
 (11) may recall that we got some information very late from
 (12) Mr Mundy One of our concerns was that we were going to be
 (13) using this data and we asked permission from the Court and
 (14) received it to be allowed to use proximate data in this chart
 (15) because we were concerned that subsequent calculations
 based on
 (16) the new data might require some change We didn't want to be
 (17) met with the criticism in closing that we used it again that we
 (18) changed our numbers from the opening to the closing chart
 We
 (19) had extensive discussion then about the exhibit It was
 (20) approved for use in opening statement and we did use it in
 (21) opening statement
 (22) What it represents is an application of some of the
 (23) conclusions that Clarion which is the company that
 (24) Mr Roddewig and Mr Papke worked with reached as a result
 of
 (25) the case studies and it's simply a - it is a computational

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- (1) application of those conclusions to Mr Mundy's calculations
 (2) There's - this has been on the table this approach and this
 (3) testimony for quite some time and in fact was the subject of
 (4) the deposition testimony Mr Roddewig was asked whether he
 (5) had views about Mr Mundy's work He said he did He wasn't
 (6) interrogated extensively about it at the deposition
 (7) Mr McCallion in December deposed him You know I don't - I
 (8) don't take other people's depositions and I don't know why
 (9) but he wasn't but he was clearly asked whether he had
 opinions
 (10) and he said he did
 (11) It is a way of describing the - it's all basically
 (12) stigma If you look at it all of the - the components of the
 (13) bar go to Mr Roddewig's and Clarion's conclusions about the
 (14) lack of a stigma impact in a real estate market as a result of
 (15) environmental risk event such as the type we're talking about
 (16) and it is really a very straightforward - I mean all he's
 (17) done is to take Mr Mundy's data which of course includes
 (18) ICF's data and said this amount of what they are calculating
 (19) is attributable to the unloiled lands This amount is
 (20) attributable to the uplands
 (21) We believe it is very important and very helpful to explain
 (22) our position in the case because from - and that's why we put
 (23) it in the opening because it is just a very simple way I
 (24) think for the experts to explain where they differ one from
 (25) another where Mr Roddewig's view of stigma goes if you apply

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- (1) it to the claim that's being made here It's a very
 (2) straightforward calculation Those are all Mr Mundy's
 (3) numbers That exhibit has been - has been present and
 (4) discussed really from the very beginning As I say it was the
 (5) subject of hearings even before opening statement
 (6) So our position is that there's really nothing undisclosed
 (7) about any of this It flows naturally from the testimony that
 (8) Mr Mundy gave and from the work that Mr Roddewig's done
 and
 (9) that he has been deposed on and that his report is filled with
 (10) his observations not surprisingly about the fact that he does
 (11) not agree that there's a stigmatizing result from these kind of
 (12) environmental risk events these contamination events
 (13) THE COURT Okay thank you counsel
 (14) MR PETUMENOS Judge I think my response is fairly
 (15) straightforward I am familiar with the passages in the
 (16) deposition to which Mr Oppenheimer alludes I'm also familiar
 (17) with the extensive debate that went on with the Discovery
 (18) Master some of which is before you based upon the
 defendant's
 (19) motion against the plaintiffs in which there was an extensive
 (20) recommendation made
 (21) The issue was do the - does either side have to
 (22) anticipate in every respect all of the things that may have to
 (23) come up - an expert may have in his head or may do later or
 (24) are we going to have some anchor in terms of a written fully
 (25) disclosed fairly disclosed report that gives us some

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- (1) information about what the expert's going to testify to After
 (2) extensive proceedings before the Discovery Master and there's
 (3) a number of orders there before you the report itself was
 (4) the cornerstone and the touchstone of what it was the expert
 (5) was going to be permitted to testify to here The questions
 (6) that Mr Oppenheimer alludes to are questions relating to do
 (7) you hold any other opinions and the expert not surprisingly
 (8) said I hold opinions that the other expert isn't correct and
 (9) that his methodologies aren't right
 (10) Any expert in the case could have given that statement but
 (11) I will represent to the Court that nowhere in any report or
 (12) supplemental report or in any work papers or any material that
 (13) we have received does Mr Roddewig calculate go through
 (14) divide out and come up with percentages of this and that
 (15) aspect of Dr Mundy's report - and it is no answer that
 (16) Dr Mundy because the boundaries changed near the
 beginning of
 (17) trial adjusted those numbers a little bit that we didn't get
 (18) such notice that this expert was going to testify to that
 (19) because the issue was always present
 (20) In other words since 1993 Dr Mundy had a certain amount
 (21) of land that he - that was unloiled and a certain amount of
 (22) land as is represented in that chart that was in different
 (23) categories and had different approaches to it so it is - it
 (24) is not an excuse to withhold opinions and calculations and work
 (25) papers done with respect to how the property breaks down into

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- (1) these various categories that it changed slightly at the end in
 (2) order to accommodate the truth which was certain boundaries
 (3) changed and certain additional oiling information was what
 came
 (4) to light
 (5) So we have not got the work papers that surround that
 (6) exhibit We don't know if it's accurate We don't know if
 (7) he's calculated the various percentages correctly and we did
 (8) not know in opening statement how this evidence was coming in
 (9) or which expert was going to testify to it
 (10) The issue that was raised before you in the hearing prior
 (11) to opening statement as I recall was Was the document
 (12) argumentative and was it an improper document for that
 (13) reason This is a wholly it seems to me different issue
 (14) MR OPPENHEIMER Your Honor this is a - I guess a
 (15) little hard for me to join issue directly because it seems to
 (16) me even under the rules that govern the ability of an expert to
 (17) comment upon in trial testimony this is the sort of thing that
 (18) Mr Roddewig could - he could draw on a board I suppose as
 (19) he was even testifying
 (20) All he's done - I'm not asking that that be done We
 (21) worked very hard on that chart I think it's clearer than
 (22) anything we could draw but the fact is all he's done is say
 (23) that if you - if you - if you share my perceptions of this
 (24) here's what happens when you look at their theory all of their
 (25) data I respectfully disagree with Mr Petumenos

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- (1) characterization of our earlier conversations Mr Fortier and
 (2) I have had conversations about Mr Roddewig testifying on this
 (3) subject and I do believe we don't in fact have much of a
 (4) disagreement that it did come up at the deposition
 (5) He did express the view he did have disagreements with
 (6) Mr Mundy and he didn't get asked any questions There were
 (7) some on Mr Green and not on Mr Mundy I'm not being
 (8) critical I've done the same thing I just don't think there's
 (9) a nondisclosure issue here in any way shape form
 (10) THE COURT Were there underlying calculations?
 (11) MR OPPENHEIMER There are They're really very
 (12) simple ones We've never been - I mean I'd be happy to
 (13) supply any additional information
 (14) THE COURT Does he have work papers where he did the
 (15) calculations?
 (16) MR OPPENHEIMER I'm sure he does I'm sure he does
 (17) THE COURT You're going to have to provide them
 (18) MR OPPENHEIMER I'd be happy to
 (19) THE COURT Okay I suppose the issue is have the
 (20) plaintiffs shown that there's been some hiding the ball or
 (21) nondisclosure in view of the orders that they've given me from
 (22) the Discovery Master regarding other issues in the case the
 (23) expert witness discovery order and the order that was given to
 (24) me as a federal order But it certainly applies to these
 (25) proceedings Pretrial Order Number 38 my order of the 17th of

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- (1) June regarding precluding expert testimony from the
 defendants
 (2) witnesses and with regard to this exhibit 13072C I have -
 (3) I just simply don't see that the proponents of this motion have
 (4) met their word and therefore you can do the calculation I
 (5) mean the witness can testify to the calculations show the
 (6) basis for the calculations and - and I don't know whether
 (7) I'll admit the exhibit at all I'll reserve that till I hear
 (8) the testimony
 (9) So now does that - with regard to all of the exhibits
 (10) that have been stipulated out and this one is the second prong
 (11) of your argument concluded Mr Petumenos?
 (12) MR PETUMENOS I believe - I believe that it is
 (13) And then I think that to - I was going to ask the witness
 (14) this but I think that what might speed up the hearing here a
 (15) little bit for the next phase if I could to know which other
 (16) oil spills if you were in view of previous discussions I
 (17) don't know if they're on the record yet or not that state that
 (18) the litigation case studies are not going to be addressed in
 (19) the proceedings There are other oil spills as well and I
 (20) would be curious if I can get a representation of counsel as
 (21) to which oil spills before I call the witness in are going to
 (22) be the subject of testimony so that I would know whether I can
 (23) narrow my examination and take less time
 (24) THE COURT I think that's fair enough
 (25) MR OPPENHEIMER Your Honor a couple of - I'd like

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- (1) to be heard on whether this witness should be called at all
 (2) But with respect to Mr Petumenos request he and I spoke over
 (3) the weekend and actually I may need to get a clarification
 (4) because violating my normal rule of never disclosing testimony
 (5) direct or otherwise I actually have disclosed a fair amount of
 (6) what I intended to - and do intend to direct Mr Roddewig on
 (7) Bottom line is I told Mr Petumenos over the weekend that
 (8) we're prepared not to elicit testimony from Mr Roddewig
 (9) regarding what in his report are designated as litigation
 (10) studies case studies I advised Mr Petumenos in response to
 (11) his question whether this included the San Francisco Bay study
 (12) that it did so we're talking about the litigation studies
 (13) including what Mr Petumenos and I have been calling the
 (14) San Francisco Bay case study which was initially not a
 (15) litigation case study but in a supplemental report was
 (16) designated as such Those will not be the subject of
 (17) testimony
 (18) The one area that I believe Mr Petumenos and I do join
 (19) issue on - before I reach that I should add the understanding
 (20) I believe Mr Petumenos and I have is that neither side is
 (21) going to question on those studies Obviously I do not want
 (22) to be in a position where a witness does not address a subject
 (23) on direct and he is crossed on that subject If it's fair
 (24) game for cross it seems to me we should have an opportunity
 (25) fairly to put in our direct testimony as we would like to

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- (1) describe and have that studies understood but with the
 (2) understanding that these litigation studies are going to be off
 (3) limits for either side we've agreed not to produce testimony
 (4) about them
 (5) Now I am doing that because of a couple of reasons One
 (6) we do not believe it is necessary for his conclusions though
 (7) it is helpful at understanding them but we can forego it and
 (8) still have a basis for his opinion
 (9) Two we feel very strongly that they are in fact
 (10) perfectly admissible but we will not push the issue - I
 (11) should say perfectly sound basis for an expert opinion Your
 (12) Honor should be mindful that though they have been described
 (13) now and again as e's relying on the conclusions of either
 (14) settlements or litigation in point of fact that is simply not
 (15) true He looks at the market data that's associated with the
 (16) spill event where he determined that there was litigation It
 (17) was his conclusion that he ought to disclose that he had
 (18) learned that there was litigation and to disclose what he
 (19) learned about it and specifically he thought it appropriate to
 (20) disclose where he could find it what the results were He did
 (21) not intend to testify to that but he felt that he might be
 (22) accused of having not fully disclosed the data that might be
 (23) relevant to his conclusions if he didn't explain that
 (24) question Yes he was aware for example there had been a
 (25) settlement before the July result He never intended to and

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- (1) has not relied upon the conclusions of litigation processes to
 (2) reach his opinions But notwithstanding that to obviate the
 (3) problem and frankly to cut down his testimony and speed
 (4) things up it isn't going to make or break the issue with us
 (5) We've entered into the stipulation
 (6) The one area where we still have a little disagreement is I
 (7) would like the right to have a very brief set of introductory
 (8) or contextual questions that focus on one of our exhibits that
 (9) has a map of the United States that has little dots at all of
 (10) the case studies he looked at because he looked at a lot of
 (11) case studies and then on a variety of bases he narrowed them
 (12) down to one he wanted to focus on he calls detailed case
 (13) studies and there are four of those he will testify about
 (14) I think it would be helpful for him to just be able to
 (15) explain that he looked at a number of studies and that he
 (16) brought his focus and attention down to the detailed studies of
 (17) the four and in doing that I'd like to simply have him put up
 (18) the exhibit of the map of the United States show the dots
 (19) where the spills he did look at and proceed into his testimony
 (20) about the detailed case studies
 (21) THE COURT You mean in other words he's simply
 (22) going to show the exhibit to show various spills that he
 (23) investigated?
 (24) MR OPPENHEIMER Yes And frankly he's not even -
 (25) if it would help obviate the problem I don't even need to have

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- (1) him describe or go into any detail Simply say I looked at a
 (2) number of spills and from those concluded to focus on the
 (3) ones that I do four detailed case studies and we take the
 (4) exhibit down and it would just I think be appropriate to
 (5) allow the jury to understand the context in which he finally
 (6) focuses on the four that he does to present to them
 (7) We don't intend to make any reference to any litigation in
 (8) that very short piece of his testimony but it's contextual
 (9) THE COURT All right.
 (10) MR PETUMENOS That's very helpful Judge I wonder
 (11) if I could ask the Court to turn to page 47 of the report
 (12) THE COURT Sure
 (13) MR PETUMENOS The Clanton report -
 (14) THE COURT Hang on just a minute Wait a minute
 (15) What page was it?
 (16) MR PETUMENOS Page 47
 (17) THE COURT Wrong report counsel Hang on just a
 (18) minute
 (19) MR PETUMENOS I have it right here for you If you'd
 (20) like
 (21) THE COURT Yeah sure if you want to bring it up
 (22) here but I've got it here
 (23) MR PETUMENOS Okay
 (24) THE COURT Maybe you better bring it It's going to
 (25) take me too long to find it. I got the supplemental report

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- (1) MR OPPENHEIMER We have the page here
 (2) MR PETUMENOS I have the page right here
 (3) THE COURT Page 47 I've got it
 (4) MR PETUMENOS The original report where it says
 (5) conclusions
 (6) THE COURT Yes uh huh
 (7) MR PETUMENOS This is not a atypical of the
 (8) litigation case study conclusion section of the report I take
 (9) strong issue with what Mr Oppenheimer has stated about what
 (10) the way this was done I sat in deposition with this gentleman
 (11) for a week and as partner for another week The report is
 (12) divided up into the various sections and segments of the
 (13) studies When you get to the bottom line you will find that
 (14) each study the conclusion that the expert draws from each of
 (15) his enterprises is stated in the conclusion section of each
 (16) study
 (17) More importantly the italicized portions of the study are
 (18) those that he finds the most significant You can read it for
 (19) yourself but it is apparent from this particular study that
 (20) there wasn't much to study except for the results of the
 (21) litigation that - that Exxon I think has withdrawn from this
 (22) case because it is so clearly inadmissible and so clearly
 (23) beyond the scope of the Evidence Rules
 (24) And the concern that I have is in any instance when a -
 (25) when a study is found to be inadmissible and Exxon I think

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(1) is doing a clever thing here because they are withdrawing from
 (2) the offer those things which are clearly beyond the scope of
 (3) the evidence and then wanting to put - want the exhibit
 (4) Mr Oppenheimer's talking about is a map of the United States
 (5) showing all of the little red dots where the expert has
 (6) studied - has made studies most of which are either
 (7) litigation studies like this where the conclusion is clearly
 (8) inadmissible or they're overview studies in which the expert
 (9) has found that there was insufficient information to draw any
 (10) conclusions whatsoever and then going to leave with the jury
 (11) the impression that he's done all this work and all this study
 (12) and all this admissible stuff
 (13) And I'm just showing you four which are - have got other
 (14) problems which we're about to address to let the jury
 (15) understand that he could have shown the jury eight or nine or
 (16) 12 or 15 that are similar and all show the same thing and I
 (17) think that's highly inappropriate and that's where we are at
 (18) loggerheads
 (19) I think the way that they want to do this examination is -
 (20) and I'm very familiar with it - we did an exhaustive search
 (21) all over the world and then we narrowed it to the United
 (22) States and we did a whole bunch more of them and we
 (23) narrowed
 (24) it to the ones that are most significant and we got it down to
 (25) this number here And we did this screening advisedly and
 there's a whole section of the report that discusses it and

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(1) now we can tell you that nowhere ever has there been very
 much
 (2) of an impact on real estate based upon all these other spills
 (3) I think that is totally unfair in view of what's in this
 (4) report There are overview studies there's very little
 (5) information about them and the fact that these litigation
 (6) studies are clearly inadmissible and I don't think that the
 (7) approach suggested by counsel should be followed
 (8) MR OPPENHEIMER Your Honor couple points First of
 (9) all the information an expert relies upon doesn't have to be
 (10) admissible to begin with More important point is I think
 (11) we're in an unusual situation where Clarion is in effect
 (12) being penalized for having - having some very significant
 (13) disclosures Frankly these reports are among the most
 (14) detailed expert reports in litigation I've seen and they tell
 (15) you everything they found including where they decided not to
 (16) include a spill because they felt that the market data was
 (17) inadequate to reach a reliable conclusion And as experts I
 (18) think their preference if it weren't for this kind of debate
 (19) sitting down and explaining what they did which frankly I
 (20) think is quite helpful to understand we do not intend to go
 (21) into this detail would be to say our process as experts was to
 (22) look for spills that had certain qualities we thought would
 (23) give us a reliable basis to reach conclusions and where we
 (24) looked and we found we couldn't do that we kicked out an
 (25) example Where we looked and we found for example that in

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(1) our view some of the foreign spills with the exception of the
 (2) Amoco Cadiz involved different sort of legal systems or
 (3) cultural systems we kicked those out too
 (4) This is a way of an expert simply explaining that this is
 (5) how they reached their conclusion and if Mr Roddewig is
 (6) asked in fact he says it in his report there were some spills
 (7) they looked at some case studies that they didn't feel made
 (8) good candidates for case studies there just was not enough
 (9) data there and they disclosed that in their report and I
 (10) think the idea that they can't describe their method and how
 (11) they went about doing their work as a general matter just
 (12) because they have disclosed some of the things they looked at
 (13) they had to kick out of the data set because it wasn't a good
 (14) candidate for detailed study is something they and we should
 (15) not be penalized for I don't intend to go into those things
 (16) They did look at a lot of spills and write a lot of reports
 (17) and they think it's fair to us to say they didn't go pick out
 (18) four spills out of the air they gave some thought to the case
 (19) studies
 (20) THE COURT I think it's appropriate that any expert
 (21) this expert particularly can describe the process he went
 (22) through in order to come to his conclusions It seems
 (23) completely artificial to for me to hamstring his presentation
 (24) giving what I would consider to be an unfair advantage to the
 (25) plaintiffs not to the defendants And certainly he can use an

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(1) exhibit if it's - if the exhibit is simply to as an
 (2) illustrative aid to describe the method by which he finally
 (3) came to - zeroed in on the issues that he's testifying about
 (4) and came to his final conclusions I don't think that there's
 (5) any question that that's the appropriate ruling on the basis of
 (6) the information I've been given
 (7) All right Now what's next?
 (8) MR PETUMENOS The thing that's next is the heart of
 (9) the issue which is the Rule 703 and I - one of the things
 (10) that I feel perhaps I haven't approached it correctly - is
 (11) that we don't operate on the assumption that all of this is
 (12) even - even admissible at all because the detailed case
 (13) studies about which there is going to be testimony I think
 (14) are highly highly suspect under Rule 703 and under Rule 403
 (15) for confusion and waste of time I would like to put before
 (16) the Court what the witness will be testifying to and exactly
 (17) what I mean in examination of him so that I have a record
 (18) THE COURT Who are you calling?
 (19) MR PETUMENOS Dr Roddewig - Mr Roddewig
 (20) THE COURT Counsel?
 (21) MR OPPENHEIMER Your Honor I - Mr Roddewig is of
 (22) course here as we said he would be and he can be examined
 (23) but I object to it I don't think he should be subjected to
 (24) two crosses for a preliminary hearing I don't think there is
 (25) anything disclosed in his report that suggests that it is

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(1) anything other than a market studies of the type that he
 (2) routinely does He as we have said before is - he's clearly
 (3) a qualified real estate consultant and appraiser He is an
 (4) appraiser He's an MAI He's a CRE He has gone out and
 (5) looked at other case studies which is something he does in the
 (6) normal course of his work and he's derived some conclusions
 (7) which he's applied to this case
 (8) I - what I think is worth remembering is that it is
 (9) utterly irrelevant that it is not technically an appraisal
 (10) under USPAP We've had numerous real estate experts testify
 in
 (11) the case on topics that were not appraisals Mr Shorett for
 (12) example testified to a damage concept It was clearly not an
 (13) appraisal Mr Shorett was quite clear he hasn't done an
 (14) appraisal here There's no requirement it be an appraisal or
 (15) any other particular animal
 (16) In terms of the fact it involves case studies of other
 (17) events we've had a lot of testimony in this case already of
 (18) precisely that type Just briefly we had Mr Bush who
 (19) derived his oil persistence curves on the basis of other oil
 (20) spills Interestingly a number of them like the Metula
 (21) Arrow the Kirk (phonetic) stands even indirectly by us which
 (22) was the experimental spill Some of the same spills
 (23) Mr Roddewig looks at indeed I cross-examined him on those
 (24) spills I could easily have made it symmetrically I wouldn't
 (25) have done it It's inappropriate the argument he shouldn't

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(1) have done that because those are all different spills and other
 (2) cross examination But in point of fact he and others
 (3) routinely looked at other spills to derive conclusions in
 (4) indications such as this Mr Mundy relies upon those
 (5) persistence curves which were generated by Mr Bush Mr
 Mundy
 (6) himself had contaminated case studies he does contaminated
 (7) properties
 (8) I know Mr Petumenos has pointed out and he's correct
 (9) about this these other market studies are not comparables
 (10) quote unquote in the sense at which an appraiser goes out
 and
 (11) looks at comparables for property But that's also utterly
 (12) irrelevant because there is no requirement that an appraiser
 (13) and real estate consultant limit himself to that kind of
 (14) comparable and they regularly go out and do market wide
 (15) studies
 (16) There is testimony from Dr Green about other cases he's
 (17) worked on I believe although I may be confusing this with a
 (18) famous Beatles song that he referred to the Penny Lane the
 (19) underground oil plume at the gas station here in Anchorage that
 (20) he worked on I happen to know that that was very extensive
 (21) litigation here in town I elected for my own reasons not to
 (22) cross examination him extensively on it but I could have
 (23) Again it's the same thing we've heard repeatedly here when
 (24) the real estate experts have expressed a view about value or
 (25) impact Mr Mundy talks about stigma Mr Green talks about

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(1) stigma how they apply it They always revert to the analysis
 (2) of other contamination events other environmental risk events
 (3) and there's no reason to single us out for not being able to do
 (4) that It's happened in the work before and Mr Roddewig and
 (5) other real estate counselors routinely do this kind of thing in
 (6) their work and we've obviously brought him here he is
 (7) obviously available to be questioned Obviously you don't
 (8) want to have a witness subjected to repeated cross-examination
 (9) if you can avoid it and I don't see that there's a basis for
 (10) seriously questioning the conventionality of his work here
 (11) THE COURT Thank you counsel I need to know what
 (12) you propose to ask this witness Mr Petumenos
 (13) MR PETUMENOS My reaction to counsel's argument is
 (14) that that may be counsel's argument but I don't believe that's
 (15) what the facts are What I want to ask - what I want to point
 (16) the Court to is this I want to acquaint the Court to the fact
 (17) that this as in fact to my knowledge never been done before
 (18) in any court ever that this witness has never done it before
 (19) in any court ever and that what the - what this witness has
 (20) in fact done - may I approach the Court with an exhibit?
 (21) MR OPPENHEIMER Tim what do you have?
 (22) MR PETUMENOS 10229A I'll just show it to you
 (23) I'm sure you're very familiar with it
 (24) This is one of the detailed case studies The Falmouth
 (25) spill of about one percent of the oil of the Exxon Valdez in

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(1) Falmouth Massachusetts almost 20 years - 1969 The witness
 (2) went to one subdivision where residential housing was being
 (3) developed next to a swamp which had been oiled He looked at
 (4) the number of vacant lots that sold discovered that just prior
 (5) to the oil spill there was some transfers of lots for which no
 (6) consideration was given so that he has no data prior to the oil
 (7) spill Then he determines the amount of lots that were sold
 (8) after the oil spill to try to develop a pattern determines
 (9) that a number of them after the oil spill were also not sold
 (10) for consideration and he has no idea what price they were sold
 (11) at so he doesn't know whether they were sold at a discount or
 (12) whether they were sold at market
 (13) Then he compares the history of these four or five lots
 (14) whatever they were in 1969 to the surrounding market
 (15) Barnstable and then the United States In 1970 this particular
 (16) subdivision went into foreclosure Insufficient lot revenue
 (17) was generated to allow the subdivision to succeed The
 (18) objective data it would seem would indicate that therefore
 (19) the only thing that he knows about the subdivision in question
 (20) was that it went sour immediately after the oil spill but
 (21) since that's not the conclusion that he wants he then gets on
 (22) the telephone and he starts calling people from 20 or 30 years
 (23) ago to ask them if this loss of revenue and if this crashing
 (24) of the subdivision that he's elected to study was because of
 (25) the oil spill And he talks to people who have no firsthand

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(1) knowledge about the subdivision people who are brokers in the
 (2) area I can point you to the page in the report you can see
 (3) what I mean pages 99 100 and 101 of the report And in the
 (4) deposition when we start getting down to what it is that these
 (5) people knew the only one who had any direct connection with
 (6) the transaction whatsoever was an attorney who represented a
 (7) creditor in the foreclosure who could remember nothing about
 (8) the transaction of relevance or materiality and then we began
 (9) talking to real estate agents in the area real estate brokers
 (10) and lo and behold the one piece of information we get out of
 (11) the subdivision is that in fact they had all kinds of other
 (12) problems during this period of time relating to - I can't
 (13) quite remember but it's sewage or things that were - and so
 (14) therefore the subdivision crashed because of reasons
 (15) unrelated
 (16) to the spill so therefore at the very end of all this we
 (17) conclude the oil spill had no impact on property in the
 (18) Falmouth area
 (19) And I take strong issue with Mr Oppenheimer's
 (20) characterization of what's going on here This is not an
 (21) appraisal This is not something that's ever been done
 (22) before This spill is remote by time and distance and it is a
 (23) far cry from what this expert is doing from what the
 (24) scientists do when there is a myriad number of scientific
 (25) studies laboratory tests hard science determining how long
 (26) the oil is staying in the environment which is what we've

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(1) heard so far when we've discussed persistence and other
 (2) scientific related things from other oil spills This is very
 (3) very different It is highly prejudicial extremely confusing
 (4) and way far afield from where we should be in this trial
 (5) Mr Oppenheimer made reference to the - the technique by
 (6) which this spill was selected which opens up the door to an
 (7) entire inquiry about all of the data - I have another exhibit
 (8) here perhaps to show you
 (9) THE COURT Counsel counsel I think you're
 (10) misunderstanding me I need to know what you're going to ask
 (11) this witness because if all you're going to do is argue your
 (12) position I'll make the decision now If you have some
 (13) valuable information to present by way of this witness other
 (14) than a simple preview of what his testimony is going to be
 (15) then you have to tell me now or else I'll assume that the
 (16) witness is not necessary and tell you you can't call him
 (17) MR PETUMENOS Well I guess it would come down to
 (18) this Really I got on a roll there and perhaps didn't have
 (19) the Court's question in mind but my point I guess is that I
 (20) believe that the record that the evidence would show that what
 (21) I am indicating by way of offer is correct and what
 (22) Mr Oppenheimer is indicating that this is all very
 (23) straightforward that this is all very common under the real
 (24) estate guidelines that the fact that it's an appraisal doesn't
 (25) mean a thing under the law that this is very reliable stuff

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(1) and that this is the same thing that everybody else has done in
 (2) court is not right It's not accurate There is a factual
 (3) dispute between Mr Oppenheimer and I about what this
 (4) witness
 (5) is going to testify to
 (6) THE COURT Okay all right I'm going to cut it
 (7) short here I'm going to let you call the witness You've got
 (8) 20 minutes no more than 20 minutes with him and if I see that
 (9) this is simple attempt at discovery I'll cut it off even
 (10) before 20 minutes But I'm going to give you a fair chance to
 (11) give me evidentiary information as opposed to the argument
 (12) that
 (13) you've been giving me this morning So you can call the
 (14) witness
 (15) THE CLERK Sir can you attach the microphone and
 (16) remain standing for the oath
 (17) A Test one two three
 (18) THE CLERK No attach the microphone to your tie
 (19) Please raise your right hand
 (20) (The Witness Is Sworn)
 (21) THE CLERK Please be seated
 (22) MR OPPENHEIMER Your Honor if I might ask the
 (23) Court would it be useful at all to - I realize this is going
 (24) to be short - to have me have the witness briefly give his
 (25) credentials
 (26) THE COURT No because I know his credentials
 (27) Counsel I've gone through all that I've gone through it more

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(1) than once if you recall There was a pretrial motion which I
 (2) went through and now I went through it again this weekend
 (3) I've read the motion all of the papers over the weekend so I
 (4) understand the issues and I understand the qualifications here
 (5) MR OPPENHEIMER Understood
 (6) THE CLERK Sir for the record could you please
 (7) state your full name?
 (8) A Yes My name is Richard J Roddewig
 (9) THE CLERK Could you spell your last name please?
 (10) A R-o-d-d-e-w-i-g
 (11) THE CLERK And your occupation?
 (12) A I'm a real estate appraiser and a real estate analyst
 (13) THE CLERK Thank you
 (14) DIRECT EXAMINATION OF RICHARD J RODDEWIG
 (15) BY MR PETUMENOS
 (16) Q Mr Roddewig good morning
 (17) A Good morning Mr Petumenos
 (18) Q Mr Roddewig you have not done an USPAP appraisal - let
 (19) me preface this The questions I'm going to ask you this
 (20) morning relate to your report entitled the Impact of the Exxon
 (21) Valdez oil Spill on Real Estate Markets all right?
 (22) A Yes
 (23) Q So I will confine my questions to that report I
 (24) understand you've done a number of others?
 (25) A That's correct

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- (1) Q All right That is not an appraisal under the USPAP
 (2) standards is it?
 (3) A No it is not
 (4) Q Have you ever done prior to the Exxon Valdez oil spill an
 (5) appraisal of contaminated property under the USPAP
 standards?
 (6) A I've given testimony about environmental impairment but it
 (7) wasn't necessarily what you might mean by contaminated
 (8) property I guess you'd have to define a contaminated property
 (9) for me Mr Petumenos
 (10) Q Other than this issue any others USPAP appraisal with -
 (11) where you wrote out the appraisal did the certification and
 (12) signed it?
 (13) A I've provided testimony in hearings where I had to comply
 (14) with USPAP standards and had to file a memo before giving the
 (15) testimony
 (16) Q In this particular study which is not a USPAP study I
 (17) want to show you first -
 (18) MR PETUMENOS Could I get this - how - Judge how
 (19) do we mark matters for hearings?
 (20) THE COURT You can mark them as Court's exhibits
 (21) consecutive to the ones we've got
 (22) MR OPPENHEIMER Your Honor may I ask a procedural
 (23) question? I'm not sure what - I'm not anxious to prolong
 (24) this Is this a cross-examination exhibit? Your Honor the
 (25) normal procedure we've been following is that
 cross examination

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- (1) exhibits are provided 24 hours in advance Because this
 (2) witness isn't scheduled to testify we don't have any
 (3) cross-examination exhibits It may be that I have no
 (4) objection but we've certainly not been given any documents for
 (5) this morning
 (6) THE COURT You've been given documents -
 (7) MR OPPENHEIMER No we've been given no
 (8) cross examination documents at all for this witness That will
 (9) happen today because he's not scheduled to testify until
 (10) tomorrow
 (11) THE COURT I see okay
 (12) MR PETUMENOS Those are for the jury
 (13) THE COURT Is this going to be a cross-examination
 (14) exhibit?
 (15) MR PETUMENOS I don't think so but it's an exhibit
 (16) in his deposition
 (17) MR OPPENHEIMER Well it looks like a
 (18) cross examination document to me
 (19) THE COURT Well if counsel says it isn't -
 (20) MR OPPENHEIMER You're not going to use it I don't
 (21) have any objection
 (22) THE COURT Counsel's at risk
 (23) MR PETUMENOS One of the things that you did - and
 (24) I'm not so sure it might not be a cross examination exhibit
 (25) I'm just trying to make a very simple point here

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- (1) BY MR PETUMENOS
 (2) Q Mr Roddewig at the beginning of your endeavor you had a
 (3) database of all the oil spills around the world right?
 (4) A We compiled the database after we started the assignment
 (5) Q And this is it Exhibit 111 Court's Exhibit 111 or a
 (6) portion of it
 (7) THE CLERK It's XXIII Court's exhibit Roman numeral
 (8) XXIII
 (9) MR PETUMENOS All right
 (10) A This is one of the databases that we collected
 (11) THE COURT Got you sorry
 (12) MR PETUMENOS And I would move its admission for
 (13) purposes of this hearing
 (14) THE COURT I'll admit it
 (15) BY MR PETUMENOS
 (16) Q There is an enormous volume of information that was created
 (17) as part of that process am I right?
 (18) A As part of which process Mr Petumenos?
 (19) Q Locating and learning about other oil spills
 (20) A Yes we collected a great deal of information
 (21) Q Then you began what was called a screening process or a
 (22) selecting narrowing down of the spills that you decided that
 (23) you wanted to study
 (24) A I think you've missed an interim step
 (25) Q Just answer my question okay?

