

***Exxon Valdez* Oil Spill**

**Federal Trial Transcript**

**Case Number A89-0095 civil**

**1994**

**Volume 34 - Volume 45**

Vol 34 6021  
 (1) IN THE UNITED STATES DISTRICT COURT  
 (2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No A89-0095 CIV (HRH)  
 (5) ) Anchorage Alaska  
 The EXXON VALDEZ ) Tuesday July 5 1994  
 (6) ) 8:00 a.m.  
 TRANSCRIPT OF PROCEEDINGS  
 (9) TRIAL BY JURY 38TH DAY  
 (10) BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE  
 VOLUME 34 Pages 6021 6024  
 Realtime Transcription

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 (1) PROCEEDINGS  
 ( ) (Jury in at 8 00)  
 (3) THE CLERK All rise  
 (4) (Call to Order of the Court)  
 (5) THE COURT Good morning ladies and gentlemen This  
 (6) is the continuation of trial in case A89 0095 civil in re the  
 (7) Exxon Valdez Could we have Dr Carlson back?  
 (8) Dr Carlson you understand you re still under oath?  
 (9) MR COOPER Your Honor a couple of housekeeping  
 (10) matters Mr Murtiashaw reminded me I had not offered DX8682  
 (11) and 8788 A That was in connection with Mr Brannon s  
 ( ) testimony  
 (13) (Exhibits 8682 and 8788 A offered)  
 (14) MR O NEILL What are they?  
 (15) We have no objection Judge  
 (16) THE COURT Defendant s 8682 and 8788 A are both  
 (17) admitted  
 (18) (Exhibits 8682 and 8788 A received)  
 (19) MR COOPER Thank you Your Honor  
 ( ) CONTINUED DIRECT EXAMINATION OF THOMAS CARLSON  
 (21) BY MR COOPER  
 (22) Q Good morning Mr Carlson How are you?  
 (23) A Good morning Doing fine  
 (24) Q Let s see we left off several days ago and you were  
 (25) talking about the - you had described the sonar counter and

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 (1) we did if I recall correctly looked at the video Do you  
 ( ) recall all of that?  
 (3) A Yes I do  
 (4) Q And I think where I wanted to go next was to ask you about  
 (5) the - if you could just describe briefly the history of the  
 (6) development of this sonar unit that s used to count these adult  
 (7) fish as they go upstream in the Kenai  
 (8) A Okay And I have an exhibit to help with that explanation  
 (9) Q I think you re referring to Exhibit 5581 Let me see if I  
 (10) can get that up on the monitor  
 (11) A Yeah that s it  
 (12) Q All right Can you explain then using that exhibit give  
 (13) us a little bit of background on the historical development of  
 (14) this sonar technology for the Kenai  
 (15) A Well the sonar counting in Alaska got its start in 1961  
 (16) when a group of people approached the Alaska state  
 (17) legislature Some of those people were ADF&G management  
 (18) biologists We were concerned about being able to more  
 (19) accurately enumerate escapement in the glacially occluded  
 (20) systems for the Kenai and the development actually takes  
 (21) place  
 ( ) in four major blocks And I m going to draw a couple lines up  
 ( ) here I m going to try to do it  
 ( ) Q That s not the easiest thing to write with  
 (24) A Now I can just focus on explaining it It started out -  
 (25) early on Bendix Aerospace which had a part of their business

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(1) relating to sonar development primarily for the Navy were  
 (2) contacted and asked to take a look at using sonar to count  
 (3) fish. They did that. The first stage of development was the  
 (4) development of a prototype that used a different kind of  
 (5) counting technique called Doppler where you looked at a  
 (6) change  
 (7) in frequency rather than the spikes that we talked about last  
 (8) Thursday.  
 (9) Q Was that the first prototype on the Kvichak River that you  
 (10) have there?  
 (11) A Yes that's where they deployed that and after one  
 (12) summer's experimentation and laboratory work they decided  
 (13) this  
 (14) wouldn't be a fruitful path to pursue so that ended the first  
 (15) phase of development the point here being that the  
 (16) development  
 (17) of sonar counting in Alaska has a very long history and has  
 (18) involved a number of development avenues and a lot of  
 (19) concentrated effort in making sure these things will perform  
 (20) their intended paths well.  
 (21) Q That then led to the second prototype on the Wood River?  
 (22) A That's correct. The second prototype what they did was  
 (23) took a number of transducers or a hydrophone I described  
 (24) that  
 (25) to you they are actually part of the sonar system that goes in  
 (26) the water. They are relatively small maybe something on the  
 (27) general diameter of a saucer for a tea cup for instance not  
 (28) very big. And the -- in the second development what they did  
 (29) was they took 30 of these transducers and they arranged them  
 (30) in

(1) in use on the Kenai since 1978 and then we move into the  
 (2) fourth phase.  
 (3) Q Now you're familiar with the fact -- in fact Mr. Menin  
 (4) who testified by deposition video deposition here on Thursday  
 (5) talked about this at some length but you're familiar with the  
 (6) fact that there were clear water tests that were done on this  
 (7) system?  
 (8) A Oh yes sir.  
 (9) Q And by clear water tests how do you understand those tests  
 (10) work?  
 (11) A In development of sonar systems although they are intended  
 (12) for use in areas where you can't see the fish you need to  
 (13) prove their performance in situations where you can see the  
 (14) fish so what happened is they took the sonar system and  
 (15) deployed it in situations where they could run what are called  
 (16) blind trials where they could have one person who would count  
 (17) the fish as they passed up the river and through the sonar  
 (18) beam visually -- and another person who would then perform  
 (19) those same counts using an oscilloscope and the output of the  
 (20) sonar counter.  
 (21) Q Is that what's referred to here on the monitor? There is a  
 (22) reference right under your number two wide scale application  
 (23) on Anvik Russian and Wood rivers?  
 (24) A Yes.  
 (25) Q And these units were deployed on these other rivers?

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(1) an array and the array looked sort of like a ladder laying  
 (2) down on its back and the transducers were oriented on the  
 (3) bracings or the steps of ladder would be so they pointed up  
 (4) into the water column. And then this array was laid on the  
 (5) bottom of the river and as the fish passed through the beams  
 (6) that were created by the transducers why then the fish were  
 (7) counted.  
 (8) Q Did they then figure out a better way to do it?  
 (9) A They certainly did. They deployed that system on the Kenai  
 (10) in 1978 and ran those until the '70s. They discovered problems  
 (11) with them. Maintenance was a tremendous headache because  
 (12) of  
 (13) the number of transducers and the amount of cabling involved.  
 (14) They also discovered that they were quite difficult for the  
 (15) technicians to operate and to compare the counts made during  
 (16) calibration with the sonar counts. Plus they determined that  
 (17) in some cases why then these counters would undercount. So  
 (18) what they did was they pursued -- ADF&G came back to Bendix  
 (19) and  
 (20) said would you try again.  
 (21) Q Is that what led to the side scan system?  
 (22) A Yes. The first prototype of that system was put together  
 (23) in 1974. That system was tested in two or three clear water  
 (24) systems the most notable being the Wood River. Finally it was  
 (25) tested on the Kenai intercalibrated with the multiple  
 (26) transducer system that was there and finally replaced the MTS  
 (27) as they called it and was the sonar -- or has been the sonar

(1) A Yes for limited periods of time when they were doing  
 (2) testing of them.  
 (3) Q Now you have indication here -- I guess you've taken us to  
 (4) 19 -- about '78 or so?  
 (5) A Actually we're looking at phase four which began about  
 (6) 1984.  
 (7) Q And what's happening in phase four here?  
 (8) A In phase four there is continued development focusing on  
 (9) the Kenai for this particular instant in time. They began to  
 (10) notice that on the north bank where bathymetry or the shape  
 (11) of the river channel is different than the south bank that the  
 (12) fish seem to be distributed a little bit more offshore and  
 (13) they were concerned that the fish were showing a behavioral  
 (14) avoidance to the substrate so beginning in 1984 they  
 (15) undertook  
 (16) a development of a counter that didn't use the substrate.  
 (17) If you remember that one picture I showed you of the parts  
 (18) they wanted to have one that didn't use that tube that was  
 (19) deployed on the bottom of the river and so they did that. In  
 (20) 1984 a prototype was developed and it was tested in 1985  
 (21) principally in 1986 on the Kenai River followed by deployment  
 (22) of a substrateless counter in 1987 on the north bank of the  
 (23) Kenai.  
 (24) Q I think I put on the monitor an exhibit that we used last  
 (25) week and that shows the substrate there?  
 (26) A That's correct. In some circumstances a response of the

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(1) fish to this substrate was observed in the data produced by the  
 (2) side scanner and other observations as well so they wanted to  
 (3) get away from that as much as they could  
 (4) Q Now so they have continued to improve and make  
 adjustments  
 (5) as necessary?  
 (6) A Yes that's correct  
 (7) Q Let's talk for a minute then about the factors here that  
 (8) affect the ability of sonar like this to count fish  
 (9) accurately  
 (10) A Okay  
 (11) Q Is there more than one factor that comes into play there?  
 (12) A Yeah there are several factors And to keep them  
 (13) organized in my mind I've always grouped them in three  
 (14) categories and that is the environment that the counter is  
 (15) going into the behavior of the fish and then what I call  
 (16) skillful operation of the sonar set Those are the three  
 (17) things that will determine how well the - well any acoustic  
 (18) instrument performance  
 (19) Q Now we've heard Mr Menin talk about the skill of the  
 (20) operators Is there any question in your mind that the ADF&G  
 (21) operators are quite skilled out there?  
 (22) A The ones I know best are the Kenai River people Yes they  
 (23) were very well skilled trained and supervised  
 (24) Q Now you talked about factors that affect the I can't  
 (25) remember the precise term that you used but the  
 environmental

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(1) factors?  
 (2) A That's correct  
 (3) Q Can you give us an example of what you mean by that?  
 (4) A Yeah I can The best way to approach it might be to look  
 (5) at a couple of typical situations and I believe that I have an  
 (6) exhibit to help explain that  
 (7) MR COOPER Let's see while I'm locating that one  
 (8) I'll ask that Exhibit 5581 the one that we just showed on  
 (9) historical development be admitted into evidence  
 (10) (Exhibit 5581 offered)  
 (11) MR O NEILL No objection  
 (12) THE COURT DX 5581 is admitted  
 (13) (Exhibit 5581 received)  
 (14) BY MR COOPER  
 (15) Q Remind me Dr Carlson which exhibit are you referring to?  
 (16) A I'd like to take a look at the two systems that have been  
 (17) discussed most so far and that's the Nushagak and the Kenai  
 (18) Q The sectors?  
 (19) A No their environmental similarities profiles of the  
 (20) rivers  
 (21) Q All right I think I know which one you're talking about  
 (22) now Let me show you 5665 A  
 (23) A Yeah that's the one  
 (24) Q Bingo I got it Go ahead  
 (25) A Thank you As you can see here this is the cross section

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(1) of the Nushagak and the Kenai and these are both locations  
 (2) where side scanners have been deployed One of the real  
 (3) important things about deployment of acoustic systems or any  
 (4) sampling device is that they tend to be quite site specific  
 (5) and you'll see examples of this with other kinds of sampling  
 (6) here later on  
 (7) But the Nushagak and the Kenai are quite different their  
 (8) physical characteristics The Nushagak is very much larger  
 (9) than the Kenai and it has a different what's called a  
 (10) hydrograph and that has to do with the way the pattern with  
 (11) which water actually flows down the river The Nushagak is  
 (12) characterized what we call a typical hydrograph and that is  
 (13) the flows - the total amount of water going down the river  
 (14) and the velocities in the river are highest in the spring of  
 (15) the year when the snow and ice has accumulated over the  
 winter  
 (16) melts And then through the spring and into the summer why  
 (17) then there is a decrease in the total volume of water that  
 (18) flows down the river and also a decrease in water velocities  
 (19) The Kenai on the other hand is fed by water melted from  
 (20) glaciers What this means is that the discharge - the volume  
 (21) of water going down the river the pattern of that is exactly  
 (22) the opposite In the spring it's the lowest and increases  
 (23) throughout the summer as the warmer days melt increasing  
 (24) amounts of glacial ice  
 (25) The net result of all this in terms of water velocities

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(1) which is one of the primary determinates of how fish are able  
 (2) to use a river system the water velocities mid channel in  
 (3) other words about 600 feet from shore in the Nushagak are  
 (4) lower than water velocities within 15 feet of the shore on the  
 (5) Kenai  
 (6) Q Maybe if you could use that light pen perhaps to mark  
 (7) where you mean there  
 (8) Now what you're looking at there that you're marking on is  
 (9) a cross section in the sense that you were looking directly on  
 (10) to the river here?  
 (11) A Right This is - you could cut a slice out of the river  
 (12) and actually look in to the river The surface of course is  
 (13) here and then this right here is a bottom profile  
 (14) Q And the N and the S on each end what do those signify?  
 (15) A Those would indicate the north and the south banks of the  
 (16) river  
 (17) Q So the north bank is -  
 (18) A Right The other term you might hear me say if I fall into  
 (19) it - in both cases the north bank is the right bank the south  
 (20) bank the left bank looking downstream in other words if you  
 (21) were in a boat going downstream  
 (22) Q We'll try to use north and south  
 (23) A All right  
 (24) Q So in the Nushagak River which is the one that Dr Rogers  
 (25) uses for his comparison and we'll come back to that later but

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(1) in the Nushagak River the water flow tends to be more rapid?  
 (2) A In the Nushagak no it tends to be - pardon me?  
 (3) Q I was going to say more in the spring of the year than in  
 (4) the summer?  
 (5) A That's correct  
 (6) Q And the fish are coming up when?  
 (7) A The fish come up in the summer They migrate up the  
 (8) Nushagak peaking in the - peaking in July  
 (9) Q So the effect of the - what does faster or slower current  
 (10) flow have to do with where the fish are?  
 (11) A Well it has a lot to do with it Work has been done  
 (12) research work has been done on sockeye salmon a couple  
 (13) researchers in Washington state Paulick and DeLacy to look at  
 (14) the ability of sockeye salmon to swim And what they found was  
 (15) that at water velocities at about four feet per second that  
 (16) sockeye salmon could only sustain swimming for a rather brief  
 (17) period of time a matter of approximately five minutes after  
 (18) which they would become exhausted  
 (19) Becoming exhausted if you're a fish is a very dangerous  
 (20) situation because exhausted means that the - going back to  
 (21) maybe the experience you all had when you exercise you  
 (22) know  
 (23) as you exercise your muscles get tired to the point where this  
 (24) actually start to hurt And what's happening the by products  
 (25) of muscular activity are building up in the tissues and the  
 (26) only way to get rid of them is to rest and let your body remove

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(1) A That's correct  
 (2) Q That's right so far And the sonar units then have to be  
 (3) able to see with their sonar beam far enough into the river to  
 (4) pick up wherever the fish happen to be in the river is that  
 (5) right?  
 (6) A Yeah The rule of sonar if the fish don't go through the  
 (7) beam they are not counted It's just that simple  
 (8) Q So if the river is one that has a very strong current going  
 (9) down the middle what does that mean in terms of where the fish  
 (10) are?  
 (11) A What that means is that the fish will be near the shore and  
 (12) near the bottom where water velocities are lower and where  
 (13) they can sustain swimming for the periods of time that it takes  
 (14) them to travel 75 a hundred miles whatever it might be up the  
 (15) river to their spawning sites  
 (16) Q So if you have a river with a rapid flow coming down the  
 (17) center of it then you want to deploy the sonar beam in -  
 (18) well the sonar beam along the banks is designed to pick up the  
 (19) fish that are close into the banks because that's where they  
 (20) are?  
 (21) A Yeah you look where the fish are and that's exactly  
 (22) right  
 (23) Q And on the Nushagak you've got indicated here sonar  
 (24) range Is that an accurate depiction or scale depiction of the  
 (25) range of the sonar on the Nushagak?