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- (1) A We eventually did a screening and selection process
 (2) Q And when you did the screening and selection process you
 (3) had to go through a certain amount of analysis to decide which
 (4) spills to take and study?
 (5) A A certain amount of analysis was done yes you're right
 (6) about that
 (7) Q And one of the issues that might - that might be helpful
 (8) to the jury is learning what that process was and how the -
 (9) whether or not your analysis in deciding which spill to study
 (10) was fair?
 (11) A The process was fair
 (12) Q I know you think it's fair but that's an issue for the
 (13) jury would you agree whether or not your process was - was
 (14) fair as it culled down the studies from all the numbers you
 (15) studied to say the four detailed litigation studies
 (16) MR OPPENHEIMER The question's argumentative insofar
 (17) as we're asking this witness what the jury should hear
 (18) THE COURT Sustained
 (19) BY MR PETUMENOS
 (20) Q In order to conduct an inquiry to understand how you
 (21) decided which studies to study and which studies not to study
 (22) would one of the things that I would - that would be helpful
 (23) for me to do would be to go through this database and
 (24) understand what you knew at the beginning?
 (25) A Not necessarily that database Mr Petumenos because the

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- (1) principal sources that we relied on for our group of 38 spills
 (2) that form the set that we then gave further analysis to were
 (3) six other reports not that report That was just one of the
 (4) databases that we looked at and we actually used five other
 (5) reports that we talk about five or six others that we talk
 (6) about in our full report
 (7) Q So that's just one of the - one of the documents you use?
 (8) There are other ones as well?
 (9) A That's one of the documents we looked at There are five
 (10) specific studies that we used to actually indicate a set of 38
 (11) spills discussed in all five of those studies
 (12) Q Tell the Judge what those studies were?
 (13) A One of them was a congressional research service study
 (14) Three of the studies were studies either conducted directly by
 (15) NOAA or under NOAA's direction and supervision and the fifth
 (16) study was an Exxon Production Research study
 (17) Q Were those studies voluminous?
 (18) A Some of them were voluminous and some of them were less
 (19) than voluminous
 (20) Q And in addition to that the database that the Judge has in
 (21) front of him is another source that you used?
 (22) A Well we collected a lot of information on spills
 (23) Mr Petumenos but the sources for the 38 spills that are
 (24) discussed in our report are those five reports and we used all
 (25) 38 of them

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- (1) Q The 38 spills then were narrowed down to four litigation
 (2) case studies - I forget what they're called
 (3) MR OPPENHEIMER Detailed
 (4) BY MR PETUMENOS
 (5) Q The four detailed case studies you spent a lot of time on?
 (6) A Yes there were four detailed case studies
 (7) Q And the 38 different oil spills that you - or the 34 other
 (8) ones span what period of time from the earliest one to the
 (9) latest one?
 (10) A I can't remember all of them but some of them would have
 (11) been from the early 1960s through the time of the Exxon Valdez
 (12) incident
 (13) Q Some of them are in Puerto Rico?
 (14) A One of them was in Puerto Rico
 (15) Q One of them is in New England several of them are?
 (16) A Several of them are in New England
 (17) Q One of them is in Nova Scotia?
 (18) A Two of them are in Nova Scotia
 (19) Q On the West Coast as well?
 (20) A West Coast of the United States there were a number
 (21) Q And one of the issues that you addressed in each and every
 (22) one of the studies that you selected was a little section you
 (23) put in your report each time on the indicia of comparability
 (24) between the various spills is that right?
 (25) A For the ones that we selected we did analyze and describe

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- (1) similarities and dissimilarities that make up the comparability
 (2) analysis
 (3) Q And in order to do that you commented on the amount of oil
 (4) spilled?
 (5) A Yes we commented in our report on that
 (6) Q The length of the cleanup?
 (7) A Yes we did
 (8) Q Scientists who discussed the toxicity of the oil?
 (9) A Some cases we named some scientists who we quoted from
 (10) Other situations we didn't name specific scientists
 (11) Q And the amount of material that you produced in connection
 (12) with your report with respect to the scientific studies was
 (13) way more than what was put in your two-year report is that
 (14) right?
 (15) MR OPPENHEIMER I'm sorry I -
 (16) MR PETUMENOS Let me withdraw it I'll ask a
 (17) different question
 (18) THE COURT The question's withdrawn
 (19) BY MR PETUMENOS
 (20) Q I had 23 different Redwell (ph) files of all of the
 (21) material that backed up this report delivered to me Does that
 (22) sound about right to you?
 (23) A Could be
 (24) Q And in those 23 Redwell files that stretch across an entire
 (25) room were other studies that you didn't put in your report but

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- (1) that you or your staff may have read on the issue of how these
 (2) oil spills might compare to the Exxon Valdez?
 (3) A I'm not sure I would agree with that Mr Petumenos As I
 (4) said there were five principal studies that talked about
 (5) comparability We used those five studies as the base of 38
 (6) spills Each one of those studies had their own analysis of
 (7) comparability so we tried to be inclusive and include all 38
 (8) of those in our initial selection of studies and then we
 (9) worked from there and made some selections based on real
 (10) estate
 (11) Q I understand but if I wanted to - if a person wanted to
 (12) inquire as to whether or not you looked at the appropriate
 (13) studies for determining comparability are you with me so far?
 (14) A Yes
 (15) Q One of the things a person might need to do is look at the
 (16) scientific reports that you produced behind your report and see
 (17) how they compared to what you wrote in your report? And there
 (18) are studies like that in the -
 (19) A I don't think you would have to do that Mr Petumenos I
 (20) think the information that we've provided on the spills that
 (21) we've included in our report indicate their comparability and
 (22) this is - this is a market analysis process not a process of
 (23) selecting a spill that is technically the same as the Exxon
 (24) Valdez spill
 (25) Q Let's take an example You know who Riki Ott is?

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- (1) A Yes
- (2) Q Riki Ott is a biologist from Cordova am I right?
- (3) A A biologist and I believe she s also a fisherperson
- (4) Q And she wrote some articles about the spill and what she
- (5) thought about different oil spills didn t she?
- (6) A Yes I believe she did
- (7) Q And those articles were included in the backup to your
- (8) report that you wrote?
- (9) A I don t remember the specifics of her articles and whether
- (10) they went into other spills I know that she s written quite a
- (11) bit on the Exxon Valdez spill and expressed a lot of opinions
- (12) about it.
- (13) Q And some of the things that she expressed in that report
- (14) were different than the things that you put into your report
- (15) am I right?
- (16) A Her report was at any time mentioned in any of the five
- (17) studies that compile the 38 spills that we put into our report
- (18) as the ones from which we made our selection
- (19) Q So your answer is yes?
- (20) A The answer is yes we did not include it because it was not
- (21) in the 38 spills mentioned in the five reports
- (22) Q So an inquiry that one could make is to determine what
- (23) wasn t included in your report to see if you have fairly done
- (24) the research?
- (25) MR OPPENHEIMER Your Honor I m going to object to

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- (1) this line of questioning I don t think this witness opinion
- (2) of what Mr Petumenos cross-examination should consist of is
- (3) relevant today
- (4) THE COURT I m afraid I was writing a note Counsel
- (5) you re going to have to repeat the question
- (6) MR PETUMENOS I ll move on to another subject if the
- (7) Court understands the thrust of my examination at this point
- (8) THE COURT I do understand the thrust of your
- (9) examination
- (10) BY MR PETUMENOS
- (11) Q Let s talk about a particular spill the Falmouth spill
- (12) You did a study of a particular subdivision in Falmouth called
- (13) Wild something Estates?
- (14) A Wild Harbor Estates
- (15) Q And that had how many lots in it?
- (16) A About 174 lots
- (17) Q And the spill in the 1969 area in Falmouth was in September
- (18) of 1969?
- (19) A September of 1969
- (20) Q How many arm s length transactions were there prior to 1969
- (21) that you found?
- (22) A It was a brand new subdivision We found some transactions
- (23) prior to the date of the spill but as far as I remember none
- (24) of them were arm s length transactions
- (25) Q You don t know what the fair market value price for lots in

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- (1) that subdivision were prior to the spill do you?
- (2) A It was a brand new subdivision and I don t know that
- (3) Q Then you studied transactions that occurred after the spill
- (4) in 1969?
- (5) A In that subdivision yes we did
- (6) Q Yes and there are a number of those that were not fair
- (7) market value transactions is that right?
- (8) A I don t remember if it was a number of them
- (9) Mr Petumenos I do remember that there were three
- (10) transactions in December of 1969 that were arm s lengths
- (11) Q All right.
- (12) A And there may have been one transaction after the spill in
- (13) 1969 that was not but I m not sure about that as I sit here
- (14) Q And you don t know the prices that were obtained for those
- (15) lots do you in 1969?
- (16) A Well the ones in December of 1969 I do
- (17) Q Do you know if they were at fair market value?
- (18) A Yes
- (19) Q And what do you say they were?
- (20) A They were fair market value
- (21) Q Did you see any appraisals for those?
- (22) A No I did not
- (23) Q After 1969 the property went into foreclosure?
- (24) A In 1970 it went into foreclosure
- (25) Q And went into foreclosure because the owner of the property

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- (1) could not meet the debt?
- (2) A Went into foreclosure because the owner could not meet the
- (3) debt on the loan from the previous owner of the property who
- (4) sold the property to him
- (5) Q And you did a graph that showed that the amount of sales
- (6) from 1969 to 1970 were dropping am I right?
- (7) A Graph covered an 11 year period from 1969 to 1980 and in
- (8) 1970 the number of sales did drop
- (9) Q Let s try my question You did a graph that showed that
- (10) from 1969 to 1970 the amount of sales dropped am I right?
- (11) A The number of sales dropped between 1969 and 1970
- (12) you re
- (13) correct
- (14) Q And you then went out and did some interviews to determine
- (15) if that had anything to do with the oil spill?
- (16) A That s correct
- (17) MR OPPENHEIMER Your Honor point of procedure I
- (18) think we ve been running 20 minutes and I d like to object to
- (19) continuation of preview of Mr Petumenos cross
- (20) THE COURT Not 20 minutes yet counsel it s 15
- (21) MR OPPENHEIMER I have five more minutes okay
- (22) BY MR PETUMENOS
- (23) Q Those interviews are contained in your report?
- (24) A Summary of the interviews are contained in the report
- (25) Q And which ones are not disclosed in your report sir?
- (26) A Which interviews are not disclosed?

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- (1) Q Yes
- (2) A I can't remember any that are not disclosed The
- (3) interviews were done by members of my staff and I think we
- (4) report on nine or ten eight or nine of the interviews
- (5) Q What do you mean by some of the interviews -
- (6) A I said the summary of the interviews not the actual
- (7) interview notes themselves
- (8) Q All of the aspects of the interviews that were in your
- (9) report that were significant were put in?
- (10) A What's included in the report are what I consider
- (11) significant There may be other details in the backup notes
- (12) that were taken by the person who did the interview that I also
- (13) would have reviewed
- (14) Q Paula King of Real Estate Associates in Falmouth was one of
- (15) the interviewees?
- (16) A Yes
- (17) Q She had nothing to do with Wild Harbor Estates did she
- (18) personally?
- (19) A That's correct
- (20) Q One of the people that did have something to do with the
- (21) Wild Harbor Estates was the attorney for one of the creditors
- (22) am I right?
- (23) A He was the attorney for the previous owner Mr Peter
- (24) Sykes was the attorney for Tonn Inc
- (25) Q One of the people that foreclosed on the property?

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- (1) A Yes
- (2) Q And you asked him some questions about what the reasons
- (3) were for the foreclosure?
- (4) A Yes we did
- (5) Q And he couldn't remember?
- (6) A He did remember that it had nothing to do with the spill
- (7) but he couldn't remember much more than that It was 20-some
- (8) years ago
- (9) Q Do you recall that he remembered that it didn't have
- (10) anything to do with the spill?
- (11) A That's my recollection that he didn't indicate that there
- (12) was any - any relationship to the spill
- (13) Q Here's your report Let's find that interview and you read
- (14) it to me
- (15) A Peter Sykes an attorney in Hyannis was primarily
- (16) associated with the development through his involvement of
- (17) Brooks Thayer owner of Tonn Inc Mr Sykes had little
- (18) recollection of Michael Lilly's involvement in Wild Harbor
- (19) Estates Peter Sykes and he primarily remembered the Brook
- (20) Thayer's involvement and that Thayer (through Tonn) sold out
- (21) to
- (21) Brezner When he was asked do you remember whether the
- (22) spill
- (22) had any -
- (23) Q Just a minute just read what's there if you would
- (24) please
- (25) A That's what it says

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- (1) Q There's nothing in your report not a thing about him
- (2) saying anything about it being affected by the oil spill is
- (3) there?
- (4) A That's correct
- (5) Q Your conclusions are based upon these interviews that you
- (6) conducted in part?
- (7) A Yes they are
- (8) Q Very briefly going on to the other detailed case studies
- (9) you didn't use the uniform methodology across the different
- (10) case studies did you?
- (11) A I think we did use a uniform methodology
- (12) Q Well did you use tax assessment records sometimes?
- (13) A When they were available we used them
- (14) Q So the point is you changed your data sets depending upon
- (15) which study you were using am I right?
- (16) A If there wasn't data on a particular point Mr Petumenos
- (17) we had to use a different source of information
- (18) Q And there was some problems with respect to the Falmouth
- (19) spill because some data was not available to you because it
- (20) was
- (20) so long ago?
- (21) A That's correct
- (22) Q And you did interviews in connection with the Huntington
- (23) Beach spill - I'm going quickly now because the Judge is about
- (24) to tell me I'm out of time
- (25) MR PETUMENOS Could I have this marked next in

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- (1) order please?
- (2) THE CLERK Roman numeral XXIV
- (3) BY MR PETUMENOS
- (4) Q The - are you intending to introduce into evidence here
- (5) any appraisals of anybody else who has done appraisals in the
- (6) case different appraiser than you?
- (7) THE COURT Don't answer
- (8) MR OPPENHEIMER Your Honor I object to this I
- (9) mean what we intend to introduce in his testimony and what
- (10) decisions I might make about that I think are completely
- (11) beyond the scope of any questioning here
- (12) THE COURT Yeah I think so Sustained
- (13) MR PETUMENOS I don't want to take my time up but
- (14) I'd like to have an offer of proof on that at some point as to
- (15) why that's important
- (16) BY MR PETUMENOS
- (17) Q The next record I guess - I'm having a hard time reading
- (18) this Is this XXIV?
- (19) THE COURT XXIV yes
- (20) MR PETUMENOS Thank you Judge
- (21) BY MR PETUMENOS
- (22) Q Is a memorandum to the file on some of the interviews you
- (23) conducted on the Huntington Beach spill right?
- (24) A Yes it is
- (25) MR PETUMENOS I move its admission

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- (1) (Court s Exhibit XXIV offered)
 (2) THE COURT It s admitted
 (3) (Court s Exhibit XXIV received)
 (4) BY MR PETUMENOS
 (5) Q Mr Gregory Winegar (phonetic) you have no information
 (6) that he actually was involved in any transactions in the - let
 (7) me back up You studied a particular piece of property in the
 (8) Huntington Beach spill am I right?
 (9) A That s correct
 (10) Q And you called that property adjacent to an oiled beach
 (11) that was sort of your oiled property as the studies go?
 (12) A On that particular study it was adjacent to oiled beach
 (13) Q When you called up and asked Mr Winegar whether or not
 (14) the
 (15) property was affected by the oil spill you had no information
 (16) that Mr Winegar was ever actually involved in that property
 (17) do you?
 (18) A I don t remember the specifics on that one Mr Petumenos
 (19) without having my recollection refreshed with that piece of
 (20) paper
 (21) Q Would it be in this piece of paper then if it was true?
 (22) A It would refresh my recollection on it I can t recall
 (23) Q Mr Craig Gilbert (phonetic) he didn t have anything to
 (24) do that you know of with the property that you studied?
 (25) A Was he the person at the Board of Realtors who lived
 (26) previously lived in the property? Does it say what his

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- (1) position was?
 (2) Q Says his firm does as much business as anyone in the
 (3) downtown pier area As to the American Trader spill bottom
 (4) line effect zero that gentleman do you remember that?
 (5) A Yes I do remember that
 (6) Q Now you didn t have any documents or any information from
 (7) Mr Gilbert about transactions on that property within the
 (8) period of time following the spill did you?
 (9) A Not on that particular property I don t believe because
 (10) we gathered actual sales on that property from the Board of
 (11) Realtors
 (12) Q And finally the last person you talked to does not work on
 (13) properties in the Huntington Beach area affected by the spill
 (14) or at least didn t at the time of the spill is what you wrote
 (15) am I right?
 (16) A That s my recollection
 (17) THE COURT Thanks
 (18) MR OPPENHEIMER A time request Your Honor
 (19) THE COURT Time s up
 (20) MR PETUMENOS Okay I have - thank you
 (21) Mr Roddewig
 (22) I have a couple of - of offers to makes The reason for
 (23) the offer of proof is that if under 703 - I guess you can
 (24) step down Mr Roddewig - the defendants intend to introduce
 (25) the actual appraisals of other appraisers on other oil

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- (1) spill related property outside of the spill area when the
 (2) appraiser is not here I will object on Rule 703 which is why
 (3) I wanted to - before the jury is present and in front of the
 (4) jury - make my objection now which is - I believe is the
 (5) important part of 104 And finally we respect - I object
 (6) to the time limit because I believe I could have established
 (7) for the Court with respect to these other spills that there are
 (8) very serious and similar problems to the ones we re presenting
 (9) here
 (10) THE COURT Let s just assume that the problems are
 (11) what you call very serious but they - the testimony would be
 (12) essentially the same sorts of issues that have been developed
 (13) regarding the Falmouth spill and the Huntington Beach spill
 (14) is there any distinction about any other interviews that he did
 (15) or analytical process that he did regarding the other spills
 (16) that would elicit any different testimony than what I ve heard
 (17) here on the Falmouth spill and the Huntington Beach spill
 (18) Q Every spill is somewhat different in the sense that I
 (19) think - I can t remember whether it s the Washington spill or
 (20) another - it is another instance in which the objective data
 (21) appear to show that there has been an impact after the spill
 (22) and the expert then gets on the phone and calls people up and
 (23) asks them what they think and gets contrary information and
 (24) then draws a conclusion from getting on the phone
 (25) This report is rife with telephone calls to people in the

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- (1) industry who I cannot cross-examine some of whom obviously
 (2) have some interest in stating that oil spills don t affect real
 (3) estate markets because they make their money that way There
 (4) are at least three indications or three instances of the
 (5) detailed case studies in which objective data appears to show
 (6) that there were impacts based on the spills which are explained
 (7) away by nonsystematic - this is not surveys now not
 (8) statistically based but just getting on the phone and calling
 (9) up whoever asking them their opinion coming into court and
 (10) stating that that supports this thing called a market study
 (11) I won t belabor the point about USPAP but how unregulated
 (12) these sorts of studies are and how far afield we are on the
 (13) science because I m adhering to your admonition that you read
 (14) the motions and exhaustively dealt with it but I wanted to
 (15) give the Court in the hearing this morning some indication of
 (16) how - how much rampant hearsay three and four levels of it
 (17) how expert opinion is coming through the back door from eight
 (18) or nine or 12 or 15 or 18 people called on the phone who are -
 (19) allegedly are experts in the real estate industry to testify
 (20) that they don t think the oil spill had any impact without even
 (21) studying it Some of whom are saying that about spills that
 (22) are 20 years old
 (23) This Court has the duty under 703 and I think the - I
 (24) don t think I need to argue it now we re getting close so I
 (25) wanted -

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(1) THE COURT Go ahead
 (2) MR PETUMENOS So I wanted to get on The commentary
 (3) to Rule 703 and the trend I can tell the Court in many of the
 (4) law review articles and so forth is that the Court is to be
 (5) on its guard with respect to novel attempts at science or
 (6) social science which tend to confuse issues and would have an
 (7) undue impact on the jury for its appearance of having some
 (8) scientific validity when it does not And the commentary to
 (9) Rule 703 the Court is admonished that even though 403 might
 be
 (10) deemed sufficient protection against the dangers of relatively
 (11) untested evidence Rule 703 is drafted so as to remind trial
 (12) judges that innovative attempts to offer expert evidence may
 (13) involve evidence that is superficially attractive but which is
 (14) problematic for one or more of the following reasons One the
 (15) party against whom the evidence is offered has had insufficient
 (16) time to rebut the validity of the offered evidence which may
 (17) be the product of years of research While this - while this
 (18) material was proffered in 1993 the amount and volume of
 (19) material that supported this - these particular studies was
 (20) enormous was unbelievable These gentlemen were in
 deposition
 (21) for five days and we couldn't scratch the surface because of
 (22) the amount of data relating to how they selected spills and so
 (23) forth and the number of studies that they collected
 (24) You can see from the witness that he resists on
 (25) cross-examination the notion that he might not have taken into

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(1) account certain important scientific studies that might
 (2) contradict his position That is going to be a very difficult
 (3) position to cross examine without putting in volumes of
 (4) evidence on a subject matter that is at this point doesn't
 (5) have much probative impact
 (6) Two the party against whom the evidence is offered has
 (7) been unable to secure the assistance of expert help necessary
 (8) to understand and attack the offered evidence The cost
 (9) according to what I understand what Exxon has done here for
 (10) what I call pseudo science was in the millions and millions of
 (11) dollars These gentlemen flew around the country sat in -
 (12) sat in court sat in libraries and read newspapers got on the
 (13) telephone made phone calls You can see the size and length
 (14) of the report I think that is applicable
 (15) Where the expert evidence and technique that is produced
 (16) the evidence is unknown and the trier of fact is therefore
 (17) unable to properly evaluate the evidence I think the Court is
 (18) in this position The amount of material to be put in front of
 (19) you has been voluminous at best but it is nothing compared
 (20) to - you had to cut me short here this morning and I
 (21) understand it because we have a trial to conduct and you've
 (22) been attempting to give me my 104 hearing as it is but I can
 (23) tell the Court that there's much more that could be said and
 (24) produced upon the scientific validity of what's going on here
 (25) The expert evidence is the subject of great controversy

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(1) among -
 (2) THE COURT Counsel wait a minute Mr Petumenos -
 (3) much more that could be said by whom? By this witness or by
 (4) witnesses that you could produce to show that this is pseudo
 (5) science and something that just shouldn't be relied upon?
 (6) MR PETUMENOS I think we produced some of that in
 (7) backup to the motion But I do believe that there would be -
 (8) that there is a substantial controversy - in fact I am
 (9) unaware in any case involving an oil spill or contaminated
 (10) property of anybody doing a study like this ever And I
 (11) believe when you - when you listen carefully to Mr Roddewig's
 (12) answer he is too This has never been done before and we are
 (13) very far afield and in view of the rulings that you have made
 (14) in this case regarding how we must stay focused and where we
 (15) must stay focused I would think thinking particularly of the
 (16) Johnson ruling in opening statement I was not permitted to put
 (17) on a photograph or a document that did not pertain to land that
 (18) I owned whether it was in the oil spill or not at the same
 (19) time that Exxon had in the wings an expert who was prepared to
 (20) testify to an oil spill that took place in 1969 in Falmouth
 (21) Massachusetts and the real estate and I just think that under
 (22) these circumstances these studies are properly under 703 and
 (23) I sincerely believe that the Court is permitting error by
 (24) permitting the testimony to go forward
 (25) THE COURT Thank you counsel

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(1) MR OPPENHEIMER Your Honor I don't know that I have
 (2) much to add to my prior comments If the Court has any
 (3) specific questions - I would point out I think what we heard
 (4) on the stand is consistent with what we've been saying that
 (5) it's a market study To the extent Mr Petumenos has
 (6) cross-examination and he does he will use it To the extent
 (7) we disagree how credible or useful or persuasive the testimony
 (8) is this is what trials are about and I don't think we heard
 (9) any question this morning from Mr Petumenos that was other
 (10) than a cross-examination question There is no basis
 (11) whatsoever to preclude us from putting on what I consider to be
 (12) evidence that is indistinguishable to that that's gone on
 (13) previously It's important to the case and it is utterly
 (14) conventional evidence
 (15) THE COURT All right Thank you counsel This is
 (16) of course a complicated question and - and the motion
 (17) practice is substantial in this It covers three court files
 (18) which I've reviewed twice now because I had an opportunity to
 (19) review the - review it on the first go-round in the - on the
 (20) motion in limine which was denied by Pretrial Order Number
 (21) 73
 (22) During - I thought that there might be some admissibility
 (23) questions regarding the testimony but of course the - the
 (24) motion itself was all inclusive I was supposed to strike
 (25) the report and all comment on the matters in the report

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- (1) essentially depriving the defendants of a witness It was
 (2) clear to me that that was the wrong thing to do at the time
 (3) and I know now on the subsequent review that I was right to do
 (4) it that way
 (5) I'm always willing to revisit these issues if in fact
 (6) there's some specific position that a party can take that would
 (7) show me that the original rulings ought to be modified but I
 (8) suppose there are two questions here One is should I -
 (9) should I change the initial ruling and not - I'm fully
 (10) convinced that I should not Two should I go specifically
 (11) into aspects of the testimony and exclude it
 (12) Now if I were to do that somebody would have to show me
 (13) that I should This witness I've reviewed the material
 (14) regarding this witness and - and his report and it's clear to
 (15) me that he's a qualified expert
 (16) Then the question would be whether his proposed testimony
 (17) somehow should be excluded because it doesn't meet the
 (18) requirements of Rule 702 That hasn't been shown here It
 (19) appears to me that the basis of his opinion testimony what
 (20) it's going to be now since it has been curtailed sort of by
 (21) the process and by voluntary curtailment of the subject matter
 (22) of his report the basis of his opinion testimony has been
 (23) fairly and although it - the plaintiff complains of this
 (24) doesn't seem to me to be inappropriate exhaustively disclosed
 (25) I don't think that it's - that after this review of all of

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- (1) the material and the testimony I've heard today and whatever
 (2) offers of proof that were made it seems to me that Rule 703
 (3) doesn't require me to exclude the testimony nor does Rule
 (4) 403
 (5) So to the extent that this motion asks me in whole or in
 (6) part to exclude any of the proposed testimony the motion is
 (7) denied The question of specific objections is reserved If
 (8) there are specific objections to the testimony
 (9) Anything else?
 (10) MR STOLL Your Honor I have some matters
 (11) THE COURT Okay
 (12) MR STOLL You will recall that during the - on
 (13) Friday afternoon we - we received from defendants - Friday
 (14) evening actually their list of witnesses for this week and
 (15) their exhibits and I've got a number of objections to several
 (16) of these that you asked that we reserve until the issue became
 (17) ripe and the first time that became ripe was this morning
 (18) MR DIAMOND Excuse me Bob which witness?
 (19) MR STOLL I'm going to get to that Bear with me
 (20) for a second I think that I could - for the ease of the
 (21) Court and the jury I think I can put this - some of these off
 (22) until after you know this afternoon because I don't think
 (23) they're going to be heard and we can put on the argument you
 (24) know afterwards But I wanted to advise the Court advise
 (25) counsel that I want to raise these objections to you know

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- (1) specific witnesses and so on We could hear these at the end
 (2) of the day but I just want to tell the Court what the
 (3) objections are and then we can - the plan for this this
 (4) afternoon or at least before the witnesses are to testify
 (5) Now there is one exhibit that has been designated there
 (6) may be other exhibits that are objectionable but one exhibit
 (7) that I do object to with respect to Mr Teal that's been
 (8) designated
 (9) MR DIAMOND Before you argue that are you going to
 (10) argue it or -
 (11) MR STOLL Yeah going to argue it.
 (12) MR DIAMOND Your Honor Mr Clough is going to
 (13) present Mr Teal Mr Clough is not in the courtroom I'd
 (14) like just a moment to get him if we're going to argue this now
 (15) THE COURT Wait a minute hang on a minute Tell me
 (16) why I should hear this now
 (17) MR STOLL Mr Teal's the next witness and he has
 (18) a - part of - one of the designated exhibits of Mr Teal is
 (19) the notebook of Mr Selby that was given to him in 1993 when
 (20) they had this tour of Prince William Sound and I objected to
 (21) the entire notebook going into evidence You advised us at the
 (22) time that we could take it up later as to certain parts of it
 (23) and I do have the parts that I object to and I'd like to be
 (24) heard on that
 (25) And you - and I said at the time that you know to read

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- (1) the - there's two booklets in the back of the book that I
 (2) object to as hearsay and I don't know that they're going to
 (3) refer to these booklets during Mr Teal's testimony this
 (4) morning or not It's listed as one of the exhibits If
 (5) they're not going to discuss these booklets then I have no
 (6) problem with it but if they're going to go into these
 (7) booklets then I do have a problem That's the only thing that
 (8) needs to be taken up this morning
 (9) THE COURT Fine Here's the way I'll deal with
 (10) that I'm going to take a ten minute break You discuss it
 (11) with Mr Clough determine what it is that is going to be
 (12) presented regarding those notebooks If it's not an issue
 (13) we'll go ahead with the jury If it is an issue I'll come in
 (14) and at least hear you preliminarily regarding your objection to
 (15) see whether or not I should do something now
 (16) MR STOLL That's fine
 (17) MR PETUMENOS Your Honor I have a short matter
 (18) MR STOLL Can I just finish one thing?
 (19) Your Honor I would like to give you these - these because
 (20) at some point in time this is going to be - we're going to
 (21) hear you know we'll have an objection
 (22) THE COURT You'd like to give them to me
 (23) MR STOLL Well I'd like you to look at them
 (24) THE COURT I'll look at them
 (25) MR STOLL Could I approach the Court?

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- (1) THE COURT You may
 (2) THE CLERK. Could we have the numbers?
 (3) THE COURT They re marked already
 (4) MR STOLL. They re part of an exhibit They re part
 (5) of exhibit 15488
 (6) THE COURT Thanks
 (7) MR PETUMENOS I have a very short matter for the
 (8) Court
 (9) I m going to be doing my first cross-examination here and
 (10) I don t want to make a fool of myself in front of the jury more
 (11) than I probably will but I had some concerns about how the
 (12) Court handles a couple of issues I have some opinions from
 (13) pages from the transcript of some of the cross-examinations
 (14) that occurred last week that I d like to show the Court and my
 (15) issue is the motions to strike for nonresponsive answers
 (16) you ll note in this transcript we didn t make any but my - my
 (17) concern is this if - is it the case that the Court if I ask
 (18) a specific question on cross-examination that calls for a
 (19) specific answer and the witness goes beyond the question and
 (20) tells me something else that I have the remedy of going to the
 (21) Court and moving to strike the testimony as nonresponsive and
 (22) asking the jury to disregard it? I understand that if I ask an
 (23) open-ended question that requires an explanation they can
 (24) explain but if I ask them a question like is that what it
 (25) says in your report and I get a speech do I have the Court s

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- (1) guidance of the Court which is what I was seeking I believe
 (2) the law to be with respect that on cross-examination the cross
 (3) examiner is entitled to the answer to the question and if
 (4) there s further material to get out that s for redirect and
 (5) that the cross examiner is entitled to make his points
 (6) There was a couple of times last week and again we took
 (7) no action so we re entitled to no remedy where for example
 (8) a witness was being asked about an agenda for a meeting and
 he
 (9) got back hearsay about what somebody else told him about the
 (10) meeting And my understanding is in that scenario that
 (11) that s not permitted by the witness That if you ask him does
 (12) this agenda say this he s not entitled to say - even if it s
 (13) in the subject matter - well the agenda says this but I
 (14) talked to somebody else and he told me the whole thing was all
 (15) right
 (16) THE COURT And the answer to that question is maybe
 (17) you re right and maybe you re wrong and it depends on the
 (18) specific situation that I m faced with when an objection is
 (19) made
 (20) MS SMITH Your Honor I have a very long list of
 (21) Gilfillan exhibits to read into the record
 (22) MR PETUMENOS I m sorry counsel I wasn t done
 (23) MS SMITH I m sorry
 (24) MR PETUMENOS The other I was wanting guidance on
 (25) relates to Evidence Rule 613 If we are impeaching through the

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- (1) assistance in that regard on cross-examination because I don t
 (2) want to ask for it if I m not going to get it
 (3) THE COURT No no here s the - this is the answer
 (4) to your question Yes you have the right to move to strike
 (5) But it s a complicated question the question of
 (6) nonresponsiveness It - if it isn t in a general subject
 (7) area then I have I suppose a discretionary duty to look at
 (8) the testimony and see whether or not there s some - the
 (9) witness has either sandbagged you or been completely
 (10) nonresponsive or in fact has been responsive in the sense
 (11) that he is discussing the general area of the question but
 (12) somehow has diverged so much that it should be fairly
 (13) considered nonresponsive
 (14) Now if in fact it s nonresponsive but it has
 (15) evidentiary value I believe that under the case law I have
 (16) the - the ability to say well it wasn t in response to a
 (17) specific question may have diverged from the question itself
 (18) but it s - it s - it has value and therefore I will deny
 (19) the motion
 (20) And it s your choice counsel You are entitled to make
 (21) any legitimate objection you believe that s available to you
 (22) and it s also my duty to determine one whether it s well
 (23) taken and two whether there s another reason why the
 (24) testimony should be in the record
 (25) MR PETUMENOS Okay All right I think I have the

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- (1) use of a prior inconsistent statement under 613(b)(2) it
 (2) states that in examining a witness concerning a prior statement
 (3) made by the witness whatever - whether written or not the
 (4) statement need not be shown nor its contents disclosed to the
 (5) witness at that time but on request the same shall be shown
 (6) or disclosed to opposing counsel
 (7) And it was - it s my practice in cross-examination to
 (8) follow that rule which is I will give counsel page and line
 (9) and then either read or show to the jury the prior inconsistent
 (10) statement without taking the time to go to the witness stand
 (11) and provide the witness with the statement because it bogs
 down
 (12) the cross-examination slows it down and ruins the pace There
 (13) were a few times when we had interruptions of the
 (14) cross-examination while the - while counsel insisted that the
 (15) statement be shown and we did it again without objection but
 (16) I don t think it s necessary and I want the guidance of the
 (17) Court
 (18) THE COURT It s not necessary Under the rule you
 (19) don t have to show it On the other hand it s been a process
 (20) of acquiescence on both sides here when somebody says the
 (21) witness should get the material or the prior statement the
 (22) witness gets it Now if the rules - if what you re saying is
 (23) you - you don t wish to have the - the witness provided with
 (24) the statement but you ll provide it for - but you will
 (25) provide it for counsel that s exactly as the rule would have

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- (1) it
 (2) MR DIAMOND I would just simply note that the rules
 (3) also - and I'm fiddling with my Rules of Evidence to try to
 (4) find it the witness has an opportunity in that circumstance to
 (5) explain the prior statement and in the context - I think
 (6) that's true
 (7) MR PETUMENOS That's not an issue
 (8) MR DIAMOND In the context of many of these
 (9) cross examinations given the complexity in order to give the
 (10) witness an opportunity to explain the witness has to see the
 (11) writing
 (12) THE COURT Yes that's true And on occasion if in
 (13) fact one party doesn't - if a cross examiner doesn't want to
 (14) give the prior statement then the first - my first response
 (15) is fine you don't have to
 (16) My second response is if it's - if it's bogging down the
 (17) examination or the witness is - appears to need the
 (18) statement then I will - I will go beyond the literal language
 (19) of the rule to make sure that the testimony flows and that
 (20) everybody's given a fair shake here
 (21) But the truth is when that objection is made - and I'm
 (22) consistent on this when that objection is made I don't have
 (23) to give it to the witness I respond that's true counsel
 (24) you don't have to give it to the witness
 (25) MS SMITH Now?