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(1) them  
 (2) The same thing happens with fish but because they're cold  
 (3) blooded the amount of time required for this to take place is  
 (4) measured in hours rather than minutes  
 (5) Q And they just can't stop swimming for an hour or so?  
 (6) A That's right Plus this means they consume a lot of the  
 (7) energy that should go into creating the eggs and the sperm and  
 (8) getting them to the spawning site  
 (9) Q So they will try to go where the flow is the least?  
 (10) A They will go where the flow is the least And other  
 (11) observations and work has been done that indicate that  
 (12) sockeye  
 (13) salmon like to have - in terms of performance they like to  
 (14) move about about three and a quarter and three and a half feet  
 (15) per second relative to the water  
 (16) What that means is that if you add the velocity of the  
 (17) water say that's two feet per second and the swimming speed  
 (18) of the fish say 1.5 feet per second you get that 3.5 feet  
 (19) per second And those are kind of rules of thumb or numbers  
 (20) that are good to keep in mind when you're trying to evaluate a  
 (21) site as being one suitable for or to understand better how  
 (22) fish are using a river  
 (23) Q And the - let's see if we can bring this back to the sonar  
 (24) now  
 (25) The fish like to go since they are swimming against the  
 (26) current where the current is the least?

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(1) A That's an accurate depiction of the sonar range on the  
 (2) Nushagak in the early years that had the program  
 (3) Q And those are the years that Dr. Rogers utilizes in making  
 (4) his comparison of the Nushagak sonar counts to Nushagak  
 (5) tower  
 (6) counts to come up with this undercount?  
 (7) A Those are some of them  
 (8) Q Well it looks from that scale that the sonar range isn't  
 (9) reaching very far out into the river?  
 (10) A No not at all In fact it's covering a small part of the  
 (11) total region where fish actually migrate up the Nushagak  
 (12) Q And in the Nushagak because that water flow is - well  
 (13) what is it about the water flow out here in the center part of  
 (14) the Nushagak that sheds light on whether the sonar in the  
 (15) Nushagak is picking up all the fish?  
 (16) A What it is is that the water velocities are such that fish  
 (17) can utilize a greater part of the cross section of the Nushagak  
 (18) than they can of the Kenai On the Kenai for instance during  
 (19) the adult outmigration period within just a very short  
 (20) distance from the shore water velocities can be as high as  
 (21) four feet per second and out in mid channel they can be five  
 (22) or six feet per second  
 (23) On the Nushagak you can go out to mid channel and still  
 (24) encounter water velocities that are in the neighborhood of two  
 (25) to three feet per second So what this means is given the  
 (26) range of the side scan sonar that was used in the early years

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(1) in the Nushagak it covered 60 feet of range but the fish  
 (2) actually could move up the river being offshore more than 60  
 (3) feet  
 (4) Q Now were there studies done on the Nushagak that  
 (5) demonstrated that phenomena?  
 (6) A Yes In fact - well the Nushagak program began in 1979  
 (7) under a legislative mandate and each and every year of that  
 (8) program up until recent the major concerns were the fact that  
 (9) fish appeared to be going around the end of the sonar beam  
 and  
 (10) were not being counted Undercounting on the Nushagak was  
 an  
 (11) acknowledged fact for years and years and years  
 (12) Q Now is it possible to tell by looking at the information  
 (13) that comes from the sonar whether or not there may be fish  
 (14) passing by outside the range of the sonar?  
 (15) A Did you say does it indicate?  
 (16) Q Is it possible to tell from the information you get from  
 (17) the sonar unit whether there may be fish out beyond the range  
 (18) of the sonar that aren't being counted?  
 (19) A Yeah The way that the vertical - the way that the  
 (20) distribution of fish along the way is displayed gives you a  
 (21) lot of information about what this likely behavior of the fish  
 (22) is when and whether there are fish that you're not counting  
 (23) that aren't passing through the beam  
 (24) MR COOPER Your Honor I'd ask that 5665 A be  
 (25) admitted

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(1) (Exhibit 5665 A offered)  
 (2) MR O NEILL No objection  
 (3) THE COURT 5665 is admitted  
 (4) (Exhibit 5665 A received)  
 (5) BY MR COOPER  
 (6) Q Let me know you 7096 A Dr Carlson  
 (7) Now is this an exhibit that will help you tell by looking  
 (8) at the information from the sonar counter whether there may be  
 (9) fish up above the sonar counter?  
 (10) A Yes  
 (11) Q Can you explain how?  
 (12) A Sure can Along the - if you remember the cross sections  
 (13) where we were looking down the river the north bank being on  
 (14) the right the south bank being on the left this is oriented  
 (15) in a similar way Where the shores - I'm going to mark where  
 (16) the shores will be  
 (17) That would be the location of the shore where the  
 (18) transducer is located and then as we move in this direction  
 (19) and this direction here we're looking from the shore into the  
 (20) river itself and these distances here are distances in feet  
 (21) And the way the side scanner works is it accumulates counts in  
 (22) what are called sectors and those are blocks that have a  
 (23) distance of five feet or correspond to a range of five feet  
 (24) And along this axis are percentages What this shows -  
 (25) Q Dr Carlson let me call back up the previous exhibit for a

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(1) moment  
 (2) In other words if you took on the Nushagak the sonar range  
 (3) here and you could actually - the information from the sonar  
 (4) counter will tell you in five feet increments this obviously  
 (5) isn't to scale how close to the sonar transducers the fish  
 (6) pass by?  
 (7) A Yeah that's exactly it  
 (8) Q Because it's able to tell the distances?  
 (9) A Right it's able to measure the distances  
 (10) Q So the chart you're showing is taking the north and south  
 (11) bank and you're going to show how much fish there are in each  
 (12) of these five foot sectors as you go out 60 feet?  
 (13) A Yes that's correct  
 (14) Q I guess that's the one I can't get 7096 A  
 (15) A Well looking at this what this indicates is that on the  
 (16) north bank in particular there is a trend of increasing  
 (17) numbers of fish as you move out towards the end of the sonar  
 (18) beam What ADF&G and others interpreted this to mean was  
 that  
 (19) there were fish - that there was the high likelihood there was  
 (20) fish beyond the range of the sonar beam that were not being  
 (21) counted and that therefore the sonars were undercounting the  
 (22) escapement  
 (23) Q Now we're talking about the Nushagak here not the Kenai?  
 (24) A We're talking about the Nushagak right And a similar  
 (25) trend but less strongly was also indicated for the south bank

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(1) Q So you figure given that trend for instance on the north  
 (2) bank because the farthest sector out is between 55 and 60  
 (3) feet?  
 (4) A That's correct  
 (5) Q So if you're getting a lot of fish out there and the  
 (6) numbers seem to be going up the logic is if the sonar could  
 (7) reach out even further you would have even more fish out  
 (8) there?  
 (9) A That's correct that's the logic  
 (10) Q So the basic lesson that you draw from these sector  
 (11) analyses is what on the Nushagak?  
 (12) A For the Nushagak the lesson that was drawn and really  
 (13) drove that program was that the sonar counters were missing  
 (14) some of the fish because they were swimming beyond the  
 range of  
 (15) the sonar I guess that's the basic bottom line  
 (16) Q And is that a reason why the as you understand it why the  
 (17) Nushagak counter not the Kenai but the Nushagak counter  
 would  
 (18) tend to show an undercount of fish compared to tower counts  
 (19) like Dr Rogers was talking about?  
 (20) A That's correct The Nushagak counts were not represented  
 (21) by ADF&G as being accurate estimates of escapement and  
 their  
 (22) annual reports in their program really amply demonstrate that  
 (23) Q Now Dr Rogers if you recall simply takes the Nushagak  
 (24) experience and says well it must apply to the Kenai as well  
 (25) as because if the Nushagak counter undercounts well the

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1 Kenai must undercount too Well you've looked at that claim  
 2 have you not?  
 3 A Yes I have The fundamental underlying assumption in Dr  
 4 Rogers' analysis is that fish behave the same Fish behave the  
 5 same particularly sockeye on the Nushagak as they do on the  
 6 Kenai  
 7 Q And you don't believe that's correct for the reasons that  
 8 you explained a moment ago about the flows?  
 9 A Yes that's one piece of evidence that's correct  
 10 Q And now we've seen by this sector analysis that in the  
 11 Nushagak the fish tend to -- there are still a lot of fish out  
 12 in the center of the river where the flows in the Nushagak  
 13 aren't all that high Have you looked to see what the  
 14 situation is on the Kenai?  
 15 A Yes I have  
 16 Q And we've got another chart comparable to -- this sector  
 17 analysis comparable to the Kenai  
 18 Now again this is the same concept We're looking at the --  
 19 for instance on the north the transducer would be down here  
 20 and then we're looking at each sector?  
 21 A That's correct In other words we're looking from the  
 22 transducer into the river uh huh  
 23 Q Here for instance this first bar means that ten percent  
 24 of the fish that were counted were within the first five feet?  
 25 A Five feet that's correct that's what that says

(1) (Exhibits 7096 A and 5594 A received)  
 (2) BY MR COOPER  
 (3) Q Dr Carlson were there any studies done recently or fairly  
 (4) recently on the Kenai to see if there were -- to use any other  
 (5) analysis to see if there were any great number of fish passing  
 (6) beyond the range of the sonar counter there so that they  
 (7) weren't being counted?  
 (8) A That's always been a concern When I spoke with Al Menin  
 (9) about that he indicated when they initially deployed the sonar  
 (10) counter that they spent time looking in other parts of the  
 (11) river to validate their assumption about the distribution of  
 (12) fish and then the Alaska Department of Fish & Game people  
 (13) who  
 (14) operate that site are really sensitive to that And in fact  
 (15) in the fourth phase of development of the counter for the --  
 (16) the sonar counter for the Kenai site they actually did do a  
 (17) special study in 1986 and then another study in 1992 that in  
 (18) part or wholly addressed that issue  
 (19) Q And in the 1992 one is that the one where they brought in  
 (20) another counter that could see farther out?  
 (21) A Yes that's correct In both of these they did that  
 (22) Q And just -- what was that piece of equipment?  
 (23) A The one in 1992?  
 (24) Q Yes  
 (25) A That was a -- it was actually another type of sonar system  
 (26) that had -- that was primarily designed for long range

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1 Q And forty some odd percent were between five and ten feet?  
 2 A That's correct  
 3 Q Now what do you -- what does this trend tell you?  
 4 A What that trend says is that the fish are near shore  
 5 oriented It doesn't show any evidence of fish being  
 6 distributed such that they would be passing around the end of  
 7 the ray as they move up the river system That's true of the  
 8 north bank  
 9 In the case of the south bank why then there are some  
 10 small counts as you look towards the end of the ray that  
 11 there may be some small amounts of fish that pass around the  
 12 end of that counter but that the majority of the fish do pass  
 13 through the counter near shore  
 14 Q So do you believe based upon that that the Kenai counter  
 15 is in fact picking up fish or the Kenai counter is not  
 16 undercounting based upon great masses of fish passing  
 17 beyond  
 18 the range of the sonar?  
 19 A Yeah The conclusion that I draw from this is that the  
 20 Kenai counter is not significantly undercounting because of  
 21 fish passing beyond the range of the sonar systems  
 22 MR COOPER Your Honor I would move to admit both  
 23 7096 A the sector analysis and 5594 A on the Kenai  
 24 (Exhibits 7096 A and 5594 A offered)  
 25 MR O NEILL No objection  
 THE COURT Both admitted

(1) applications  
 (2) Q So it was designed to see farther out?  
 (3) A It was designed to see farther out that's correct  
 (4) Q And as you understand it they deployed that unit there for  
 (5) a period during the run?  
 (6) A Yes during 1992  
 (7) Q There was an ADF&G report that reports on this?  
 (8) A That's correct a report by Bruce King  
 (9) Q And what basically did they find when they brought this  
 (10) other unit in to check to see if there were fish farther out  
 (11) beyond the range of the sonar?  
 (12) A What Bruce was interested in doing was estimating the  
 (13) number of fish that were migrating up the Kenai River beyond  
 (14) the range of the side scan sonar system so what he did was he  
 (15) deployed it -- he deployed this other kind of sonar so that he  
 (16) could see essentially most of the way across the Kenai River  
 (17) In fact he could see 80 meters across the river and the total  
 (18) river is only a little over a hundred meters About 110 meters  
 (19) wide  
 (20) Q So that's about 240 feet?  
 (21) A Yeah Or another way of saying it is he could see about 80  
 (22) percent of the way across the river  
 (23) Q And the sonar counter on the river the range as indicated  
 (24) on this exhibit we're looking at is about 60 feet?  
 (25) A That's correct

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- (1) Q So he is able to see farther out to determine if there is
- (2) fish passing beyond the range of this counter?
- (3) A Four times as far
- (4) Q What did he find?
- (5) A Well he actually made an estimate and that estimate was
- (6) that the number of fish passing beyond 20 meters was about 4
- (7) fish per minute
- (8) Q Let me show you DX4611 Is this a copy of the report by
- (9) Mr. King that deals with this situation?
- (10) A Yes it is
- (11) Q And in it he reports the findings that you were just
- (12) talking about?
- (13) A Yes that's correct
- (14) Q Show you on page 5 I've highlighted some language there
- (15) try and zoom in on that
- (16) In the highlighted part there few fish migrated more than
- (17) 20 M Is that 20 meters?
- (18) A That's correct that's a standard notation
- (19) Q That's basically about 60 feet the range of the existing
- (20) sonar unit?
- (21) A Yes
- (22) Q From the transducer maximum fish passage beyond 20
- (23) meters
- (24) or 60 feet approximately was less than 4 fish per minute
- (25) Now what does 4 fish per minute mean?
- (26) A 4 fish per minute if you start translating it into the