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- (1) THE COURT Now
 (2) MS SMITH I can do this now or I can do this
 (3) later I've given your clerks a list It's just up to the
 (4) Court if you want me to read them in
 (5) THE COURT Actually what I'd like to do is - it's a
 (6) long list, I can see that
 (7) MS SMITH Yes
 (8) THE COURT I prefer you simply give them the list
 (9) they'll take the list and admit the document I'm assuming
 (10) there's no objection right?
 (11) MR STOLL There is some objection to some of the
 (12) exhibits
 (13) THE COURT Then I'm not going to deal with it now
 (14) We'll deal with it at another time
 (15) MS SMITH I didn't know that
 (16) MR McCALLION Your Honor may we have a list to
 (17) review?
 (18) THE COURT Absolutely counsel
 (19) MR DIAMOND Just so you have it heads up there are
 (20) two points we would like to discuss with you in anticipation of
 (21) testimony this week and we would like to do that before
 (22) tomorrow's session so if you could -
 (23) THE COURT I think I have a 3:30 matter so 2:30 to
 (24) 3:30 is clear
 (25) MR DIAMOND I think we can do it right after 1:30 if

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- (1) you have time to hear us then
 (2) MR PETUMENOS Could we know what it is in case -
 (3) MR STOLL We can take this up without the Court
 (4) THE COURT Yeah that's fine but we'll see whether
 (5) or not we'll take it up at 1:30 But we may very well take it
 (6) up at 2:30
 (7) THE CLERK Please rise This court stands in
 (8) recess
 (9) (Recess from 10:12 a.m. to 10:32 a.m.)
 (10) (Jury in at 10:32 a.m.)
 (11) THE CLERK This court now resumes its session
 (12) Please be seated
 (13) THE COURT The jury is present counsel
 (14) MR CLOUGH Your Honor for our next witness we'd
 (15) like to call Mr. Andrew Teal
 (16) THE CLERK Sir could you attach the microphone to
 (17) your tie and remain standing for the oath? Please raise your
 (18) right hand
 (19) (The Witness is Sworn)
 (20) THE CLERK Please be seated Sir for the record
 (21) can you please state your full name?
 (22) A Andrew Robert Teal
 (23) THE CLERK Can you please spell your last name?
 (24) A T-e-a-l
 (25) THE CLERK And your occupation?

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- (1) A I'm an environmental manager with Imperial Oil in Edmonton
 (2) Alberta
 (3) THE CLERK Thank you
 (4) DIRECT EXAMINATION OF ANDREW R. TEAL
 (5) BY MR. CLOUGH
 (6) Q Good morning Mr. Teal
 (7) A Good morning
 (8) Q Can you tell the jury a little bit about yourself please
 (9) sir?
 (10) A Well my name's Andy Teal as we've heard already I live
 (11) just outside of Edmonton Alberta and I'm the environmental
 (12) manager for Strathcona Refinery with Imperial Oil and that
 (13) also takes into account Western Canada generally in
 (14) environmental affairs management throughout Western
 (15) Canada
 (16) I'm 38 I have three children and that's basically it
 (17) Q And you're here in Anchorage today?
 (18) A I'm here
 (19) Q What's the relationship sir between Imperial Oil your
 (20) employer and Exxon?
 (21) A Imperial Oil is an Exxon affiliate
 (22) Q And what does that mean if you could explain to the jury?
 (23) A Well basically Exxon in Canada I guess 69 percent of
 (24) Imperial Oil is actually owned by Exxon
 (25) Q Now could you explain a little bit more about what your
 responsibilities are as the environmental affairs manager for

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- (1) Imperial Oil?
- (2) A Well as the environmental affairs manager I deal with
- (3) various issues environmental issues at the refinery but also
- (4) again throughout Western Canada dealing with everything from
- (5) emergency response through to actual environmental issues
- (6) around air quality water quality general environmental
- (7) management
- (8) Q Now does your work also involve you participating in
- (9) something called the National Emergency Response Team?
- (10) A Yes Actually I'm the operations manager for National
- (11) Emergency Team which is an Imperial Oil national team that
- (12) covers the whole of Canada
- (13) Q What does the national team do - the National Emergency
- (14) Team I should say?
- (15) A The National Emergency Team is basically there to respond
- (16) to and assist the regions with major incidents
- (17) Q When you say a major incident what do you mean?
- (18) A Well everything from a major oil spill such as the tanker
- (19) issue or a spill into a water body and also things such as
- (20) hazardous materials spills at train derailments those kinds of
- (21) incidents
- (22) Q Mr Teal what did you receive your education in sir?
- (23) A I have a Bachelor of Science degree with a double major in
- (24) biology and physical geography
- (25) Q And when did you graduate from the university?

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- (1) A 1978
- (2) Q And where did you go?
- (3) A University of Saskatchewan in Saskatoon in Canada
- (4) Q What did you do upon graduation sir?
- (5) A Well immediately following graduation I actually joined
- (6) Imperial Oil moved down to Estevan Saskatchewan on the
- (7) prairies and that's where I started out and I got my field
- (8) experience you might say some hands-on experience in the
- (9) production operation area
- (10) I was there for about a year and a half doing various tasks
- (11) as far as operating and also worked as an assistant area
- (12) engineer developing drilling programs pressure surveys all
- (13) of those kinds of things and there really I did get directly
- (14) involved with field operations and also the environmental
- (15) implications of those operations
- (16) From that activity I then moved to the head office in
- (17) Calgary Alberta where in fact I was the environmental
- (18) advisor with the environmental group there dealing with
- (19) general environmental issues throughout Western Canada and
- (20) assisting our field operations A lot of the duties there was
- (21) everything from exploration environmental impact
- (22) assessments
- (23) spill response planning contingency plans actually
- (24) responding
- (25) to spills throughout that period of time
- (26) And then I actually moved down to research laboratory in
- (27) Calgary and I was an environmental research scientist

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- (1) Q And what did you do there sir?
- (2) A Well my predominant role there was actually spill site
- (3) mitigation rehabilitation I developed a number of programs
- (4) for that specific purpose and also spill prevention and spill
- (5) response techniques evaluation
- (6) Q How long did you work at the Calgary laboratory facility as
- (7) an environmental research scientist?
- (8) A It was about a year and a half
- (9) Q Does that facility do much work in the field of spill
- (10) response oil spill response and remediation?
- (11) A Oh yeah In fact well we have a special lake basin down
- (12) there that is used for testing techniques things such as
- (13) dispersants burning wave energy evaluation all those kinds
- (14) of things are done in that facility in fact it's a - it's a
- (15) world recognized facility It's been used by a number of
- (16) different parties throughout the world to come to Calgary and
- (17) do that kind of testing and that's one - one particular
- (18) function that we do have in that research facility is in fact
- (19) spill response capability and evaluation of techniques
- (20) Q Now after your tour of duty at the facility what were you
- (21) assigned to next with Imperial sir?
- (22) A Well right about that time - actually it was about 1985
- (23) I think - we developed the National Emergency Team that I
- (24) referred to earlier and one of my responsibilities at that
- (25) point was - actually I guess you could say we initiated the

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- (1) program and I became the containment and recovery advisor
- (2) for
- (3) the National Emergency Team and developed the concept and
- (4) it
- (5) progressed So that was one of my roles at that point in time
- (6) was with the National Emergency Team and from there I
- (7) actually
- (8) moved to Edmonton where I became the regional
- (9) environmental
- (10) advisor for the Interior region
- (11) Q And was that the position you had as of the time of the
- (12) Exxon Valdez spill?
- (13) A Basically yes At that time I was dealing with a lot of
- (14) site remediation work hydrocarbon contaminated soils
- (15) throughout Western Canada actually and I was in that role
- (16) actually when I was relocated you might say
- (17) Q In the course of your professional employment with Imperial
- (18) prior to the Valdez spill did you receive any specialized
- (19) training in the field of oil spill response sir?
- (20) A Well certainly in fact it became a specialty of mine
- (21) very early in my career In fact my field experience I had a
- (22) lot of actual hands on experience in dealing with day-to-day
- (23) issues and spill responses But as far as training I - I did
- (24) take a number of courses I guess a major course I did take
- (25) was in South Hampton England It was a two-week course
- (26) dealing with major oil spill responses in marine environments
- (27) and it again was two full weeks of both classroom session and
- (28) hands on training physically deploying large scale equipment
- (29) as well as shoreline evaluation and rehabilitation issues and

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- (1) cleanup issues for shorelines so that was a two-week event
 (2) I also took the Texas A&M oil spill course in Galveston
 (3) Texas which deals with marine incidents as well as inland
 (4) issues and again the full range of responses
 (5) MR PETUMENOS Excuse me I'm sorry to interrupt
 (6) Could I get some dates on these classes if I could? I don't
 (7) know whether they were before the spill or after the spill
 (8) A They were all prior to the Exxon Valdez
 (9) MR PETUMENOS Thanks That's just my question
 (10) A And also throughout that I guess between 1978 and 85 I
 (11) took a number of courses from the - what's known as the
 (12) Petroleum Industry Training Service in Western Canada and it
 (13) has a number of spill response courses everything from the
 (14) on-scene commander course through the spill site
 (15) rehabilitation and spill response techniques and I took four
 (16) or five of those courses
 (17) Q And in the course of your work with Imperial prior to the
 (18) spill what work did you do yourself on spill response planning
 (19) and preparation?
 (20) A Well again that was one of my primary roles was to look
 (21) at the potential issues in our field locations and be sure that
 (22) we had adequate contingency plans in place develop
 (23) techniques for specific conditions and issues that we would
 (24) have to potentially respond to And actually I was with
 (25) the - what we call the Prairie Regional Oil Spill Containment

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- (1) gasoline diesel all the way through to heavier crudes crude
 (2) oils most of them actually were actually crude oil spill
 (3) responses and out of those I'd say probably eight to ten of
 (4) them would have been fairly significant spills in - in aquatic
 (5) environments where in fact there was some marine response
 (6) but also lakes and rivers throughout - throughout Canada
 (7) Q Have you taught any courses or seminars in the field of oil
 (8) spill response?
 (9) A Yeah that was one of the things I - I enjoy doing is
 (10) training actually and so I was involved with a lot of
 (11) training courses The petroleum industry training courses I
 (12) mentioned earlier actually I was the chairman of the Spill
 (13) Site Rehabilitation Course and also gave lectures at a number
 (14) of the other courses
 (15) We also within Imperial Oil developed in about 1985 also
 (16) what we called our Major Spill Response Course and it was a
 (17) full one week I was one of the principals on that and we
 (18) dealt with the major response issues that we may get into
 (19) throughout Canada and it was marine focused We held those
 (20) courses on the West Coast and the East Coast and also in the
 (21) Great Lakes
 (22) Q Have you presented papers at the API conferences spill
 (23) response conferences?
 (24) A Yes I have
 (25) Q Can you explain to the jury what the API Spill Response

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- (1) and Recovery Advisory Committee which is a great acronym if
 (2) you want to hear it but I won't get into that but I was the
 (3) chairman of the R&D committee which we did a lot of research
 (4) and development work on looking at techniques that could and
 (5) should be used for those kind of circumstances and we took
 (6) that all the way through to actual spill exercises and spill
 (7) response training for all of our field operations
 (8) Q And what were your personal responsibilities for setting up
 (9) these field exercises?
 (10) A Well exercises I've been involved with a number of
 (11) exercises I've done a number where I've actually been the
 (12) instructor the trainer for field personnel both from -
 (13) throughout industry and also those exercises - they're really
 (14) joint exercises where we host them with environmental agencies
 (15) with local emergency response organizations those kind of
 (16) things and you know I took the role of really the instructor
 (17) I guess you could say at a number of those exercises both
 (18) throughout Western Canada and also up into the Arctic
 (19) including the Northwest Territories and also I've done some
 (20) work on the West Coast around Vancouver
 (21) Q Can you please tell the jury about your experience in
 (22) responding to actual spills prior to your work on the Valdez
 (23) spill?
 (24) A Well I guess you could say I responded to dozens of
 (25) different kinds of spills everything from product spills

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- (1) Conferences are?
 (2) A The API conferences the American Petroleum Institute it's
 (3) a - they host every two years an International Oil Spill
 (4) Conference and really it's - it's a place to go for those
 (5) who are in the business of oil spill and emergency response
 (6) You might say that it's the who's who of oil spill response are
 (7) there and it does workshops planning sessions dealing with
 (8) all different kinds of topics for spill response and I'd say
 (9) it's probably the best place to go to keep up on - on the
 (10) field of oil spill response
 (11) Q Have you also participated in the AMOP program?
 (12) A Yes I have That's basically our Canadian version of the
 (13) API International Conference It also is an international
 (14) conference
 (15) Q Let me interrupt I should - why don't you tell them what
 (16) AMOP stands for? We have a lot of acronyms
 (17) A I'm so used to acronyms I forget others aren't AMOP is
 (18) the Arctic Marine Oil Spill Program and as the title implies
 (19) it's to deal with arctic marine environments cold water
 (20) environments and spill response capability
 (21) Q And Mr Teal generally for how many years of your
 (22) professional career have you been working in the field of oil
 (23) spill response?
 (24) A Well basically ever since I started with the company in
 (25) 78 so that's been about 16 years

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- (1) MR CLOUGH Your Honor at this time we d like to
 (2) offer Mr Teal as an expert in the field of oil spill
 (3) response
 (4) THE COURT He s qualified
 (5) BY MR CLOUGH
 (6) Q Mr Teal let s get to the business at hand here How did
 (7) you get involved with the response to the Exxon Valdez spill?
 (8) A Well I ll never forget the moment when I first heard of
 (9) the incident In fact I was laying on my living room floor
 (10) with my three-year-old on my chest and I heard a broadcast
 come
 (11) across the radio that there had been an incident in Alaska and
 (12) obviously with my background and experience anytime you
 hear
 (13) something like that your heart starts pounding and it wasn't
 (14) very long after that actually my pager was activated from our
 (15) National Emergency Team and that s how I found out about
 that
 (16) in fact it was an Exxon tanker and that the incident was in
 (17) Prince William Sound
 (18) Q And were you asked to go to Valdez?
 (19) A Yes I was In fact when I was first contacted that
 (20) would be the Friday and Saturday I was in Anchorage
 (21) Q That would have been Saturday March 25th 1989?
 (22) A That s correct
 (23) Q Upon your arrival what area of the spill response were you
 (24) asked to work on in the early days?
 (25) A Well I arrived in Valdez Sunday morning and there were a

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- (1) number of initial tasks working with the Exxon Response Team
 in
 (2) containment recovery issues but really one of my primary
 (3) roles I was asked to meet with Dave Kennedy who s with
 NOAA
 (4) and we were to sit down and look at the longer range planning
 (5) the strategic aspect of the issues that we would have to be
 (6) facing Obviously at that time we realized we had a very
 (7) large spill on our hands there would need to be a longer range
 (8) plan to look at things such as shorelines and the strategy for
 (9) those shorelines
 (10) Q Now can you tell the jury who is Mr Kennedy?
 (11) A Well Mr Kennedy is - he s I guess you would say an
 (12) internationally recognized oil spill specialist with NOAA
 (13) And in fact as part of their - what s known as the HAZMAT
 (14) organization which specializes in emergency response and he
 (15) was on scene very quickly Again we were meeting fairly early
 (16) as to looking at those strategic issues
 (17) Q Now can you tell the jury just what type of planning you
 (18) worked on in conjunction with Mr Kende?
 (19) A Well we sat down and looked at how we could best work
 (20) jointly on this issue and one of the key responsibilities that
 (21) I was asked to move forward was looking at the shoreline
 (22) techniques as far as either cleanup aspects and also things
 (23) such as sensitivities We would have to evaluate and I guess
 (24) the key issue was shoreline cleanup It was really my focus
 (25) He was also looking at a number of other issues around the

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- (1) longer range aspect of the scientific program water column
 (2) issues wildlife all those kinds of things
 (3) Q Now when you say evaluating sensitivities what do you
 (4) mean?
 (5) A Well in any spill response that s one of the - the key
 (6) things you have to understand is what are the implications of
 (7) the oil spill to the area being affected What are the
 (8) sensitivities you need to fully understand and appreciate the
 (9) implications of the oil but also the clean up effort and in
 (10) most situations and this one the geological features you have
 (11) to understand what they are what the implications of the
 (12) cleanup techniques are what the oiling issues are but also
 (13) the biological sensitivities the ecological implications the
 (14) intertidal issues as well as the other sensitivities around
 (15) things like seal haulouts herring spawning grounds
 anadromous
 (16) fish streams all those things have to be looked into In
 (17) addition to that we also had the archaeological resource to
 (18) make sure that we were addressing adequately
 (19) Q Now you said Mr Kennedy was with NOAA What was
 NOAA s
 (20) role in the spill response?
 (21) A NOAA were the scientific advisory body to the FOSC the
 (22) U S Coast Guard
 (23) Q And when you say FOSC what does that stand for?
 (24) A The federal on scene coordinator
 (25) Q Were there other federal and state environmental agencies

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- (1) involved in these early days of the spill response?
 (2) A There were a number actually That was one of the
 (3) challenges is to - is to try and get everybody around the
 (4) same table so we could get everybody involved And in fact
 (5) from the state there was a number of agencies being
 represented
 (6) and needing to be involved as well as the federal side and
 (7) also local interest groups environmental groups also
 (8) landowners and Native organizations as well
 (9) Q Now the FOSC what was the Coast Guard s role as the
 FOSC
 (10) in terms of the spill response?
 (11) A Well the FOSC is in control in command of the spill
 (12) response
 (13) Q In these early days what type of a structure did the FOSC
 (14) implement to try to incorporate the concerns of all the
 (15) agencies and local groups?
 (16) A Well through the various discussions basically evolved
 (17) into what we originally called the Shoreline Cleanup
 Committee
 (18) which became known as the ISCC the Interagency Shoreline
 (19) Cleanup Committee
 (20) Q Could we have defendants exhibit 5156 please?
 (21) Mr Teal could you explain to the jury a little bit
 (22) about - first of all is this a chart showing the makeup of
 (23) the Prince William Sound ISCC is Interagency Shoreline
 (24) Cleanup Committee?
 (25) A Yes It is

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- (1) Q Could you explain to the jury how that committee was
 (2) composed and what it did?
 (3) A Okay Well as you see on the screen here again state
 (4) agency referring to before the Alaska Department of
 (5) Environmental Conservation the Alaska Department of Fish and
 (6) Game DNR the Department of natural resources AHPO really
 (7) is
 (8) a state historic - state historic preservation office and
 (9) they dealt with the archaeological issues
 (10) And the federal agencies Environmental Protection Agency
 (11) NOAA I've mentioned previously NMFS is the National Marine
 (12) Fisheries Service U S Coast Guard again the FOSC U S
 (13) Forest Service and the U S Fish and Wildlife Service So
 (14) those are the - the regulatory agencies that were directly
 (15) involved in the committee
 (16) Q And who else was involved as members of the committee?
 (17) A Well as we see there Chugach Alaska Corporation were on
 (18) the committee CDFU or Cordova Fishermen s Union and
 (19) Exxon
 (20) and Prince William Sound Conservation Alliance and basically
 (21) they were representing the environmental groups the interests
 (22) there
 (23) Q Now did the committee have a chairperson?
 (24) A Yes we did
 (25) Q And who fulfilled that role?
 (26) A NOAA with the - as the scientific advisor to the FOSC
 (27) the FOSC asked that NOAA be the chairperson for the
 (28) committee

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- (1) Q And who were the individuals for NOAA that fulfilled that
 (2) responsibility?
 (3) A Well there were a number I guess Sharon Christopherson
 (4) was the one that was there the most Bill Pavia there were a
 (5) number of NOAA representatives
 (6) Q Who was the Exxon representative on the ISCC?
 (7) A Well I was - I was the Exxon representative
 (8) Q And I noted that Chugach Alaska Corporation is there What
 (9) was their role as a member of the ISCC?
 (10) A Their function was to be there on behalf of the Native
 (11) organizations in the area to represent them the Native
 (12) villages in Prince William Sound for example and that was
 (13) really their - their role
 (14) Q Now for the Prince William Sound ISCC was Chugach
 (15) Alaska
 (16) Corporation there in addition to being there as a regional
 (17) corporation were they also the representative of Chenega
 (18) Eyak
 (19) and Tatitlek the Village Corporations that are plaintiffs here
 (20) in this court?
 (21) A Yes they were
 (22) Q Now Mr Teal I want to ask you an important question
 (23) here Who was in charge of this oil spill response was it
 (24) Exxon?
 (25) A No it was very clear who was in charge Admiral Robbins
 (26) he was the - again the Coast Guard FOSC the federal
 (27) on scene
 (28) coordinator

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- (1) Q Now you say it was very clear How did - how was it very
 (2) clear to you who was in charge?
 (3) A Well anybody that knows Admiral Robbins will know that
 (4) there can only be one person in command when Admiral
 (5) Robbins is
 (6) around and he made that very clear to all of us including the
 (7) ISCC
 (8) Q Did Admiral Robbins send out a memorandum to the ISCC
 (9) early
 (10) in the response setting out instructions on how it would work?
 (11) A Yes he put a letter together I think it was April 20th
 (12) that outlined his requirements
 (13) Q I'm sorry go ahead
 (14) A No I was just going to say that it included roles how he
 (15) expected the oil spill to - to be responded to and the
 (16) structure of how it should work
 (17) MR CLOUGH Counsel I'm going to be putting
 (18) defendants exhibit 2293 on the Elmo here
 (19) BY MR CLOUGH
 (20) Q Mr Teal I'll zoom this in a little bit if I can Is
 (21) this the memorandum from Admiral Robbins that you were just
 (22) referring to?
 (23) A Yeah that's correct.
 (24) Q And I've highlighted a couple of the portions here Can
 (25) you tell the jury essentially summarize what the memorandum
 (26) says?
 (27) A As you can see it is dated the 20th of April 89 and

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- (1) it's headed the Organizational Structure of the Clean up Effort
 (2) for the Exxon Valdez Oil Spill That last or the third
 (3) paragraph I guess kind of states very clearly his position on
 (4) this and I can read that for you if you wish
 (5) I expect advice from all interested parties through the
 (6) structure I've set forth in the attached I would like to make
 (7) it very clear I as the on scene coordinator make the final
 (8) decisions as to what Exxon does to clean up the spill There
 (9) can only be one boss and I have that responsibility
 (10) Q Exxon was not in charge of this spill were they?
 (11) A No
 (12) Q Now does this memorandum also set forth in the next page
 (13) some information about Admiral Robinson's (sic) insistence that
 (14) the interests of the local groups and local parties be
 (15) incorporated into the ISCC process?
 (16) A That's - that's true
 (17) Q What did the Admiral - can you show the jury what the
 (18) Admiral had to say to you all on that issue?
 (19) A Well again I don't think we need to go through all the
 (20) points but the part that we have highlighted there I think
 (21) makes it pretty clear that I want to ensure that all parties
 (22) with a significant interest are represented I particularly
 (23) want to hear the voices of the Native Alaskans in those sectors
 (24) where they have an interest
 (25) Q And finally in this document with its enclosures did

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- (1) Admiral Robbins set forth essentially a statement of the
 (2) mission that he wanted the ISCC to fulfill in terms of
 (3) responding to the Valdez spill?
 (4) A Yes he did
 (5) Q Is that set forth in this next page that I'm rather
 (6) inartfully going to put on the Elmo here?
 (7) A Yeah that's it And as you can see it was identify the
 (8) Interagency Shoreline Cleanup Committee outlined in the
 charter
 (9) and the mission as he expected his expectations I guess of
 (10) the ISCC And really it was just saying that you know they
 (11) wanted us to evaluate general shoreline clean-up procedures
 and
 (12) plans establish priorities review the clean up practices
 (13) make recommendations as far as work plans to him and
 (14) evaluating the effectiveness of cleanup
 (15) Q If we could have defendants exhibit 5156 back up again
 (16) please
 (17) Now I notice that this exhibit was entitled the Prince
 (18) William Sound Interagency Shoreline Cleanup Committee
 (19) Mr Teal was there just one ISCC or were there in fact
 (20) several?
 (21) A Well there were - there were four all told in fact
 (22) that was in the Admiral's letter He wanted to make sure it
 (23) was the same kind of function in each region so the Seward
 (24) Homer and Kodiak also had the same kind of organization
 (25) Q Now was the purpose of having the local ISCCs out there to

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- (1) make sure that they got local input from the local
 (2) organizations in each of the geographic areas?
 (3) A That's correct It was the same kind of process where all
 (4) the players came together around the table to be directly
 (5) involved and basically it was a joint process
 (6) Q Now did the ISCC approve a program for identifying oiled
 (7) shorelines and recommending clean-up strategies pursuant to
 the
 (8) Admiral's mission statement?
 (9) A Yeah As far - obviously to be able to do the kinds of
 (10) things the Admiral was asking we need to understand the
 (11) sensitivities what the resource issues are the implications
 (12) as I referred to earlier but also where the oil was in
 (13) relation to those sensitivities and where the oil was on the
 (14) shorelines And so through those discussions one of the
 (15) things that kind of evolved from that was the need to have site
 (16) specific information actual detailed information from the
 (17) shorelines that were being affected so we could make site
 (18) specific recommendations for cleanup
 (19) And that function became known as SCAT Shoreline Cleanup
 (20) Advisory Team which had shoreline clean up assessment
 teams
 (21) that physically went out to the shorelines to make those
 (22) evaluations and that was really an extension I guess you
 (23) would say of the ISCC requirement
 (24) Q Now what was your role regarding the SCAT program sir?
 (25) A I was a manager of the Shoreline Cleanup Advisory Team

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- (1) Q And as part of your role as manager for the Shoreline
 (2) Cleanup Advisory Team were you responsible for ensuring that
 (3) accurate records were kept to document the oiling conditions
 (4) found in the areas your teams went to?
 (5) A Well obviously that was one of the key requirements to
 (6) make sure that we had good data that we had clear
 (7) documentation as to where the oil was and also what the
 (8) sensitivities were And so the SCAT teams basically went out
 (9) to those shorelines collected the data on site and then
 (10) detailed their documentation both in the field and when they
 (11) came back in to the command centers to make sure that we had
 (12) the right information on where the oil was And we knew where
 (13) the sensitivities were and it was well documented and that was
 (14) really one of my functions was to make sure that in fact that
 (15) information was being adequately both documented and also
 filed
 (16) and managed and distributed back through to the ISCC
 (17) organization so everybody had the same data
 (18) Q Now who made the decisions as to where the SCAT teams
 (19) could go out and survey?
 (20) A Well it was basically done through the ISCCs Again that
 (21) was one of the functions was to make sure that we were
 (22) understanding where to look where the oil was and the
 (23) priority lists were basically developed by the ISCCs as to
 (24) where they believed the oiling conditions were likely to be
 (25) It was a joint process We discussed that at great lengths

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- (1) Obviously we had to get as much information as possible
 (2) together to determine where we expected the oil might be
 (3) information coming in from the field was a number of agencies
 (4) out there looking making observations There were - all the
 (5) fishermen were out assisting in the cleanup We were getting
 (6) information back from them There was a myriad of inputs into
 (7) the ISCC of people making observations detailed surveys
 (8) ADEC in fact that was one of their primary functions very
 (9) early was to go out and look for oiling conditions on
 (10) shorelines bring that back to the ISCC and then all that
 (11) information was then pooled And then from there we were
 able
 (12) to align that with the trajectory modeling we were getting from
 (13) NOAA which indicated where we anticipated the oil was going
 (14) and from that we compiled all the information to develop
 (15) basically a priority plan for where to send the SCAT teams
 (16) Q Now we've had some testimony in the Court to date about
 (17) aerial surveys Were the aerial survey programs the same thing
 (18) as the SCAT program?
 (19) A No that was basically a reconnaissance program By the
 (20) way there were a few programs ADEC was doing their own
 (21) program again feeding that into the ISCC A number of
 (22) agencies were actually out there flying around doing various
 (23) reconnaissance type actual surveys
 (24) Q If we could have defendants exhibit 8078 please
 (25) Could you tell the jury what this photograph shows?

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(1) A Yeah Actually this is one of our SCAT Recon Teams we
 (2) called them They were really part of the video reconnaissance
 (3) program that we had in place And again this was one of the
 (4) pieces of information that were fed into the ISCCs to help in
 (5) identifying where any significant oiling may be And this as
 (6) you can see we've got the door off the helicopter This is
 (7) the way they would actually fly out there with the doors
 (8) open The guy in the back seat actually is one of the SCAT -
 (9) what we call OGs the oil spill specialist/geomorphologists
 (10) We have all kinds of acronyms here I'll try and lead you
 (11) through them But actually each Recon Team like this had two
 (12) such individuals The guy up front he's a navigator He's
 (13) got all the maps trying to make sure he's documenting and
 (14) locating specifically where they are in relation to the
 (15) shoreline so we can bring that information back as to where the
 (16) oil was in relation to the maps The guy in the back seat
 (17) he's doing a recording of what's visually being seen along the
 (18) shoreline As far as the oiling conditions the shoreline
 (19) type any key sensitivities that may be identified from the
 (20) air and these guys would fly along the shoreline very low
 (21) altitude slow as they could moving along recording both on
 (22) the video but also audio recording as well They would speak
 (23) into the machine make sure that they had the information being
 (24) recorded as to what they were physically visually observing
 (25) and what was physically on the shoreline

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(1) Q Now for the SCAT teams themselves - if we could have
 (2) DX8073 please
 (3) Tell the jury what a SCAT team consisted of
 (4) A Well this is actually a SCAT team out in the Kodiak region
 (5) and typically what you would have you have the OG which I
 (6) referred to earlier as basically oil spill specialist/
 (7) geomorphologist a geologist and in addition to that you have
 (8) an intertidal ecologist again looking at the biological
 (9) resources and sensitivities and you also have an
 (10) archaeologist
 (11) Q And these SCAT teams essentially how did they usually get
 (12) out to the shorelines where they were going to do their work?
 (13) 8075 please?
 (14) A Well typically we had the SCAT teams on vessels It
 (15) was - we found to be the best way of accessing the
 (16) shorelines Throughout Prince William Sound the vast majority
 (17) of shorelines were evaluated from small craft In fact we
 (18) usually used the fishing vessels as we see here and a SCAT
 (19) team would be on a fishing vessel like this and there would be
 (20) a skiff on board They'd move to the shoreline areas get into
 (21) the skiffs and move to the shoreline to do the site specific
 (22) evaluation
 (23) What we see here basically is a biologist the
 (24) archaeologist In fact there are two OGs here and what I
 (25) believe they're doing is it's a change out Anytime we had the

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(1) teams being switched out with individuals they would get
 (2) together they would make sure they would pass on the
 (3) information from previous surveys They were basically
 (4) trained the new individuals coming in and usually go out to a
 (5) shoreline together in fact to make sure that they were seeing
 (6) things in a similar way
 (7) Q Now these surveys themselves are actually conducted on
 (8) the shorelines isn't that correct sir?
 (9) A That's correct yes In fact with these - with the
 (10) vessel surveys excuse me we actually would move to the
 (11) shoreline the team would get out and walk the shoreline
 (12) Wherever they could access the shoreline they would
 (13) physically
 (14) walk it You know in some locations obviously that's -
 (15) that's not possible with sheer cliffs et cetera In those
 (16) circumstances they would skiff along the edge of the cliffs
 (17) make their observations and documentation
 (18) Q If we could have defendants exhibit 8072 please?
 (19) Could you describe for the jury what we see here and what
 (20) these SCAT teams would do when they'd get out on the shores?
 (21) A Well again what we see here is one of the archaeologists
 (22) Actually he's got his bag of trail mix there which they often
 (23) carried around There they're on the shoreline looking at the
 (24) oiling The conditions again in relation to the
 (25) sensitivities The OGs would physically go out and make sure
 (26) that he was identifying where the oil was the archaeologist

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(1) would be looking for any potential implications as far as the
 (2) oil or any potential cleanup for that key resource and also
 (3) the biologist would be looking then at the intertidal
 (4) community any other sensitivities like egg nests et cetera
 (5) in proximity to the shoreline and specifically to the oiling
 (6) Q If we could have exhibit 8069 please
 (7) Can you tell the jury what we're seeing here?
 (8) A This is actually the OG and the biologist The OG's
 (9) looking at oiling conditions and the biologist is there to
 (10) observe any issues that may be from the intertidal areas
 (11) Also one of the responsibilities of the biologist was to do a
 (12) photo documentation and as you can see there she has a
 (13) camera
 (14) around her neck and that's one of the functions that they had
 (15) as well
 (16) Q Now were the SCAT teams that were out there in the field
 (17) were they required to document the results of their
 (18) observations and findings?
 (19) A Most definitely We gave them fairly clear instruction
 (20) that that's needed We needed to - they were basically our
 (21) eyes in the field for the ISCC as to what was physically out
 (22) there and we needed to make sure that information was well
 (23) represented so we had that in front of us when we were looking
 (24) at making decisions in the ISCCs as to what was appropriate for
 (25) those conditions
 (26) Q Could we see defendants exhibit 2282 please?

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- (1) Oh there we go I realize this one s a little hard to
 (2) read on the Barco Maybe if you could just sort of generally
 (3) describe to the jury what we re looking at here
 (4) A Okay This is what we call an OG form or a Shoreline Oil
 (5) Evaluation form And this is - again the oil spill
 (6) specialist/geomorphologist would fill this out and as you can
 (7) see the top right-hand corner they would record who it was
 (8) when it was where it was how it was accessed weather
 (9) conditions all those kind of things specific locations the
 (10) segment numbers
 (11) One of the things we had to do which is hard to do
 (12) actually to make sure you know specifically where that oiling
 (13) condition is is to segmentize all the shorelines and so
 (14) that s basically how we did it through this - I guess through
 (15) this documentation process
 (16) And on here also you see the shoreline oiling conditions
 (17) are being represented where in relation to the intertidal
 (18) areas was the oil found In this one you can see it was found
 (19) up in the high areas of the shoreline in the supra intertidal
 (20) and what kinds of oiling conditions That s basically what s
 (21) on here It s just where the oil is what type what the width
 (22) of bands are on the shorelines and also any other relevant
 (23) information from oiling
 (24) We also asked the OGs to give us some description as to
 (25) what the oil looked like and you see under comments there

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- (1) here he says it s thin continuous tar band at the high water
 (2) level small patches of light oiling on beach number one so
 (3) he s just identifying this is the kind of condition they were
 (4) finding at this segment and specifying where they were finding
 (5) light oiling on a particular beach
 (6) Q Would the biologist keep an evaluation record as well?
 (7) A Yes yeah They used a similar kind of forms This is an
 (8) ecological evaluation form that would be filled in by the
 (9) intertidal biologist and it s the same kind of thing and I
 (10) guess again identifying where the oil was in relation to the
 (11) biology And we asked them to document the key species
 (12) where
 (13) they were again in relation to the oil and any information
 (14) that they thought was relevant as far as both oiling and
 (15) shoreline clean up issues If they felt that there was an
 (16) implication or a potential problem as far as shoreline
 (17) treatment in a particular location this was their opportunity
 (18) to flag that to identify any specific issues that should be
 (19) taken into account when developing a shoreline treatment
 (20) program
 (21) Q Now we ve seen just two pages here of a file for a
 (22) segment Was this the only type of written documentation
 (23) maintained by the SCAT teams for a segment when they
 (24) surveyed
 (25) it?
 (26) A No There s also an archaeological form There was a
 (27) sketch map Also other maps segment maps to help identify

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- (1) specifically where they were
 (2) Q Field notes as well?
 (3) A Pardon me?
 (4) Q Field notes as well?
 (5) A Yes that s right In fact all the field notes we asked
 (6) them to record their observations on writing on paper and it s
 (7) a good thing we did because it rained very frequently out
 (8) there so all those - all those things were taken into account
 (9) and part of the documentation packet issue
 (10) Q Were these recommendations formed to the ISCC were there
 (11) recommendation for a particular cleanup for a particular
 (12) segment of beach?
 (13) A That s the way it worked By taking this detailed
 (14) information by compiling it and looking at the
 (15) recommendations we then took to the ISCC a summary then
 (16) basically of the observations and recommendations for what we
 (17) believed should be done again the situation we were facing on
 (18) a site-by-site basis and this -
 (19) Q I notice - I m sorry go ahead
 (20) A This is a cover sheet that again summarizes that and it is
 (21) part of the ISCC process documentation
 (22) Q Now I m looking - if you could Joel blow up the bottom
 (23) part of that a little bit There s a bunch of signatures
 (24) there Could you explain what those signatures represent in
 (25) the process?

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- (1) A Well the state historic preservation officer again is the
 (2) State agency that was there to ensure that all aspects of the
 (3) archaeological issues were being addressed the ISCC
 (4) chairperson I would sign it on behalf of Exxon and the FOSC
 (5) would ultimately sign it once it had gone through the review
 (6) process and the agreement came out of the ISCC it was then
 (7) forwarded to the FOSC for his signature
 (8) Q Now how many segments of shoreline were surveyed in this
 (9) manner?
 (10) A There were over a thousand
 (11) Q And approximately how many miles did those segments
 (12) cover?
 (13) A The SCAT teams physically went to over 3400 miles of
 (14) shoreline
 (15) Q Now at the conclusion of that process was SCAT able to
 (16) document the oiling conditions that it found throughout the
 (17) areas affected by the spill in 1989?
 (18) A That s correct yes
 (19) Q If we could have the next one in order please
 (20) Could you tell the jury what this shows for the year 1989?
 (21) A Well for 1989 this is basically a representation of or
 (22) summary of all that - all that documentation that came in
 (23) You can see the - there s 3400 miles approximately of
 (24) shoreline that was surveyed and the majority of which no oil
 (25) was found but the oiling conditions that were found are
 (26) represented with those different colored bars You can see

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- (1) there that in fact the majority was in the light or very
 (2) light category and that's just a representation or a summary
 (3) of all that information
 (4) MR PETUMENOS Excuse me I missed the exhibit number
 (5) and I can't see it on the Barco counsel
 (6) MR CLOUGH Sure
 (7) MS GUSTAFSON 5170
 (8) BY MR CLOUGH
 (9) Q Mr Teal talk about your own personal experience Did you
 (10) get out in Prince William Sound and other areas much in 1989?
 (11) A I would like to get out a little more actually but I made
 (12) sure I did get out because obviously you have to go out and
 (13) understand the conditions and implications In I guess
 (14) Prince William Sound I was probably out two or three times a
 (15) week physically out there on the shoreline having a look
 (16) seeing what the issues are and how things were progressing
 (17) Q And you walked a lot of the beaches and shorelines
 (18) yourself?
 (19) A I went to the majority of the major locations the key
 (20) sites
 (21) Q Now we've seen an awful lot of photos starting from the
 (22) opening statement that I gave to the jury here of especially
 (23) Point Helen and Sleepy Bay some of the places that have been
 (24) called the worst of the worst I notice there's a thing here
 (25) on 5170 representing the amount of shorelines that were heavily

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- (1) oiled The question I want to ask you is let's take that big
 (2) picture of Point Helen Was that a typical heavily oiled beach
 (3) in Prince William Sound in 1989?
 (4) A No those aren't typical of the -- of the heavy oiling band
 (5) that we see here They're really the -- you know the worst
 (6) case conditions
 (7) Q Now you yourself got out and saw a number of other heavily
 (8) oiled beaches in 1989 in Prince William Sound?
 (9) A Yes I did yeah
 (10) Q And did you have an opportunity to pick an example of a
 (11) heavily oiled beach from 1989?
 (12) A Yes we have an example here that I thought would be good
 (13) to help people understand what that category really represents
 (14) a typical kind of heavy oiling condition
 (15) Q Tell us what we're looking at here
 (16) A Well this is a southern end of Knight Island and we've
 (17) chosen a segment that is in fact identified as heavily oiled
 (18) and it's actually the SCAT report the actual -- actual
 (19) pictures from the SCAT survey that we have to view
 (20) Q What are we looking at here?
 (21) A This is a GIS representation mapping of what that area
 (22) looked like You can see the pink band there that whole area
 (23) was identified as -- as heavily oiled
 (24) Q Tell the jury what we're looking at here
 (25) A Okay this is I guess --

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- (1) Q This is a photograph from that beach that we just saw?
 (2) A That's right yeah
 (3) Q The shoreline?
 (4) A As I indicated it is a photograph from the SCAT report
 (5) that the biologist likely took You can see that you know
 (6) there is a wide band of oiling condition here You can see
 (7) where the high tide level was where the oil was taken up to it,
 (8) and down to about the mid intertidal so the upper intertidal
 (9) zone -- I don't know how well you can see that
 (10) Q If you want you can step down to the Barco and point to it
 (11) if that's easier
 (12) MR PETUMENOS Judge may we have a date for the
 (13) photograph?
 (14) MR CLOUGH Is the photograph from the summer of
 (15) 1989?
 (16) A Yes It's from the SCAT evaluation from the team that was
 (17) physically on-site
 (18) MR PETUMENOS I don't mean to interrupt Judge but
 (19) I am curious you would have SCAT documentation that would
 (20) tell
 (21) you precisely when this photograph was taken?
 (22) A This was taken from the -- from the SCAT files for 89
 (23) so --
 (24) MR PETUMENOS Whenever the SCAT team did their trip?
 (25) A That's right
 (26) MR PETUMENOS That could have been --

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- (1) A It could have been at any time during the summer of 1989
 (2) MR PETUMENOS So we don't know whether it was May or
 (3) August or --
 (4) A We could find that documentation if you wish as far as
 (5) the specifics as to when it was taken but it would be in 89
 (6) BY MR CLOUGH
 (7) Q This is prior to cleanup correct?
 (8) A That's correct
 (9) Q Now if you like why don't you describe to the jury what
 (10) they're looking at here?
 (11) A Okay Well maybe it would be easier if I just -- I'm not
 (12) sure how well this is showing up on -- well it's not too bad
 (13) Remember I was saying that the high tide came deposited the
 (14) oil laid it down at the upper intertidal down into the mid
 (15) intertidal zone and that's actually quite -- quite typical
 (16) That's how the oiling conditions usually occurred is the oil
 (17) would -- would be laid down as the tide was going back out so
 (18) the heavy band would be from the highest point here down
 (19) through to about here which is -- we classified anything
 (20) greater than six meters or six and a half yards of shoreline
 (21) oiling would be classified as heavy
 (22) Q Now did you also select for the jury an example of a
 (23) typically moderately oiled beach of 1989?
 (24) A Yeah we've got an example of that
 (25) Q Where is this beach taken from?

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- (1) A I believe this is on the south end of Knight Island so
 (2) it's in a similar area but it's right on the south tip it's
 (3) on the south side of Knight
 (4) Q What does this map show?
 (5) MR PETUMENOS Excuse me Your Honor my paralegal
 (6) sent me a note and Mr Diamond told me what it said and it
 (7) says could he rectify the exhibit numbers for us
 (8) MR CLOUGH Yes I could I appreciate that from
 (9) both of you Mr Diamond actually sent me that note a minute
 (10) ago and it went in this ear-
 (11) BY MR CLOUGH
 (12) Q And I'm showing you what I believe comes from defendants
 (13) exhibit 13152 is that correct? We can go back one exhibit and
 (14) pop that up We'll get this straight
 (15) A You want me to read the numbers?
 (16) Q Does that say defendants Exhibit 13152 down there?
 (17) A That's correct
 (18) Q This is actually one of the parcels owned by Chenega
 (19) Corporation Mr Fortier's client right?
 (20) A That's my understanding right
 (21) Q Let's go to the next one see what we're seeing
 (22) A The moderate oiling classification which is the blue
 (23) band As you can see here this whole shoreline was
 (24) predominantly moderately oiled
 (25) Q Can you tell the jury is this photograph taken from that

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- (1) lightly oiled - I'm sorry lightly oiled
 (2) Q Is this a photograph from that segment?
 (3) A Yes it is it's a rocky - rocky headland and this is
 (4) quite typical especially in Prince William Sound and Kenai
 (5) The majority of the shorelines there are in fact like this
 (6) and so as the oil moved by again at the high tide you can see
 (7) kind of a straight line in the top here This is how you can
 (8) tell that it's oil rather than black lichen
 (9) We'll show you some black lichen in a little bit here but
 (10) this straight line on top the demarcation is a key indicator
 (11) that in fact this is oil And the band between zero and
 (12) three meters so anything less than three meters this kind of
 (13) banding on shoreline would be classified as light so that's
 (14) the light category
 (15) Q Now for rocky faces like this this type of banding what
 (16) would happen to the oil?
 (17) A Well typically in this kind of - there's a date here by
 (18) the way 89 7/8 probably can't see that These exposed
 (19) areas this is probably classified as a moderately exposed
 (20) location and anytime you get a storm event coming in a lot of
 (21) wave action a lot of energy at the higher intertidal zone it
 (22) would usually take care of any oiling conditions that remained
 (23) at that point
 (24) Q Now you mentioned that this was more typical of the
 (25) shorelines in Prince William Sound generally not talking about

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- (1) stretch of the shoreline?
 (2) A Yes it is Again it's from the SCAT report
 (3) Q And tell them what they're seeing here
 (4) A Well what we see is in these small pocket beach areas
 (5) you would typically get a higher concentration of oil occurring
 (6) or being laid down in these areas Now a moderate oiling band
 (7) is between three and six meters so it's not the - the heavy
 (8) the greater than six it's the next category down which we
 (9) identified as between three and six meters and so a band
 (10) through here of between three and six meters would be shown
 (11) as
 (12) moderately oiled
 (13) Q And did you also select an example of a lightly oiled
 (14) beach?
 (15) A Yes I did
 (16) Q And can you tell the jury what the exhibit number is for
 (17) this one?
 (18) A It's 12987
 (19) Q Thank you I couldn't read it from here And where is
 (20) this parcel located?
 (21) A It's Chenega Island and it's actually on the south side of
 (22) Chenega
 (23) Q What does this map show?
 (24) A Again the light and very light conditions are represented
 (25) with a yellow line and you can see that it's identified all
 (26) the way along here And this segment was generally very

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- (1) the oiling just the structure of the shoreline than the more
 (2) flat beaches is that correct?
 (3) A That's correct yeah
 (4) Q Did you bring a video with you here today to show the jury
 (5) a little bit about or explain what you were talking about
 (6) there?
 (7) A Yeah I think it's important to understand that the
 (8) shorelines that we're dealing with Keep in mind too for a
 (9) SCAT team to try and survey something like this is very
 (10) difficult that's why a skiff going along the shoreline they
 (11) would be documenting as they're moving along Obviously you
 (12) can't walk these kind of areas but you know just to give you
 (13) a feel for what those shorelines looked like and actually I'd
 (14) say fairly typical of the conditions that we'll be looking at
 (15) as far as the - not the oiling issues I'm talking about the
 (16) geology or the geomorphology of the shoreline
 (17) Q Joel if we could run that video and this is taken from
 (18) defendants exhibit 10630 and 10631
 (19) If you could just then Mr Teal tell the jury what
 (20) they're looking for
 (21) MR PETUMENOS Are we going to have the Clough rule
 (22) in effect just narrate the video?
 (23) MR CLOUGH I feel honored
 (24) MR PETUMENOS You're welcome
 (25) MR CLOUGH That sounds fine

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- (1) A So I am allowed to say something?
 (2) BY MR CLOUGH
 (3) Q You re allowed to narrate
 (4) MR PETUMENOS Tell us what we see
 (5) (Videotape played)
 (6) A As we re just flying along the shoreline here this is in
 (7) Prince William Sound Could you just hold it right about
 (8) there? Remember I said before when there s an oiling
 (9) condition you can see a straight line on the top edge of it
 (10) and what we re seeing here you ll see a band a black band
 (11) and that s in the splash zone That s black lichen and you
 (12) see that all along these shorelines
 (13) This area down through here - this isn t oil you re
 (14) looking at by the way this is a clean shoreline and this is
 (15) the intertidal biota the fucus and algae that are on the -
 (16) on the rocks So if you d just let it roll forward now given
 (17) that you can see that the bands do - do show up all the way
 (18) along these rocky headlands
 (19) This is not quite as cliffy It s more of a rocky boulder
 (20) field as well as some of the bedrock outcrops Again very
 (21) tough to be able to survey but the SCAT teams physically went
 (22) out there and walked the kind of locations come to the rocky
 (23) outcrops they would skiff around them again make those
 (24) documentations from the skiff
 (25) Q And these are typical of the types of shorelines that you

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- (1) saw in Prince William Sound throughout 1989?
 (2) A Yeah these are pretty typical Rocky headlands and
 (3) you ll get into you know pocket beaches cobbles and
 pebbles
 (4) gravels those kinds of - of shorelines I think that s
 (5) pretty typical
 (6) (Videotape concluded)
 (7) Q Finally the final category as I recall was the very
 (8) lightly oiled category?
 (9) A Yes
 (10) Q And we re looking here at defendants exhibit - I ll have
 (11) to - 13165
 (12) First of all can you tell us how the very lightly oiled
 (13) category came into being?
 (14) A Well it kind of evolved with time As the spill
 (15) progressed and the oil moved out of Prince William Sound it
 (16) basically broke up into small pieces and was distributed in a
 (17) different way in the Gulf of Alaska than it was in Prince
 (18) William Sound And we got reports back from our SCAT teams
 (19) that were out there fairly early that there really was a need
 (20) for a different classification out in that area
 (21) And so what was determined is that we needed a very light
 (22) classification because they were finding the odd tar ball
 (23) mousse patty scattered along great lengths of shoreline very
 (24) sporadically and so how do we classify that and so that s how
 (25) this issue of very light came into being

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- (1) Q Now what are we looking at here?
 (2) A This is again a same kind of sequencing looking at a - at
 (3) a shoreline location on Kodiak Island And I believe the
 (4) next - yeah this is the actual segment Remember, I
 (5) explained to you about segments identified the - that was the
 (6) way the SCAT teams had gone and evaluated it, and you see
 this
 (7) shoreline was classified as very light category
 (8) Q Now is this a photograph from that shoreline?
 (9) A Yes it is and it s dated 7/25/89
 (10) Q Can you tell the jury can you point to the very light
 (11) oiling on this shoreline?
 (12) A Well again very light is difficult to see from a shot
 (13) like this It s - now you really have to get down there and
 (14) look in amongst the boulders These are angular boulders on
 (15) the beach and look behind those boulders is often where you
 (16) might find one of these tar patties or tar balls So you re
 (17) not going to see very light oiling conditions in a scene like
 (18) this You really have to have some - have some closeups so
 (19) there s - I think we ve got a picture here that is an example
 (20) of what mousse patty would look like
 (21) Q This is a pen here give you some scale and you know I m
 (22) not saying that they all looked like this This is I guess
 (23) typical where you d have a - probably about a two- to
 (24) three inch tar patty And you can see this debris caught up in
 (25) it you know it gets mixed in with the other organic material

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- (1) In the area That s actually quite quite typical especially
 (2) out in the Gulf of Alaska But also it s really - it s a
 (3) mousse and it s a chocolate at this brown color It s pretty
 (4) easy to identify and you could have them that big or smaller
 (5) or you know you could even have tar patties if you will
 (6) that are you know about this size that would float in on the
 (7) high tide and as the tide receded it would just lay it down
 (8) usually in the upland tidal
 (9) MR PETUMENOS Are we still on exhibit 13165?
 (10) MR CLOUGH No that last photograph is from Exhibit
 (11) 13161
 (12) BY MR CLOUGH
 (13) Q Now were the results of the 1989 SCAT surveys documented
 (14) in the form of maps?
 (15) A Yes all that information In fact we ve seen some of the
 (16) mapping data in those segments
 (17) Q Here we have defendants exhibit 8425 Can you tell us
 (18) what this shows?
 (19) A This is a - this is a Kodiak SCAT office actually This
 (20) is a SCAT team probably one of the helicopter teams as it came
 (21) in that day They d sit down that night and go through all the
 (22) paperwork the OG the biologist the archaeologists make sure
 (23) they had all the documentation established that they had to do
 (24) some cross referencing make sure they were all seeing the
 same
 (25) thing the documentation was accurate for that team Kind of a

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- (1) QA/QC process or quality control check And we made sure that
- (2) this was a part of their rigor in the documentation process
- (3) and take that data and this individual back here is entering
- (4) information into databases and what we did is enter into a
- (5) database which was a GIS system a Graphic Information System
- (6) Geographic Information System that then was able to take the
- (7) field data and represent it then on maps
- (8) Q Now was this the only QA/QC process that was done on the
- (9) SCAT mapping data?
- (10) A No this - this was the field QA/QC and then we also had
- (11) a major effort to look at making sure that we had the best
- (12) representation of all the information possible of these SCAT
- (13) teams on SCAT maps and that's referred to as SCAT2 actually
- (14) was - was that process It was to make sure that we'd done
- (15) the best job possible from a quality control perspective in
- (16) representing the oiling information
- (17) Q And were, in fact maps prepared at the conclusion of that
- (18) process documenting the results of these surveys?
- (19) A Yes they were
- (20) Q And did you bring those with you to the courtroom today?
- (21) A Yeah we've got a bunch of them here somewhere
- (22) MR CLOUGH Your Honor we need just a second to set
- (23) up the easel
- (24) THE COURT Why don't we take a break counsel and
- (25) you can set it all up then

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- (1) MR CLOUGH That would be just fine
- (2) THE CLERK Please rise This court stands in
- (3) recess
- (4) (Jury out at 11 33 a m)
- (5) (Recess from 11 33 a m to 11 52 a m)
- (6) (Jury in at 11 52 a m)
- (7) THE CLERK This court now resumes its session
- (8) Please be seated
- (9) BY MR CLOUGH
- (10) Q Your Honor at the request of counsel to clarify any
- (11) confusion there might have been because I forgot to read an
- (12) exhibit number if I could state for the record the heavily
- (13) oiled example the two maps and the photograph came from
- (14) defendants exhibit 13151 the moderately oiled example of the
- (15) maps and the photograph came from defendants exhibit
- (16) 13152
- (17) the light example came from defendants exhibit - and the maps
- (18) came from defendants exhibit 12987 Finally the very light
- (19) came from defendants exhibit 13165 and that's the only one
- (20) where there was a separate exhibit number associated with it
- (21) the tar patty picture presented after the two maps on the beach
- (22) came from defendants Exhibit 13161
- (23) MR PETUMENOS This is Judge not an academic point
- (24) because we're going from segment to segment We're moving
- (25) around different locations These exhibits are marked with
- (26) multiple documents Only one or two pages are being viewed

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- (1) from each of them and we're getting lost over here We can
- (2) follow it
- (3) THE COURT Okay thank you
- (4) MR CLOUGH We've provided them the full
- (5) information
- (6) THE COURT Okay
- (7) BY MR CLOUGH
- (8) Q Okay Mr Teal let's talk mapping Get this up a little
- (9) closer Where are you going to stand?
- (10) A I don't know Come over here I guess
- (11) Q We're looking at let there be no doubt about this
- (12) defendants Exhibit 7020AA Prince William Sound property
- (13) data
- (14) SCAT2 oiling for 1989 Tell us what we're looking at
- (15) Mr Teal
- (16) A Well the process we were talking about before where we
- (17) were physically going out and documenting the oiling
- (18) conditions
- (19) on the shoreline that was entered into a GIS system That
- (20) data is then represented on the map and that's - really what
- (21) that process is is taking the field data and putting it on map
- (22) format
- (23) This is 1989 Prince William Sound Just to refresh your
- (24) memory Bligh Reef is up in this area and the oil moved down
- (25) through here And you heard about the storm that hit and
- (26) that's what really pushed the oil over into this direction
- (27) When it did that obviously the oil kind of cascaded down

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- (1) through this area and throughout the Sound
- (2) You also remember some of the current information that
- (3) you've heard about before the Alaska currents come up come
- (4) up
- (5) here and curl around and as they exit through the Sound you
- (6) can see what's happening here as the oil moved down this
- (7) area
- (8) caught the currents and the prevailing winds are from the
- (9) northeast here so you'd expect it all to move down through
- (10) this area and down and out the Sound and that's basically
- (11) what you see
- (12) In fact the crimson color is a heavy - you can see on the
- (13) north side of the islands is where the predominant oiling
- (14) that's where the heaviest conditions are and it makes good
- (15) sense as you see the flow and in fact places like Smith
- (16) Island Green Island and that's Point Helen down here and
- (17) then the north end of LaTouche Island and in fact Evans
- (18) Island here also those are the areas that did get the heaviest
- (19) oiling And in fact you know what's being referred to as
- (20) some of the worst locations are in fact those those areas
- (21) that were hit as the oil moved through
- (22) Q Now the gray areas here what do they represent on this
- (23) map?
- (24) A These are the landowner parcels
- (25) Q And you have to get up real close to see these and I
- (26) apologize but we've got an awful lot of territory to cover
- (27) with this map When you get a look at this later you'll see a

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(1) whole bunch of little numbers along all these shorelines and
 (2) some hash marks Can you tell the jury what this represents
 (3) and what's going on here?
 (4) A Okay Remember we talked about the segments there was
 (5) over a thousand of these segments These designations that
 (6) you
 (7) can see identified along the shoreline are in fact the
 (8) identifiers for those segments So for example Smith Island
 (9) you'd have Smith Island five segment on Smith Island and
 (10) that's between the two points and then Smith Island six and
 (11) so on So what those are are the segments where SCAT teams
 (12) physically went to and did the evaluation on the shorelines
 (13) Q I notice we're not showing all of Prince William Sound
 (14) here We can - the jury we can fill out the billboards again
 (15) I don't think we need to - there's a whole area up in here the
 (16) eastern end Why isn't that depicted on this map?
 (17) A Again from the trajectory of the spill and the modeling
 (18) that was being done and the current information and the wind
 (19) information it was very clear that in fact the slick was
 (20) moving in this direction and moving towards Knight Island and
 (21) so there's no oiling information for anywhere over on the east
 (22) side of - of Prince William Sound There's no indication
 (23) that in fact either there should be or there were any
 (24) indications of oiling over in this area
 (25) Q Now was every inch of every shoreline that we can see in
 this map actually surveyed on the ground?

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(1) A No not every inch Obviously again you can see where
 (2) those identifiers are Those are the locations where we
 (3) actually had - had the SCAT teams on the ground And the
 (4) other areas though I mean for example these long stretches
 (5) here doesn't mean that nobody has been there or has been to
 (6) see - looked to see if there's any oil There was a lot of
 (7) reconnaissance work going on We were referring to earlier on
 (8) as far as the video data collection that was being done as far
 (9) as ADEC all the other agencies they were out looking in the
 (10) various areas were going around and looking at all these
 (11) peripheral areas and in fact we were getting information into
 (12) the ISCC from observation from the Fishermen's Union for
 (13) example They used to bring information as to where they'd go
 (14) looking for their floats if they'd lose them off the fishing
 (15) vessel in the storm or something They knew where the
 (16) currents
 (17) were where to go and look for those kinds of things and would
 (18) feed that in to us and so that we did have a lot of
 (19) information as to where to look and a lot of people out
 (20) looking With the SCAT data though is the actual ground
 (21) survey that resulted from these observations and that focusing
 (22) of where to go and look
 (23) In fact this area over here it's Blue Fjord You can see
 (24) how that has a number of segments on it but there's no oil
 (25) indicated there and that was one of those anecdotal
 informational pieces that came into ISCC and somebody
 thought

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(1) they saw some oil over there on the shoreline and we put a
 (2) SCAT crew in and they surveyed the whole area and could not
 (3) find any
 (4) So those peripheral areas to the main body that's how we
 (5) addressed them through all the other people out there looking
 (6) if there was an indication that somebody had seen something of
 (7) significance we needed to go look at we put a SCAT team in
 (8) there In fact just one point on this as far as the summer
 (9) months as it progressed and the SCAT program unfolded and
 (10) the
 (11) evaluations were occurring we also had one SCAT team in
 August
 (12) that that's all they were doing
 (13) MR PETUMENOS Excuse me Judge I'm just going to
 (14) object to the narrative form of the testimony I have no idea
 (15) anymore what the question is Perhaps there's a question -
 (16) THE COURT That's fair enough counsel
 (17) MR CLOUGH Let me ask a question to clarify
 (18) BY MR CLOUGH
 (19) Q What procedures were in place to ensure that you guys
 (20) didn't miss significant areas of oiling in that summer?
 (21) A Well that's really what we're talking about as far as the
 (22) evaluation of the surrounding areas and also the SCAT team
 (23) that we had in August that was specifically there to go to
 (24) locations that may have been missed in between segments for
 (25) example also rating reports of these kinds of conditions that
 we needed to go and have a look at and that was their primary

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(1) function through a number of weeks there
 (2) Q Is it possible that the SCAT - one thing first remind
 (3) the jury who actually - after all this information got into
 (4) the ISCC who decided where the oil was and where the SCAT
 (5) teams needed to go?
 (6) A Again that was compiled within the ISCC and they provided
 (7) direction as far as priorities and where they thought we
 (8) should be moving to And it also depended on the
 (9) sensitivities as far as the biological sensitivities and the
 (10) time windows that were available so we tried to minimize
 (11) disturbance We had to organize the whole clean up effort to
 (12) minimize the impact on things like pupping seasons herring
 (13) spawning all those kind of things so that was all brought
 (14) into play And that was all done at the ISCC and a list would
 (15) come out as to where we should physically go then and make
 sure
 (16) the timing aspects of things were taken care of as well
 (17) Q Your work with the ISCC and your work as manager of the
 (18) program are you confident that these maps are generally
 (19) accurate?
 (20) A Yeah I believe they're as accurate as they can be
 (21) Q Is it possible you missed any oil out there that year?
 (22) A It's possible You know given the area it is possible
 (23) that there was some minor conditions that were not
 documented
 (24) but I think the process that we had was - was fairly
 (25) comprehensive

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- (1) Q Do you know of anything any better data on mapping out
 (2) there that year?
 (3) A No None that I m aware
 (4) Q Now is this process done down in Kenai as well?
 (5) A Yes We did the same thing as far as taking the SCAT data
 (6) and entering it onto the maps for the Kenai region
 (7) Q We ve got here an exhibit on its side It looks like
 (8) defendants exhibit - can you read that Andy?
 (9) A 7030AA
 (10) Q And can you tell us what this shows please sir?
 (11) A Same kind of thing as we re talking before Again as the
 (12) oil came out of Prince William Sound moved through the Gulf
 (13) there s actually another storm that came in as the oil was
 (14) moving by and moved it up into some of these - these
 (15) embayments but the same kind of thing where we have ISCCs
 (16) a lot of agencies a lot of information coming in to identify
 (17) where people had seen oiling conditions out in the various
 (18) regions That data would then come in to the ISCCs They
 (19) would develop then a priority list as to where to go and
 (20) look and then the SCAT teams would physically go out to the
 (21) shorelines and do the same kind of program as we were talking
 (22) in Prince William Sound
 (23) Q Now did you SCAT the entirety of the Kenai Peninsula?
 (24) A Not the entirety no As again you can see where the
 (25) identifiers are these are the locations that we went to

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- (1) Again that s based on the focus provided and the priority
 (2) provided by the ISCC both in Seward and the map organization
 (3) in Homer but there was also some oiling conditions that were
 (4) not SCAT d and that s around the point here You can see the
 (5) number of areas up through here where we didn t actually put
 (6) SCAT teams in 89 and one of the reasons for that is the types
 (7) of conditions that were moving around this corner were the very
 (8) light tar patties very sporadic conditions distributed at
 (9) high tide over a wide area but in very small concentration
 (10) And in fact it was kind of like transient oiling around that
 (11) corner where it might move in in a high tide but the next high
 (12) tide comes and it s gone again and we were having some
 (13) problems actually with that in that it s very difficult to
 (14) document those conditions and that s where that very lightish
 (15) started to come into play But you d put a SCAT team out
 (16) there they d hear there was oiling conditions and they d go
 (17) and couldn t find any So what we basically did as far as the
 (18) program of the oiling condition around the corner is that the
 (19) best way to address that was through the village clean up
 (20) crews
 (21) Q Can you explain to the jury what the village clean-up crew
 (22) program was down in the Kenai?
 (23) A Well they d - they d go to their key areas along and
 (24) around the villages and they d basically walk the shorelines
 (25) And if they saw those kinds of conditions they d pick it up

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- (1) right as they re there so that s how those kinds of light
 (2) condrtions were addressed around the corner
 (3) Q Now the ISCC for this area was located up in Homer?
 (4) A That s true yeah
 (5) Q And did the Homer ISCC make the decision as to what was
 (6) SCAT d what was necessary to be SCAT d and what was not
 (7) down there?
 (8) A That s right
 (9) MR PETUMENOS Objection leading
 (10) BY MR CLOUGH
 (11) Q Who made the decision as to what needed to be SCAT d in
 (12) that area? I apologize
 (13) A Both in Seward and in Homer the ISCC or the map
 (14) organizations were the ones that actually tallied all the
 (15) locations to look at and made a priority and asked the SCAT
 (16) teams to go to those locations
 (17) Q And did the Homer ISCC oversee the village clean up
 (18) program as well?
 (19) A They were involved yes as far as identifying where they
 (20) were and the tasks that they were performing
 (21) Q And did you prepare a SCAT map for Kodiak Island what
 (22) went on out there?
 (23) A The same kind of process again
 (24) Q Let s identify the exhibit here I m sorry Exhibit
 (25) 7031AA Can you tell us what this map shows?