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- (1) number of fish that might have been missed if you multiply
- (2) it - what it means is let's say that 30 fish per hour were
- (3) not counted and so if you go ahead and you multiply that out
- (4) over the total outmigration even though the number here would
- (5) represent what's happening more at the peak rates why then
- (6) you
- (7) obtain an undercount estimate of something in the
- (8) neighborhood
- (9) of 20 000 fish
- (10) Q 20 000 for the whole run?
- (11) A For the whole run
- (12) Q And that's compared to - how much of an undercount does
- (13) Dr. Rogers say there was on this Kenai counter?
- (14) A His estimate was 1.1 million fish
- (15) Q Far away from 23 000?
- (16) A Yeah quite a difference
- (17) Q Now what does this then lead you to conclude about Dr
- (18) Rogers' claim of over a million missing fish?
- (19) A Well this and other evidence leads me to believe that
- (20) it - that it's not realistic incorrect
- (21) Q Now we've been talking about the question of whether or
- (22) not the counter might miss fish because the fish are too far
- (23) out beyond the beam of the sonar unit Let's shift gears for a
- (24) moment and let's talk about whether the counter might be
- (25) missing fish for another reason
- (26) A You mentioned this concept of closeness or proximity when
- (27) we were looking at the videotape the other day Can you just

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- (1) remind us what you were talking about there?
- (2) A Well what we're talking about there is the way sonar
- (3) systems work particularly the type of sonar system that the
- (4) Bendix side scanner falls under When fish are located close
- (5) together so that they are separated by less than three inches
- (6) in range and just leave it at that why then the echo that
- (7) would come back could not be distinguished at least by the
- (8) machine from an echo that contained one fish
- (9) So if you had two fish together why then they would be
- (10) counted as a single fish and - so that's how that works
- (11) Q So the issue here is whether or not the fish as they go
- (12) through are close enough together to be counted as a single
- (13) fish If you had two fish counted as a single fish you would
- (14) have some kind of an undercount?
- (15) A Right And the question is does this occur - or the
- (16) questions are does this occur and how frequently does it
- (17) occur
- (18) Q Now did you set out to try to answer those questions?
- (19) A Yes I did There was no information available in the
- (20) literature to help point the way so I undertook a study to
- (21) estimate that
- (22) Q Did this study start with some old photographs?
- (23) A It certainly did It started with photographs that were
- (24) taken in 1955 on the Wood River
- (25) Q How did you happen to know that there were photographs?

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- (1) A Well this project had been done by the man who was my
- (2) major professor for my master's work and was part of the
- (3) history of the development - development of escapement
- (4) estimation methods that are currently used throughout Alaska
- (5) Q Now what was it - what did the photograph show? What
- (6) were they photos of?
- (7) A They were photos of fish passing up the Wood River and
- (8) they - the way that they did the study during the - well
- (9) they did it over several -
- (10) Q Let me interrupt you Is the Wood River a clear river?
- (11) A The Wood River is clear at that location where the
- (12) photographs were taken which is just below lake Aleknagik
- (13) Q So unlike the Kenai you can look in the river and count
- (14) the fish?
- (15) A Yes
- (16) Q So you were saying how these photographs came to be
- (17) taken
- (18) A This was the same period of time where the tower counting
- (19) methodology what you've heard so much about and will be
- (20) hearing more about was developed same period of time One
- (21) of
- (22) the realizations was the tower counts would be labor intensive
- (23) so there was a method to try to find a less intensive method
- (24) and photography was found to be less intensive
- (25) So what they did during the 1955 escapement they took one
- (26) photograph every minute during the outmigration The
- (27) photographs were taken from a camera that had approximat 1v
- (28) the



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1 same perspective as an observer on a counting tower would  
 have  
 ( ) Q About how many photographs did they end up with as part of  
 (1) this study?  
 (2) A They ended up with over 25 000 photographs A lot of  
 (3) photographs  
 (4) Q A lot of photos of a lot of fish?  
 (5) A That s correct  
 (6) Q Now you ve brought a couple of these photographs with you  
 (7) here today or we ve got them set up here on the screen in  
 (8) order to show what these photos are like?  
 (9) A Yes that s right This is an example of one of the  
 (10) photographs and this is one of a higher density survey in  
 (11) other words larger number of fish within the photo frame  
 (12) Q Enlarge that there  
 (13) A Great Thank you  
 (14) Q Well I didn t do too good of a job enlarging it Maybe I  
 (15) can ask Rob to help me out  
 (16) These photos were taken from above?  
 (17) A Yes that s right looking into the water column So what  
 (18) we re seeing is the dorsal aspect You re looking at the fish  
 (19) from the top down  
 (20) Q And you ve brought this photo in because it shows -  
 (21) A Right When we initially looked at the photos it was  
 (22) clear that those situations where fish would be close enough  
 (23) together so that their echos would merge were not particularly

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(1) common and what we ended up doing for were situations such  
 as  
 (2) the one I ll circle here And in this particular case you can  
 (3) see that s two fish where one fish is slightly below the  
 (4) other The rest of the fish are oriented sort of like a  
 (5) lattice structure you could say where they are separated from  
 (6) each other  
 (7) MR COOPER If we look at 1799 Your Honor while Rob  
 (8) is zooming in on that for us I ll ask that 17 - well  
 (9) actually these are different frames of the same exhibit I ll  
 (10) go ahead and do the other one and then deal with them as a  
 (11) group  
 (12) BY MR COOPER  
 (13) Q Okay  
 (14) A The reason that I wanted to show this one is the idea of  
 (15) instantaneous density or number of fish per frame is  
 (16) extremely important as I tried to go through and explain the  
 (17) analysis that I performed And if you look at any particular  
 (18) instant of time during the escapement of fish into a river  
 (19) system you will find during those periods of time when passage  
 (20) rates are higher in other words more fish per hour are  
 (21) migrating why then you expect to see the instantaneous  
 density  
 (22) higher  
 (23) If you took more photographs you would suspect to see more  
 (24) fish When it s lower you would expect to see fewer fish  
 (25) within a frame or lower instantaneous density

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(1) Q What kind of passage rates are we talking about in these  
 (2) photographs more or less?  
 (3) A In these particular photographs this one out here would be  
 (4) on the lower end of the scale (indicating) and would be a  
 (5) passage rate on the order of say 900 fish per hour a  
 (6) thousand fish per hour And the first photograph I showed you  
 (7) those would be passage rates on a higher level up around say  
 (8) 6 000 fish per hour  
 (9) MR COOPER Your Honor I would ask to admit Exhibit  
 (10) 1799 DX1799 consisting of those two photographs  
 (11) (Exhibit DX1799 offered)  
 (12) MR O NEILL No objection  
 (13) THE COURT 1799 two photographs is admitted  
 (14) (Exhibit DX1799 received)  
 (15) BY MR COOPER  
 (16) Q Now you have another chart Dr Carlson to help explain  
 (17) then what you did after you looked at these multitude of  
 (18) photographs?  
 (19) A That s correct  
 (20) Q This is DX8752 Shall we start on the left hand side  
 (21) there?  
 (22) A Okay What the left hand side shows is the I guess the -  
 (23) one of the primary conclusions or primary results of the photo  
 (24) study  
 (25) What I needed was I needed a relationship between the

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(1) number of fish likely not counted and the passage rate the  
 (2) number of fish passing within an increment of time and that s  
 (3) what this left hand figure shows  
 (4) Q So we have on the bottom passage rate of fish per hour?  
 (5) A That s correct for those passage rates characteristic of  
 (6) the Kenai  
 (7) Q So the one I circled indicated on this horizontal axis  
 (8) this is 1 000 fish per hour?  
 (9) A That s correct  
 (10) Q And then we have here the percent undercount per hour?  
 (11) A Percent undercount  
 (12) Q Based upon the number of fish that were too close for the  
 (13) sonar to distinguish?  
 (14) A That s correct  
 (15) Q So at a passage rate of 1 000 fish per hour your analysis  
 (16) of the photos would indicate there was a percentage  
 undercount  
 (17) of - that s too high I guess but about what?  
 (18) A On the order of about one percent About there  
 (19) Q If you go all the way out to this higher passage rate  
 (20) 6 000 fish per hour that was the highest one indicated in the  
 (21) photographs?  
 (22) A No The highest in the photographs was around almost  
 (23) 10 000 fish per hour This is the highest for the Kenai  
 (24) system  
 (25) Q So that s as high -

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1 That is as high as the Kenai gets around 6 000 per hour  
 2 That is the reason that portion is presented here  
 3 Q You get a percentage undercount at that highest rate on the  
 4 Kenai by comparing these Wood River photographs of about  
 5 what?  
 6 A On the order of about four percent or so  
 7 Q Now on the right side that is the highest passage rate?  
 8 A That is correct  
 9 Q And then the next question becomes how often do you get  
 10 the high passage rate?  
 11 A That is exactly right For instance on the Kenai River  
 12 the escapement of fish is characterized by -- well let me back  
 13 up a little bit  
 14 The escapement is measured in hour long chunks in the same  
 15 way that estimation of fish passage from tower counts is  
 16 estimated in hour long chunks and those chunks are the  
 17 number  
 18 of fish that pass within an hour And during the period of an  
 19 escapement why then there are a lot of different passage  
 20 rates Some low some high  
 21 Q Now this is -- on the right graph here the graph on the  
 22 right hand side we've got 1989 ADF&G AMR and this is  
 23 information taken from ADF&G records?  
 24 A That is correct That is from their 1989 escapement report  
 25 uh huh  
 26 Q And you have here passage rate fish per hour Let's just  
 27 take the one at 3 000 fish per hour here Now does this graph

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1 passage rates and multiply them by the percentage of  
 2 undercount  
 3 at the passage rate and sum over all of those 2 000 hours  
 4 why then you obtain an estimate of the number of fish  
 5 undercounted due to what we call proximity or being close  
 6 together in space  
 7 Q Is that the number I circled 23 300?  
 8 A Yes That is what it turned out to be in 1989 Other years  
 9 it would be different  
 10 Q What was the number that Dr Rogers and the plaintiffs  
 11 claim?  
 12 A His estimate was 1 1 million fish  
 13 Q In percentage terms what is his estimate Dr Rogers by  
 14 what percentage was the counter undercounting?  
 15 A On the order of 60 percent something like that  
 16 Q And your analysis of these photos and what you've  
 17 described  
 18 showed an undercount because of this proximity factor of about  
 19 what?  
 20 A About 1 46 percent  
 21 Q So as far as the Kenai counter according to your analysis  
 22 was not significantly undercounting because of this proximity  
 23 factor?  
 24 A Yeah Undercounting because of proximity does not appear  
 25 to be a factor  
 26 Q If you added together the undercount because of this  
 27 closeness proximity factor along with the undercount that may

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1 then tell you for how many hours they achieved that high a  
 2 passage rate?  
 3 A Yes That says that the passage rate of 3 00 fish per hour  
 4 occurred for approximately 200 hours over the total  
 5 escapement  
 6 Q Total number of escapement hours was about how much?  
 7 A I don't recall exactly but we can add these up here and  
 8 it is on the order of a couple thousand  
 9 Q I guess most of the fish then are at this much lower  
 10 passage rate?  
 11 A Yeah the majority of the time In fact I think that  
 12 represents about 75 percent or 80 percent of the total hours  
 13 Plus the rates up the Kenai were a thousand fish per hour or  
 14 less  
 15 Q What then does that tell you when you combine it with the  
 16 photographs about what kind of an undercount there may have  
 17 been in 1989 on the Kenai River as a result of the fish being  
 18 too close together?  
 19 A It tells you a couple things It tells you that --  
 20 relating back to the photographs it tells you if you would  
 21 look at the Kenai at any instant of time that the number of  
 22 fish you would see in an area of photo frame would be small on  
 23 the order of maybe one or two and there would be a lot of  
 24 times when you would look there and you wouldn't see any fish  
 25 at all So when you go ahead and you take those hours and

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1 exist because of the fish being outside the range of the sonar  
 2 what do you get for a total undercount?  
 3 A Those are independent and it is appropriate to add them and  
 4 you get an undercount of 3 percent on that order  
 5 Q As opposed to the 60 percent approximately that Dr  
 6 Rogers claims?  
 7 A That is correct  
 8 Q Now did you also look at some videotapes of fish passing  
 9 in a clear water system or to get a sense of this closeness  
 10 concept?  
 11 A Yeah I looked at that and the answer is yes  
 12 Q Where did you get the videotape?  
 13 A The videotape was one that Dr Rogers had made on the  
 14 Wood  
 15 River fairly recently  
 16 Q This is the same Dr Rogers that testified for the  
 17 plaintiffs here?  
 18 A Yeah Right  
 19 Q Does that videotape shed any light on this question of how  
 20 frequently these fish are so close together that they might not  
 21 be counted?  
 22 A What it does is it introduces some dynamics You can  
 23 actually see the fish move and how they tend to retain their  
 24 position relative to one another as they move up the river  
 25 bank The important thing being it isn't like bumper cars out  
 there These fish aren't willy nilly crashing into each

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(1) other There are a lot of reasons for that You know one is  
 (2) that it would damage them The other is fish have well adapted  
 (3) sensory systems to avoid that kind of situation because it is  
 (4) dangerous to them  
 (5) Q So as we show this videotape what should the jurors be  
 (6) looking for?  
 (7) A The thing to look for - it's fairly short you may even  
 (8) want to look at it twice There are a couple things to look  
 (9) for In the first block there is a man standing in the river  
 (10) holding a meter stick a stick that is a little over three feet  
 (11) long and this will help you gain some scale in terms of the  
 (12) distance of the fish offshore the ban that they are moving in  
 (13) some of the spacial concerns  
 (14) And then the other thing to look at is just focus on how  
 (15) the fish respond to each other their placement relative to  
 (16) each other as they move up the bank  
 (17) Q What river is this again the Wood River?  
 (18) A This is the Wood River at the counting tower just below  
 (19) Aleknagik  
 (20) Q And the Wood River is where?  
 (21) A In Bristol Bay  
 (22) Q About what kind of passage rates are we going to be seeing?  
 (23) A These passage rates are in the 4 to 5 000 fish per hour  
 (24) range  
 (25) Q So these are passage rates that are not very frequently

(1) (Exhibit 398 received)  
 (2) THE WITNESS I don't think that's the right one  
 (3) BY MR COOPER  
 (4) Q That's not the right one Can you cancel that one? Let's  
 (5) try another Having built up all that suspense I'd be crushed  
 (6) if we didn't have it  
 (7) A I should say  
 (8) Q Could you try pulling up PX398?  
 (9) (Videotape played)  
 (10) Q You might want to come down and point out the fish  
 (11) A Fish will be coming from right to left you can see right  
 (12) here There you see another group coming through on your  
 (13) monitor here See as they move down through here And then  
 (14) here comes another group of fish Again see as one fish  
 (15) moves another fish tends to move They try to maintain  
 (16) position relative to each other They do a lot of station  
 (17) keeping when they move in groups like that  
 (18) And again you can see the spacing of the fish Fish are  
 (19) actually flaring here There is probably somebody over in the  
 (20) bank In clear water systems that's often the case the fish  
 (21) are busy observing what's around them Waiting for a bear to  
 (22) sneak up and munch on them is probably what they are worried  
 (23) about Here again you can see -  
 (24) Q Are you seeing many in there that are so close that they  
 (25) would be undercounted or missed?