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- (1) A Well remember what I was explaining about as the spill
 (2) came out of Prince William Sound and started to break up into
 (3) small pieces small tar balls tar patties and then in there
 (4) were some larger areas than that where you d get a number of
 (5) tar patties accumulating in rift lines and things like that
 (6) There were a few locations where they did get some heavier
 (7) oiling but the vast majority of the oiling in the Kodiak
 (8) region generally was in this very light classification where
 (9) you get you know the odd tar patty or a tar ball rolling up
 (10) at high tide and it was really quite transient the oiling
 (11) conditions So this is the same kind of representation
 (12) Again you can see where the SCAT teams have been to The
 (13) oiling conditions identified you can see the very light is a
 (14) blue line and the vast majority of the oiling we show here is
 (15) in fact in that category
 (16) Q Now Mr Teal was all of Kodiak Island SCAT d during 1989?
 (17) A No not all of - not all of the island
 (18) Q And why not?
 (19) A Well a similar kind of issue as we were talking about
 (20) around the - around the point at Homer or in the - on the
 (21) Kenai Peninsula is that the ISCC in Kodiak would again
 (22) prioritize where they wanted the SCAT teams to go and that
 (23) was where the more significant oiling was They wanted SCAT to
 (24) focus on the significant oiling areas A lot of villages out
 (25) around Kodiak that actually were physically going out and
 doing

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- (1) the same kinds of things as we talked about the villages in and
- (2) around the Kenai Peninsula where they would go to their own
- (3) shorelines walk the shorelines If they found these tar balls
- (4) or tar patties they'd just pick them up and that was the end
- (5) of it So that kind of information isn't - isn't represented
- (6) on this map So what's here is - is a SCAT data that's
- (7) scientific collection of information and its representation
- (8) That's what our maps are all about
- (9) MR CLOUGH Your Honor at this time we'd like to
- (10) move in exhibits 7020AA the SCAT map for Prince William Sound
- (11) 7030AA the maps for Kenai 89 and 7031AA the Kodiak map for
- (12) 1989
- (13) (Exhibits 7020AA 7030AA and 7031AA offered)
- (14) MR PETUMENOS No objection Judge
- (15) THE COURT They're all admitted
- (16) (Exhibits 7020AA 7030AA and 7031AA received)
- (17) MR CLOUGH Let's take this down for a second because
- (18) we're going to use the Barco again If we could have - it's
- (19) defendants exhibit 5142 please
- (20) Mr Teal I'd like to switch now from the surveying process
- (21) and talk a little bit about the cleanup Can you tell the jury
- (22) what defendants exhibit 5142 shows how the cleanup was
- (23) organized and implemented?
- (24) A Well as we talked about the prioritization as to where to
- (25) go the field surveys these are the SCAT surveys we've just

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- (1) referred to and then the cleanup recommendations all went into
- (2) the ISCC for their review and approval In addition to that
- (3) you know the cultural resource issues the archaeological
- (4) issues were addressed through the state the state historic
- (5) preservation officer That review occurred prior to it going
- (6) into the ISCC The ISCC would get all that information then
- (7) and were then able to determine what the best response would
- (8) be given all those influencing factors
- (9) That then would leave the ISCC with a clear
- (10) recommendation as to what they believed should be done That
- (11) went to the Admiral the FOSC for his approval Once it was
- (12) approved by the Admiral then it would go to Exxon for
- (13) implementation That's generally the process Moved through
- (14) to the completion of the treatment program and then to - back
- (15) to actually a state and federal representative would then go to
- (16) the shorelines to determine that in fact all that could be
- (17) done had been done as far as the 1989 treatment program and
- (18) then from there the FOSC would sign off would give his final
- (19) approval that in fact it had been completed
- (20) Q Now there's been some talk at this trial about thousands
- (21) and thousands of clean up workers swarming the beaches
- (22) Looking at the scheduling of the Task Forces how large were
- (23) the Task Forces that would actually go out to the beaches?
- (24) A Well it really depends on the oiling conditions As we
- (25) talked those very light conditions often it would be a small

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- (1) crew where you'd have maybe a handful of individuals out there
- (2) four to six something like that with one skiff and they
- (3) would just get on the shoreline just walk along it pick up
- (4) what was needed and then they'd be off in a very short period
- (5) of time
- (6) All the way up to you know the very heavily oiled areas
- (7) places in Prince William Sound where you could have a number of
- (8) actually shoreline cleanup response crews on site Now a
- (9) response team on site would likely have about 20 to 25 people
- (10) would be in a - a party shall we say that's on the shoreline
- (11) doing the actual physical cleanup
- (12) Now in a Task Force if you have to put a Task Force into
- (13) a key area let's take Smith Island for example the north
- (14) side of Smith Island We saw it was all very heavily oiled
- (15) along through there You could have four or five of these task
- (16) groups physically on the shoreline from a Task Force But
- (17) that's the kind of treatment that occurred the numbers of
- (18) people that would be involved Again it varied depending on
- (19) the oiling conditions
- (20) Q Now were most of the shorelines in Prince William Sound
- (21) treated with mechanical - or I should say were most of the
- (22) shorelines in general treated with mechanical shoreline
- (23) cleanup techniques?
- (24) A No As we saw the bar showed the most oiling conditions
- (25) the light and very light most of it were very light Those

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- (1) are the kind of conditions where you would have again a very
- (2) small team that would get out on the shoreline and just move
- (3) through it very quickly
- (4) Q Is that what became known as a Type A Manual Cleanup?
- (5) A That's right yes
- (6) Q What does Type A Manual Cleanup consist of?
- (7) A Well it really consists of manual pickup Could be a
- (8) shovel or a trowel or spade whatever you want to call it
- (9) where they would just scoop it up put it in a bag and move
- (10) on That was really the - the type of program that we talked
- (11) to when we talk Type A cleanup
- (12) Q Who made the determinations as to which type of cleanup
- (13) techniques would be used on particular beach segments?
- (14) A Well the ISCCs were really the place where those decisions
- (15) were made as to what is most applicable for the shoreline
- (16) treatment program given the sensitivities and given the type
- (17) of oiling that was brought to bear
- (18) Q Could we see defendants exhibit 8068 please?
- (19) Can you tell us what this - first of all the date on
- (20) this starting with the date can you tell us what this
- (21) photograph shows?
- (22) A Well the date is the 6th of April 1989 I took this
- (23) picture It was - the ISCC this was the first time that we
- (24) were able to get all those parties from around the table
- (25) physically to the shorelines and started looking at the kinds

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- (1) of conditions this is Prince William Sound This is Eleanor
 (2) Point by the way which is right on one of the north ends of
 (3) Eleanor Island which is again one of those areas that was
 (4) heavily oiled and you can see the oil here There's quite a
 (5) bit of oil on these rocks and we wanted to get the ISCC
 (6) physically there so we could understand the implications of
 (7) cleanup look at the issues around resources et cetera and
 (8) these members are in fact from the Prince William Sound
 (9) ISCC We've got Colleen Burg with ADEC I've got Nancy
 (10) Lethcoe Prince William Sound Conservation Alliance got John
 (11) Johnson with CAC out there
 (12) Q Who's CAC?
 (13) A That's Chugach Alaska Corporation and so all the different
 (14) agencies were represented physically on the shoreline seeing
 (15) the conditions that had to be dealt with evaluating the
 (16) techniques We had flushing systems we had manual pickup
 (17) raking all those kinds of things were demonstrated basically
 (18) for the ISCC so we could make sound judgments when it came
 (19) to
 (20) looking at that paperwork and relating it to what the issues
 (21) were on the shoreline
 (22) Q This shows sort of the front end of the whole process
 (23) What happened at the back end at the end of the summer after
 (24) the various shorelines had been treated?
 (25) A Well really as I showed in the flow diagram as to the
 process --

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- (1) Q We're here by the way looking at defendants exhibit
 (2) 8077?
 (3) A There was the signoff or the evaluation by the state
 (4) representative and the FOSC representative that would go and
 (5) have a look at the conditions that remained after the -- after
 (6) the treatment program had occurred and make a decision as to
 (7) is
 (8) there more that should be done here or is this adequate as far
 (9) as 1989 treatment
 (10) Q Now this particular photograph is this taken from the SCAT
 (11) files that you were in charge of as manager?
 (12) A Is this taken from our files? It likely is It was
 (13) probably taken by one of the -- one of the team members
 (14) Q Now who would be involved in these sign-off procedures?
 (15) A Well again the FOSC representative and the state
 (16) representative and in some cases in fact out in the Gulf of
 (17) Alaska area I think the land -- landowner or representative or
 (18) manager land manager would be directly involved as well
 (19) particularly with Park Service and other folks like that
 (20) they -- they would have a part of the program
 (21) MR STOLL Excuse me Your Honor I'm going to move
 (22) to strike the last portion of his answer as it relates to
 (23) speculation as to what may have happened out in the Gulf of
 (24) Alaska
 (25) MR PETUMENOS I join in the objection
 MR CLOUGH How many people are we going to have a

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- (1) objecting here? I thought we had a protocol or at least to
 (2) questions on cross-examination
 (3) THE COURT That's true counsel I'll let it slide
 (4) this time Do you have a response?
 (5) MR CLOUGH I believe he did have a foundation for
 (6) that I could lay some more foundation
 (7) THE COURT Describe it in some detail all right
 (8) BY MR CLOUGH
 (9) Q As manager of the SCAT program and your work on the spill
 (10) response in 1989 are you aware of the sign-off process was
 (11) conducted throughout all of the areas affected by the spill in
 (12) 1989?
 (13) A That process was done yes in all regions
 (14) Q And in fact was it done on all of the beaches that were
 (15) treated in Kodiak in 1989?
 (16) A I can't specify that it was done on every single shoreline
 (17) but those locations where there were programs identified and
 (18) was a work order specified that that was the process yes
 (19) Q For everywhere that there was a work order specified at the
 (20) conclusion of the summer of 1989 this process that you just
 (21) described with Coast Guard and ADEC going out and signing
 (22) off
 (23) the beach occurred?
 (24) A That's correct yes
 (25) MR STOLL Your Honor my objection is to the
 statement that he thought that possibly the landowner signed

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- (1) off on this and I don't think there's -- I don't think he has
 (2) any personal knowledge about that
 (3) A Would you like me to clarify that?
 (4) MR STOLL At least as far as Kodiak is concerned
 (5) BY MR CLOUGH
 (6) Q Let's start with Prince William Sound What do you know
 (7) if anything about whether landowners were involved in the
 (8) sign-off process?
 (9) A Well to the best of my knowledge in Prince William Sound
 (10) the landowners were not directly involved with the actual
 (11) signoff on the shoreline It was the state and federal
 (12) representative that was physically signing off on those
 (13) shorelines And in the Gulf of Alaska it was the same kind of
 (14) process but all I'm saying is that the land manager or land
 (15) representative was often with them during that program
 (16) Q And was the land manager often with them in Prince William
 (17) Sound during the sign-off program as well?
 (18) A I can't -- I can't state whether they were or not
 (19) MR STOLL Your Honor could I ask a question in
 (20) relation to the objection?
 (21) VOIR DIRE EXAMINATION OF ANDREW R TEAL
 (22) BY MR STOLL
 (23) Q Do you have personal knowledge the land manager for any
 (24) of
 (25) the Kodiak Island Borough property was on the site when this
 so-called signoff occurred?

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- (1) A In this particular signoff?
 (2) Q No not the particular one depicted here but any of those
 (3) for any of the parcels do you have personal knowledge?
 (4) A I was not personally involved no
 (5) MR STOLL Okay That s my objection
 (6) THE COURT All right in view of the record the
 (7) objection s overruled It s certainly thoroughly examined
 (8) DIRECT EXAMINATION OF ANDREW R TEAL (Resumed)
 (9) BY MR CLOUGH
 (10) Q Moving on Mr Teal what about - what time were clean up
 (11) operations terminated in summer of 1989?
 (12) A September 15th was the date that was specified as the
 (13) termination for cleanup
 (14) Q And who made the determination the clean up operations
 (15) would stop at that time?
 (16) A It was the FOSC He was the one in charge
 (17) Q And what about you yourself did that end your involvement
 (18) with the Exxon Valdez oil spill response?
 (19) A No it didn t We moved
 (20) Q What did you do at that time?
 (21) A Well we moved into Anchorage and we then developed -
 (22) well we had established at that point what we called our Fate
 (23) and Persistence Program which was looking at shorelines
 (24) oiling conditions types of - the different types of
 (25) shorelines the energy exposure that they were exposed to and

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- (1) trying to understand the natural processes as far as how
 (2) things would change through time of the oil on those types of
 (3) shorelines
 (4) Q You say energy exposure we re talking waves here?
 (5) A That s correct yeah
 (6) Q Storms?
 (7) A Right
 (8) Q Currents coming in and out?
 (9) A Right tidal action the whole works
 (10) Q The whole works?
 (11) A Yeah
 (12) Q Did your program employ time lapse photography during the
 (13) course of that to study this issue?
 (14) A Yes it did We had - actually we had about 54 locations
 (15) throughout the spill area that we were doing very extensive
 (16) evaluation transect type evaluation on throughout that time
 (17) period We also had four locations where we actually set up
 (18) time lapse cameras on the shoreline looking down at a
 (19) particular location kilo indications where pictures would be
 (20) taken every five minutes So by putting all those together
 (21) you could actually see the tidal changes you could see when a
 (22) storm event hit and what the effects of that storm were
 (23) Q And did you personally observe on your trips to Prince
 (24) William Sound these wave action storm action et cetera?
 (25) A Definitely on a number of occasions yes

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- (1) Q Did you bring with you today a video to show the jury to
 (2) document the types of conditions that you saw and that your
 (3) program observed during 1989 and 1990?
 (4) A Yeah we ve got some brief clips from some of that
 (5) MR CLOUGH Your Honor we d like to put on the
 (6) video defendants exhibit 10645 and -
 (7) MR PETUMENOS I m going to want a little foundation
 (8) on time lapse photography if I can inquire before we get going
 (9) here This is a fairly unique sort of exhibit
 (10) THE COURT This is a video of time lapse
 (11) photography?
 (12) MR CLOUGH This is a video Your Honor first of
 (13) some general wave actions that he was going to describe based
 (14) on his personal observations followed by time lapse
 (15) photography
 (16) THE COURT So the first is just the normal no time
 (17) lapse photography?
 (18) MR CLOUGH But there is not a cut between the two
 (19) THE COURT So when it gets to the time lapse can you
 (20) recognize when you re getting to it?
 (21) A As soon as it comes up yeah certainly
 (22) THE COURT Okay
 (23) BY MR CLOUGH
 (24) Q And the time lapse the time lapse video which we re going
 (25) to see here in a moment is from the program which you worked

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- (1) on Fate and Persistence Program in 1989/ 90?
 (2) A That s correct yes
 (3) MR CLOUGH Roll it
 (4) (Videotape played)
 (5) A Okay remember I was talking before about the rocky
 (6) shorelines and the majority of them are like this We have to
 (7) understand to monitor these conditions to realize implications
 (8) as to how things would change through the winter months You
 (9) can see here s some of the kinds of storm action the washing
 (10) action along those shorelines and obviously in exposed areas
 (11) Could you stop it on this one right about - well just let
 (12) it roll a little bit - okay right about there This energy
 (13) being released on the shoreline you can see how it s throwing
 (14) the pebbles and small cobbles and it s really like a washing
 (15) action on the shoreline especially when the - when the wave
 (16) or the energy is pulled back when the wave expends itself on
 (17) the shoreline and it s pulled back these pebbles and cobbles
 (18) are all rolling around and rattling And in a big storm it s
 (19) deafening to be there I don t know if you ve been on a
 (20) shoreline like that but there is a lot of energy a lot of
 (21) action a lot of movement of those sediments and so that s one
 (22) of the reasons why you need to understand what s happening
 (23) here
 (24) and what the implications of that are as far as cleansing
 (25) through the winter months and also what you ll be needing to
 look for in 1990

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- (1) Okay you can let it roll
 (2) Again these are just other examples of - okay stop
 (3) here Okay now this is the time lapse camera pictures and
 (4) again one of the main reasons we -
 (5) MR PETUMENOS I object to the narrative form of the
 (6) response upon getting into the exhibit
 (7) THE COURT The objection s overruled
 (8) A One of the main reasons that we wanted to put this in place
 (9) was again to fully understand what the changes were going to
 (10) be like through the winter months How the - how the
 (11) shorelines were changing in angle and shape in relation to
 (12) where that oil was because if you - you need to understand
 (13) what s happening with the oil Is it being washed away or is
 (14) it being buried by the sediments being redistributed? So
 (15) that s the reason why we used these time lapse camera pictures
 (16) to better understand the dynamics of the shoreline to better
 (17) understand the implications for the survey in 1989 This
 (18) helped us understand that yes in fact we did have to go out
 (19) there and dig pits to identify any subsurface oil that may be
 (20) buried by some of the sediments that were relocated
 (21) Could we just let it roll?
 (22) (Videotape paused)
 (23) MR PETUMENOS Am I going to get my voir dire before
 (24) the film is rolled? I don't know what we re doing
 (25) THE COURT On foundation?

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- (1) MR PETUMENOS Yes Judge
 (2) THE COURT Sure very briefly counsel
 (3) VOIR DIRE EXAMINATION OF ANDREW R TEAL
 (4) BY MR PETUMENOS
 (5) Q This time lapse photography was for the purpose of
 (6) determining what cleanup to do in the following year Is that
 (7) what I heard you say?
 (8) A There was two purposes One was to better understand what
 (9) was happening to the oiling conditions so that we would
 (10) understand the survey requirements for 1990 and also we d
 (11) understand how natural cleansing occurred and the
 (12) implications
 (13) of that as far as the remaining oil
 (14) Q Where are we here? What is the location?
 (15) A This particular location is LA 15-C
 (16) Q Where is that?
 (17) A It s the northeast side of LaTouche Island
 (18) Q Is it in Sleepy Bay?
 (19) A No It s not
 (20) Q Is it around the corner on the northeast side?
 (21) A Yes It is
 (22) Q And you put a camera out when?
 (23) A Cameras were put in place in the fall of 89
 (24) Q And how often did it run?
 (25) A Again about every five minutes there s a picture being
 taken

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- (1) Q For the entire winter?
 (2) A That s right
 (3) Q And this film did it span a period of time?
 (4) A Yes it did
 (5) Q What was the period of time?
 (6) A From the end of September right through to I believe
 (7) about March of 990
 (8) Q What we re going to see then is every five minutes It
 (9) went on how long the camera kicked in every five minutes Is
 (10) that what I understand?
 (11) A Yes that s correct
 (12) Q How long did it stay on?
 (13) A Just - all it is is a still camera that takes a picture
 (14) and just captures that moment if you will
 (15) Q So it s a photograph five minutes goes by another
 (16) photograph?
 (17) A That s right
 (18) Q Five minutes goes by another photograph?
 (19) A Right
 (20) Q For months?
 (21) A That s right
 (22) Q And that s what the jury s going to see here in a minute?
 (23) A All we re going to see is just some clips of that
 (24) Q This is not one storm?
 (25) A This is actually two different locations two different

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- (1) events
 (2) Q I m confused Did you say it starts in September and the
 (3) last photograph is taken in March?
 (4) A All I m saying is that these particular clips were some of
 (5) those storm events that we observed during that time period
 (6) but these clips are not taken over that extended period of
 (7) time
 (8) Q What period of time are they taken?
 (9) A These particular ones would be taken likely in November
 (10) December of 89
 (11) Q Do you know?
 (12) A These specific frames? No I do not know when these
 (13) specific frames were taken There were storms again from that
 (14) period of time
 (15) Q From somewhere in November and December?
 (16) A That s correct
 (17) Q How long did the storm go on?
 (18) MR CLOUGH Your Honor if I may ask how long is
 (19) this going to go on?
 (20) MR PETUMENOS Well I think - I ll pick it up on
 (21) cross Judge I ve heard enough Let s pick it up on cross
 (22) MR CLOUGH All right
 (23) DIRECT EXAMINATION OF ANDREW R TEAL (Resumed)
 (24) BY MR CLOUGH
 (25) Q Andy why don t you pick it up and try and describe from

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- (1) where you were about what we re going to be seeing here
- (2) (Videotape resumed)
- (3) A Okay Again these - the storm events as they come in
- (4) the action changing now we switched to LA 20-A which is
- (5) actually in Sleepy Bay so this is Sleepy Bay the head of
- (6) Sleepy Bay
- (7) MR PETUMENOS That was it for the other location?
- (8) A That s right That s all there is And this is showing
- (9) how things change understanding the sediment movements
- and the
- (10) energy and how that is affecting the shoreline You see how
- (11) things move around change around We ll see in a minute here
- (12) how the - just let it run
- (13) MR GROSS That s all
- (14) (Videotape concluded)
- (15) BY MR CLOUGH
- (16) Q I think you have to rewind it if you want to make that
- (17) point Andy?
- (18) A No that s okay I think we saw the waves come in the
- (19) energy the shifting of sediments is really what we need to
- (20) understand That was really the focus of the video
- (21) Q Now Mr Teal were joint - excuse me were survey
- (22) operations conducted in the years 1990 through 1992?
- (23) A Yes there were It was a little different in 1990 We
- (24) went actually to joint surveys where in 89 we had the SCAT
- (25) teams with just the biologists archaeologists and an OG

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- (1) involved We expanded that in 1990 to include a state
- (2) representative a federal representative and a landowner
- (3) representative
- (4) Q Now when you say joint surveys what exactly do you mean
- (5) by that?
- (6) A Well we jointly developed the idea of having these teams
- (7) that would have representation from - from all the key
- (8) parties and it came out of an evolutionary process basically
- (9) from the ISCC into an organization called TAG which is a
- (10) Technical Advisory Group And it was a group that again the
- (11) key parties were represented It was a cooperative joint
- (12) approach in identifying what was needed for 1990 both from a
- (13) survey perspective but also as far as what kinds of clean up
- (14) activities may be required given the conditions we were
- (15) seeing
- (16) So that joint process developed a listing a location as
- (17) to where we needed to go and look and then these joint teams
- (18) physically went to those locations and then did the survey
- (19) Q Were the results of the joint surveys also documented in
- (20) the forms of maps similar to those that we saw for 1989?
- (21) A The same process was in place in 90 as it was in 89 where
- (22) the survey teams again it would be an OG and a bio and -
- (23) sorry the archaeologists weren t involved in 1990 because we d
- (24) already gone through that evaluation in 1989 They went
- (25) separately actually and did some follow up work at various

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- (1) locations so we had a biologist, though and an OG and their
- (2) role was to document very similarly as we were talking in
- (3) 1989 in fact it was even further refined That data then
- (4) was captured was QC d entered into a GIS system in the maps
- (5) we were just talking about
- (6) Q Did you bring the maps with you here today too?
- (7) A Yes
- (8) Q Did you bring the maps for the joint 1991 surveys as well?
- (9) A Yes
- (10) Q And there was joint surveys conducted in 1992 as well?
- (11) A That s correct yes
- (12) Q And the same process was used for all the surveys?
- (13) A Basically the same type of process in 1991
- (14) Q Let s - first of all we have to -
- (15) A You want to do 1989 first?
- (16) Q Let s get the maps out so we can reference the exhibit
- (17) numbers and quickly get them stuck behind the Barco I ll
- (18) pull you see if you can pull that out of there Can you grab
- (19) those?
- (20) A Yeah All three of them?
- (21) Q Yes
- (22) A Do you want me just to jump into this?
- (23) Q Yeah what I d like you to do briefly since the process is
- (24) basically the same describe - first of all references the
- (25) exhibit number

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- (1) A DX-7019AA
- (2) Q What does that one represent?
- (3) A This is the data from the Spring Shoreline Assessment
- (4) Program of 1990 The collection of that data again jointly
- (5) and the teams information then is inputted into GIS and this
- (6) is a representation of that data You can see how things have
- (7) changed a little bit There isn t as much red anymore which
- (8) is good You can see there are some of these key locations we
- (9) were talking about before north end of LaTouche Island Point
- (10) Helen some spots on Green and some spaces on Smith
- (11) MS SMITH Andy let s move it up a little bit It s
- (12) very hard to see the color
- (13) BY MR CLOUGH
- (14) Q This is defendants exhibit 7092 - 7019AA?
- (15) A 7019AA
- (16) Q Okay And do we have a similar map for Kenal?
- (17) MR CLOUGH Your Honor at this time I d like to move
- (18) in defendants exhibit 7019AA
- (19) (Exhibit 7019AA offered)
- (20) MR PETUMENOS No objection Judge
- (21) THE COURT It s admitted
- (22) (Exhibit 7019AA received)
- (23) A Same kind of process again jointly identify where we need
- (24) to go and look and then those joint survey teams physically
- (25) went out to locations got the oiling conditions these maps

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- (1) are the representation of that work
- (2) MR CLOUGH And this is defendants exhibit 7033AA
- (3) for Kenal 1990 We would move that at this time Your Honor
- (4) (Exhibit 7033AA offered)
- (5) MR PETUMENOS No objection
- (6) THE COURT It s admitted
- (7) (Exhibit 7033AA received)
- (8) A Going to do this as quickly as possible
- (9) Okay same kind of thing for Kodiak same process jointly
- (10) evaluate where to look physically go out and look to get at
- (11) the shorelines document input into GIS representation on the
- (12) maps
- (13) MR CLOUGH Your Honor I d like to move in
- (14) defendants exhibit 7037AA the 1990 Kodiak map
- (15) (Exhibit 7037AA offered)
- (16) THE COURT It s admitted
- (17) (Exhibit 7037AA received)
- (18) BY MR CLOUGH
- (19) Q Now in 1991 Mr Teal was there also a joint survey
- (20) conducted?
- (21) A Yes there was
- (22) Q And in 1991 - let s grab that How did the - how was it
- (23) determined where the joint survey would go in 1991?
- (24) A Well there was a lot of discussion in 1990 about did we go
- (25) everywhere we needed to go make sure we captured all the

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- (1) Q Does defendants exhibit 7028AA show the results of the
- (2) MAYSAP survey process?
- (3) A Yes it does in a similar way Again if you look at
- (4) those key locations you can see how the heavy conditions have
- (5) moved away Now we re into moderate and light but you still
- (6) can find some of those locations that have some heavy oiling
- (7) conditions remaining but very few at this point Again these
- (8) are the locations where you ll find it though in those key
- (9) hot spot areas
- (10) Q When you pointed to a couple of locations with your finger
- (11) for the record could you tell us some of those hot spots where
- (12) you were still running into the oiling in 1991?
- (13) A Okay Well there s places like Point Helen for example
- (14) north end of LaTouche Island the northeast end of Evans
- (15) Island just the odd spot on Green Island and a couple of
- (16) locations over on Knight Island places like Rua Cove and Bay
- (17) of Isles spots like that
- (18) Q And did you also prepare maps showing the results of the
- (19) survey in Kenal area for 1991?
- (20) A Yes Similar program similar evaluation process and here
- (21) is the joint data that was represented on the map
- (22) MR CLOUGH Your Honor I d like to move in the
- (23) Prince William Sound map defendants exhibit 7028AA
- (24) (Exhibit 7028AA offered)
- (25) THE COURT It s admitted

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- (1) locations that we needed to return to to look at And in
- (2) fact the state in the fall of 1990 started going through all
- (3) the data they had as far as all the different surveys that
- (4) they had available to them all the information from villages
- (5) and other parties had inputted to the state They did an
- (6) exhaustive evaluation as to where had there ever been any oil
- (7) That was then brought into the TAG the Technical Advisory
- (8) Group The FOSC had sent letters to the mayors of the - of
- (9) the areas of the towns communities that were in the area of
- (10) influence of the spill all their input came in to the FOSC and
- (11) the state - sorry the federal agencies also pulled all their
- (12) data together so it was a very comprehensive pulling together
- (13) of information as to where there had been oil and then those
- (14) lists were pulled together compiled by TAG and jointly within
- (15) the Technical Advisory Group and a fairly exhaustive list was
- (16) produced then as to where to go and look for 1991
- (17) Q Now did the 1991 joint survey go to all of the locations
- (18) that the State of Alaska had wanted to be sure were surveyed
- (19) that year?
- (20) A All those locations that the State identified on their
- (21) lists were addressed
- (22) Q And we re looking here at defendants exhibit 7028AA Does
- (23) that show the results - this was called by the way the
- (24) MAYSAP survey?
- (25) A That s right still in MAYSAP

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- (1) (Exhibit 7028AA received)
- (2) MR CLOUGH I d also like to move in the Kenal joint
- (3) survey map defendants exhibit 7025AA
- (4) (Exhibit 7025AA offered)
- (5) THE COURT It s admitted
- (6) (Exhibit 7025AA received)
- (7) BY MR CLOUGH
- (8) Q And was there also a map prepared for Kodiak in 1991?
- (9) A Yes Again same process
- (10) Q Same process?
- (11) A We won t go through the process again but this is a
- (12) representation of the results from that MAYSAP joint survey
- (13) MR CLOUGH And defendants Exhibit 7027AA I d move
- (14) at this time
- (15) (Exhibit 7027AA offered)
- (16) THE COURT And that s admitted also
- (17) (Exhibit 7027AA received)
- (18) BY MR CLOUGH
- (19) Q One more joint survey to go here
- (20) Was there a survey conducted in 1992 Mr Teal?
- (21) A Well in 1992 the - the SOSOC which is the State On Scene
- (22) Coordinator and the FOSC the Federal On Scene Coordinator
- (23) got together with the attendant folks and developed a follow up
- (24) survey in 1992 Really the objective was to just go back to
- (25) some of those key areas because they wanted to be sure there

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- (1) was no additional treatment required in those hot spots And
 (2) so that's really what we see here the results from that
 (3) program
 (4) Q I'm trying to find our '89 map that we moved in a minute
 (5) ago so you can do a comparison between the two
 (6) MR STOLL Is it the beginning of those?
 (7) MR CLOUGH I think you're right Thanks Bob
 (8) While we're thinking of it I'd like to move in Your
 (9) Honor at this point defendants exhibit 7021AA the 1992 joint
 (10) survey map for Prince William Sound and also we have a joint
 (11) survey map for Kenai Mr Teal if you can read that exhibit
 (12) number for me I'd appreciate it
 (13) A DX07022AA
 (14) MR CLOUGH Move their admission at this time
 (15) (Exhibits 7021AA and DX07022AA offered)
 (16) THE COURT They're received
 (17) (Exhibit 7021AA and DX07022AA received)
 (18) MR PETUMENOS Judge just for the record these are
 (19) all FINSAP maps
 (20) BY MR CLOUGH
 (21) Q Is that the title FINSAP survey?
 (22) A Yes
 (23) Q How'd it get that title?
 (24) A It was developed by the state agencies and in fact it was
 (25) the FOSC - Ernie Piper and FOSC at that time Dennis McGuire

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- (1) that got together and developed the programs and the survey
 (2) locations and in fact named the program
 (3) Q And did the 1992 joint survey that Mr McGuire and
 (4) Mr Piper had designed did it go to all of the locations the
 (5) agencies working the joint survey process felt needed to be
 (6) surveyed at that time?
 (7) A It's my understanding at that time that's how they
 (8) developed The whole program is to look at where there may
 (9) be
 (10) locations that anybody felt were required to go back and have a
 (11) look at and that's from the state and federal agencies
 (12) Q I'm holding up here defendants exhibit 7020AA which is
 (13) the Prince William Sound 1989 map and you've got over there
 (14) defendants Exhibit 7021AA Can you generally try and
 (15) compare
 (16) the two for the jury show what's happening here
 (17) A Okay Well just very briefly again remember the key
 (18) locations that were heavily oiled in there You can still see
 (19) that in fact there still is some oil remaining at those key
 (20) spots However there are a number of the areas that now are
 (21) in fact not seeing certain conditions
 (22) Q And did the result of the 1992 survey generally confirm
 (23) that the surface oiling conditions had very dramatically
 (24) reduced since 1989?
 (25) A Right As I was explaining the storm action the cleansing
 (26) processing during the years and the treatment effort during
 (27) 1989 really resulted in a significant change and reduction

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- (1) through time That's really what we saw when we went out to
 (2) have a look at the shorelines
 (3) Q Now Mr Teal did 1992 mark the end of your involvement
 (4) with the Exxon Valdez oil spill?
 (5) A Didn't mark the end of my involvement no I was in
 (6) Anchorage for two and a half years and came up for the FINSAP
 (7) survey at the request of the FOSC and the SOSC and in 1993 I
 (8) was also requested by the FOSC to come and join the survey in
 (9) the spring of '93 to look at the setaside survey sites
 (10) Q Before we talk about that survey one last question about
 (11) the joint survey process that we just saw the maps on Those
 (12) maps showed surface oiling right?
 (13) A That's correct yes
 (14) Q Did the joint surveys that were conducted by the agencies
 (15) and Exxon in 1990 1991 and 1992 did they examine the issue
 (16) of
 (17) subsurface oiling as well?
 (18) A Oh definitely Well as I was describing you know we
 (19) were watching to see how things were changing in the events
 (20) through '89 into '90 and realized that you know there was going
 (21) to be a need to go out take the information from '89 from all
 (22) sources and then go and look at those locations and start to
 (23) dig pits If you didn't see it on the surface you needed to
 (24) dig pits to see if in fact it was underneath and in the SAP
 (25) program It was over 4800 pits dug to go and try and find
 (26) where there may be some subsurface oil remaining and in the

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- (1) MAYSAP program there was approximately 3 000 pits We dug
 (2) 3300 I think it was and again those were to try to identify
 (3) and delineate where the subsurface oil may be
 (4) Q And if we could also have again defendants exhibit 5170
 (5) Does this show how surface oiling decreased over time as
 (6) documented by the joint surveys?
 (7) A That's basically what this shows is that you know again
 (8) the survey of '89 The SAP program these are the joint
 (9) surveys the oiling conditions that did remain as seen by those
 (10) programs This is the summary of the representation of that
 (11) information -
 (12) Q Now I notice -
 (13) A - In this form
 (14) Q I notice through the years the total miles of shoreline
 (15) that were surveyed decreased Who made the decision as to
 (16) you
 (17) know why the survey size should decrease year by year?
 (18) A Again it was jointly done through the Technical Advisory
 (19) Group and all the players that were involved in that to - to
 (20) pull the data together to determine where to go and look for
 (21) each of those surveys
 (22) Q This ISCC Technical Advisory Group would it be fair to
 (23) describe that as essentially a consensus approach to trying to
 (24) respond to the Exxon Valdez oil spill?
 (25) A That was how it was designed really That's what it's all
 (26) about is to come up with a cooperative approach to addressing

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- (1) the issues and a consensus as to what to do
 (2) Q In your opinion was this ISCC/TAG consensus approach a
 (3) successful model for oil spill response?
 (4) A I believe it was. It did provide the opportunity for all
 (5) the input for the involvement of all the interested parties
 (6) and was very successful in making sure that we were
 addressing
 (7) all of their issues and concerns
 (8) Q Now if we could have defendants exhibit 14012 please
 (9) Widen this up here Mr Teal I've got the cover page of an
 (10) article here which is defendants exhibit 14012 Can you tell
 (11) the jury what this is?
 (12) A This is a paper that was written for the API Oil Spill
 (13) Conference in 1991 by members of the ISCC. In fact it was
 (14) John Knorr with the Forest Service and Nancy Lethcoe that
 (15) came to me and said you know we believe this is a great
 (16) program great process we should write a paper for the ISCC to
 (17) go into the oil spill conference. In fact NOAA
 (18) representatives John Knorr with Forest Service and Nancy
 (19) Lethcoe Prince William Sound Conservation Alliance and I
 (20) pulled that paper together and in fact it was presented by
 (21) John Knorr
 (22) Q And the two NOAA representatives who were co-authors with
 (23) you Mr Whitney and Ms Christopherson were they the
 (24) individuals you identified earlier who had acted as chairmen of
 (25) the ISCC process in 1989?