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(1) seen - higher than generally seen in the Kenai?  
 (2) A Yes but more common on the Wood River The reason  
 (3) being  
 (4) on the Wood River the fish tend to favor one bank so even  
 (5) though you may have this same number of fish in total moving  
 (6) up at any particular instant in time you may have say two  
 (7) times the number of fish within a particular volume of water  
 (8) Q Let's roll it -  
 (9) THE COURT Before do you that do you want 8752  
 (10) admitted?  
 (11) (Exhibit 8752 offered)  
 (12) MR COOPER Yes  
 (13) MR O NEILL No objection  
 (14) THE COURT DX8752 -  
 (15) (Exhibit DX8752 received)  
 (16) MR O NEILL We're going to play the videotape we  
 (17) probably should offer the videotape  
 (18) MR COOPER Be happy to  
 (19) (Exhibit 398 offered)  
 (20) MR O NEILL No objection  
 (21) THE COURT What number?  
 (22) MR COOPER PX398 Actually I believe it's  
 (23) preadmitted  
 (24) MR O NEILL No objection  
 (25) THE COURT It's either preadmitted or admitted now  
 (26) without objection

(1) A I'm sure there is a few in there but they are very  
 (2) difficult to see because you don't see this clumping together  
 (3) of fish  
 (4) Q If you wanted to watch one of those what lure would you  
 (5) use?  
 (6) A Probably gillnet would be my choice  
 (7) THE COURT Excuse me before we go on was that  
 (8) really 398 or some other exhibit?  
 (9) MR COOPER PX398 was the right number Apparently I  
 (10) had the wrong Barco number  
 (11) BY MR COOPER  
 (12) Q Dr Carlson let me move to a little bit different subject  
 (13) here on this whole question of the Kenai If I could get the  
 (14) posterboard Exhibit DX9307 Do you have that?  
 (15) Now you've seen this before?  
 (16) A Yes I have  
 (17) Q This is this curvilinear relationship that Dr Rogers used  
 (18) between the Nushagak counts from the tower and the sonar  
 (19) counts  
 (20) to come to his undercount?  
 (21) A Yes that's correct  
 (22) Q Maybe we should take a moment for you to explain how this  
 (23) works On the bottom we have sonar counts of the Nushagak  
 (24) counter?  
 (25) A That's correct the apportioned counts  
 (26) Q And on the left we have tower counts?

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(1) A Tower and aerial escapement added together  
 (2) Q Under his theory well he plotted these various annual  
 (3) counts both tower aerial and sonar?  
 (4) A Yeah He looked at a period of time from 1980 through - I  
 (5) think it was 1988 looked at an eight year block of time  
 (6) Q And his claim that the counter progressively undercounted  
 (7) as the fish number increased is based upon the line that he  
 (8) draws to best fit these various points?  
 (9) A Yes that's correct  
 (10) Q Now have you looked at information concerning what the  
 (11) data here that forms a basis for this curvilinear relationship  
 (12) these data points?  
 (13) A Yes I have I've looked at them all  
 (14) Q Do you believe that it's appropriate to use those all  
 (15) those different data points for that purpose?  
 (16) A No There is really a mixture quite a mixture of  
 (17) different kinds of data on that board  
 (18) Q Can you explain what the mixture is and why you think it's  
 (19) not appropriate to use those?  
 (20) A Well the mixture goes back to the Nushagak project where  
 (21) it started and where it ended One of the primary or  
 (22) fundamental assumptions underlying this kind of analysis is  
 (23) that there is consistency in the measures In other words  
 (24) that the sonar counts that were made in 1979 had the same  
 (25) basis  
 (26) as the sonar counts made in 19 - or 1980 had the same basis

(1) A Very very different  
 (2) Q Some of these data points he used were with a sonar system  
 (3) that only reached so far out into the river other years were  
 (4) different sonar systems that reached different lengths into the  
 (5) river?  
 (6) A Yeah They were constantly trying to grapple with the  
 (7) undercounting problem They acknowledged it's a problem  
 (8) There was no hiding that problem It would be impossible to  
 (9) hide in the data  
 (10) Q This is on the Nushagak?  
 (11) A Yes So they were continually trying to improve that  
 (12) system  
 (13) Q So some of this relationship that he puts between these  
 (14) counts is simply a factor of the phenomena that they use  
 (15) different kinds of sonar counters in different years?  
 (16) A That's one factor There are others but what it really  
 (17) says is that they were using very different measurement tools  
 (18) The fact that they were classified under sonar almost is not  
 (19) important They were very different tools  
 (20) Q And what about the pink points what do these pink points  
 (21) refer to pink salmon?  
 (22) A Yeah they refer to pink salmon  
 (23) Q Now we've been talking about sockeye and what Dr Rogers  
 (24) was talking about was sockeye in the Kenai River and here he's  
 (25) using some pink salmon counts?

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(1) as the counts made in 1988  
 (2) Q Otherwise you're comparing apples and oranges?  
 (3) A (With) you're comparing apples and oranges To give  
 (4) an idea of the range of things that happened here and almost  
 (5) every year during that period of time there were significant  
 (6) changes in the way that the sonars were actually deployed and  
 (7) used on the Nushagak In 1980 for instance they had two  
 (8) counters two substrate counters the kind - the original kind  
 (9) of counter  
 (10) However by 1986 they had actually changed their - going  
 (11) back in 1980 that meant that they were looking at roughly  
 (12) something on the order of 20 meters or 60 feet of the river on  
 (13) either bank By 1986 because they were trying to cope with  
 (14) the way the fish actually moved up the Kenai they had very  
 (15) very significantly changed their deployment methodology So  
 (16) that on one bank I believe it was the north bank they  
 (17) actually used two sonars one looking at near shore another in  
 (18) deeper water looking at a greater distance offshore And on  
 (19) the south bank they had actually built a weir out almost 20  
 (20) meters into the water and then were looking at a range beyond  
 (21) that  
 (22) So what that meant is by 1986 1987 they were actually  
 (23) looking at a section of the Nushagak almost equal in length to  
 (24) the total width of the Kenai River  
 (25) Q So in other words -

(1) A That's correct  
 (2) Q Is it appropriate to use the pink salmon counts when you're  
 (3) dealing with sockeye?  
 (4) A I don't believe so and in this analysis there are two  
 (5) reasons for not believing so The 1980 data point in their  
 (6) annual report ADF&G mentioned that they felt that the pink  
 (7) salmon counts should only be an index because of offshore  
 (8) distribution of pink salmon This is probably due to the  
 (9) discharge characteristics of the Nushagak River where the  
 (10) hydrograph is continuously decreasing into the summer The  
 (11) pinks tend to come in later than the sockeyes so generally  
 (12) speaking under that trend in the hydrograph they would be  
 (13) entering the river when water velocities would be lower than  
 (14) they were for the bulk of the sockeye  
 (15) Q So that would tend to put them out in the middle and beyond  
 (16) the reach of the sonar unit?  
 (17) A It would make more of the river cross section available to  
 (18) them which would include the areas offshore beyond the range  
 (19) of the sonar site And those data points up there for '80  
 (20) '82 and '84 and throughout that period of time there were  
 (21) continuous changes in the Nushagak sonar set up In addition  
 (22) in each and every one of those years the project reports  
 (23) document offshore distribution and undercounting  
 (24) Q So taking those factors into account do you have an  
 (25) opinion as to whether the information depicted on this chart of

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Dr Rogers is reliable and can accurately reflect whatever undercounting may be going on?

1 A When I read through his analysis there was no indication that at least in his discussion that he was aware of or had taken into consideration the Nushagak program how it actually worked what was actually going on there nor was there any intent to standardize this data to make apples and oranges all into apples or as close as you could

2 So for that reason above and beyond all others why then I would reject this analysis as being useful And in addition I think the foundation of the analysis being based on the behavior of the fish being the same in the Nushagak and the Kenai would be yet again an overwhelming reason for rejecting this analysis

3 Q All right Dr Carlson I want to change gears completely now We've been talking about fish going - adult fish going up the rivers up the Kenai?

4 A Right

5 Q And we've been dealing with the claim of the plaintiffs that in 1989 ADF&G undercounted by some 60 percent the number of fish that went up the Kenai River Now do you understand that the plaintiffs have another claim respecting this Kenai system?

6 A Yes I do

7 Q And sockeye?

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8 A That's correct

9 Q And that claim basically as you understand it is that because the fishery was closed in '89 due to the oil spill too many fish got up the river in '89?

10 A Yes that's correct The idea of overescapement uh huh

11 Q And that those fish then that got up there in '89 did something - there were so many fish that their habitat couldn't support them for whatever reason and consequently when those fish are supposed to start coming back this summer

12 that there aren't going to be many of them that's the plaintiffs claim the gist of it?

13 A That's the gist of it as I understand it uh huh

14 Q So here we're dealing with not what happened in 1989 in terms of whether the plaintiffs could have caught more fish but whether there is going to be any fish coming back to be caught starting this summer and next year?

15 A That's correct uh huh

16 Q Now you've looked at this claim of the plaintiffs?

17 A Yes I have quite a little bit

18 Q All right What I want to do is shift to that claim now

19 A So we're through with adults and onto fry and smolt?

20 Q Through with adults and onto fry and smolt

21 Now let's see let's just maybe start by talking about this escapement in excess of the goal that occurred in 1989 and some other years

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22 A Okay

23 Q If I could get Exhibit 7113

24 MR COOPER Can you bring up the first page of that please?

25 BY MR COOPER

26 Q Now can you tell us - well let's talk about this for a minute

27 The plaintiffs claim as you understand it is that the - is based upon the fact that a number of fish in excess of the goal escaped into the rivers in 1989 because of the fishery closure?

28 A That's correct fish in excess of the high end of the escapement goal range

29 Q Maybe you can explain this On this chart is there an indication of the escapement goal range?

30 A Yes that's the green bar there and it shows the lower and the upper bound of that escapement goal range and it shows how

31 it changed over time The bottom of the graph there those are years 1978 through 1987 On the left hand side is escapement the number of fish that actually move up the - moved up the

32 Kenai River And you can see through the 70s and into the 80s the escapement goal range was less than 500 000 fish four to 500 000 fish

33 And then in 1987 it was increased so that it went as high as 700 000 fish

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34 Q So we've got the escapement on the left hand side here of the vertical axis and what we're talking about is fish that escaped the fishery and go up into the river and spawn?

35 A Right those would be the fish that went passed the sonar site and it does include some fish that were later caught in the sport fishery in the Russian River what have you so there are a few that are there

36 Q Now looks - if I look at this correctly in 1987 they had a pretty big escapement?

37 A They had - they had a very high escapement roughly 1 6 million fish

38 Q Now that was two years before the oil spill?

39 A That was two years before the oil spill in '89 that's correct

40 Q And certainly as far as you're aware the oil spill didn't have anything to do with that escapement did it?

41 A No it didn't

42 MR COOPER If we could have the next page

43 BY MR COOPER

44 Q Let's build on this for a little bit This is the same graph except we've added 1988?

45 A That's correct we've added one additional year

46 Q Now 1988 again the next year before the oil spill even happened?

47 A Yes that's correct

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(1) Q And they had another escapement that was in excess of the  
 (2) ADF&G escapement goal?  
 (3) A That's correct. In that year that had an escapement of  
 (4) approximately a million fish which was 300,000 above the -- in  
 (5) excess of their escapement goal range the upper end of it.  
 (6) Q That's the increment above the green bar there?  
 (7) A That's correct.  
 (8) Q Then we have the oil spill in 1989.  
 (9) MR COOPER: If we could have the next page.  
 (10) BY MR COOPER:  
 (11) Q And that's this year here --  
 (12) MR COOPER: Sorry Rob, did it again.  
 (13) THE WITNESS: Yeah, that's the year of the oil spill  
 (14) and the escapement that year was approximately the same or  
 (15) very nearly the same as that in 1987, two years before.  
 (16) BY MR COOPER:  
 (17) Q So there were three years of escapement but only --  
 (18) escapement in excess of the ADF&G goal but only one year of  
 (19) that was attributable to the oil spill?  
 (20) A That's correct. Only one year -- well, 1989, that's the  
 (21) year that the spill occurred.  
 (22) MR COOPER: Your Honor, I would ask to admit Exhibit  
 (23) 7113, this series of graphs.  
 (24) (Exhibit 7113 offered).  
 (25) MR O NEILL: No objection.

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(1) Q Have you then based upon that assumption made a  
 (2) calculation as to what percentage of the total escapement for  
 (3) these three years of high escapements was due to the oil spill?  
 (4) A Yes, I was interested -- when you look at the -- what's  
 (5) happening in the lake system, why then what's important is  
 (6) the number of juvenile fish -- you know, what the number of  
 (7) juvenile fish in the lake system was for particular periods of  
 (8) time and in addition you know the total number that  
 (9) occurred over the period when potential impacts were the  
 (10) greatest. And I did do that calculation to try to put in some  
 (11) context almost 500,000 fish that were. I guess you could say  
 (12) due to the oil spill.  
 (13) MR COOPER: Put up DX1881 A.  
 (14) BY MR COOPER:  
 (15) Q Does this demonstrate that calculation?  
 (16) A Yes, that demonstrates that calculation and what it turns  
 (17) out to be is if you sum the escapement over that three year  
 (18) period the 500,000 a little bit less than that, that three  
 (19) escapement that occurred in 1989, it was above and beyond  
 (20) what  
 (21) would have been expected given the typical management  
 (22) practice.  
 (23) for escapements. It would have been about ten percent of the  
 (24) total number of fish.  
 (25) Q So this portion of the '89 escapement which we're assuming  
 (26) is attributable to the oil spill is about ten percent of all  
 (27) of that three year escapement that occurred in '87, '88 and

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(1) THE COURT: Defendants Exhibit 7113 is admitted.  
 (2) (Exhibit 7113 received).  
 (3) BY MR COOPER:  
 (4) Q Let me see. I know that -- were you in court the other day  
 (5) when Dr. Mundy testified that he had not made any effort to  
 (6) calculate how much of this 1989 overescapement was  
 (7) attributable  
 (8) to the oil spill as opposed to other factors?  
 (9) A No, I wasn't there at that time.  
 (10) Q Now, you haven't made any effort, have you, to figure out  
 (11) how much of the escapement in 1989 would have occurred  
 (12) anyway  
 (13) if there hadn't been an oil spill?  
 (14) A I was curious about that and actually relied on some work  
 (15) done by another scientist.  
 (16) Q Now, we're going to be hearing probably later today from  
 (17) Dr. Deriso, who is going to address that subject. He's the  
 (18) other scientist you were talking about?  
 (19) A Yes, he's the other scientist.  
 (20) Q But what I would like to do is just ask you to assume that  
 (21) the number that Dr. Deriso in his analysis comes up with is  
 (22) about 475,000 fish. Can you do that?  
 (23) A I can do that.  
 (24) Q So that of this 1989 escapement of a million --  
 (25) approximately a million six, only about 475,000, assume was  
 (26) attributable to the oil spill. All right?  
 (27) A Yeah, okay.