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- (1) A Yes Again Sharon Christopherson was the key chairperson
 (2) throughout the summer months and John Whitney was actually
 the
 (3) key chairperson from September onward right in through 1990
 (4) Q Did you and your co-authors from NOAA the Forest Service
 (5) and Ms Lethcoe from representing the environmental
 community
 (6) from Prince William Sound Conservation Alliance did you draw
 (7) some conclusions in this paper as to how this consensus
 (8) approach worked in terms of the response for the Valdez spill?
 (9) A It's in the paper I think it's the last page in the paper
 (10) there You've got - I'm not going to go through the whole
 (11) paper just perhaps some few key points here
 (12) Q No not going to do that?
 (13) A Actually rather than reading this can we just go up a
 (14) little higher? There's some points further up
 (15) Q Is that what you're looking for?
 (16) A Okay yeah Right about here some of the key points this
 (17) is what it's stating is that you know here's what it did
 (18) basically A forum for setting resources and work priorities
 (19) also a consensus building group I mean those are really two
 (20) of the key functions that we had
 (21) In the conclusions if you just go to that last paragraph
 (22) there we can see that the spirit of cooperation to meet
 (23) cleanup challenge head-on is demonstrated by the key
 interests
 (24) in the committee from the very beginning in the highly
 (25) charged atmosphere in Valdez this was a program that was

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- (1) developed to pull all those interests and all the - the
 (2) energies together to make sure that we could focus and move
 (3) forward and do the right things So that's really what this
 (4) paper is about It talks about the cooperative approach which
 (5) is in the title It talks about consensus building and it
 (6) talks about the process of identifying key resources
 (7) sensitivities and moving forward with cleanup
 (8) recommendations
 (9) Q Now you said that in 1993 you'd been asked by the FOSC to
 (10) participate in another program out in Prince William Sound?
 (11) A Is it okay if I sit down for a second?
 (12) Q Yes it is you've been up there a while
 (13) THE COURT In fact it's okay if we take a break
 (14) again counsel We're going to take a very short break
 (15) THE CLERK Please rise This court stands in
 (16) recess
 (17) (Jury out at 12 45 p m)
 (18) (Recess from 12 45 p m to 12 58 p m)
 (19) (Jury in at 12 58 p m)
 (20) THE CLERK This court now resumes its session
 (21) Please be seated
 (22) BY MR CLOUGH
 (23) Q Mr Teal we've been talking a little bit about the topic
 (24) of subsurface oil and I wanted to finish up with that You
 (25) said that the joint survey process from 1990 to 1992 did

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- (1) address the topic of subsurface oiling?
 (2) A Yes certainly it did yes
 (3) Q And how many pits were dug by the 1992 survey? Excuse
 me
 (4) 1990 survey?
 (5) A Well the 1990 survey was just over 4800 pits
 (6) Q And how about '91?
 (7) A '91 was 3200 and some - almost 3300
 (8) Q Were the results of all those pit diggings pits provided
 (9) to the Federal On Scene Coordinator?
 (10) A Oh yes it was all part of the package that was
 (11) distributed to all members
 (12) Q Was it provided to the State On Scene Coordinator
 (13) Mr Piper as well?
 (14) A Yes it was
 (15) Q And was it provided to all the agencies in the ISCC TAG
 (16) process?
 (17) A That's correct
 (18) Q Now in 1992 what happened in about midsummer of 1992
 with
 (19) relation to the Exxon Valdez cleanup?
 (20) A Well following the FINSAP survey and there was some
 (21) additional treatment required just in a couple of locations
 (22) basically the - the FOSC and the SOSOC signed off at that
 (23) point as far as the effort was required both surveying and
 (24) treatment
 (25) Q And when you say the FOSC you mean Admiral
 Ciancaglini

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- (1) of the Coast Guard?
- (2) A That's correct yes
- (3) Q And by signoff he essentially said no further cleanup is
- (4) required by federal law?
- (5) A That's correct
- (6) Q Was there a separate signoff by the State of Alaska?
- (7) A Yes they did sign off
- (8) Q Was that by John Sandoz the Commissioner of the
- (9) Environmental Conservation?
- (10) A Yes that's correct
- (11) Q And in that signoff did the State of Alaska determine there
- (12) was no further cleanup required under State of Alaska law?
- (13) A At that point yes
- (14) Q Did those signoffs occur in approximately June of 1992?
- (15) A Yes
- (16) Q You said in 1993 Admiral Ciancaglini asked you to
- (17) participate in the setaside program?
- (18) A That's correct yes Well back in 1989 a number of
- (19) members of the scientific community and we all wanted to have
- (20) some study sites where we could not clean them not treat them
- (21) leave them in place where varying oiling conditions and
- (22) different energy exposures so that we could see how natural
- (23) cleansing basically occurred on its own unassisted by the
- (24) clean up program and so there were nine locations again
- (25) different exposures different oiling conditions that were

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- (1) left These are short areas probably between 100 yards and
- (2) 300 yards of a shoreline that were left without treatment and
- (3) so there we studied very extensively number of transects
- (4) number of evaluations done in those locations
- (5) Q You say left without treatment you mean the heavy oiling
- (6) on it was just basically left to sit there and see what was
- (7) happening?
- (8) A That's right We didn't have any really you know heavy
- (9) heavy very worst locations We didn't leave any of those but
- (10) certainly those there was a couple sites where there were the
- (11) wide band oiling conditions yes
- (12) Q And in 1993 at the request of Admiral Ciancaglini did you
- (13) go back with a group and survey those sites?
- (14) A That's correct we did
- (15) Q And can you describe generally what you saw in that
- (16) survey?
- (17) A Well it was - it was intriguing for me to go back and
- (18) look at some of those locations I was involved in designing
- (19) what the program should look like generally and some of the
- (20) site locations where we should be looking and again we did
- (21) that all through the ISCC process and went back to locations
- (22) and really very little oil remained It was somewhat
- (23) surprising to some people but really when you see what we'd
- (24) seen through the winter months and the natural cleansing
- (25) process and fully understood you could see how particularly

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- (1) surface oil was removed There were some - some remnants of
- (2) surface oil conditions and subsurface we evaluated the
- (3) subsurface locations and saw that, you know particularly where
- (4) there was significant exposure we couldn't find any subsurface
- (5) oil There were some pits yes We did find some subsurface
- (6) oil This is often in the - in the wave shadow areas in the
- (7) lee of large rocks those kinds of areas where the energy quite
- (8) hasn't taken care of the remaining the remaining oil there
- (9) Q Now this group that you were part of at the request of the
- (10) Admiral did they take videos of the conditions they saw out
- (11) there at these setaside sites?
- (12) A Yes actually we documented the conditions using the same
- (13) kind of process The state actually did the OG work and the
- (14) documentation of the sketch maps et cetera and I did the
- (15) video work
- (16) Q And did you bring together a portion of the video that you
- (17) took during that process to show to the jury?
- (18) A Yeah We don't have it all here but just a couple of
- (19) clips to show you a couple of different kinds of sites and the
- (20) conditions that remained
- (21) Q We'd like to see Joel defendants exhibit 14018A
- (22) And Andy if you could step down and show the jury what
- (23) you were finding there
- (24) (Videotape Played)
- (25) A Well this kind of layout at sites and the conditions and

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- (1) the exposure - just hold it right there This is - this is a
- (2) site on the northeast side of LaTouche Island It's a setaside
- (3) site It was heavy band oiling and as you can see there's a
- (4) large fetch which is - which is the open ocean and
- (5) therefore the - a greater fetch the more energy you can
- (6) have so this is a fairly high energy environment and a heavy
- (7) oiling location
- (8) We're just going to roll ahead We can see here this is
- (9) panning through the lower intertidal You can see this is very
- (10) rich lot of biota lot of fucus natural kind of setting for a
- (11) lower intertidal higher energy environment. Remember very
- (12) low
- (13) tide right now
- (14) As we move forward across here and moving back and looking
- (15) across the setaside site to the beach location where we're
- (16) digging the pits Okay hold it there
- (17) Okay this is a typical location where you might be able to
- (18) find subsurface oiling conditions You see the boulders very
- (19) porous shoreline and up in this area in the mid and upper
- (20) intertidal is usually where that oiling band would have laid
- (21) down so away from this area We're not saying this was all
- (22) heavily oiled down here I'm just saying that this was a
- (23) shoreline where there was in fact heavy oiling present
- (24) Again it would have been up in this area and this area we dug
- (25) pits all the way through and in fact found that there was

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- (1) oil
- (2) Perhaps we could just roll ahead to the next point Again
- (3) pits were dug all the way through this area and no oil was
- (4) found in the subsurface
- (5) Okay just keep rolling Okay remember I mentioned there
- (6) were a couple pits where we did find some subsurface oil and
- (7) we're looking out here towards the ocean and you can see that
- (8) there is some rocky outcrops or bedrock expressions that
- (9) create
- (10) that wave shadow and the pits right behind there they aren't
- (11) getting all the energy that the rest of the shoreline this is
- (12) where we found the subsurface oil
- (13) Perhaps we could hold it just a little further get his
- (14) hand out of the way Right there Okay that's good We'll
- (15) ignore the hand Can you get it? Okay there we go
- (16) All right this pit is on the surface it was clean As
- (17) you can see we've disturbed the sediments here and you can
- (18) see a little bit of oil along some of the sediments as it's
- (19) being pulled out of the pit About six inches down and about a
- (20) band of three or four inches there was some - some subsurface
- (21) oil that we found and it was classified in the survey as MOR
- (22) which is - Mid Oil Residue is the definition of MOR but
- (23) originally this was heavy oil It was HOR
- (24) And what we've seen is that even in these wave shadow
- (25) areas there was a reduction in the amount of subsurface oil
- (26) that did remain Where there were exposed and a lot of energy

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- (1) was occurring we couldn't find any oil remaining but where
- (2) there was these wave shadows we were finding just a little bit
- (3) of oil still down underneath the sediments
- (4) Now the issue is here remember there's no - no cleanup
- (5) here at all This is just natural cleansing that's occurring
- (6) Okay just roll ahead Remember if photography - it's
- (7) not that good I was taking it myself and I think we captured
- (8) the key issues though This is a big bedrock outcrop and
- (9) again very protected area There's no wave energy happening
- (10) back here It's basically just as the - as the tide comes in
- (11) behind and swirls around
- (12) Now if you can just focus in right there Okay Remember
- (13) the backside the lee side of this bedrock outcrop down in
- (14) this little crevasse here actually it doesn't look like it
- (15) but I can assure you if you pulled these rocks out of there
- (16) there would be oil underneath In fact we did do that You
- (17) could have a look and you'd see very black in fact some
- (18) moussey-type conditions Just isolated little pockets like
- (19) this again no treatment at this location In fact on the
- (20) surface you can see there's an algae growth so it's kind of
- (21) scabbed over and has grown over and where there was no
- (22) treatment and these kinds of conditions were removed you
- (23) could
- (24) find some of these - these more heavily oiling - oiling
- (25) conditions that did remain
- (26) Q Let me ask you a couple questions How large an area is

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- (1) that that we're looking at?
- (2) A Oh it's probably a couple feet long and about a foot wide
- (3) Q And did you have any chance to see the photographs that
- (4) Ms. Fobes had introduced earlier in the trial with somebody
- (5) holding up a rock with a oily bottom to it?
- (6) A I didn't see the photographs actually no
- (7) Q If somebody picked up one of those rocks from that one
- (8) location about a foot by two foot wide would that have some
- (9) oily gunk still on the bottom of it?
- (10) A Yeah yeah it would It wouldn't look very good
- (11) Especially in a spot where there was no treatment and there's
- (12) a small collection like that
- (13) Q Now let's go back to that whole beach you were walking
- (14) along a few minutes before where you were digging all those
- (15) pits and all those thousands and thousands and millions of
- (16) rocks there If you walked up and picked them up would you
- (17) find that kind of oily gunk on the bottom of it?
- (18) A No you wouldn't
- (19) Q Why not?
- (20) A Mainly because these kinds of conditions were treated
- (21) That was part of the program The survey to identify spots
- (22) like this and this would be typical of a spot in 1990 or In
- (23) fact even in '89 where a clean up crew would come in and
- (24) actually remove all of that material all the - all the oil
- (25) that was collecting around there

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- (1) Q And this particular beach that didn't happen did it?
- (2) A That's correct
- (3) Q That's because it was a setaside site?
- (4) A That's right So we could study these kinds of things to
- (5) see how things changed in time
- (6) Okay you can just let it roll Okay if you can hold it
- (7) there for a second Now what we went through before was a
- (8) high energy exposed area heavy oiling bands some of the
- (9) kinds of - of remnant oil that does remain at that particular
- (10) setaside site This though is a low energy environment
- (11) which is the other end of the extreme in Herring Bay which
- (12) Herring Bay was a very heavily oiled area but as you can see
- (13) here this is low energy In fact it's a tidal pool here
- (14) eelgrass all through the lower intertidal Mussel beds all
- (15) through here fucus beds It's a very rich area
- (16) You can just roll along and I'll try and describe the site
- (17) and the kinds of oil that was there Again remember this is
- (18) a setaside site
- (19) Now as we saw throughout the spill you know these areas
- (20) didn't get oiled The oiling actually occurred in the upper
- (21) intertidal areas away from the - from the very low intertidal
- (22) zone So if you could just stop right about there
- (23) Okay there's the helicopter This shoreline's about 150
- (24) yards long and again the band of - this was a moderately
- (25) oiled location and so there was an oiling band through this

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- (1) upper intertidal up into the supra intertidal and it was
 (2) not - it was not really thick or heavy but it was in that
 (3) moderate band classification And so if you can just keep
 (4) rolling I'll show you some of the kinds of remnants that are
 (5) left in these kinds of environment
 (6) Now one of the things you want to keep in mind the low
 (7) energy environment got the sediment there I guess sands and
 (8) gravels and fines and when they accumulate with the oil what
 (9) we call asphalt or asphalt in the U S Here's a little
 (10) patch right here You can see that that still remains there
 (11) and again the reason it remains there is because this hasn't
 (12) been cleaned up This is a no treatment location and so it's
 (13) just left there to weather naturally
 (14) Now if this - if this was a treatment location a
 (15) shoreline crew a Type A type cleanup crew would walk
 through
 (16) pick that up put it in a bag We wanted to see if you didn't
 (17) do that what would happen and how things change through
 (18) time These are some of the kinds of conditions that remain
 (19) Now there's not a lot of these there In fact I was
 (20) quite surprised It was in a low energy environment not a lot
 (21) of storm waves and energy Had quite a lot of oil in there and
 (22) just a few of these small patches of actual remain
 (23) (Videotape concluded)
 (24) Q Okay you can take your seat
 (25) A Thanks

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- (1) Q Let me ask you this Mr Teal Did you participate during
 (2) 1993 in any other programs that looked at surface and
 (3) subsurface oiling?
 (4) A Actually the SOSC Ernie Piper asked me to join them in a
 (5) Trustees survey that took place in the summer of 1993
 (6) Q And what was the purpose of this Trustee survey that
 (7) Mr Piper asked you to join?
 (8) A Well it was really to - they put a list together of - of
 (9) basically hot spots key areas where - that there had been oil
 (10) seen through the years They wanted to go back to them
 (11) document have a look at remaining conditions
 (12) Q And did you accompany them on some of that - that trip?
 (13) A Yes I did I was out there for approximately a week with
 (14) them
 (15) Q What did you see in the course of your own observations?
 (16) A Well it was interesting to see again these key sites I'd
 (17) been to back to on a number of occasions and yes we still
 (18) found some - some surface representation of very weathered
 (19) oil very hard to find though In fact one of the things is
 (20) without the detailed maps and type of documentation we've had
 (21) through the years it would be very hard to find some of the
 (22) surface oil conditions but because we did have them we were
 (23) able to go back and focus in on the map and have a look
 (24) around Very little remaining subsurface oil We did pits
 (25) did quite a bit of pitting to have a look at subsurface

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- (1) conditions and yes we did find some subsurface oil but there
 (2) had been significant change through the years In fact some
 (3) of those locations that were very heavily oiled and had quite a
 (4) bit of oil in the subsurface went back to those same locations
 (5) and in fact yeah you could still find a little bit there
 (6) but it had changed significantly through time
 (7) Q Now Mr Piper was the project manager for this study for
 (8) the Trustees wasn't he?
 (9) A Yes he was yeah
 (10) Q And at the conclusion of the project did Mr Piper write up
 (11) a report setting forth the results of the work that summer?
 (12) A Yes he did
 (13) Q Did you have occasion to look at that report?
 (14) A Yes I read through that report.
 (15) Q What were Mr Piper's conclusions on what was happening to
 (16) subsurface oiling as reflected in that report?
 (17) MR PETUMENOS Excuse me I have objection to the
 (18) best evidence rule If we're going to discuss the report I
 (19) may want other portions of the report in and I may want the
 (20) entire report I object to testifying orally to the
 (21) conclusions
 (22) THE COURT The objection's sustained
 (23) BY MR CLOUGH
 (24) Q Well let me ask you this question Mr Teal is all the
 (25) oil gone from out of Prince William Sound today?

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- (1) A No it's not all gone I mean I've been back to a number
 (2) of locations and again to focus in on those hot spots those
 (3) worst case conditions that existed in 1989 and - and there
 (4) are some of those locations you can still go back to and still
 (5) find some remaining oil Just very weathered surface remnants
 (6) and in some situations there is a little bit of subsurface oil
 (7) there as well
 (8) Q Have you been out to Prince William Sound in 1994?
 (9) A Yes I was out in '94
 (10) Q How do things look out there today?
 (11) A Well my observations in '83 and in '94 actually it was
 (12) quite gratifying to go back to those key locations in '94 and
 (13) '93 and see how things had changed so significantly through
 (14) time I have been on those shorelines in '89 and it was
 (15) difficult I guess is a good word to describe it to stand
 (16) there and see the amount of oil that was on those key locations
 (17) and think about you know is it possible even that we're
 (18) going to be able to get those - those locations recovered
 (19) And in going back to those same sites year after year and
 (20) seeing the significant change through time and then to go back
 (21) in 1994 and have a look at those spots and see very little if
 (22) any oil remaining I was on Green Island Smith Island
 (23) Eleanor Island they were all very heavily oiled and very
 (24) little oil remains if any
 (25) MR CLOUGH No further questions Your Honor

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- (1) THE COURT Counsel do you want to break for the
 (2) day?
 (3) MR PETUMENOS That s up to you Judge
 (4) THE COURT I d just like to know what your preference
 (5) is
 (6) MR PETUMENOS I can go for a little while so we use
 (7) all the time Maybe end the trial sooner who knows
 (8) THE COURT Sure Go ahead
 (9) CROSS-EXAMINATION OF ANDREW R TEAL
 (10) BY MR PETUMENOS
 (11) Q Mr Teal the thrust of your testimony what we re to
 (12) understand just in very general terms is that this operation
 (13) with the federal government state was - was it a smoothly
 (14) running cooperative arrangement where everybody got along
 (15) in
 (16) making their decisions?
 (17) A It was a cooperative approach to identifying and addressing
 (18) the conditions that were out there Anytime you re in a major
 (19) response like this lot of people lot of emotion obviously
 (20) there are going to be personality conflicts and those kinds of
 (21) things I mean I wouldn't portray it as there were never any
 (22) issues or glitches along the way but as a whole it was a very
 (23) cooperative approach and it was basically a joint effort The
 (24) FOSC was in control and it was an FOSC-directed program
 (25) Q That s a point you made several times The Federal
 On Scene Coordinator he was the boss right told you guys

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- (1) what to do at Exxon?
 (2) A That s correct
 (3) Q On a day to-day basis?
 (4) A Yes
 (5) Q And if you didn t - if you didn t do what he said what
 (6) was his alternative?
 (7) A What was his alternative? I m not sure I could speculate
 (8) as to what - how else he could have responded I m not sure
 (9) I m clear on the question
 (10) Q You don t know?
 (11) A You mean what would his alternative be to what alternative
 (12) to clean up
 (13) Q Say he asked Exxon to do this and that and the other and
 (14) you didn t do it and it happened again and you didn t do it
 (15) and it happened again and you didn t do it and he got fed up
 (16) with it what was his alternative?
 (17) MR CLOUGH Objection he s asking the witness to
 (18) speculate about what the Admiral might do
 (19) THE COURT Sustained
 (20) BY MR PETUMENOS
 (21) Q What was his authority if you know? I m not asking you to
 (22) speculate at what he would do I m asking you what his
 (23) authority was if he didn t like the way Exxon was running the
 (24) cleanup do you know
 (25) MR CLOUGH Objection to the degree he s asking this

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- (1) witness to make a legal conclusion as to the authority of the
 (2) Federal On Scene Coordinator commander
 (3) THE COURT Were you ever told by the Admiral what his
 (4) authority was or any of his people?
 (5) A His authority being that he was in control of the spill and
 (6) the response to that spill condition yes
 (7) THE COURT Is that the statement that you showed in
 (8) the exhibit I m the boss was that the statement of authority?
 (9) A That s correct
 (10) THE COURT Any others?
 (11) A Nothing specific
 (12) THE COURT Go ahead
 (13) BY MR PETUMENOS
 (14) Q So you don't know how he would enforce that authority?
 (15) A I don't know how he would physically enforce that
 (16) authority other than the way he - he described it was that it
 (17) was his responsibility to make sure the job got done
 (18) Q I understand I just want to know if you know how he could
 (19) enforce that responsibility and the answer I think is you
 (20) don t know?
 (21) A Well under federal law, he can take charge of the
 (22) response
 (23) Q Okay That was his authority wasn't it he could take
 (24) over?
 (25) A That s correct

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- (1) Q Anything else he could do that you know besides that?
 (2) A In regard to what?
 (3) Q His authority
 (4) A Well as the individual in control and in charge of the -
 (5) of the program I guess it would be fairly open
 (6) Q You ve worked for Imperial your whole career right?
 (7) A That s correct yes
 (8) Q And Imperial you said it was owned 68 percent by Exxon
 (9) but Imperial is a foreign country to the U S am I right?
 (10) A That s correct
 (11) Q And therefore there are some provisions that require
 (12) Canadian entities own some of Imperial is that right you know
 (13) about that?
 (14) A Yes yes the remaining shareholders are Canadian
 (15) Q And they have to be under Canadian law?
 (16) A That s my understanding yes
 (17) Q So Imperial is basically an Exxon Company?
 (18) A It s - the major shareholder is Exxon that s correct
 (19) Q And management for Imperial is run out of Exxon?
 (20) A No it s Imperial Oil It s a Canadian management
 (21) Q You were on a response team that was - was that set up by
 (22) Exxon?
 (23) A No it was set up by Imperial Oil
 (24) Q How is it that Imperial Oil - does Imperial Oil do
 (25) business in Alaska?

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- (1) A No it doesn't
- (2) Q You do anything in Alaska?
- (3) A Come and assist in spill responses
- (4) Q And who asked you to do that Exxon?
- (5) A That's correct
- (6) Q And the media was hot on this oil spill right?
- (7) A I think it would be fair to say that there were a lot of
- (8) media clips regarding the spill yes
- (9) Q The media was on this oil spill very quickly to the point
- (10) where you learned about the oil spill not from your own
- (11) company
- (12) but you actually yourself learned about it from the media
- (13) right?
- (14) A I heard it over the radio broadcast that's correct
- (15) Q The media got to your ears before your beeper did?
- (16) A That's correct
- (17) Q Now you indicated that you had some hands on spill
- (18) response experience in the - I forget what you said something
- (19) about in the water environment but it's true isn't it that
- (20) with respect to maritime spills of over I think it's 300
- (21) barrels you had only worked on one in a maritime environment
- (22) oceans?
- (23) A The - well I -
- (24) Q Oceans?
- (25) A Yes I understand the maritime environment it's - yes
- (26) that's true Actually I was only involved with two two

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- (1) marine incidents
- (2) Q Prior to Exxon Valdez?
- (3) A That's correct
- (4) Q Only one over 300 barrels?
- (5) A No actually there were two There was what is referred to
- (6) as the Minuk spill which is up in the Northwest Territories in
- (7) the Beaufort Sea that I was involved in and also advisory
- (8) capacity There was a spill in the West Coast of Vancouver
- (9) Island that the Canadian Coast Guard were responding to but
- (10) our National Emergency Team assisted and were involved with
- (11) that spill as well and that was over 5 000 barrels
- (12) Q The one you did up on the North Slope that was up in the
- (13) Beaufort Sea you didn't end up having to do very much up
- (14) there did you?
- (15) A Well we certainly had to evaluate the conditions and the
- (16) issues and the sensitivities the risks
- (17) Q Did you do any cleanup?
- (18) A Didn't have to do any physical cleanup no
- (19) Q No? And so in terms of directing a cleanup in the way that
- (20) you did in the Exxon case in the maritime environment of
- (21) spills over 300 barrels this was the first time for you?
- (22) MR CLOUGH Objection Your Honor there's no
- (23) testimony that this witness directed the cleanup on the Exxon
- (24) Valdez oil spill
- (25) BY MR PETUMENOS

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- (1) Q In terms of the duties you testified on direct is what I'm
- (2) referring to
- (3) A That was the point I was going to make actually is that I
- (4) wasn't directing the cleanup
- (5) Q I understand good point
- (6) A I was involved in the -
- (7) Q Mr Oppenheimer says a good point
- (8) A In the assessment
- (9) MR CLOUGH I'm Mr Clough
- (10) MR PETUMENOS Mr Oppenheimer says good point
- (11) BY MR PETUMENOS
- (12) Q What I was trying to get straight here is in terms of the
- (13) kind of shoreline work that you did in the Exxon case all
- (14) right in spills over 300 barrels in the maritime environment
- (15) where you actually did a cleanup this was your first one?
- (16) A I was involved with again the spill in the West Coast
- (17) our Canadian West Coast which is the Nestucca spill which is
- (18) heavy crude oil or Bunker C actually
- (19) Q Your second one all right
- (20) A Okay And in addition to that though I've done a lot of
- (21) training regarding shoreline response issues
- (22) Q We're talking about actual physical directing of cleanup in
- (23) the maritime environment you with me?
- (24) MR CLOUGH Again Your Honor this is the same
- (25) objection He didn't direct the cleanup

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- (1) MR PETUMENOS Could I finish my question first?
- (2) THE COURT I think it's time to quit for the day
- (3) counsel I can feel your energy We're going to stop right
- (4) here and we'll start again appropriately
- (5) I'll let the jury go and one of the jurors I'll really
- (6) let go Ms Swangler we're all sorry to see you go but have
- (7) a good week
- (8) MR DIAMOND Your Honor before you excuse the jury
- (9) Mr Petumenos has suggested I report on the continuing good
- (10) health of my son and if appropriate inform the jury that it
- (11) was an allergic reaction to a bee sting under his eye that
- (12) scared us all half to death but the Doctor was right in
- (13) predicting no adverse consequences other than looking like a
- (14) prize fighter who lost a TKO after 12 rounds and mother and
- (15) child are doing fine
- (16) THE COURT Good all right We'll see you Don't
- (17) talk to anybody about the case and don't form or express any
- (18) opinions We'll see you tomorrow at 8 30
- (19) (Jury out at 1 26 p m)
- (20) MR CLOUGH Your Honor I'm assuming Mr Teal can
- (21) step down
- (22) THE COURT He can yes
- (23) MR CLOUGH He's had a long morning
- (24) THE COURT We all have
- (25) MR CLOUGH We all have

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- (1) THE COURT But they seem to get longer and longer
 (2) counsel One of the by-products of a long trial is there
 (3) anything for me to take up on the record now?
 (4) MR DIAMOND There were two matters I wanted to
 (5) advise you we filed with your office this morning and I
 (6) served Mr Stoll with a declaration of Al Maki who was
 (7) involved in the Dames & Moore relationship in 1989
 (8) THE COURT Oh uh-huh
 (9) MR DIAMOND And we have attached to it virtually
 (10) every document that we could find that had something to do
 with
 (11) the scope of the services performed by Mr Suchanek for
 Dames &
 (12) Moore and Dames & Moore for Exxon
 (13) THE COURT Did you find the document entitled scope
 (14) of work that was supposed to be attached to the contract
 (15) MR DIAMOND What Mr Maki has concluded after
 (16) searching our files and conferring with the Dames & Moore
 (17) people in Seattle was that the letter which we previously filed
 (18) with the Court I think it was a March 27th letter which
 (19) preceded the agreement by two days had a paragraph entitled
 The
 (20) Scope of Work That was the only scope of work that was done
 (21) in connection with the March 29th agreement for the reasons
 (22) that Mr Maki explains that things were moving very quickly
 (23) THE COURT Okay
 (24) MR DIAMOND The work that Mr Suchanek did it turns
 (25) out was pursuant to a project that started I believe in

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- (1) either May or June on Kodiak and a separate scope of work
 was
 (2) done for the Kodiak project thus the voluminous materials you
 (3) have We've given you everything we have on that undertaking
 (4) I don't think Mr Stoll has had an opportunity to review
 (5) all of this because I really haven't had an opportunity to
 (6) carefully review all of it either And I'm sure he - he
 (7) obviously wants to before we resolve the issue of control
 (8) THE COURT So do I
 (9) MR DIAMOND We have one logistical problem in terms
 (10) of the timing of this We have scheduled as our witnesses
 (11) following Mr Teal two individuals who are from out of state
 (12) brought up from the Lower 48 who will be talking about oiling
 (13) at Kodiak and the Kodiak clean-up effort If we are to respond
 (14) to videotape and the clips of Mr Suchanek we probably would
 (15) like to know that before these witnesses leave and they are
 (16) scheduled to leave after they testify which probably will be
 (17) tomorrow so we - we would ask the Court and I realize that
 (18) not getting these to you earlier not getting these to
 (19) Mr Stoll earlier not our doing or no one else's doing but if
 (20) we can manage to get this resolved sometime tomorrow before
 (21) they take off we'd like to have them available if we need to
 (22) put on the additional testimony We would also suggest -
 (23) THE COURT I think I can resolve this question by
 (24) reading these materials and maybe hear a brief period of
 (25) argument and then just make a ruling

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- (1) MR DIAMOND That would be fine
 (2) THE COURT That would be tomorrow morning sometime
 (3) MR DIAMOND Want us to come in early or do it at
 (4) 8 30?
 (5) THE COURT It's not going to be a problem I've
 (6) heard most of what you have to say anyway
 (7) MR STOLL Your Honor I have some other matters one
 (8) of which deals with the next two witnesses And we can take
 (9) this up I gather from the comments of the Court if the Court
 (10) wants to do this at 2 30 that would be fine
 (11) THE COURT I think it would be better that it's
 (12) inevitable that we're inefficient at this time of day need a
 (13) little break
 (14) MR STOLL Your Honor if I could just tell you what
 (15) the issue is The -
 (16) THE COURT Okay
 (17) MR STOLL The issue is we filed oh I think
 (18) probably a month or so ago I can't remember the exact date
 (19) but any rate we filed the last few weeks a motion to exclude
 (20) the witnesses of the defendants that were included on so-called
 (21) supplemental lists These are lists - you'll recall that
 (22) pretrial order 40 the trial plan required that the parties
 (23) designate who their witnesses were 60 days before trial
 (24) commenced And the parties did that
 (25) The defendants have added additional witnesses since that

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- (1) time Now to be sure the plaintiffs added some additional
 (2) witnesses also or purported to and defendants objected to
 (3) that and as part of the DM - later became known as the DM272
 (4) order that was the order that related to videotapes the
 (5) number of exhibits that the parties could offer - remember
 (6) there was the 1700 new exhibits the defendants had there was
 a
 (7) trade-off made at that time between the plaintiffs and the
 (8) defendants before Master Ruskin in which the plaintiffs were
 (9) permitted to call certain of the witnesses that they had
 (10) designated had not been in the 60 days and the defendants
 were
 (11) then entitled to expand their list of exhibits It was part of
 (12) the trade off
 (13) There was no such agreement with respect to the defendants
 (14) witnesses that were not designated 60 days before trial And
 (15) our motion goes to these late noticed witnesses two of whom
 (16) are Mr Purdham and Mr Byers who are the next two witnesses
 (17) that Exxon intends to call We did not receive notice that
 (18) they intended to call these witnesses this week until Friday
 (19) Previously after we filed this motion some weeks ago you
 (20) said well we'll see because they have designated like a
 (21) hundred witnesses
 (22) THE COURT Counsel can I stop you here? Didn't we
 (23) say we were going to argue the merits of this motion at 2 30?
 (24) MR STOLL Okay that's fine Anyway it goes to that
 (25) motion

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- (1) THE COURT Mr Diamond no reply at this time
- (2) MR DIAMOND No How about an observation? There is
- (3) one other matter we could take it up at 2 30 or we can take it
- (4) up tomorrow It concerns testimony that I expect may come in
- (5) through Mr Roddewig If not through him through the next
- (6) real estate witness It concerns the Trustees fund for land
- (7) purchases and the effect on the market We have - we re going
- (8) to be - our real estate experts are going to be talking about
- (9) sales post spill
- (10) THE COURT Is Roddewig going to be talking about it?
- (11) MR DIAMOND Yes I think we probably need to talk
- (12) about that before he testifies
- (13) MR OPPENHEIMER We can show you exactly what s going
- (14) on
- (15) THE COURT That s fine we ll do it at 2 30
- (16) MR STOLL Thank you Your Honor
- (17) THE CLERK Please rise This court stands in
- (18) recess
- (19) (Recess at 1 33 p m)

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- (1) STATE OF ALASKA)
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA)
- (6) I Joy S Brauer RPR a Registered Professional
- (7) Reporter and Notary Public
- (8) DO HERBY CERTIFY
- (9) That the foregoing transcript contains a true and
- (10) accurate transcription of my shorthand notes of all requested
- (11) matters held in the foregoing captioned case
- (12) Further that the transcript was prepared by me
- (13) or under my direction
- (14) DATED this day
- (15) of 1994
- (21) JOY S BRAUER RPR
Notary Public for Alaska
- (22) My Commission Expires 5-10-97

Look-See Concordance Report

 UNIQUE WORDS 2,870
 TOTAL OCCURRENCES 13,089
 NOISE WORDS 385
 TOTAL WORDS IN FILE 40,173

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(1) IN THE SUPERIOR COURT FOR THE STATE OF ALASKA
 (2) THIRD JUDICIAL DISTRICT
 (4) In re) Case No 3AN 89 2533 Civ11
) Anchorage Alaska
 (5) The EXXON VALDEZ) Monday August 15 1994
) 2 43 p m
 (6))
 (8) Pages 1 through 56
 (10) TRANSCRIPT OF PROCEEDINGS (Continued)
 (11) HEARING
 (13) BEFORE THE HONORABLE BRIAN C. SHORTELL
 Superior Court Judge
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(1) PROCEEDINGS
 (2) THE CLERK. Please rise this court now resumes its
 (3) session. Please be seated.
 (4) THE COURT. Counsel.
 (5) MR. STOLL. Your Honor, not in any particular order
 (6) but the next witness up is a fellow named Wayne Purdham
 (7) followed by a fellow named Fred Byers and these two
 (8) individuals were on lists of defendants so-called supplemental
 (9) witness list and they're subject to the motion that we filed
 (10) moving to exclude witnesses that had not been designated 80
 (11) days before trial pursuant to Pretrial Order 40.
 (12) THE COURT. When was the supplemental witness list
 (13) issued?
 (14) MR. STOLL. Well, they've had four supplemental
 (15) lists. I can't remember which one - do you know which one
 (16) Byers and Purdham?
 (17) MR. OPPENHEIMER. June 8, the revised list.
 (18) MR. STOLL. They're on apparently the June 8th one.
 (19) There was a fourth list that we got Friday. It's one name but
 (20) it's also a witness on later this week but just dealing
 (21) with -
 (22) THE COURT. Purdham and Byers were first given on any
 (23) witness list of the defendants on June 8th?
 (24) MR. STOLL. That's correct.
 (25) THE COURT. Is it correct?