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(1) '89?  
 (2) A Yes, that's correct.  
 (3) Q Now, incidentally, after the 1989, was there further  
 (4) escapement in excess of the goal into the future?  
 (5) A Yeah, there was an additional year -- there were additional  
 (6) years when the escapements above the upper end of the range  
 (7) occurred.  
 (8) MR COOPER: Show DX8811, please.  
 (9) I guess before I do that, I should ask to admit DX1881 A  
 (10) (Exhibit 1881 A offered).  
 (11) MR O NEILL: No objection.  
 (12) THE COURT: DX1881 A is admitted.  
 (13) (Exhibit 1881 A received).  
 (14) BY MR COOPER:  
 (15) Q Maybe you could use your light pen, Dr. Carlson, and show  
 (16) us these other two escapements in excess of the goal that have  
 (17) occurred since 1989.  
 (18) A 1992 and again in 1993, and the 1992 escapement very  
 (19) much  
 (20) like the 1948, and then the 1993 was less in magnitude but  
 (21) still above the high end of the escapement goal range.  
 (22) Q Now, let's maybe try to translate some of this into what  
 (23) may be going on in the lakes. If I recall correctly, Dr. Mundy  
 (24) testified and I'll just try to characterize it very generally  
 (25) because I don't want to mischaracterize it, but testified  
 (26) generally that the amount of the high escapement in 1989

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basically led to so many young fish being in the lake rearing systems that some sort of starvation problem probably happened. There wasn't enough food and consequently the fish basically all died in the lake system and that's why there won't be any more coming back in starting this summer. That's your basic understanding?

A Yeah that's my basic understanding. That's essentially a conclusion drawn from a study.

Q Now have you looked to see if you agree with that particular scenario?

A What I've done is I've posed a question under the assumption that the smolt estimates are reliable looking at other factors that - looking at those factors that might have contributed to a situation where the smolt outmigration would have been depressed.

Q You referenced the smolt outmigration and we probably ought to stop there for a moment and explain what you're talking about there.

A How do we know whether or not fish are going to come back this year or next year? The plaintiffs claim they are not. What basically is the information that we're all looking at to see if that's going to happen?

A Well historically what you have is you have the performance of the population over a long period of time. Forecasting fish runs is sort of black art. I guess is the way

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(1) claim that the fish aren't going to be coming back this year (2) and next year are the smolt counts that ADF&G made?

(3) A Yeah that's correct

(4) Q I know you've got some disagreements with those smolt (5) counts but is one of the things you tried to look at is if (6) indeed the increment of escapement in 1949 that may have been (7) caused by the oil spill could somehow have been responsible (8) for (9) the collapse that the plaintiffs believe is going to occur (10) starting this year?

(11) A What I was curious about was whether or not there was (12) evidence that the previous high escapements impacted the (13) freshwater system

(14) Q In other words you were curious to see whether there was (15) evidence that these '88 and '87 excess escapements might (16) have (17) done the damage that the plaintiffs claim was done by the '89 (18) escapement?

(19) A That's correct

(20) Q What did you look at in order to try to assess that (21) question?

(22) A Well I looked at a number of different things that - most (23) important being the relationship between the number of (24) spawners (25) and the number of smolt produced and I also considered the (26) life history of the fish and the way that the different brood (27) years actually utilized the freshwater environment

(28) Q Let me bring up another chart that I think will help you

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I think about it and it's a very difficult thing to do under the best of circumstances but typically in the Kenai system that's really what they have had.

What happened last year you know and the previous years and the amount of escapement for instance in intervening years. Recently they have had additional information and that's been the number of smolt or the number of juvenile fish leaving the lake system migrating down the river and actually entering the marine environment.

Q When do they start trying to count the smolt making estimates based on the number of smolt coming out of the river?

A They started that program in 1989 the year of the spill.

Q The year of the spill?

A Uh huh.

Q And they have got some methods that we're going to talk about in more detail but they have some methodology where they basically try to capture some of the smolt that are coming out of the lake and migrating down out into the ocean?

A That's correct they try to sample these smolts.

Q And you're not going to have fish coming back in future years if you don't have smolt going out in previous years?

A Yeah I guess you could say that's the underpinning or foundation for concern. If you don't see smolts going out you need to be concerned about adults coming back.

Q And as you understand it the basis for the plaintiffs

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(1) explain that (2) MR COOPER First Your Honor ask that DX8811 be (3) admitted (4) (Exhibit DX8811 offered) (5) MR O NEILL No objection (6) THE COURT DX8811 admitted (7) (Exhibit DX8811 received) (8) BY MR COOPER (9) Q Now Dr Carlson does this chart reflect some of this (10) information that you were describing that you looked at? (11) A Yes this chart shows the 1987 and 1988 brood year. It (12) shows the number of spawners that - explain this a little bit (13) the color coding helps. As you can see - (14) Q Might want to use the light pen there and maybe explain (15) that first column? (16) THE COURT What exhibit is this please? (17) MR COOPER DX4661 A (18) BY MR COOPER (19) Q Okay (20) A The green is the adult fish icons. The height of the pile (21) of them indicates the number of spawners that went into the (22) system in that particular brood year (23) Q How do we know how many spawners went into the system (24) is (25) this from ADF&G records?

(26) A From ADF&G records sonar counts made on the Kenai

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(1) subtracting away the records that the sports catcher take above  
 (2) the counting site  
 (3) Q So after - the number of fish that es up the river  
 (4) less the ones the sport fishermen take out this is sockeye  
 (5) we re talking about?  
 (6) A Yes this is exclusively sockeye  
 (7) Q In 1987 it s represented by this bar and about a million  
 (8) five or so?  
 (9) A It s about a million three a little over a million three  
 (10) Q Then what did you look at? You looked to see how well  
 (11) their children did?  
 (12) A Yeah looked at the number of smolts that came out from  
 (13) that brood year For instance the -  
 (14) Q The information that you were using for the number of  
 (15) smolts is this information that the ADF&G compiles that we re  
 (16) going to talk about later that you quarrel with but you re  
 (17) going to assume here that they are right?  
 (18) A Yeah we re looking at the numbers that were created in two  
 (19) different counting programs is a good way to think about  
 (20) them The first counting program is the sonar counts of the  
 (21) number of adult fish moving up the river system and into the  
 (22) lakes to spawn The second set of numbers those related to  
 (23) smolt in the yellow there that I ll explain are the estimates  
 (24) made on the physical capture actually capturing fish in a trap  
 (25) and counting them the physical capture of smolt moving down

(1) have the number of smolt?  
 (2) A That s the number of smolt in millions So what that  
 (3) figure shows for the 1987 brood year 1.3 million adult  
 (4) spawners produced an outmigration of about 30 million smolt  
 (5) Q And then in the 1988 brood year what happened there?  
 (6) A What that shows is that an escapement - or about 850 000  
 (7) spawners produced about 5 million smolt In other words -  
 (8) what s of significance here is the ratios the number of smolts  
 (9) that were produced per spawner And the indication is that  
 (10) there was a change in that ratio between the 1987 and the 1989  
 (11) brood years  
 (12) Q Now did that change the ratio of smolts per spawner  
 (13) happen before these rearing lakes could have been impacted  
 by  
 (14) the large number of fish that escaped into the river in 1989?  
 (15) A 1987 and 1988 brood years the juveniles had largely left  
 (16) those systems prior to the appearance of the 1989 brood year  
 (17) fish  
 (18) Q In fact you ve got - that can get a little confusing  
 (19) You ve got a graph that demonstrates that?  
 (20) A Yes I do  
 (21) MR COOPER Call up 8695 A  
 (22) First Your Honor I ll ask that this exhibit which you  
 (23) have which is DX4661 A be admitted  
 (24) (Exhibit 4661 A offered)  
 (25) MR O NEILL No objection

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(1) the river system in the outmigration during late May and June  
 (2) Q Now on this chart you indicate that this many spawners  
 (3) produced this many smolt that ultimately after living for  
 (4) what a couple years in the lake system after they were born  
 (5) went out the river?  
 (6) A Yeah The majority of the smolt in the Kenai system go out  
 (7) as age one smolt What that means is that they spend one  
 (8) summer and one winter in the lake and then they migrate out  
 the  
 (9) spring following that winter  
 (10) Q And what have you looked at over here now the next year  
 (11) class of spawners?  
 (12) A That s the 1989 brood year Going back to the 1987 brood  
 (13) year why then the smolts there would have been the smolts that  
 (14) predominantly went out as age ones in 1989 the first year of  
 (15) the program  
 (16) Q So the children of these spawners in 87 went out the river  
 (17) in 89 most of them?  
 (18) A That s right most of them went out in 89  
 (19) Q Then we had this many spawners in 1989?  
 (20) A That s correct  
 (21) Q And their children after living in the lake system for a  
 (22) while went out as smolts in about what year?  
 (23) A They would have gone out in 1990 as age one smolt and  
 (24) 1991  
 (25) A As age two Again they may have went out as age one smolt  
 (26) Q So what have you got over here? On the right hand side you

(1) THE COURT 4661 A is admitted  
 (2) (Exhibit 4661 A received)  
 (3) BY MR COOPER  
 (4) Q If you can explain this - maybe you can use the light pen  
 (5) to explain this  
 (6) THE COURT What exhibit please?  
 (7) MR COOPER DX8695 A  
 (8) THE WITNESS What we have here is we have the history  
 (9) of the 1987 1988 and 1989 brood years through the movement  
 of  
 (10) the age one smolt out of the system and color coding there  
 (11) which I ll put a light pen to here show indicates time  
 (12) periods of time and stages If you remember the lifestyle  
 (13) discussion that we had - life cycle discussion In the life  
 (14) cycle the adults spawn eggs incubate in the winter fry  
 (15) emerge in spring and move out into the lake system where they  
 (16) start consuming the food in the lake which is zooplankton  
 (17) What this figure shows the most important part of it is  
 (18) when the smolt of the previous brood year moved out relative to  
 (19) the time when the fry of the next brood year moved into the  
 (20) lake environment just vacated by those smolts So I m going  
 (21) to draw a couple lines here  
 (22) The significance of these lines is that the red - this  
 (23) right here (indicating) indicates the period of time when the  
 (24) smolts the fry had physiologically changed and moved down  
 the  
 (25) river to go to the ocean when they actually left the



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lake rearing environment. And as you can see they left before the major period of lake residents of the 1988 brood year. The 1988 brood year in turn the age one smolts left that system prior to the time when the 1989 fry moved into the lake and starting using the lake's resources.

What this says is that these brood years or the juveniles from these years of spawning actually utilized the lake environment and left it prior to the appearance of the 1989 brood year.

Q So if we were to go back to that previous chart Exhibit 4661 A DX4661 A is it correct to say then that this reduction in the number of smolts compared to the number of spawners that occurred between the '87 brood year to the '88 brood year this occurred without any impact at all by the large escapement in 1989 the year of the oil spill into the system?

A Yeah. The 1987 brood year would have completely left the system prior to the - prior to the 1989 brood year and the same is true of the 1988 the majority of the fry from that brood year would have turned into smolts and would have left the system.

Q So that drop in smolts per spawner that you were talking about that occurred without regard to any impact of the oil spill on escapement in '89?

A That's correct. That would be correct.

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Q What does that drop tell you about what may be happening in the lakes before the oil spill ever impacted them?

A It says if you chose to believe the smolt outmigration estimates that something happened in the freshwater system that reduced the number of smolts produced by that system prior to the appearance of the 1989 brood year fry.

Q Something happened that caused a pretty drastic reduction in the smolt per spawner level?

A Yeah something happened.

Q Now there is not a whole lot of data I guess that's available to look at to try to figure out what it is that may have caused this problem?

A Yeah. That's what everybody is trying to understand what may have caused this problem.

Q And in a moment we're going to come to the starvation theory that Dr. Mundy mentioned but are there other things besides starvation that could account for that kind of phenomena where you lose production of smolt even though there seems to be a lot of spawners that go up the river to spawn?

A There are other possibilities. In sockeye producing systems one of the more important is predation. That is also a concern.

Q Predation you mean something eating the little fish?

A Something eating the fry in the lake or something eating

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the smolt as they move down the river.

Q You have done some work on the lakes up there haven't you since 1989 in order to inform yourself about what may be going on?

A Yes I have.

Q And you've been helping the ADF&G people with some hydroacoustic work up there?

A Yeah. We've been making some observations trying to understand the behavior of the fry in that lake a little better.

Q Did you learn any information in the course of that work about whether there might be - any clues I don't want to overplay the word but any clues as to whether predation might be one of the factors here that could be at work?

A There is a clue and that is that the sockeye fry in Skilak Lake retain a behavior that is a protection against predation and that is that they school during the daylight periods.

Q In other words if fish are getting hit pretty heavily by whatever is eating them they will tend to school for protection?

A They will tend to school for protection makes them harder to find. They are not so easily encountered when they are in schools.

Q You hope the guy on the outside gets eaten and not you if you're on the inside?

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A Correct. You hope if they find you exactly that happens.

Q And did you observe that there was a pattern of schooling then?

A Yeah. There is a pattern of schooling and it changes a little bit in character throughout the annual cycle but you can say with absolute certainty that the behavior of juvenile fish in Skilak Lake is characterized by schooling.

Q What equipment did you use to determine if they were schooling or not?

A We used a type of sonar system called a split beam system and we looked horizontally into the water column with that system.

Q Now have there been other studies done on other lakes to see if predation can cause a drastic reduction in smolt salmon?

A Yeah. In most sockeye systems predation is the major cause of mortality for smolt. There have been a considerable number of studies done looking at that.

Q In fact has Dr. Rogers Dr. Ruggeroni both of whom we heard on the stand earlier have they done one of those studies?

A Yeah they have. The Wood River system in many respects has been a laboratory for trying to understand sockeye. They and they have done work in that system.

Q What did they do?

A Well in the Wood River system they looked at predation by

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(1) raised predators char included and probably one of their more  
 (2) important studies was looking at predation by coho in the  
 (3) Chignik system which is outside of the Wood River  
 (4) Q Can you give us some kind of general idea as to what sort  
 (5) of mortalities they found that could occur as a result of  
 (6) predation?  
 (7) A The ones I remember best are the ones for the Chignik  
 (8) system where predation by coho was - consumed something  
 (9) the order of 50 percent of the fry in the Chignik lake  
 (10) Q Half of the fry in the lake?  
 (11) A Yes that's correct  
 (12) Q Was there a control program that was utilized at some point  
 (13) on the Wood River in order to try to control predation?  
 (14) A The Wood River early on I think it was in the 30s 40s  
 (15) maybe a little bit later than that they actually had a bounty  
 (16) on Arctic char and later on I guess it was maybe in the 70s  
 (17) they undertook another program where they would catch the  
 (18) char until the smolt outmigrated and would release them  
 (19) Q So they just keep them from eating on the smolt?  
 (20) A Yes that's correct  
 (21) Q What - did they find out how that helped - to what extent  
 (22) that helped the smolt numbers to increase?  
 (23) A It seemed to reduce predation by a considerable amount at  
 (24) least the holding of the fish of the char seemed to be  
 (25) beneficial I can't remember what the results of the other

(1) that?  
 (2) A Yeah given a lot of thought to that Trying to explain  
 (3) what you see captured in the smolt traps and trying to put that  
 (4) within the context of what you see in the fall in the lakes has  
 (5) been a real challenge  
 (6) Q Is there a system or a lake system that has actually been  
 (7) examined to see what happens when you have several years of  
 (8) high escapement in a row?  
 (9) A Yes There is a lake on - lake system on Kodiak Island  
 (10) that has been held up as one of the models of what happens to  
 (11) both the food of the juvenile salmon as well as the juvenile  
 (12) salmon themselves over a period when escapement increases  
 (13) the point where overescapement and overproduction of  
 (14) juveniles  
 (15) Q What's that lake?  
 (16) A Frazer Lake  
 (17) Q F R A Z E R ?  
 (18) A Yeah  
 (19) Q Not to be confused with F R A S E R which is in British  
 (20) Columbia?  
 (21) A Yes  
 (22) Q In Frazer Lake there were some years of high escapement  
 (23) and  
 (24) people looked to see if that had some sort - resulted in a  
 (25) reduction of the food supply for these fish?  
 (26) A Yeah Over a fairly long period of record what happened is

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(1) work was where they actually put a bounty on Arctic char  
 (2) Q Must have been a lot of disappointed char that they were  
 (3) holding onto there?  
 (4) A Yeah they left a lot hungrier than when they were first  
 (5) captured  
 (6) Q What else predated if that's a verb?  
 (7) A Bird predation is a problem on salmon Some systems can -  
 (8) they can consume as much as ten percent or so of the  
 (9) smolts  
 (10) Q Any indication if there were a lot of birds around the  
 (11) Kenai at the time these smolt were outmigrating?  
 (12) A I haven't observed large numbers of birds myself but  
 (13) talking to the people at the smolt site in 1989 there were  
 (14) large numbers of birds there  
 (15) Q I gather Dr Carlson you're not prepared to stand up here  
 (16) and say you've studied this and there is no question in your  
 (17) mind it's a predation phenomena that we're seeing here?  
 (18) A No I haven't studied it to be able to say that but what  
 (19) I'm saying is that in most consideration of impacts on systems  
 (20) predation needs to be considered and I don't see why the  
 (21) should be an exception to that  
 (22) Q Now let's talk about the theory that the plaintiffs Dr  
 (23) Mundy suggested the starvation theory there are so many fish  
 (24) up there that somehow they ate all the - outstripped the food  
 (25) supply and started starving Have you given any thought to

(1) the escapements to this lake increased and then in the 80s  
 (2) actually increased significantly over a previous period  
 (3) Q You've got an exhibit that shows these Frazer Lake  
 (4) escapements?  
 (5) A I believe so  
 (6) MR COOPER Could we have 8761?  
 (7) You don't have it? I'll just use the overhead on it  
 (8) BY MR COOPER  
 (9) Q This is DX8761 Now - well does this simply show the -  
 (10) here we have a nice color copy  
 (11) This shows for each year what the escapement was in the  
 (12) Frazer Lake?  
 (13) A Yes that's correct It shows a period of record from 1965  
 (14) through 1991 and it shows the sequence of high escapements  
 (15) that occurred in 80 81 and 82 and those are those blocks  
 (16) right there  
 (17) Q These three years?  
 (18) A Yes  
 (19) Q Now as a result of the studies that were done on this  
 (20) situation there is some knowledge about what the food supply  
 (21) looked like after all of these fish escaped up into the system  
 (22) and produced all these fry that were rearing in the system?  
 (23) A Yeah The Frazer Lake system is a fairly well studied  
 (24) system and they had measured the zooplankton juveniles the  
 (25) condition of fry throughout this period

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(1) MR COOPER I d asked that this be admitted DX8761  
 (2) (Exhibit DX8761 offered)  
 (3) MR O NEILL I have no objection I think it s a  
 (4) better practice to admit them before he talks about them but  
 (5) no objection  
 (6) THE COURT Well counsel I normally do it that way  
 (7) We fell into a habit of doing it the other way and I really  
 (8) would prefer that we do it the normal way  
 (9) MR COOPER Happy to do it however  
 (10) THE COURT DX8761 is admitted  
 (11) (Exhibit DX8761 received)  
 (12) BY MR COOPER  
 (13) Q Let s see DX8677 B is that an exhibit - Do you have a  
 (14) copy of that up there?  
 (15) THE COURT Let s take our recess at this point  
 (16) Would counsel stay just a minute after I excuse the jury?  
 (17) Ladies and gentlemen we will take our first recess at this  
 (18) time be approximately 15 minutes  
 (19) (Jury out at 10 00)  
 (20) THE COURT You may be seated  
 (21) Beginning at the point after we received a note from the  
 (22) jury about wanting to take a look at Prince William Sound  
 (23) counsel and I have had at least one session and this morning  
 (24) I ve received a specific proposal that would outline three  
 (25) possible approaches to a view of a total of six sites in Prince

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(1) William Sound  
 (2) I ve given a lot of thought about whether - to the  
 (3) question of whether or not I should change my view that was  
 (4) that we should not have a view in this case At this point I  
 (5) am unpersuaded that a view would be of assistance to this jury  
 (6) in resolving the issues that are before it in Phase II A  
 (7) However I think that as to Phase III we may very well have a  
 (8) different situation If you can satisfy me that you can  
 (9) resolve some of the logistics problems and the one that is  
 (10) worrying me the most is the fact that the jurors must be  
 (11) divided up into three groups and therefore will see -  
 (12) potentially see slightly different things my greater concern  
 (13) is that they may hear different things because they will have  
 (14) three different guides with them  
 (15) If you can satisfy me that you can solve the problems of  
 (16) what they hear principally and resolve some questions that I  
 (17) have about how we would deal with questions if jurors have  
 (18) questions I may very well say you ve got a go for a view  
 (19) during Phase III but not during Phase II A We can talk about  
 (20) that some more as time permits What I want to do right now is  
 (21) free people up If you ve got people standing by let them  
 (22) know that it isn t going to happen right away  
 (23) Second thing is at this point I propose to tell the jury  
 (24) that we will not be taking a view of Prince William Sound  
 (25) during Phase II A but that we may do a view in Phase III I

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(1) propose to tell them that it is my view that their decision on  
 (2) Phase II A issues would not be aided by a view at this time  
 (3) Any questions about that situation at this point Mr  
 (4) O Neill?  
 (5) MR O NEILL No sir  
 (6) THE COURT Mr Lynch?  
 (7) MR LYNCH Your Honor the proposal that we submitted  
 (8) was that the jurors would be on the same site at the same  
 (9) time While they would not be traveling in the same airplane  
 (10) they would be in the same physical site the prior proposal  
 (11) that we had given you so we solved that one problem  
 (12) THE COURT I thought this was three different  
 (13) routes?  
 (14) MR LYNCH Two airplanes but by using a larger  
 (15) airplane we were able to put them both together  
 (16) MR O NEILL We do need to work on some script  
 (17) issues  
 (18) THE COURT Yes but that will certainly help  
 (19) We will be in recess now for 15 minutes  
 (20) (Recess from 10 05 to 10 18)  
 (21) (Jury in at 10 18)  
 (22) THE CLERK All rise  
 (23) THE COURT Ladies and gentlemen before we continue  
 (24) with Dr Carlson I want to take care of one piece of sort of  
 (25) housekeeping so that I don t forget it later in the day I m

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(1) back to your question about a jury view I ve met with the  
 (2) attorneys and I ve spent a good deal of time thinking about  
 (3) your request myself I have decided at this point that I am  
 (4) not going to approve a jury view for this Phase II A of the  
 (5) case However subject to solving some logistics problems I  
 (6) may very well approve a view for Phase III I don t think a  
 (7) view will help you with the issues that you have to decide in  
 (8) Phase II A but it might help you in Phase III So that s  
 (9) where we are right now with your request  
 (10) You may continue Mr Cooper  
 (11) BY MR COOPER  
 (12) Q Dr Carlson let me show you 8677 B Is that the chart  
 (13) that shows what happened in the zooplankton or food supply in  
 (14) Frazer Lake -  
 (15) A Yes it does  
 (16) Q - when we had that year of high escapement?  
 (17) THE COURT Objection to 8677 B?  
 (18) MR O NEILL None Your Honor  
 (19) THE COURT It is admitted  
 (20) (Exhibit 8677 B received)  
 (21) BY MR COOPER  
 (22) Q The number on that is 8667?  
 (23) A 8677 B  
 (24) Q Now that just show us - well this is a chart that  
 (25) indicates the density basically of zooplankton in Frazer Lake?

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1) A Yes  
 2) Q Zooplankton is what the sockeye feed on?  
 3) A Zooplankton are the tiny animals that the sockeye eat  
 4) Q We've seen the high escapement years Dr Carlson Can you  
 5) show it on here what indicates what the food supply was during  
 6) those years?  
 7) A Okay I'll go ahead and make a couple marks on this A  
 8) period in the early 80s when there was a sequence of high  
 9) escapements and the Frazer Lake story or the model really  
 10) takes into consideration the period leading up to it as well  
 11) as that period of time and what it shows is during the period  
 12) of time that escapements increased through the period of  
 13) record the number of zooplankton measured in numbers of  
 14) animals per cubic meter decrease  
 15) Q All right And there was a pretty dramatic decrease?  
 16) A Yeah quite a significant decrease It went from something  
 17) on the order of 10 000 zooplankton per cubic meter down to  
 18) something in the neighborhood of one to 2 000 zooplankton per  
 19) cubic meter or a factor of ten  
 20) Q Now have you looked to see how the situation in Kenai  
 21) lakes - Kenai Lake Skilak Lake the major rearing lakes  
 22) compare to those three years of high escapement?  
 23) A Yeah What I did was I looked at the - how the model  
 24) compared to what we experienced in Skilak Lake  
 25) Q I'll show you Exhibit 4799 B and ask you if that's the

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1) that gave the phytoplankton which are the plants that  
 2) zooplankton eat get more light and that resulted in higher  
 3) zooplankton in 1988  
 4) Q What is the comparison here of the food supply that tell  
 5) you with respect to whether or not this starvation theory that  
 6) Dr Mundy mentioned is a likely one?  
 7) A Says that this element of the Frazer Lake model which is  
 8) used as the sort of prototype persons for starvation that in  
 9) this element of it the model is inconsistent with what was  
 10) observed  
 11) Q Now in the Frazer Lake system aside from the food supply  
 12) reduction was there also a reduction in length of the fry that  
 13) was noted after those years of high escapement?  
 14) A Yeah There was a reduction in the length of the smolts  
 15) yes  
 16) Q And you've looked at that and compared that to what the  
 17) situation is in these Kenai River smolt after the 87 88 and  
 18) 89 escapements?  
 19) A That's right We looked in the case of the Kenai lakes  
 20) Because of the two counting programs in addition to the adult  
 21) counting programs that ADF&G has one for fry in the lake and  
 22) one for smolt moving down the river we were able to look at  
 23) quite a lot of information relating to this  
 24) Q Let me show you 8801 A and 8784 Are those the two that  
 25) compare the length measurements Frazer Lake situation  
 versus

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1) comparison?  
 2) A Yes this is the comparison  
 3) THE COURT Is there an objection to 4799 B?  
 4) MR O NEILL None Your Honor  
 5) THE COURT It is admitted  
 6) (Exhibit 4799 B received)  
 7) BY MR COOPER  
 8) Q And can you show us now on this exhibit - well you have  
 9) the exhibit we were just looking at on the lower portion of  
 10) this exhibit 4799 B?  
 11) A Yes that's correct What we are trying to show in this  
 12) exhibit is the comparison of the Skilak experience or the  
 13) Kenai Lake's experience with the model the Frazer Lake model  
 14) Q Does the Kenai or Skilak Lake experience here show the  
 15) same  
 16) kind of a major reduction in zooplankton or food supply after  
 17) these three years of high escapement that Frazer Lake did?  
 18) A No it doesn't Let me go to the figure here The brood  
 19) years of high escapement were 87 88 and 1989 and as you  
 20) can see in the lake over this period of time with the  
 21) exception of an increase in 1988 the zooplankton biomass  
 22) which is another way of looking at the amount of zooplankton  
 23) available remained fairly constant  
 24) The reason that it went up in 1988 was that through the  
 25) early 80s or through the mid 80s there was a trend in the  
 decrease of turbidity in the Kenai lakes Skilak and Kenai and

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1) Kenai River?  
 2) A Yes these are those  
 3) MR COOPER Ask those be admitted Your Honor  
 4) (Exhibits 8801 A and 8784 offered)  
 5) MR O NEILL No objection  
 6) THE COURT 8801 A and -  
 7) MR COOPER DX8784  
 8) THE COURT They are admitted  
 9) (Exhibits 8801 A and 8784 received)  
 10) BY MR COOPER  
 11) Q The first one 8784 that's the situation in Frazer Lake?  
 12) A Yeah this is the situation in Frazer Lake The fish  
 13) there the icons are to scale and what it shows is the  
 14) experience with the size of smolts during that period of time  
 15) and what it shows is that between - during that period of time  
 16) when the escapements were low compared to that period of  
 17) time  
 18) when the escapements were high well then there was quite a  
 19) difference in the change of the size of the smolts In fact  
 20) there was a 40 percent reduction in the size of smolt that  
 21) exited that system  
 22) Q How well do your data match between the smolt data size  
 23) and  
 24) the escapement data that you were able to come up?  
 25) A For the Frazer system?  
 Q For Frazer  
 A The trends were quite clear that when escapements were

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1 increasing - when there was an increasing trend in  
 2 escapements there was a decreasing trend in fish size  
 3 MR COOPER Now if we could have 8801  
 4 MR O NEILL 8801 A  
 5 MR COOPER Try it with an A after it  
 6 BY MR COOPER  
 7 Q Now this is the smolt length from the Kenai?  
 8 A Yes that's correct this is the smolt length from the  
 9 Kenai  
 10 Q What kind of trend does this show?  
 11 A This shows a trend through 1991 which is the period of  
 12 most significance that there was actually an increase in  
 13 length of smolt exiting the Kenai system opposite of what we  
 14 saw in the Frazer Lake system  
 15 Q Now I don't want to take the time to go into it in detail  
 16 but let me ask did you also look at a similar comparison with  
 17 the weight of the smolt?  
 18 A Yeah I looked at weight as well and weight is even more  
 19 dramatic Over this same period of record the weight of the  
 20 smolt increased a considerable amount and my recollection is  
 21 that they almost doubled in size  
 22 Q Dr Carlson given your analysis and the results of your  
 23 studies - which as I understand it indicate that there are  
 24 other factors or at least a factor like predation that could  
 25 account for what's happening in the lakes Am I right there?