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(1) MR. OPPENHEIMER. No, that's actually not. I was just
 (2) referring to the only witness that was listed previously.
 (3) Mr. Byers has been on the list from day one.
 (4) MR. STOLL. Okay. I withdraw. I misunderstood that.
 (5) THE COURT. So Byers is -
 (6) MR. OPPENHEIMER. Got an issue with Mr. Purdham but
 (7) Mr. Byers certainly not.
 (8) THE COURT. Mr. Purdham was on the first witness list
 (9) on June 8th.
 (10) MR. OPPENHEIMER. Yes, Your Honor. If you'd like, I
 (11) can address this.
 (12) THE COURT. I'd probably like, but hold on just a
 (13) minute. Are you done?
 (14) MR. STOLL. No, I'm probably done.
 (15) THE COURT. An hour's recess makes your presentation
 (16) more precise. I appreciate that. I'll remember it too.
 (17) MR. STOLL. I'm sure you will.
 (18) MR. OPPENHEIMER. In all fairness, he did have a few
 (19) observations before the break.
 (20) MR. DIAMOND. Those were just scheduling conflicts.
 (21) MR. OPPENHEIMER. Your Honor, the witness that's being
 (22) referred to, Mr. Purdham, is being called in connection with an
 (23) ICF report and this is a - let me back up. If I may,
 (24) The original witness list was submitted April 11th
 (25) pursuant to the stipulation of the parties. On June 2nd, the

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- (1) Court called for revised witness lists with the intent
- (2) hopefully to cut down witnesses and that in fact was exactly
- (3) what happened. All of the parties since June 2nd have
- (4) submitted revised lists with new witnesses though the total
- (5) number of each group has come down. For example on June 3rd
- (6) I went back and just double-check confirmed my recollection
- (7) plaintiffs here had 12 new fact witnesses and one new expert
- (8) witness this all after the April 11th cut off. This is -
- (9) both sides have done this
- (10) We supplied our revised list that has Mr. Purdham on it on
- (11) June 8. He's knowledgeable about Kodiak. The reason we did
- (12) that was on - in mid April cover letter is dated April 11
- (13) the date of our original list we got a random report from ICF
- (14) which the Court may remember some colloquy on that talked
- (15) about new oiling data and new mapping from ICF and that was
- (16) all Kodiak and Mr. Purdham is one of the witnesses who was
- (17) added as a result of that
- (18) THE COURT: When did you get that new report?
- (19) MR. OPPENHEIMER: Well it's cover sheet is April 11
- (20) Our records book have it mid April probably a day or so after
- (21) that. That is post-filing of our witness list. And at about
- (22) the same time we were getting that list as I say that same
- (23) week we were getting new revised witness lists from the
- (24) plaintiffs. The - I think on Mr. Purdham that's really
- (25) the - the first point to be made

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- (1) The second point is that this objection to Mr. Purdham was
- (2) filed for the first time on July 27th and from the June 8
- (3) list where we added Mr. Purdham in the aftermath of the ICF
- (4) new mapping data and Kodiak information we've had a couple
- (5) of
- (6) events not the least of which is a June 15 hearing before the
- (7) Court where we indicated we were putting on new witnesses
- (8) because of the ICF report and there was no objection. And
- (9) we've had Mr. Bush whose testimony pertains to some of that
- (10) mapping testify on I believe - well it was before the
- (11) motion so in other words there's been no objection since June
- (12) 8th. From June 8th until July 27th there was no objection
- (13) whatsoever to Mr. Purdham's having been added and Mr. Bush
- (14) who
- (15) was the sponsor of the April report came and went without any
- (16) indication on our part that we were going to have a problem
- (17) with Mr. Purdham and I don't think we should
- (18) The parties have both added witnesses subsequent to the
- (19) original cutoff and in this case clearly this is responsive
- (20) to the - to the entire Kodiak oiling story which came to a
- (21) head on or about the day we filed the first witness list and
- (22) within what a week and a half two weeks we had the new
- (23) name
- (24) on our revised list at about the same time we received a
- (25) revised list from the plaintiffs
- (1) THE COURT: What is he going to testify about?
- (2) MR. OPPENHEIMER: Mr. Clough will know in more detail
- (3) but he is basically one of the Exxon folks who was on the

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- (1) ground as I understand it in Kodiak. He is - he's familiar
- (2) with the conditions that were there and he can address the
- (3) issues that come about as a result of the claims that have been
- (4) made by Mr. Selby and others and by the ICF mapping as to
- (5) the
- (6) conditions on Kodiak. He's a precipient fact witness in that
- (7) area
- (8) THE COURT: Okay. Thank you.
- (9) MR. DIAMOND: May I add one point because Mr. Stoll
- (10) made reference to the stipulation that I negotiated with him as
- (11) somehow resolving or touching upon these issues this morning
- (12) it's easy to forget history particularly when it's being
- (13) written so quickly but what you'll remember that we had
- (14) disagreement over a number of issues deposition - deposition
- (15) excerpts exhibits and videotapes. We had also made
- (16) objections
- (17) to the plaintiffs additional witnesses that were designated
- (18) late. And we did so because unlike our additional witnesses
- (19) which were added because of events new ICF oiling data that
- (20) came to us after the initial submission talking about
- (21) anecdotal oiling in Kodiak some of the other witnesses that
- (22) they're sniping at were added because of other information that
- (23) they provided. We objected to their new witnesses because
- (24) there was never any reason to get them. We simply got names
- (25) without any explanation and without having provoked it
- (1) When we went to the bargaining table in front of Master
- (2) Ruskin to work out exhibits videotapes and the depositions

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- (1) one of the issues on the table was our pending and yet
- (2) unresolved objections to plaintiffs untimely designation of
- (3) additional witnesses. There were no objections at that time
- (4) As Mr. Oppenheimer pointed out they didn't file this until
- (5) July 27th in the trial. They had not objected to any of our
- (6) additional witnesses. The reason we agreed not to raise
- (7) objections to their untimely designated witnesses was it was
- (8) part of the negotiating process and we had on the table then
- (9) objections to those people. They had not put on the table at
- (10) the time we resolved those other issues any objections to any
- (11) of our witnesses and clearly had they it all would have been
- (12) swept up in a single negotiation
- (13) I was not going to give up our objections to their untimely
- (14) designated witnesses unless they were going to reciprocate. I
- (15) didn't have to because they hadn't raised objections. So it's
- (16) a little bit unfair to say that we gave them the green light to
- (17) call witnesses that they didn't designate in a timely fashion
- (18) and somehow left ourselves in the limbo position where we
- (19) didn't have that same right. It just never came up because
- (20) they hadn't objected at that time to any of our witnesses and
- (21) I think it's a little unfair to recreate the history and leave
- (22) out some of the details and suggest we made concessions that
- (23) we
- (24) never made
- (25) THE COURT: Thank you counsel.
- (1) MR. STOLL: Your Honor there's some differences

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- (1) here In the first place let's just deal with Mr. Purdham
 (2) first and take these one witnesses at a time
 (3) Mr. Purdham has never been designated in any interrogatory
 (4) as a person knowing anything about the oil spill. He has had
 (5) his deposition taken. Mr. Selby had his deposition taken for
 (6) many days. All of the witnesses that we had have had their
 (7) deposition taken. I think all of them. Maybe there's one or
 (8) two.
 (9) THE COURT: Was Mr. Byers' deposition taken?
 (10) MR. STOLL: Mr. Byers, I don't know the answer - no
 (11) his deposition was never taken.
 (12) THE COURT: Why should I assume that Mr. Purdham's
 (13) deposition would have been taken even if he had been listed?
 (14) MR. STOLL: No, I'm not saying it would have been
 (15) taken. I can't - you know, I can't recreate history. I'm
 (16) speculating as to what - if we'd known about him, we probably
 (17) would have taken his deposition, but you know, it is
 (18) speculation on my part to say that necessarily his deposition
 (19) would have been taken. Actually, by April - my only point is
 (20) that neither one of these people were identified or, excuse me,
 (21) Purdham, I know was not identified in any interrogatory as to
 (22) having - a person having knowledge about the oil spill.
 (23) Actually, by April, by the time people designated witnesses
 (24) the deposition process had been closed. I do not recall
 (25) Mr. Bush testifying to anything that was new dealing with

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- (1) Kodiak in his direct testimony that was not previously, you
 (2) know, that was not in an older point.
 (3) The business about the June 8th, we had a - they had filed
 (4) objections to our witnesses. It's true. We had not - we
 (5) hadn't gone through all their witness lists by that time. We
 (6) had just received the first. I believe the first supplemental
 (7) witness list a few days before that. The issue about us
 (8) objecting to their witnesses wasn't - wasn't before the -
 (9) before the Master at that time, and I'm not suggesting that it
 (10) was, but the point is, is that they had filed objections to our
 (11) witnesses as being untimely. They thought that they were
 (12) untimely designated. We - we - I was simply - earlier today
 (13) at 1:30 when we finished trial, recessed from trial, I was
 (14) simply giving the background on this, because I anticipated
 (15) they'd say, well, you got to call some people that were not in
 (16) your original April designation.
 (17) The point is, is that that was a trade-off to them getting
 (18) to - they withdrew their objections to that in DM272 in
 (19) exchange for us agreeing, among other things, to them being
 (20) able to use several hundred more new exhibits, which clearly
 (21) was not contemplated, and also for us to withdraw our
 (22) objections to some video and some deposition designations. I
 (23) mean, there was a trade-off there.
 (24) The point is, is that that DM272 and our designation of
 (25) some late witnesses has nothing to do with - that is no

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- (1) precedent for them being able to then go in and be able to late
 (2) file supplemental, you know, late designate additional
 (3) witnesses, and Purdham is clearly in that category.
 (4) So, I think that the - we set up a regimen under Pretrial
 (5) Order 40, and it's been followed, and they then file these
 (6) supplemental witness lists, and it's just in violation. It's a
 (7) question of whether the Court's going to enforce - as far as
 (8) I'm concerned, a question whether the Court's going to enforce
 (9) Pretrial Order 40, and you - we raised this some time ago, but
 (10) you said put it down on paper and you know, raise it when it
 (11) comes up. Well, there was no need to file anything real early
 (12) because their case wasn't going to go on until August, so we -
 (13) we did file something. We laid it out, and we didn't know which
 (14) of their hundred and some witnesses they were actually going
 (15) to call, so that's why it's coming up now.
 (16) THE COURT: All right, is Purdham the only witness
 (17) that this situation applies to?
 (18) MR. STOLL: No, that's not the case, Your Honor.
 (19) MR. OPPENHEIMER: Your Honor, there are three other
 (20) witnesses that are in the motion. I think they fall in a
 (21) different category, but it might be useful for us to deal with
 (22) them today. I think they can be disposed of, too. There is
 (23) one photo authenticating exhibit, which I think is a separate
 (24) category, Mr. Day. There are two individuals who speak to the
 (25) fish virus issue, Mr. Elston and a Mr. Myers. Mr. Myers is

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- (1) with the State, and I can address those separately. They're
 (2) slightly different arguments with respect to those two.
 (3) THE COURT: All right.
 (4) MR. STOLL: There's another witness, also, and that
 (5) was on Friday, they designated Mano Frey.
 (6) THE COURT: I saw that. I saw that floating on my
 (7) desk.
 (8) MR. STOLL: And that's another - that witness is
 (9) designated for this week, as well, Your Honor. So this applies
 (10) to apparently four witnesses.
 (11) THE COURT: Well, I'd like to hear about all of them
 (12) because it seems to me that it's cumulatively that these
 (13) witnesses become a problem for me.
 (14) MR. OPPENHEIMER: Understood, Your Honor, and let me
 (15) address the fish witnesses. The two fish witnesses, Mr. Myer
 (16) and Mr. Elston, are both responsive to Mr. Kocan, who testified
 (17) at trial that he believed that there was a relationship between
 (18) EVOS and this virus that is affecting the herring.
 (19) By way of background, Mr. Kocan was deposed in January of
 (20) this year by Mr. Cooper of our office in connection with the
 (21) federal matter. Mr. Cooper's declaration is in the papers. He
 (22) at that time expressed the view that he had no opinion about
 (23) that causal relationship. There was a supplemental deposition
 (24) in mid-June. I believe it was June 14 of this year, where he
 (25) flip-flopped. He changed his view that there was a

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(1) relationship At that point Mr Cooper embarked upon securing
 (2) an expert to be responsive to that issue That expert
 (3) ultimately ended up being Mr Elston Mr Elston was
 (4) identified and that is to say he was found and identified to
 (5) the other side in a supplemental designation on July 14
 (6) Now I would make - I make the obvious point that all of
 (7) Mr Kocan's statements with respect to the relationship between
 (8) EVOS and the VHS virus all occurred after our June 8 witness
 (9) list and against the backdrop of his testimony as recently as
 (10) January of this year to the contrary
 (11) Mr Myer is the chief pathologist for the Department of
 (12) Fish and Game for the State of Alaska You may recall during
 (13) the trial that Mr Kocan testified that three days prior to
 (14) testifying here at trial which of course is quite recent he
 (15) had had a certain conversation with Mr Myer in which Mr Myer
 (16) had confirmed the propriety of this theory that Mr Kocan has
 (17) about the relationship between the virus and EVOS and there
 (18) was obviously no way we could have known that he was going
 (19) to testify about that
 (20) He had not indicated could not have indicated that he did
 (21) had such a conversation Mr Myer is being called in part
 (22) to - Dr Myer is being called in part to deal with that
 (23) statement as well as to speak to the - this virus theory that
 (24) Dr Kocan has been testifying to in its current form or
 (25) roughly in its current form only since mid-June but first in

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(1) time after we filed the June 8 witness list
 (2) So I think that Mr Myer and Mr Elston are subject to a
 (3) little different analysis I think a quite powerful one that we
 (4) could not have known at June 8th that either of them would be
 (5) required We didn't know we needed Dr Elston until
 (6) Dr Kocan's theories changed and about Mr Myer we heard
 (7) nothing until trial testimony
 (8) THE COURT Dr Kocan's theories changed from what to
 (9) what?
 (10) MR OPPENHEIMER He originally expressed the view in
 (11) January - pardon me in January of '94 that he did not have an
 (12) opinion regarding the relationship between EVOS and this
 (13) virus
 (14) in terms of causation And in his supplemental deposition on
 (15) June 16 he expressed the view that the lesions were related to
 (16) EVOS and it was at that point that the search for Dr Elston
 (17) was underway and by July 14th Dr Elston had been identified
 (18) And as I say Dr Myer's responsive to testimony from Dr Kocan
 (19) at trial
 (20) MR STOLL Your Honor Mr Petumenos will have to
 (21) respond because he did Mr Kocan - Dr Kocan
 (22) MR OPPENHEIMER May I make one other point just
 (23) before we leave this issue?
 (24) THE COURT Uh huh
 (25) MR OPPENHEIMER If it would be appropriate just to
 address two points that Mr Stoll made on the earlier point

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(1) about Mr Purdham We've had at least two witnesses Knault
 (2) and Keplinger fall in the same category late notice or late
 (3) identified witnesses by the plaintiffs neither of whom were
 (4) identified in interrogatories or who had been deposed
 (5) And secondly the statement that Mr Bush didn't testify
 (6) about anything that wasn't in reports prior to April is
 (7) erroneous I think Mr Stoll has - is not focused on the fact
 (8) that he introduced a series of maps they were oiling maps and
 (9) one of the oiling maps is a - is a Kodiak oiling map and that
 (10) is indicative of new data that is the subject of the mid-April
 (11) '94 report not an earlier report.
 (12) MR PETUMENOS Judge on the Kocan I'd like to
 (13) divide it into two issues One is - one is to attempt to
 (14) defer on the issue to have Elston testimony because I would
 (15) like to go back and review the records record on that to -
 (16) with respect to what Mr Kocan said in the two depositions and
 (17) review it myself I think part of what's going on here is
 (18) those studies were ongoing at the time but I would need to
 (19) review that to be - I don't want to make a representation to
 (20) the Court which isn't accurate
 (21) THE COURT Which studies were ongoing?
 (22) MR PETUMENOS The relationship between the virus and
 (23) the Exxon Valdez oil spill
 (24) THE COURT So no definitive answer would have been
 (25) given until the time those studies were concluded

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(1) MR PETUMENOS That could be the case in which case
 (2) Mr Oppenheimer might have a point but I'd like to go back to
 (3) review it because I'm not sure
 (4) THE COURT That's fine I'll give you the
 (5) opportunity This is for the witness who?
 (6) MR PETUMENOS Elston
 (7) MR STOLL That's not for this week though
 (8) MR DIAMOND Elston and Myer
 (9) MR PETUMENOS The Myer I do have a position that is
 (10) pretty - more well-developed The issue of the conversation
 (11) between Dr Myer and Dr Kocan was raised on
 cross-examination
 (12) THE COURT Yes it was
 (13) MR PETUMENOS And the issue that was raised was this
 (14) other expert in the world disagrees with you doesn't he and
 (15) he got the answer no he doesn't
 (16) We are in a classic case of impeachment on a collateral
 (17) matter You can't boot strap into the case a witness or in
 (18) this case an expert by asking on cross-examination whether
 you
 (19) had a conversation with somebody who disagrees with you and
 (20) then try to get whatever answer you get and then bring in the
 (21) witness to testify to what he thinks We could have - we
 (22) could have done that with any witness anyone else
 (23) THE COURT You mean you can't have the conversation
 (24) reported inaccurately and bring the witness in bring the super
 (25) in and the conversation in to say well it's just being

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- (1) reported inaccurate
- (2) MR PETUMENOS I mean to tell you that it depends
- (3) upon who the super is because the rule that s implicated is
- (4) 801(d) on prior inconsistent statements It is not - the way
- (5) the evidence code makes the distinction is if he had asked
- (6) Mr Kocan - I suppose in this if he limit it to this
- (7) Dr Myer could testify if he were to say to Dr Kocan did you
- (8) tell Dr Myer that you didn t believe that the virus was caused
- (9) by the Exxon Valdez oil spill and if Dr Kocan were to say no,
- (10) I never said that and then Dr Myer were to come in and say
- (11) he told me just the opposite that is perfectly permissible
- (12) It s not collateral it s completing the impeachment on a prior
- (13) inconsistent statement but it is completely different under
- (14) the law to say did Dr Myer tell you that he thought thus and
- (15) so and then bring in the controversy of what Dr Myer thinks
- (16) about the issue and have a swearing contest about that.
- (17) What is not collateral then is the prior inconsistent
- (18) statement of the declarant What is collateral is the
- (19) statements of the out-of-court declarant and to come and prove
- (20) them up when you yourself have raised them on
- (21) cross-examination That is the classic example of a collateral
- (22) attempt at impeachment which is are -
- (23) THE COURT If it s classic there are lots of cases
- (24) out there
- (25) MR PETUMENOS I would - I wasn t sure what they

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- (1) plaintiffs who brought in Dr Myer through Dr Kocan s
- (2) testimony and fairness requires we are allowed to rebut that
- (3) THE COURT These witnesses will be going on when?
- (4) MR STOLL Your Honor -
- (5) MR DIAMOND Probably - if he knows the answer to
- (6) the question
- (7) MR STOLL I don t know when these witnesses -
- (8) THE COURT I want to talk about these two witnesses
- (9) MR DIAMOND I think currently scheduled for next
- (10) week
- (11) THE COURT Okay so there s no problem as long as
- (12) you get whatever new material you need to present to me
- (13) including cases on all theories that you - that apply to these
- (14) two witnesses You can in no more than five pages and it
- (15) should be simultaneous and I know what the issue is now and I
- (16) can deal with it As long as you get the briefs to me on
- (17) Friday I ll give you a ruling on Monday
- (18) MR PETUMENOS I just have a question on that issue
- (19) Did counsel just say because counsel is correct about
- (20) this I don t have - a mentorious position If counsel said
- (21) that we raised in our direct Dr Myers as part of the support
- (22) for our - our opinions that would be a whole keg of fish
- (23) THE COURT I didn t hear it that way He said you
- (24) opened the door big time
- (25) MR OPPENHEIMER Right.

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- (1) were doing here I would endeavor to discuss the issue of the
- (2) collateral impeachment rule because I think there are cases
- (3) out there
- (4) THE COURT Yes that s fine I ll always give you
- (5) that opportunity
- (6) MR OPPENHEIMER I m not sure whether Your Honor
- (7) wanted me to address it. This has been briefed
- (8) THE COURT Not briefed in this context has it?
- (9) MR OPPENHEIMER Well I think the basis of the
- (10) testimony was set forth in our opposition to the motion to
- (11) strike Mr Myer We filed - there s a motion filed we filed
- (12) in opposition I think it s briefed but I would - on the
- (13) merits Your Honor I make another observation in addition to
- (14) the fact that I don t agree with that analysis of prior
- (15) inconsistent statement that s a small part of what s going on
- (16) here They opened the door in a big way Their testimony was
- (17) that their expert had talked to the head of - I mean he s the
- (18) chief pathologist for the State s department here and they
- (19) said in effect he endorses my theory Now in point of
- (20) fact -
- (21) THE COURT I know I heard it
- (22) MR OPPENHEIMER Yeah And I think we have every
- (23) right to have the jury learn what he actually thinks about that
- (24) theory If anybody has brought in another expert not on a
- (25) witness list and not physically present to testify it is the

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- (1) THE COURT And you know counsel there is some
- (2) reason to that position when - when a witness on the stand
- (3) takes a question and fires that kind of information out I mean
- (4) clearly it s a total surprise to the question which of
- (5) course it was
- (6) MR PETUMENOS Okay let s reserve judgment on that
- (7) till we see the transcript.
- (8) THE COURT I ll reserve judgment on that until 1997
- (9) if you want me to but unfortunately you re going to make me
- (10) make a decision by Monday
- (11) MR STOLL Your Honor what I was bringing up was
- (12) on - this motion deals with Purdham and
- (13) THE COURT Yes right.
- (14) MR STOLL And Mano Frey
- (15) THE COURT Let s talk about Purdham I ll get to -
- (16) Frey in a minute
- (17) MR STOLL Frey is also this week That s the only
- (18) reason I m - now the situation with Keplinger and Knault I d
- (19) like to just clarify this They raised this issue - well you
- (20) hadn t previously designated Both Keplinger and Knault had
- (21) filed affidavits in response to a motion for summary judgment
- (22) by the - the point about Keplinger and Knault is they were
- (23) subject to their motion to exclude against us because we hadn t
- (24) designated the - among other things we hadn t designated
- (25) these people prior to you know In our April filing

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(1) We made a trade Mr Diamond and I we made a trade We
 (2) sat down with the Master and we discussed you know this
 (3) trade-off And I said okay I'll - okay we'll agree that
 (4) you get several hundred new exhibits but in exchange for that
 (5) you withdraw your objection to our - our - our witnesses
 (6) Keplinger and Knault specifically That was done There were
 (7) some other things some other exhibits too but that was -
 (8) that was the deal
 (9) Now if I get the benefit - I should be able to get the
 (10) benefit of that not for them to say well we made that deal
 (11) with you now we're going to boot strap in and get Frey and
 (12) Purdham as witnesses That wasn't part of the deal And
 (13) simply as far as I'm concerned it is simply an issue of
 (14) whether Pretrial Order 40 says what it says I haven't heard
 (15) any reason why those two witnesses they are - why things are
 (16) any - why Order 40 doesn't apply It was the trial plan
 (17) THE COURT All right Tell me one other thing I
 (18) don't think I asked Purdham and Byers going to be testifying
 (19) to the same thing?
 (20) MR CLOUGH Perhaps I'm probably best to address
 (21) that No they will not They were there for some overlap of
 (22) period of time Mr Purdham didn't get there till June They
 (23) had very different rolls Mr Purdham was the area operations
 (24) coordinator Mr Byers was a professional consultant from
 (25) outside who worked as an advisor through the spill

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(1) THE COURT They're going to testify what they saw
 (2) there?
 (3) MR CLOUGH What they saw and also the level - see
 (4) what the data from the ICF report does is it takes reports from
 (5) the Exxon clean up program and stuff that was being done by
 (6) the
 (7) cleanup crew and tries to extrapolate that in terms of oiling
 (8) That's sort of the new stuff we were dealing with with the new
 (9) ICF maps That's Mr Purdham's area of expertise He was the
 (10) guy in charge of the clean up program and all the crews out
 (11) there whose reports were used by ICF the map that they
 (12) generated
 (13) MR DIAMOND Your Honor I was going to add two
 (14) things Number one this was not new This all started
 (15) because we came in and we complained to you about
 (16) eleventh hour
 (17) revisions to their expert reports in which they came up with
 (18) new oiling information
 (19) THE COURT But that's true but that only goes to
 (20) your argument that it's somehow unfair for them to stand on the
 (21) letter of the order when in fact if they - if you'd known
 (22) that this issue was out there in the first place you'd never
 (23) have given up without having this witness included in the
 (24) witness list also right?
 (25) MR DIAMOND Well that's absolutely true We told
 (26) you that we - we were going to do this This is no secret
 (27) We told the other side in open court and it's on the record

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(1) that if they're going to do this we need to designate
 (2) additional witnesses to deal with the new anecdotal
 (3) information
 (4) MR OPPENHEIMER Your Honor that was on June 15th
 (5) MR DIAMOND This should not be a surprise to anybody
 (6) in this courtroom because we said we're - we're now operating
 (7) under a handicap we've designated witnesses not knowing we
 (8) had
 (9) a controversy about oiling in Kodiak This new information now
 (10) creates a controversy We are going to add some witnesses
 (11) and
 (12) we did forthwith we didn't sit on our - our hands we did it
 (13) immediately and we notified the plaintiffs that we were doing
 (14) that and we notified what these witnesses were being handed
 (15) to
 (16) say
 (17) THE COURT This witness was designated the week
 (18) before June 15th wasn't it - wasn't he?
 (19) MR OPPENHEIMER This witness was first designated on
 (20) June 8th
 (21) THE COURT So your statement you're going to need to
 (22) add new witnesses is - is -
 (23) MR OPPENHEIMER He was the first we had - no he
 (24) was the first we had or first or second that we had There is
 (25) a fairly long list
 (26) MR DIAMOND We may well have designated even before
 (27) the hearing and told you - we may have added him on a
 (28) supplemental and told you about it but this goes way back to

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(1) June My point with respect to Mr Stoll is that there is a
 (2) certain laying in the weeds quality about this
 (3) THE COURT That's what I just said
 (4) MR DIAMOND Yeah
 (5) THE COURT Wait a minute I didn't make that
 (6) finding Don't go jerk it up but all I'm trying to do is
 (7) define your argument Your argument is it's unfair because if
 (8) I'd known it was in the pot I'd negotiated it out too
 (9) MR DIAMOND Absolutely absolutely
 (10) THE COURT That has some appeal to a trial lawyer
 (11) that argument I'm not sure that it comes the day though
 (12) MR DIAMOND Well I don't - I don't know what we
 (13) could have done We came in and we complained about the
 (14) ICF
 (15) what we thought were untimely ICF reports We tried to protect
 (16) ourselves by adding witnesses who could rebut this new
 (17) evidence We told you we were doing that or had done that
 (18) We
 (19) told the other side we were doing that or had done that
 (20) Nobody complains They raise additional witnesses
 (21) THE COURT Counsel correct me if I'm wrong but
 (22) haven't you all argued all these points before?
 (23) MR DIAMOND Today?
 (24) THE COURT Yes
 (25) MR DIAMOND Yes
 (26) MR STOLL Your Honor I'd like to add one thing I
 (27) don't think was added before this goes to the business about

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- (1) all this new stuff that ICF supposedly added The only
 (2) difference - the only difference in these maps and I guess
 (3) the exhibit s not here Your Honor but you ll recall there s
 (4) a - Mr Bush s map has got lines about whether there s oiling
 (5) under a program then he s got little triangles where there
 (6) is - there were Veco clean-up crews I can t remember if they
 (7) were triangles or circles but any rate - but at any rate
 (8) he s got the only thing that is different on the April - the
 (9) April 11th map that is different from the prior one is that
 (10) he s got the Veco triangles on Kodiak That s the only
 (11) difference
 (12) I mean there is not a - any other program That s the
 (13) difference The Veco data came from Exxon It did not come
 (14) from anybody - that s where we got the data We got that
 (15) late that s why he didn t submit that until April 11th
 (16) because we had made a request for that I think three or four
 (17) years earlier and they produced it late Took us three or four
 (18) years for them to produce these records so he added these
 (19) little triangles that s it. And Purdham I ve seen his
 (20) exhibits are - go a lot more than simply responding to little
 (21) Veco triangles that were added to this map on April 11th I
 (22) think we re back to what - what does Pretrial Order 40 stand
 (23) for?
 (24) THE COURT Yes
 (25) MR OPPENHEIMER I m not sure Your Honor needs this

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- (1) but actually what has just been said is incorrect There s
 (2) ADF&G data dating back to the 89 period which for reasons
 (3) unknown at least to our side was not included in any report on
 (4) any map or integrated in any oiling data until April 11 1994
 (5) in this most recent report and in point of fact the only map
 (6) of Kodiak oiling that ICF has produced that puts all this
 (7) material together was - was that which came out in his recent
 (8) report
 (9) THE COURT Done all of you aren t you?
 (10) MR DIAMOND Well I was just going to say that it s
 (11) only a triangle
 (12) THE COURT I was afraid you were just going to say
 (13) that
 (14) MR DIAMOND It s only a triangle reminds me it s
 (15) only a decimal point
 (16) THE COURT And there s only three zeros after the
 (17) comma
 (18) All right this is the situation that I m faced with once
 (19) again The witness lists adjustment of the parties to - to
 (20) the disorganization they found themselves prior to - for a
 (21) substantial period prior to trial new information being
 (22) generated by both sides a need to respond and - and
 (23) flexibility up to a point by each party and then suddenly
 (24) that party when it perceives that its litigating advantage is
 (25) furthered by it it gets very rigid what does the pretrial

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- (1) order mean after all We should interpret it in this one
 (2) instance even though we don t do it that way any other time
 (3) literally, and you should exclude this witness
 (4) My practice over the years has always been that if I m
 (5) going to exclude a witness I ve got to know that it s the
 (6) right thing to do I ve got to know that somebody s
 (7) sandbagging I ve got to know that it s unfair to the other
 (8) side I ve got to know that the other side might not be able
 (9) to respond to the information that s being presented by the
 (10) witness None of those things do I know now
 (11) I see this as simply another maneuvering issue and involved
 (12) in this trial I don t see it as an issue of ultimate
 (13) injustice and I don t see a reason why I should strike this
 (14) witness on the basis of the - of a history of the parties with
 (15) regard to these witness lists and how sacrosanct they
 (16) considered them to be or the idea that somehow the plaintiffs
 (17) are being treated unfairly here It simply isn t true The
 (18) fact is is this is another witness that they ve had plenty of
 (19) time to adjust to and can adjust to and will adjust to without
 (20) any injustice or unfairness and therefore the witness will be
 (21) allowed to testify
 (22) Now shall we talk about Mano Frey because the only thing
 (23) I know is that his name is on a newly filed witness list which
 (24) I must admit when I came to the office and saw it on the desk
 (25) I said a word that I will not say here Well I won t even

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- (1) promise that I may say that word but I d like to hear the
 (2) argument
 (3) MR CLOUGH Mr Oppenheimer just whispered in my ear
 (4) you get to deal with this one Mr Mano Frey is being called
 (5) to directly rebut some statements Mr Selby made on the stand
 (6) that were never made at a prior time Mr Selby talked about
 (7) the Arctic Power tour and the observations he made in Prince
 (8) William Sound in 1993 when Exxon took him out on a tour in
 (9) 1993
 (10) THE COURT Right
 (11) MR CLOUGH Mr Mano Frey was on that tour with
 (12) Mr Selby Mr Mano Frey coauthored an article with Mr Selby
 (13) describing the results of that tour Subsequently we provided
 (14) the plaintiffs with a copy of it It directly contradicts what
 (15) Mr Selby testified to in court It s the sole reason Frey is
 (16) being offered is to rebut the statements of Mr Selby It will
 (17) be short and to the -
 (18) THE COURT Will it be his testimony rebutting or the
 (19) article?
 (20) MR CLOUGH His testimony and the article both
 (21) THE COURT What are the statements he s rebutting?
 (22) MR CLOUGH Mr Selby s descriptions of the oiling
 (23) conditions they observed out there in 1993 and what they saw
 (24) THE COURT I m sorry counsel you ll have to tell me
 (25) what he said