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1 A That's correct  
 2 Q - the relatively small contribution of the oil spill to  
 3 the total escapement that occurred in that three year period  
 4 and the reasons you've just explained why you don't believe  
 5 this starvation hypothesis that Dr Mundy was talking about  
 6 Given all that do you have an opinion as to whether or not the  
 7 oil spill was a substantial factor in the run failure the  
 8 plaintiffs believe is going to happen starting shortly a month  
 9 or so from now?  
 10 A My opinion is that it wasn't a substantial factor  
 11 Q Now you had mentioned before that you had some question  
 12 about whether or not the smolt counts up on the Kenai system  
 13 that this run failure is premised on whether or not those  
 14 counts are in fact accurate?  
 15 A Yes I have a lot of questions along those regards  
 16 Q Let's try to deal with that and we'll try and do that  
 17 reasonably quickly here  
 18 Now first again we're dealing here not with the sonar  
 19 unit that's counting adults going up here we're dealing with a  
 20 trap kind of arrangement dealing with smolts coming  
 21 downstream?  
 22 A That's correct different lifestyles different dynamics  
 23 Q I think we have some photographs of some smolt traps that  
 24 might be illustrative  
 25 A Yes indeed  
 26 Q Let me show you Exhibits 9271 8691 9271 - I'm sorry

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1 8411 8414 My question is simply are these photographs  
 2 depicting smolt traps that are used to count the smolt?  
 3 A Yes these are  
 4 MR COOPER Your Honor I'd asked that those  
 5 photographs be admitted  
 6 (Exhibits 8691 9271 8411 8414 offered)  
 7 MR O NEILL No objection  
 8 THE COURT How many did we wind up with? I thought  
 9 you had four  
 10 MR COOPER D\72 - do you want me to repeat them?  
 11 THE COURT 9271 8691 8411 8414 admitted  
 12 (Exhibits 8691 9271 8411 8414 received)  
 13 BY MR COOPER  
 14 Q Now this is an aerial photo of the Kenai River Exhibit  
 15 9271?  
 16 A Yes made this year  
 17 Q Are the smolt traps in place here?  
 18 A They are in the position that they were operated this  
 19 year They are a little bit different than they were in 1983  
 20 and 1982  
 21 Q First show us where the smolt traps are on this  
 22 photograph  
 23 A Okay The smolt traps are in two groups There are six  
 24 traps in all There are four traps right here along the south  
 25 bank you can see them There are two that are close together

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1 that are fished essentially as a single trap and then there  
 2 are two others that are closer to shore and then there are two  
 3 other traps here that are more towards the center of the  
 4 channel  
 5 The traps are such that the - put a number on here The  
 6 traps are fished such and built such that approximately seven  
 7 percent of the cross section of the river would be sampled by  
 8 the traps  
 9 Q Is that the case also when they started this program in  
 10 89?  
 11 A No there was an evolution in the program In 1989 they  
 12 had three traps and then they asked for additional traps and  
 13 the year following that I believe and then beginning in '82  
 14 may have been a year earlier than that -  
 15 Q 92?  
 16 A Pardon me in '92 the first year I was on the site why  
 17 then six traps were being fished as they were in '93 and then  
 18 again this year  
 19 Q Now these fish - which is downstream here coming from  
 20 the top?  
 21 A Right downstream is this direction  
 22 Q Now unlike the adults that are struggling to switch  
 23 against the current try to find the bank where the speed of  
 24 the current is lower these fish aren't fighting any current at  
 25 all?

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- (1) A No As a matter of fact smolt typically seek out the  
 (2) higher water velocities and try and make it downriver  
 (3) Q So part of it is try and get these traps where the smolt  
 (4) are?  
 (5) A Right Two important factors where these traps are One  
 (6) is you want to put the traps in the location so that the smolts  
 (7) will encounter the traps that's the first challenge and then  
 (8) the second challenge is you hope the traps fish such that you  
 (9) sample a representative cross section that is that the fish  
 (10) don't avoid the traps when they encounter them  
 (11) Q Why don't we show the next three photographs quickly to  
 (12) give the jury an idea what these smolt traps look like 8691  
 (13) A I think this is looking from the south shore towards the  
 (14) center of the river The fish traps or the inclined plane  
 (15) traps are supported by pontoons You can see those right here  
 (16) Q We could zoom in on that  
 (17) A That might be helpful  
 (18) That makes a difference You can see that the traps are  
 (19) supported by pontoons and between the pontoons right here  
 (20) where the trap is actually located The distance between these  
 (21) pontoons is a little over a meter so that's sort of the plane  
 (22) view the top view the place that the smolt need to go through  
 (23) to be captured by the traps And then the traps actually  
 (24) extend down into the water a little over three feet  
 (25) Q I think we have a couple pictures that may demonstrate

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- (1) that if we could have 8411  
 (2) Q Well this is another view of the trap itself the trap  
 (3) apparatus?  
 (4) A I think we're progressively zooming in That looks more  
 (5) familiar  
 (6) Q This is 8411 this is DX8411 and this is the mouth of the  
 (7) trap that we're looking at?  
 (8) A This would be standing on the front end of the pontoons and  
 (9) it's looking into the workings of the trap The water is  
 (10) flowing - woops Water is flowing in this direction  
 (11) (indicating) You notice the turbulence here you can also see  
 (12) the upper part of the incline You can see that it's made out  
 (13) of aluminum that has holes punched in it so that as the water  
 (14) comes in why then the water moves through the side here  
 (15) through the - there is a screen along each edge and the water  
 (16) also goes through the bottom The holes in the screens are too  
 (17) small to allow the smolt to go through so they are actually  
 (18) carried by the force of the water up and into a portion of the  
 (19) trap called a live box where they are held until they are  
 (20) processed  
 (21) Q Let me see if we can have you explain how this system  
 (22) works They don't catch all the smolts coming down the river  
 (23) in those traps?  
 (24) A No a small part  
 (25) Q And they need to know what percentage of the smolt they are

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- (1) catching in the traps in order to extrapolate from that and  
 (2) figure out how many total smolt there are?  
 (3) A Right There is no way to know how many fish are coming  
 (4) down the river at any instant in time so you have to find some  
 (5) other way of gauging what portion of the fish you're capturing  
 (6) Q So they do some tests to figure out what percentage of the  
 (7) smolt they are capturing in the traps?  
 (8) A Yes they do They take some of the fish that they capture  
 (9) in the traps and they change their appearance by staining them  
 (10) with a dye They turn them brown and then they take them  
 (11) upriver and release them and then they look at the number of  
 (12) fish with changed appearance that they recaptured compared  
 (13) to  
 (14) the number of what they call marked fish that they released  
 (15) and that ratio is a measure of the efficiency of the traps  
 (16) Q At about what recapture rate are they letting in when they  
 (17) send a known volume of these marked fish down into the traps  
 (18) what percentage do they end up with in the traps?  
 (19) A Actually fairly low Typically on the order of one percent  
 (20) or a little bit less a little bit more Right around one  
 (21) percent  
 (22) Q Now you started to talk about things that have to happen  
 (23) in order for smolt to be trapped One of the things that has  
 (24) to happen is not be able to avoid the trap?  
 (25) A That's right When they encounter or sense the trap why  
 (26) then they have to not be able to swim out of the trap or away

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- (1) from the trap and avoid being captured  
 (2) Q Have you looked to see whether or not there is any  
 (3) indication whether they are able to swim away from a trap or  
 (4) detect a trap and avoid capture?  
 (5) A Yeah The concept we're talking about here is selectivity  
 (6) and in fisheries science it has a very definite meaning And  
 (7) what that meaning is is that of the fish that encounter the  
 (8) trap let's say they range in size from small to large why  
 (9) then most types of fish captured here select for more than fish  
 (10) than it does the others  
 (11) In the case of the smolt traps use of these kinds of  
 (12) devices have shown that they tend to preferentially select the  
 (13) smaller fish What that means is when you try to look at smolt  
 (14) catch to make a better guess about what the population looks  
 (15) like you have to be able to - you have to know something  
 (16) about how it's capturing fish of different size to make  
 (17) accurate statements about the population that's being sampled  
 (18) Q And you've looked at that question with respect to these  
 (19) smolt traps?  
 (20) A Yes I have  
 (21) Q What did you look at what did you find?  
 (22) A Well it's common knowledge ADF&G knows - one thing I  
 (23) would like to say is that the smolt trap program is still in  
 (24) development and ADF&G is quite clear and concerned about these  
 (25) problems that we'll be discussing They are not novel and new

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1 to them but they have known for quite some time that larger  
 2 sockeye coming down the Kenai River from Moose Creek and  
 3 from  
 4 Hidden Lake are simply not captured in the traps So the fact  
 5 that they are selective is well known  
 6 Q You can demonstrate that by looking at what happens with  
 7 respect to coho?  
 8 A Yeah Coho are a different species with regard to sockeye  
 9 and there is ample evidence that they behave somewhat  
 10 differently but they do have data to get a handle on  
 11 selectivity  
 12 Q Have you analyzed the smolt that have been trapped by -  
 13 smolts that have been trapped in the traps omitting or not  
 14 counting smolt that are larger smolt?  
 15 A I've looked at this coho data  
 16 Q Well how about on the - is that coho data or sockeye  
 17 data?  
 18 A The data that I prepared the exhibit for is coho data and  
 19 I've looked at sockeye data as well  
 20 Q I was just going to go to the sockeye data Let me show  
 21 you Exhibit 8789 A  
 22 MR O NEILL No objection  
 23 THE COURT It is admitted  
 24 (Exhibit 8789 A received)  
 25 BY MR COOPER  
 26 Q Let me see if we could briefly describe what is happening

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(1) Q So it would be up a bit?  
 (2) A Yes  
 (3) Q And then you've drawn on this trend line here?  
 (4) A Right  
 (5) Q Because of the way that line slopes that indicates that  
 (6) the larger the smolt length the lower smolt are captured?  
 (7) A The fewer the number of smolt that were captured uh huh  
 (8) Q What does that tell you about the reliability of the smolt  
 (9) trapping method?  
 (10) A Well there is actually quite a lot of information in this  
 (11) chart Could you erase your marks and I'll put some of mine on  
 (12) there?  
 (13) There are some real curiosities here that are interesting  
 (14) and that is in those years when the number of juveniles in the  
 (15) lake system was highest was greatest and when the juveniles  
 (16) experienced less growth in other words they were smaller size  
 (17) in the fall well then those are the periods in which the  
 (18) smolt trap catches are highest and that's these two years  
 (19) That's these years here Okay?  
 (20) And then in the - for the two brood years 1990 and 1991  
 (21) when the smolt trap catches were the lowest why then that's  
 (22) when the smolt were the largest That's these right here And  
 (23) in fact in these years the age one smolt that exited the Kenai  
 (24) system had approximately the same size same length and  
 (25) weight  
 (26) as the age two smolt in these earlier years and then in the

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1 here On the horizontal axis you have indicated smolt length?  
 2 A That's correct That's the length of the smolt that are  
 3 captured in the traps  
 4 Q So the farther along here you go the longer the smolts?  
 5 A Yeah  
 6 Q On this vertical axis you're indicating the number that  
 7 were captured in the traps?  
 8 A Correct  
 9 Q So for instance in 1989 the average smolt length was a  
 10 little over 65 millimeters?  
 11 A This is brood years?  
 12 Q I'm sorry for the '89 brood year  
 13 A Right  
 14 Q The average length was about 67 or so millimeters?  
 15 A That's correct uh huh  
 16 Q And there were not a whole lot of those?  
 17 A That's right that's how you would read that  
 18 Q So what does the - and you plotted these various other  
 19 data points?  
 20 A That's correct There is one data point we have better  
 21 information about in that figure  
 22 Q Which one is that?  
 23 A That's the 1992 brood year the fish that went out this  
 24 year The more recent estimates are around 15 million rather  
 25 than 12 million

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(1) intervening years when we had intermediate smolt  
 2 outmigration  
 (3) then the smolt were intermediate size  
 (4) And there is more to the story than just this and that it  
 (5) will come up as we continue to develop this but basically the  
 (6) quandary in reconciling the smolt counts with other  
 (7) observations that were made if you remember back they were  
 (8) looking at the comparison of Kenai lakes with the Frazer model  
 (9) during the period in which the smolt numbers were actually  
 (10) declining as estimated by the traps why the condition of the  
 (11) fish was getting better and better and better In fact they  
 (12) doubled in weight over that same period of time  
 (13) And this was true of the fall fry The fish that were in  
 (14) the lake prior to the winter prior to the time that they went  
 (15) to the smolt and there was a puzzle If these fish were in  
 (16) the lake in abundance in proportion to the number of spawners  
 (17) and they are increasing in weight how come they are not  
 (18) showing up as smolt And then the idea became well there  
 (19) must be something that's happening to them during the winter  
 (20) they must be starving to death  
 (21) And it was really hard to reconcile that with these  
 (22) observations So the next logical choice became the smolt  
 (23) program itself and it is a time worn concept of selectivity  
 (24) Q In other words another possibility besides starvation is  
 (25) the smolt traps are not counting right?  
 (26) A That's correct