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- (1) MR CLOUGH Sure several significant points
- (2) First of all Mr Selby described what he can see in a
- (3) particular beach - I forget the name of it I apologize a lot
- (4) of beaches have been thrown around and Selby described a beach
- (5) he could see down through the fog and see a long layer of
- (6) asphalt The reason they couldn't land there was a thick layer
- (7) of fog and nobody could see the beach
- (8) He will also testify that afterwards he and Mr Selby
- (9) co-authored an article generally describing the tour and the
- (10) article describes how well things were doing and how good
- (11) things look And Mr Selby testified he was disappointed at
- (12) how poorly things were looking
- (13) THE COURT Tell me why he wasn't designated until
- (14) today
- (15) MR CLOUGH We had no idea until Mr Selby got up
- (16) there on the stand these statements would come out of his
- (17) mouth There had been nothing whatever on this
- (18) THE COURT When did he get up there
- (19) MR CLOUGH What day did Jerome testify?
- (20) MR STOLL I think about two weeks ago, Your Honor
- (21) MR CLOUGH No he was one of the final witnesses
- (22) MR STOLL I'm sorry it was the second or third of
- (23) August
- (24) MR CLOUGH We contacted Mr Frey
- (25) MR STOLL That would be two weeks - 12 days ago

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- (1) THE COURT A fortnight ago
- (2) MR STOLL Twelve days ago to be exact Your Honor
- (3) MR PETUMENOS In Shakespearean
- (4) MR STOLL It was 12 days ago
- (5) THE COURT Scroll that baby down there and find the
- (6) testimony okay?
- (7) THE CLERK August 3rd
- (8) MR DIAMOND We have it from the clerk
- (9) THE CLERK August 3rd
- (10) THE COURT Okay so about two weeks ago
- (11) MR DIAMOND August 9?
- (12) THE COURT 3rd
- (13) MR DIAMOND Her computer's faster than mine
- (14) THE COURT We go to the old manual notetaking It's
- (15) much faster
- (16) MR STOLL No computer
- (17) MR DIAMOND August 3rd
- (18) THE COURT So after all you knew on the day that
- (19) that testimony was given who the people were that went on that
- (20) tour didn't you?
- (21) MR CLOUGH Yes we did Your Honor we didn't go
- (22) solicit Mr Frey Mr Frey came to us He heard about the
- (23) testimony He came to representatives of Exxon We called
- (24) him
- (25) and found out what he was going to say and listed him the following day

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- (1) THE COURT So he came to you Thursday?
- (2) MR CLOUGH My recollection was Mr Selby testified
- (3) on a Monday was Wednesday -
- (4) MR STOLL Wednesday as we understand
- (5) MR CLOUGH I can go back and recreate the dates I
- (6) can tell you that we listed him as a witness within 48 hours
- (7) after I had confirmed that in fact he was going to say that
- (8) I was the one that confirmed it
- (9) THE COURT What I'm trying to find out Frey
- (10) contacted you initially right?
- (11) MR CLOUGH Yes someone from Exxon's Anchorage
- (12) office unrelated to the oil spill case
- (13) THE COURT When did that occur?
- (14) MR CLOUGH Your Honor it occurred I think a
- (15) couple of days or so after the testimony I'd have to go and
- (16) check the date
- (17) THE COURT That would be the 5th So why did you
- (18) designate him today?
- (19) MR CLOUGH I didn't designate him today I
- (20) designated him last Friday
- (21) THE COURT Friday?
- (22) MR CLOUGH Quite frankly Your Honor what I did is
- (23) I wasn't going to put Mr Frey in position to subpoena him
- (24) against his will We asked him would he be willing to
- (25) testify When he said he would we listed him

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- (1) THE COURT I tell you what I'm not going to let him
- (2) testify I'm not going to let him testify because it strikes
- (3) me as being a peripheral point at best The problem is that I
- (4) only have the words out of counsel's mouth as to what he's
- (5) going to say If you want to bring him in here and make an
- (6) offer of proof with him I'll be happy to hear it and I'll
- (7) determine whether or not that changes my mind but these things
- (8) are all discretionary calls This one looks to me like it's
- (9) just one of those things that you - you inexcusably designated
- (10) him late and it's on such a sniping sort of a - an analysis
- (11) of the value of his evidence that I don't know that it's going
- (12) to make much difference one way or another what I do with it
- (13) So no the answer is no he can't testify but you can
- (14) certainly repair your record in some way by bringing him in
- (15) and I'll hear about - well exactly exactly what he says as
- (16) opposed to what Mayor Selby said Lots of witnesses in this
- (17) case have said many things most of which don't need to be
- (18) rebutted even though you feel that greatly they do in
- (19) absolutely detail So for now he's not going to testify
- (20) MR STOLL Your Honor the next matter deals with -
- (21) and you asked us to put this off until these witnesses came up
- (22) also This relates to so-called expert testimony not
- (23) designated as expert testimony We had a motion about this
- (24) And I'd like to - the defendants pursuant to your order gave
- (25) us a description of what some of these people were going to

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- (1) testify to and we have some of these witnesses coming this
 (2) week and I'd like to deal with these people. You can deal
 (3) with them -
 (4) MR DIAMOND I thought we had laid this to rest in
 (5) chambers last week and we agreed that this was going to be
 (6) handled during the - if there were objections to the testimony
 (7) as it came in it would be handled at that time. I mean I -
 (8) I have not come prepared to reargue this point
 (9) THE COURT I'm not going to hear it. Not today
 (10) MR PETUMENOS I think what we wanted to do Judge
 (11) is get some authority to you on the line drawing between 701
 (12) and 702, so that when we made those objections at the time -
 (13) THE COURT Get it to me in writing
 (14) MR PETUMENOS I think that's what we have
 (15) MR STOLL Your Honor -
 (16) THE COURT Get it to me in writing counsel I'm not
 (17) going to have these things brought up at the last minute at
 (18) hearing where the other side hasn't had appropriate notice you
 (19) were going to raise it
 (20) MR STOLL Just a minute I did that Your Honor
 (21) With all due respect I got a list from them on Friday as to
 (22) who the witnesses were for this week. I called Mr Diamond
 (23) He and I did not contact each other this weekend. I talked to
 (24) him this morning at 8:30. I told him that there were - that
 (25) we had objections to this he said oh I think that's all

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- (1) taken care of that's going to be our position. It's all taken
 (2) care of in an in-chambers conference. I said I don't agree
 (3) with that and neither did Mr Petumenos. I said I'll take it
 (4) up at 2:30
 (5) This is the first opportunity I've had to take this matter
 (6) up and some of these statements which we you know
 (7) received
 (8) we don't know who some of these people are being withdrawn
 (9) We don't know who they're - we don't know who's going to be
 (10) brought up. They bring - they've got a lawyer lawyer named
 (11) Hancock from Kodiak who's going to testify apparently that
 (12) the Exxon Valdez oil spill had no negative impact on real
 (13) estate markets in Kodiak
 (14) Now that - if that isn't an expert testimony I've got
 (15) cases on this but I thought that the Court did not want
 (16) further briefs that's why I haven't - I'll give you the
 (17) cases but I think that that is a clear expert type opinion
 (18) and I'm sorry but I'm just trying to bring this up which I
 (19) thought was the proper proceeding. If you don't want me to do
 (20) it this way I'll do it any way the Court wants me to do it. I
 (21) was just trying to bring it up as timely as I could
 (22) THE COURT It - I want it in writing I don't like
 (23) to be faced with an issue at the end of an hour long hearing
 (24) that I didn't know was coming and I didn't prepare mentally
 (25) for it so the answer to you is no I will not allow you to
 (26) argue it now. But the secondary answer is yes I'll allow you

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- (1) to file something but I want it in writing I want to see
 (2) what the position is. Positions shift in here much too much
 (3) When you put it down on paper there might be more solemnity
 (4) to
 (5) that issue and at least the other side can take a look at it
 (6) and I can see it before you walk in here
 (7) MR STOLL Your Honor I'm sorry
 (8) THE COURT This is an ever-changing situation with
 (9) regard to the particular witnesses and I never know from one
 (10) minute to the next where any of you are so I have to deal with
 (11) it as you bring it up ad hoc every time you feel like it. This
 (12) time it's going to be done the way I said that it should be
 (13) done
 (14) MR STOLL That's fine
 (15) THE COURT When can you file whatever you're going to
 (16) file?
 (17) MR STOLL We'll file tomorrow morning
 (18) THE COURT I'll - good. You tell me after you see
 (19) and you've had an opportunity to read whatever they file you
 (20) tell me how long it's going to take you to respond and whether
 (21) you want to do it in writing or not, all right?
 (22) MR DIAMOND Fine
 (23) MR STOLL Your Honor some of these witnesses are
 (24) intended apparently to be brought up as early as I think
 (25) Wednesday or Thursday of this week. I mean we just got the -
 (26) I just got the notice from them I tried to tell them as I

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- (1) say what we were going to bring up you know as soon as I
 (2) could
 (3) THE COURT You know - and let's just remind
 (4) ourselves what did my order on this say? Tell me. Do you
 (5) remember it?
 (6) MR STOLL Yes I believe
 (7) THE COURT What did it say?
 (8) MR STOLL I believe what it says was that a witness
 (9) could not testify as to - give expert opinion unless they've
 (10) been designated as an expert and there was a - there was a
 (11) limit of three witnesses on any - three experts on any
 (12) particular topic
 (13) THE COURT And the burden was on the - on the
 (14) defendants
 (15) MR STOLL Proponent right I agree. The only
 (16) reason I'm raising this issue is because I got this witness
 (17) statement for these witnesses and the witness statement does
 (18) not appear to be in sync with what I thought the order as I
 (19) just described it said because I think that when you have
 (20) somebody testify as to what the effects what the causation is
 (21) in the market that that is expert opinion. That's - that's
 (22) all
 (23) THE COURT Okay fine. So so you file it tomorrow
 (24) and we'll see what happens after that
 (25) MR STOLL That's fine Your Honor

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- (1) THE COURT I'll try and set a schedule we can all
 (2) live with
 (3) MR PETUMENOS And the other problem is Judge that
 (4) my concern with some of these witnesses you don't want to be
 (5) in a position of having them say use their three witnesses and
 (6) their chief appraiser that's going to do the whole case hasn't
 (7) testified yet you know the one that is going to -
 (8) THE COURT You make a good point
 (9) MR PETUMENOS So you're not - I know you're not
 (10) going to enforce it at that point because it's too Draconian a
 (11) result so we're trying to get it straight
 (12) THE COURT I understand that.
 (13) MR STOLL There's about three or four of these set
 (14) for this week that's why I'm bringing it up
 (15) THE COURT Bring it up in a way that I can clearly
 (16) understand it and so can the other side and we'll see what
 (17) happens
 (18) MR STOLL Okay That's fine Your Honor
 (19) Your Honor the - Mr Clough advised me that as far as
 (20) the material I gave you from the tour booklet that those -
 (21) the booklets I gave you this morning are not going to be used
 (22) this week but at some point in time I'd like to schedule a -
 (23) THE COURT Not going to be used They are going to
 (24) be used sometime during the trial
 (25) MR CLOUGH He actually talked to me about the next

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- (1) two days I certainly wasn't going to use them then and I
 (2) don't believe any of the witnesses later in the week are going
 (3) to be using them They were designated with Teal because we
 (4) thought we might use a picture out of them but as you can see
 (5) we didn't We're not going to be using them this week
 (6) THE COURT Are you going to be using them later?
 (7) MR CLOUGH Subsequent to this week I don't think
 (8) I've completely thought that through for all the following
 (9) weeks as yet
 (10) THE COURT Let me tell you something They look
 (11) inadmissible to me So why don't you just knock them off
 (12) your - off your exhibit list and you can do away with a lot
 (13) of silly arguments
 (14) MR DIAMOND Your Honor you recall they are in
 (15) evidence and they were in evidence
 (16) THE COURT Well parts of them but I didn't -
 (17) MR DIAMOND They were in evidence simply to rebut
 (18) Mr Selby's statements about what Exxon told him you
 (19) remember
 (20) there was a - quite a controversy and Mr Selby in our view
 (21) was recreating history somewhat
 (22) THE COURT I don't remember that I admitted these -
 (23) these documents wholesale counsel It surprises me that I
 (24) would have
 (25) MR DIAMOND You admitted over objection the entire
 package of materials that he was given to establish what he

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- (1) was in fact told information he was given by Exxon to counter
 (2) his statements about how Exxon was hiding the ball and how
 (3) Exxon was misinforming people
 (4) MR CLOUGH You recall the plaintiffs had taken
 (5) selected pages out of the portion of them and had Mr Selby
 (6) testify to them at trial
 (7) MR STOLL Your Honor -
 (8) THE COURT Yes I'm starting to - it's starting to
 (9) unfortunately come back to me
 (10) MR STOLL Let me address that We showed one page
 (11) if I could - may I approach the Court?
 (12) THE COURT No I don't think it's necessary to do it
 (13) this way The fact is they're not going to be using these
 (14) booklets for this week If there's an overall question of
 (15) admissibility you have to get the record clear for me so that
 (16) I can remember exactly what happened But however I
 responded
 (17) to the question that I had to deal with with Mayor Selby I'm
 (18) willing to review it to see whether or not these you call
 (19) advertising booklets stay in the record All right?
 (20) MR STOLL When should we schedule that?
 (21) THE COURT I don't think there's any necessity to
 (22) schedule it on a crash basis if they're not going to be using
 (23) them for at least a week
 (24) MR STOLL I agree with that I don't think there's
 (25) any - I'm not - I just want to - I just want to do things at

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- (1) the Court's pleasure
 (2) THE COURT So the issue is Are they going to be
 (3) used at all later on in this trial? And the answer to that
 (4) question appears to be maybe So the only real issue would be
 (5) when should I take it up if they're going to be used So you
 (6) have to give at least 24-hour notice that you're going to use
 (7) these books in the examination of some witness so that the
 (8) other side can respond to it
 (9) MR STOLL That's fine Your Honor You wanted to
 (10) take up the Dames & Moore - tomorrow? Okay
 (11) MR DIAMOND He hasn't read it yet
 (12) THE COURT Right
 (13) MR STOLL Your Honor we scheduled for this week
 (14) they have scheduled a number of deposition transcripts -
 (15) depositions read
 (16) THE COURT Oh uh-huh
 (17) MR STOLL And the procedure that we've followed
 (18) heretofore when we had depositions was that one side would
 give
 (19) the other side a script of what they anticipated they were
 (20) going to actually read and we have not - we've made requests
 (21) for that script and we haven't received it yet and we want to
 (22) have an opportunity at least 24 hours before they want to read
 (23) the thing to compare what they propose versus what the Master
 (24) has ruled and I just want to get - I want to bring that to
 (25) the Court's attention We've asked for it on several

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- (1) occasions and we haven't got the script yet. They've got a
 (2) lot of people
 (3) MR DIAMOND Back office problem is just generating
 (4) the paper is taking longer than we thought They'll obviously
 (5) have it and it's just a ministerial act of pulling out -
 (6) THE COURT Have it when?
 (7) MR DIAMOND We'll get it to them 24 hours before we
 (8) use it
 (9) MR STOLL Your Honor Mr Field just asked if we
 (10) could have it 48 hours before
 (11) THE COURT Can you get it to them in 48 hours?
 (12) MR DIAMOND I think some of it's going to be used on
 (13) Wednesday small excerpts I'll try to get those over to them
 (14) before the close of business today It's taking - it's just a
 (15) long process of typing
 (16) THE COURT Don't hear an objection to that so -
 (17) MR STOLL If it's just a -
 (18) THE COURT Hold it, hold it With regard to whatever
 (19) witnesses are going to be used on Wednesday that material
 has
 (20) to be delivered today It doesn't have to be by 4 30 but it
 (21) has to be delivered today With regard to any other deposition
 (22) designations it has to be 48 hours ahead of time If you have
 (23) a difficulty that you need - that would require me to relax
 (24) that particular deadline then you must let me know Not
 (25) respond to accusations from the other side Much smarter if

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- (1) you just simply come in here and say I couldn't do it in 48
 (2) hours and ask can I have 36 and I'll give you 34 and that will
 (3) be fine
 (4) MR DIAMOND Or I'll approach Mr Stoll and he'll
 (5) ultimately be reasonable
 (6) THE COURT I know he will I'm confident about that
 (7) MR STOLL I will be reasonable
 (8) Your Honor I have a question about the - having witnesses
 (9) in the courtroom and that relates to - they have some real
 (10) estate experts who are going to be testifying and we would
 (11) like to have Mr Carlson either not in this courtroom
 (12) necessarily but either in this courtroom or the overflow
 (13) courtroom when he testifies We don't know whether Mr
 Carlson
 (14) will be called as a rebuttal witness ultimately or not but I
 (15) assume that it's appropriate that it's okay to have him in the
 (16) courtroom because the rule on exclusion of witnesses relates
 (17) to one witness learning from his co-witness what - I mean you
 (18) know another person on direct I assume there's no problem
 (19) with that but I wanted to clear it with the Court so that I
 (20) didn't have a problem after the fact of having -
 (21) THE COURT This is an expert?
 (22) MR STOLL He could be an expert He was not - he
 (23) was a - he was - he's the assessor Mr Carlson was the
 (24) assessor of Kodiak Island Borough
 (25) THE COURT Okay all right

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- (1) MR STOLL I don't know for sure whether we're going
 (2) to recall him as a rebuttal witness but I don't want to
 (3) preclude being able to call him when their experts testify as
 (4) to Kodiak
 (5) MR DIAMOND May I inquire as to why a fact witness
 (6) needs to be present for the testimony of other witnesses? I
 (7) thought we were entitled on the motion to have lay witnesses
 (8) excluded
 (9) THE COURT You are But there again counsel you're
 (10) on that murky dividing line between fact and expert witness
 (11) which you're well on the other side of by this time so I don't
 (12) know that I'd take a high horse position on this one
 (13) MR DIAMOND Then I won't take a high horse
 (14) position Which side would Professor Tumeo be on?
 (15) THE COURT Back to Professor Tumeo
 (16) MR DIAMOND We did have one other -
 (17) MR PETUMENOS Before the Judge -
 (18) THE COURT The answer is Mr Carlson can be in I
 (19) mean I can relax the rule with regard to various witnesses
 (20) Mr Carlson can be in
 (21) MR DIAMOND I chased Mr Carlson out after he
 (22) testified
 (23) MR STOLL That's why I'm raising the issue
 (24) MR DIAMOND I was told he promptly went and watched
 (25) it on television in the other courtroom

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- (1) THE COURT A resourceful witness
 (2) MR PETUMENOS On the subject of being relaxed when
 (3) we have driven ten minutes into your next hearing for which we
 (4) should apologize -
 (5) THE COURT Yes
 (6) MR PETUMENOS We had discussed the Alyeska
 (7) contingency plans and how they be relevant to
 (8) cross-examination in view of the direct examination that we
 (9) heard from Mr Teal this morning I want to give late notice of
 (10) the Alyeska contingency plans to cross with Mr Teal on
 (11) because we - he talked extensively about the sensitive areas
 (12) and the areas that he went planned for and so forth I wish
 (13) to inquire about the Alyeska Contingency Plan and wanted to
 (14) give them what is under the circumstances some late notice,
 (15) but I think your ruling was you weren't sure whether it would
 (16) become relevant on cross-examination and I now believe it
 (17) has
 (18) MR CLOUGH Your Honor his examination (sic) was
 (19) examination of sensitivity - his testimony was about
 (20) examination of sensitivities in the field The contingency
 (21) plans are hundreds of pages of documents which were
 compiled
 (22) years before the spill If there is some particular page or
 (23) pages regarding an area that he thinks this witness may have
 (24) been examined or had the sensitivities examined to that might
 (25) be a separate issue but to have me run back now tonight and

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- (1) have hundreds of pages of those plans to go back through and
 (2) try to figure out what may or may not come up in
 (3) cross-examination is going to make it hard to prepare
 (4) THE COURT Sure What do you want me to do about
 (5) it?
 (6) MR CLOUGH I assume Mr Petumenos knows right now
 (7) what portions of the plan he wants to use I assume what -
 (8) having the jury feel about him he s not going to want to go
 (9) through hundreds of pages I m sure he s got particular areas
 (10) he wants to talk about If he could let us know what these
 (11) particular areas are it allows us time to prepare
 (12) THE COURT I bet it does I m not going to make him
 (13) do that On the other hand what I will do is I will say you
 (14) can't use the contingency plan until you approach the bench
 (15) Tell me you re going to use it tell me the way you re going
 (16) the use it and I ll make an in-court ruling
 (17) MR PETUMENOS Okay
 (18) THE COURT Okay?
 (19) MR PETUMENOS Yeah
 (20) MR DIAMOND My turn? I mentioned that we
 (21) anticipated some testimony from the real estate witnesses
 (22) concerning the trustees fund where that came from and the
 (23) acquisition of real estate in connection with the real estate
 (24) presentation
 (25) THE COURT Oh yes uh-huh

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- (1) MR DIAMOND And I ve discussed this with
 (2) Mr Petumenos Mr Oppenheimer and I have and we ve
 suggested
 (3) some work around but nothing that I think is going to work
 (4) It comes up in this - in this fax We are rebutting a
 (5) case of stigma where the claim is that the oil spill basically
 (6) rendered unmarketable and valueless these large tracts of land
 (7) throughout Prince William Sound and the Kenai We re going to
 (8) put on market evidence about the tracts as to large parcels of
 (9) remote wilderness land Our evidence is that prior to the
 (10) spill there was no such market there was no market at all
 (11) there were no buyers for this property and that the only
 (12) market that exists exists now by virtue of the oil spill
 (13) There have been two transactions one of which Mr Mundy
 (14) used as a comparable both of which were created or enabled
 by
 (15) the Exxon funding of the Trustees \$900 million fund which in
 (16) part can be used for land acquisition purposes Our witnesses
 (17) are going to testify or we would like our witnesses to be able
 (18) to testify that there was no market for these properties before
 (19) the spill The effect of the spill has been to create demand
 (20) where none existed before and it s demand on the part of
 (21) governmental authorities governmental agencies that are now
 in
 (22) the business of acquiring property by virtue of funds that have
 (23) been generated as a result of the spill
 (24) So that contrary to the plaintiffs claim that the spill
 (25) created this terrible detriment of stigma that rendered all of

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- (1) this property valueless In fact the spill has had as a
 (2) by product the - the answer later or salutary effect of
 (3) creating a market where none existed before and allowing these
 (4) plaintiffs should they choose to try to sell them to state
 (5) and federal government agencies
 (6) We ve danced around how - how do we do this without
 (7) communicating to the jury the notion that there is Exxon money
 (8) and I think Mr Oppenheimer and I who both have witnesses
 who
 (9) will discuss these subjects agree that we don't need to tell
 (10) the jury that this is - that the demand has been created by
 (11) Exxon money We do need to communicate the fact that this
 (12) is - the demand for this property has been created by funds
 (13) that are generated as a result of the oil spill And I think
 (14) that Mr Petumenos view - and he can speak for himself - is
 (15) that that s almost - that necessarily signals to the jury that
 (16) this is Exxon funded land acquisition
 (17) I guess our view ultimately is if that s the case so be
 (18) it They ve injected this issue They ve created the issue
 (19) that there is - that we ve killed the market We - we have a
 (20) right every right to present evidence that in fact we didn't
 (21) kill the market we created a market and if there s no way of
 (22) doing it but for the fact of suggesting information from which
 (23) the jury might conclude that it is Exxon money I don't - I
 (24) think that s something the plaintiffs have to live with but I
 (25) wanted to raise the issue let you think about it We don't

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- (1) need a decision this evening and maybe we can work a
 different
 (2) solution that hasn t occurred to the lawyers
 (3) MR PETUMENOS Judge It s very late I realize I m
 (4) going to be very brief so you can get to your other hearing
 (5) THE COURT Okay
 (6) MR PETUMENOS The argument that s just been made
 (7) is - is erroneous Dr Mundy places a one-year stigma on
 (8) unoiled lands It was over in 1990 He places a three-year
 (9) stigma on oiled area lands in the western area of the Sound
 (10) No land was ever purchased by the Trustee Council within the
 (11) period of the stigma that he alleges with the possible
 (12) exception of Kachemak Bay
 (13) MR OPPENHEIMER We keep hearing this but you should
 (14) look at his report He s got a stigma period at the end of
 (15) every persistence code and that is at the end of the longest
 (16) period of persistence
 (17) MR PETUMENOS And the second thing that I have to
 (18) say and that relates to unoiled property and with respect to
 (19) the way the Trustees are operating this testimony is very
 (20) speculative because unlike where the Park Service has a fund
 (21) where they can apply it and they do apply it or there s
 (22) congressional appropriation this is no different than anytime
 (23) a government makes a decision to purchase property the
 (24) Trustees don t have to purchase acre one if they don't want
 (25) to And in fact recent pronouncements from Senator
 Merkowski

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- (1) and others that have been publicly disseminated are they
 (2) shouldn't and they should stop and there shouldn't be
 (3) anymore As I'm aware there is the Seal Bay transaction and
 (4) Kachemak Bay transaction and no other and there may never
 be
 (5) any other and my concern is that this is not a - what Exxon
 (6) wants to argue is we have made it better for you
 (7) THE COURT Wait a minute wait a minute I don't
 (8) understand this If in fact - the defense is there was no
 (9) market right?
 (10) MR DIAMOND The defense is pre-spill there was no
 (11) market The effect of the spill has been to create a market
 (12) where none was before
 (13) THE COURT Why do you need subdivision B of that
 (14) argument if in fact there was no market?
 (15) MR DIAMOND Because we're dealing with the claim
 (16) that the effect of the spill - with Mr Stoll guffawing behind
 (17) my back it's annoying
 (18) THE COURT He wasn't guffawing but he was chuckling
 (19) and I couldn't see him do it but I recognize that distinctive
 (20) chuckle
 (21) MR DIAMOND I'm sorry I lost my train of thought
 (22) You were asking -
 (23) THE COURT I'm asking if there's no market - if you
 (24) have evidence there's no market why do you want to produce
 (25) evidence that there is?

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- (1) MR DIAMOND Because all plaintiffs experts
 (2) testified post spill we killed the market Post spill there is
 (3) no mark You're only letting us put on half the proof if we
 (4) only talk about half the spill - I'll let Mr Oppenheimer
 (5) finish my sentence
 (6) MR OPPENHEIMER I'm sorry I apologize Mr Diamond
 (7) can't do anything without being interrupted Both arguments
 (8) are complimentary in the sense from an economic point of view
 (9) there was no market before and for all practical purposes
 (10) there's probably no market afterwards except to the extent
 (11) that the purchase is facilitated by this new funding in the
 (12) market
 (13) THE COURT Whose business is it to raise that? The
 (14) plaintiffs right?
 (15) MR OPPENHEIMER No no Your Honor they have
 (16) raised as Mr Diamond says half the story because
 (17) Mr Mundy's natural lands are predicated upon his analysis for
 (18) the market for those including the value of those and one of
 (19) the sales he uses is precisely one of these sales
 (20) THE COURT Oh okay
 (21) MR OPPENHEIMER And the other point Your Honor is
 (22) I believe we're entitled to make both of the economic arguments
 (23) in any - in any - we have - we have really another point we
 (24) want to make about this which I think you've heard us make in
 (25) cross examination a little bit which is when the governments

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- (1) do when they have funds available to do that which in this
 (2) case is only because of the spill they don't - they are not
 (3) influenced the way it's been suggested they are by the oiling
 (4) They do in fact buy the two purchases we're talking about
 (5) They're post spill of oiled properties are two of the largest
 (6) spill - purchases that have ever taken place and we think
 (7) that that is not only evidence that we haven't killed off the
 (8) market but that as we've been suggesting as we'll be more
 (9) direct about in the direct examination the players in the
 (10) market the government agencies are Byers if they choose to
 (11) be even if there's oil and two of the largest purchases are
 (12) after the oil spill
 (13) MR PETUMENOS Very briefly the two purchases were
 (14) in areas that were - here Afognak and the Seldovia Native
 (15) Association well up into Cook Inlet They were many years
 (16) several years after the spill Mr Oppenheimer's point about
 (17) there being a stigma period in oiled property is therefore
 (18) appropriate to understand in context What they are saying is
 (19) there is evidence in the market from these two transactions
 (20) that governments buy oiled property under the scenario that we
 (21) have - first of all Afognak has not been valued by Mr Mundy
 (22) or anybody because Afognak's not in this case Seldovia has
 (23) not been valued by anyone because Seldovia is not in this case
 (24) and neither one of those properties, I think Dr Mundy examined
 (25) Seldovia for another client and there was some

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- (1) cross-examination here carried a persistence factor very far
 (2) and in Afognak it wouldn't have been under the theory
 because
 (3) of the amount of oiling Mr Shorett who did Kodiak took it
 (4) one year Afognak's right next door And so the notion that
 (5) Exxon is now providing the opportunity for us or that it's
 (6) good for us that - that our land is now more valuable they
 (7) spilled oil on it or that the government buys oiled land is
 (8) not supported by the offer of proof
 (9) THE COURT Let me tell you something Both of your
 (10) positions are in jeopardy here and to the extent you can argue
 (11) this more clearly the next time around I'd appreciate it
 (12) When do I have to decide this?
 (13) MR PETUMENOS That was a chuckle because I think
 (14) it's going on tomorrow
 (15) MR OPPENHEIMER Your Honor I think it will come up
 (16) with Mr Roddewig's testimony As the timing goes it's either
 (17) tomorrow or the day after Say thought because he comes up
 (18) after Mr Teal's cross-examination and I believe we have two
 (19) other - Purdham and Byers and then we have Mr Roddewig
 (20) THE COURT So then there's going to be no mention of
 (21) the Trustees fund or the purchase of this type of land no
 (22) mention of the two sales until I have an opportunity to explore
 (23) this out of the presence of the jury and I'm going to need an
 (24) offer of proof from the witness so that I know what the
 (25) witness proposes to say

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- (1) MR OPPENHEIMER Understood
 (2) MR STOLL Your Honor could I ask one question?
 (3) THE COURT As I see it my options are this One I
 (4) could preclude this - this evidence altogether Two I can
 (5) say - I can edit it in some way to suggest that to keep away
 (6) from the issue of settlement for one thing keep away from the
 (7) issue of Exxon being the payor or any other unduly prejudicial
 (8) item of the - of the testimony But I can't - I can't tell
 (9) you what I'm going to do at this point I only know that this
 (10) is a pretty thorny problem
 (11) MR STOLL Your Honor could I just ask one
 (12) question?
 (13) THE COURT Uh-huh
 (14) MR STOLL With respect to Mr Purdham since he's
 (15) the next witness after Teal can he testify as to anything or
 (16) simply the items that were brought up allegedly brought up by
 (17) the Bush maps? You know my understanding from what the
 (18) argument was today was that he - the reason for the late
 (19) designation was because of something that Mr Bush said and I
 (20) respectfully disagree with the Court but the Court's made the
 (21) ruling not trying to reargue that but in my - is he - is he
 (22) just going to testify on that subject?
 (23) THE COURT That's what they said isn't it?
 (24) MR STOLL Yeah Well that's true but is that what
 (25) the Court's ruling encompasses?

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- (1) THE COURT That's the setting in which I made the
 (2) ruling
 (3) MR STOLL Okay that's fine
 (4) THE COURT Any comment?
 (5) MR OPPENHEIMER Your Honor the - I believe we're
 (6) in sync here but the Bush report and the Bush maps are a
 (7) collection of all of the information about oiling and its
 (8) condition there and Mr Purdham though he will be a short
 (9) witness I'm told is - I mean he's going to address the
 (10) oiling situation that he saw in Kodlak and address the cleanup
 (11) insofar as it relates to the condition of oiling there and I
 (12) don't think that's inconsistent with what we're saying but I'd
 (13) like to be clear about that
 (14) THE COURT I heard you say that That's what I -
 (15) when you first described him I thought he was going to be
 (16) simply a fact witness that talked about what he saw
 (17) MR OPPENHEIMER I think that's correct I believe
 (18) that's correct
 (19) MR CLOUGH No he's not offering any expert opinions
 (20) or anything like that It's not that situation at all
 (21) MR STOLL Just going to testify about what he - do
 (22) you mind me asking here? He's just going to testify as to
 (23) what -
 (24) THE COURT What he observed
 (25) MR STOLL What he observed

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- (1) THE COURT Terms of where the oiling was what it was
 (2) like
 (3) MR CLOUGH And what was done about it exactly He
 (4) was the head of the Exxon cleanup He's going to talk about
 (5) what he did out there He was there from June to the end of
 (6) the year
 (7) THE COURT How long do you think direct will take?
 (8) MR CLOUGH Between 30 and 40 minutes
 (9) THE COURT Okay What can I say counsel If
 (10) something occurs to you that is not within the scope of the
 (11) ruling you're entitled to object
 (12) MR STOLL I understand
 (13) THE COURT Is there anything else? Would one of you
 (14) like to take these robes and put them on and do my injunctive
 (15) hearing that I'm 25 minutes late for?
 (16) MR DIAMOND I'm sure Mr Oppenheimer would be happy
 (17) to but I'm 25 minutes late for a meeting
 (18) THE COURT It's always nice to volunteer your
 (19) colleagues
 (20) MR CLOUGH If I could I would Your Honor but I'm
 (21) afraid I can't
 (22) THE COURT I doubt the robes will fit you Mr
 (23) Clough
 (24) THE CLERK This court stands in recess
 (25) (Recess at 3 55 p m)

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- (1) STATE OF ALASKA)
 (2) Reporter's Certificate
 (3) DISTRICT OF ALASKA)
 (4) I Joy S Brauer RPR a Registered Professional
 (5) Reporter and Notary Public
 (6) DO HERBY CERTIFY
 (7) That the foregoing transcript contains a true and
 (8) accurate transcription of my shorthand notes of all requested
 (9) matters held in the foregoing captioned case
 (10) Further that the transcript was prepared by me
 (11) or under my direction
 (12) DATED this day
 (13) of 1994
 (14) JOY S BRAUER RPR
 (15) Notary Public for Alaska
 (16) My Commission Expires 5-10-97

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