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- (1) Q In fact you've prepared an exhibit that shows the smolt  
(2) count traps have been way off?  
(3) A That's correct  
(4) Q Let me show you Exhibit 4660 B That's that exhibit?  
(5) A Yes  
(6) THE COURT Objection to 4660 B?  
(7) MR O NEILL No objection  
(8) THE COURT It is admitted  
(9) (Exhibit 4660 B received)  
(10) BY MR COOPER  
(11) Q Now I think you've got on the screen here Dr Carlson  
(12) the first part of this exhibit One that you got up here -  
(13) woops  
(14) A Smolt that's what we have up there  
(15) Q Smolt counts 483 We're now looking at what year here  
(16) what brood year?  
(17) A This is the 1986 brood year so this would have been the  
(18) age two smolt that went out the first year of the smolt  
(19) program which was 1989  
(20) Q So the first group of smolt from that 1986 brood year the  
(21) fish that were born in '86 went out - well at least some  
(22) group went out as age two smolts?  
(23) A That's correct  
(24) Q And we know from the smolt trap that they caught 483?  
(25) A We back calculated that but that's a good estimate

d2

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- (1) Q Based upon the ADF&G data?  
(2) A Yeah based on their smolt estimate  
(3) Q What was the ADF&G estimate from that count as to how  
(4) many  
(5) of these the two smolts there were?  
(6) A They estimated that there were 71 000 age two smolt that  
(7) went out of the system in 1989  
(8) Q Now based upon that these fish go out into the ocean and  
(9) they suffer mortality out in the ocean?  
(10) A That's right the majority of them don't come back  
(11) Q And based upon the normal mortality kind of numbers how  
(12) many of these 71 000 fish would you expect to have seen back  
(13) returned?  
(14) A In the art of forecasting the number that's used is that  
(15) 70 percent of the smolts that come out - or 20 percent of the  
(16) smolts that go out will return as adults so that's the initial  
(17) estimate  
(18) Q So the initial estimate based upon the smolt counts from  
(19) these traps was that 14 000 would come back?  
(20) A That's correct  
(21) Q And we know if the trap is right the trap count is right  
(22) that 71 000 - there were only 71 000 of these 1986 brood year  
(23) age two smolts?  
(24) A That's correct  
(25) Q Now in fact did more fish come back than the 71 000?  
(26) A Yeah It was a real shock to everybody you could say

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- (1) Q And certainly more than the 14 000 than you would have  
(2) expected?  
(3) A That's correct  
(4) Q Could we have the next page up?  
(5) We got this big fish on the bottom What does this  
(6) signify?  
(7) A Well the experience was that over the return of two year  
(8) olds that we actually saw 700 000 of the adults come back out  
(9) of these 71 000 smolts of course the quandary being that -  
(10) Q Can that happen?  
(11) A No Ten times as many adults returning as smolts going  
(12) out definitely not The interesting thing is that if  
(13) everything else was accurate it would estimate that - you  
(14) know back calculating from this you'd estimate that the smolt  
(15) estimates were under by a factor of 50 They were 50 times too  
(16) low for that particular age group  
(17) Q Well Dr Carlson now based upon this work that you have  
(18) done and what you've described concerning the accuracy of  
(19) these  
(20) smolt counters which plaintiffs cite from the proposition that  
(21) there is going to be a run failure starting this year do you  
(22) believe that in fact that run crash is going to happen?  
(23) THE COURT Let's rephrase that Believe is -  
(24) BY MR COOPER  
(25) Q Do you have an opinion Doctor one way or another in fact  
(26) the smolt counts are reliable indicators that a run failure

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- (1) will occur starting this year?  
(2) A Well my opinion is that the smolt estimates are an  
(3) unreliable means to forecast run size and so on that basis  
(4) why then I really question the forecast that's currently out  
(5) there  
(6) Q When will these fish start coming back?  
(7) A Which brood year? What are you -  
(8) Q Well in 1984 (sic) when will the sockeye start returning?  
(9) A Well they have started to return  
(10) Q They have just now started?  
(11) A They will be peaking if they follow the historical  
(12) patterns mid to late July  
(13) Q We've got a couple other quick subjects that I would like  
(14) to cover One sort of taking off from where we just were  
(15) Have you made an effort to determine if the plaintiffs turn  
(16) out to be right and if the smolt counts are right and if there  
(17) is a run failure have you made an effort to determine how many  
(18) fish will be missing from the run this year as a result of the  
(19) problems that the plaintiffs claim exist in these lakes?  
(20) MR O NEILL I object He's not an expert on  
(21) counting fish and wasn't so qualified  
(22) BY MR COOPER I'm not sure -  
(23) THE COURT Well depends on how he's going to  
(24) approach the matter  
(25) MR COOPER I would be happy to explain Your Honor



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1 if you want a side bar  
 2 THE COURT Let's do it  
 3 (At side bar off the Record)  
 4 THE COURT You may proceed  
 5 BY MR COOPER  
 6 Q Let's see Now Dr Carlson you have made an effort to  
 7 ascertain how many quote missing end quote fish there may  
 8 be in the Kenai River system if all these contentions that the  
 9 plaintiffs made were the case?  
 10 A Yeah I've taken a look at that  
 11 Q Let me show you Exhibit - two exhibits 866 - let me see  
 12 if I can read it here 8669 B and 8638 A Are those two  
 13 exhibits the ones that illustrate this point?  
 14 A Yes they are  
 15 MR O NEILL We have no objection Your Honor  
 16 THE COURT 8669 B and 8638 A are admitted  
 17 (Exhibits 8669 B and 8638 A received)  
 18 MR COOPER Do we have 8669 B? Let's use the Elmo on  
 19 it  
 20 BY MR COOPER  
 21 Q Where is the starting point on this calculation Dr  
 22 Carlson?  
 23 A Well the starting point is looking at that portion of the  
 24 Upper Cook Inlet runs that were impacted by overescapement  
 25 1989 and it turns out that the Kenai River is only one of the

(1) MR O NEILL No objection  
 (2) THE COURT Defendants 2389 is admitted  
 (3) (Exhibit 2389 received)  
 (4) BY MR COOPER  
 (5) Q Now if we could look at Exhibit 8638 A can you go to the  
 (6) first page on it? This exhibit now explains the calculation  
 (7) that you did Dr Carlson?  
 (8) A Yeah it goes step by step  
 (9) Q Now we have here reflected the 64 percent/36 percent ratio  
 (10) that you were just describing?  
 (11) A Right It sums to a hundred percent of harvest  
 (12) Q And that hundred percent of the harvest 36 percent would  
 (13) be from other systems in Upper Cook Inlet 64 percent from the  
 (14) Kenai system if it's like the average of the last several  
 (15) years?  
 (16) A Yes that's correct  
 (17) Q If we could have the next page  
 (18) Now here we say this is the 1994 forecast by ADF&G?  
 (19) A That's correct  
 (20) Q You were able - from the information in that forecast you  
 (21) were able to ascertain that they apparently predict about a  
 (22) million fish will go into those other unaffected sockeye  
 (23) systems in Upper Cook Inlet?  
 (24) A Yes They estimate that the total harvest will be two  
 (25) million fish out of a total run size of 3.3 million fish

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(1) systems there that had that  
 (2) Q This is the only system where the plaintiffs are claiming  
 (3) there was an overescapement because of the oil spill?  
 (4) A That's a correct way of saying it  
 (5) Q And there are other systems that they catch salmon in Upper  
 (6) Cook Inlet?  
 (7) A Yes The Kaslof there is the Susitna and then there is  
 (8) Crescent which is right there and then there is a couple more  
 (9) that are smaller I think I think Fish Creek is another one  
 (10) Q That was inevitable Now you determined then that -  
 (11) well what does the 36 percent and 64 percent indicate there on  
 (12) the exhibit?  
 (13) A Well that's the ratio of harvest between the other  
 (14) components of the Upper Cook Inlet and the Kenai system  
 (15) That's the historical average over the last five year period  
 (16) Q Now have you used those historical averages then to  
 (17) calculate how many of these so called missing fish there would  
 (18) be this year?  
 (19) A I used those averages in conjunction with the ADF&G  
 (20) forecast for the Upper Cook Inlet for 1994  
 (21) Q There is an ADF&G forecast that indicates their best  
 (22) forecast as to how many fish will be in the system?  
 (23) A Yes that's correct  
 (24) Q Is that Exhibit 2389?  
 (25) A Yeah this is the forecast

(1) Q And then we know that that one million that they estimate  
 (2) for the unaffected systems if this historical average holds  
 (3) true would be 36 percent of the total?  
 (4) A Yeah that's the way we start this analysis  
 (5) Q Can we have the next page?  
 (6) So if you then try to just - you just figure out  
 (7) mathematically if this one million is 36 percent of the total  
 (8) then the total is 1 770 800?  
 (9) A That's correct What - since the total catch was  
 (10) projected to be two million fish and one million of that would  
 (11) be allocated to the other that left the base of the two  
 (12) million at one million for the Kenai And then the addition  
 (13) to account for the 64 percent that should return to the Kenai  
 (14) is that increment there of 778 000 fish  
 (15) Q So if we could have the next - the last page up  
 (16) This is the one million that apparently must then go into  
 (17) the - be predicated into the Kenai?  
 (18) A Yeah that's the forecasted Kenai catch  
 (19) Q It just happens that these two are -  
 (20) A Well forecast Kenai catch - forecast Kenai run size is  
 (21) 1.5 million give or take a few thousand and what I did is  
 (22) just subtracted away a half a million as being in say the  
 (23) mid point of the escapement goal range That left a million  
 (24) available for catch So that's where that comes from  
 (25) And then the other million allocated to the other sums to

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(1) the two million total catch allocated in the forecast  
 (2) Q So of the two million total catch allocated in the  
 (3) forecast one million goes to the other systems?  
 (4) A That's correct  
 (5) Q You can derive that from the forecast?  
 (6) A Right  
 (7) Q That leaves one million to go into the Kenai system?  
 (8) A That's correct  
 (9) Q And if in fact you had had the normal five year average  
 (10) i.e. no run failure you would have expected then an  
 (11) additional 778,000 fish into the Kenai system?  
 (12) A Yeah that's the presumption on the forecast  
 (13) Q So the bottom line is that the number of missing fish as  
 (14) it were is how many?  
 (15) A Is 778,000  
 (16) Q For the year 1994?  
 (17) A Right for the year 1994  
 (18) Q Now hopefully very quickly I want you to tell us a little  
 (19) something about the Ayakulik River system which is Red Lake  
 (20) Kodiak?  
 (21) A Yeah Red Lake is the nursery lake for the sockeye  
 (22) Q And you understand the plaintiffs are making a claim that  
 (23) in the year of the oil spill there was also an overescapement  
 (24) of - one time overescapement into that system they say has  
 (25) also damaged its ability to produce smolt?

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(1) A That's correct uh huh  
 (2) Q And you looked at the historical records from that fishery  
 (3) to see if there was any other earlier escapements in excess of  
 (4) the total like the one that occurred in '89?  
 (5) A Yeah I did that and I also looked at the characteristics  
 (6) of the smolt exiting that system  
 (7) Q Did you find there was another year in history that there  
 (8) was an overescapement like the one in '89?  
 (9) A Yes there was  
 (10) Q And does Exhibit 4653 and 4652 those reflect the  
 (11) escapement and the resulting run sizes?  
 (12) A Yes this is the period of record for run size and  
 (13) escapement  
 (14) MR COOPER Your Honor I would ask that those two be  
 (15) admitted  
 (16) (Exhibits 4653 and 4652 offered)  
 (17) MR O'NEILL No objection  
 (18) THE COURT Defendants Exhibit 4652 and 4653 are  
 (19) admitted  
 (20) (Exhibit 4653 and 4652 received)  
 (21) MR COOPER If we could have 4653  
 (22) BY MR COOPER  
 (23) Q The year that you found that there was a similar high  
 (24) escapement was 1980?  
 (25) A That's correct 1980 was essentially equivalent in size to

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(1) the 1989 escapement  
 (2) Q Now the next exhibit 4652 if we could have that  
 (3) These fish from this system primarily return how many years  
 (4) after the - the progeny return how many years after they  
 (5) spawn?  
 (6) A They are like other fish in this year four and  
 (7) five year old fish  
 (8) Q The bulk of them five year old fish?  
 (9) A That's correct  
 (10) Q Now let's see 1980 was the earlier high escapement?  
 (11) A That's correct  
 (12) Q And those fish would have returned in 1985 predominantly?  
 (13) A Yes predominantly  
 (14) Q So this then - these are the number of fish that returned  
 (15) as a result of that - from that 1980 high escapement?  
 (16) A Yeah If you would break that bar down showing a  
 (17) contribution of run size from the 1980 brood year you would  
 (18) see many of the fish that returned in 1980 - most of the fish  
 (19) returning in that year were from that brood year  
 (20) Q So it looks like the number of fish returning despite that  
 (21) high escapement is good?  
 (22) A That's correct  
 (23) Q Do you have a view as to whether or not in light of this  
 (24) information the oil cause - or the spill caused escapement in  
 (25) 1989 would be expected to damage significantly damage the

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(1) ability of Red Lake on the Ayakulik system to produce smolt?  
 (2) A Yes I do This is one other important piece of  
 (3) information  
 (4) Q Why don't you give us that information and then you can  
 (5) give us the opinion  
 (6) A That's the size of the smolt that are moving out of the  
 (7) Avakulik system If you recall the evidence of starvation or  
 (8) impact due to high escapement decreases in smolt size and  
 (9) what was the history in the Avakulik system is is that while  
 (10) there was some small decline in the size of smolt they were  
 (11) still and are still among the largest exiting any of the lake  
 (12) systems on Kodiak Island  
 (13) So based on the run size and the experience with the high  
 (14) escapement in 1980 and that piece of information I conclude  
 (15) that the high escapement in 1989 doesn't have any - an impact  
 (16) on the production of that system  
 (17) Q All right One final thing As I think I've indicated  
 (18) both sides are trying to prepare these exhibits that will flow  
 (19) into the verdict form ultimately with an indication of  
 (20) contention respecting lost harvest 8982 A?  
 (21) MR O'NEILL No objection  
 (22) THE COURT Defendants 8982 A is admitted with no  
 (23) objection  
 (24) (Exhibit 8982 A received)  
 (25) MR COOPER Could we have that on the screen?

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BY MR COOPER

Q Just to explain this Dr Carlson you have indicated here  
 1 in the first - well this is basically 1994 and 1995 the  
 2 the years that plaintiff says this run failure will occur  
 3 This is lost sockeye harvest?  
 4 A Correct  
 5 Q This is the Upper Cook Inlet and Kodiak Red Lake?  
 6 A Correct  
 7 Q Now here you have listed what you understand to be the  
 8 plaintiffs estimate of how many fish will be missing because  
 9 of the oil spill?  
 10 A That s correct  
 11 Q And we ve been listing ADF&G estimates and this is a  
 12 pertinent ADF&G one but there is not one in this situation  
 13 that you re aware of?  
 14 A Not that I m aware of  
 15 Q Here we have listed Exxon slash Carlson zero to 778 000  
 16 the zero being what?  
 17 A The zero is I guess you can say where my heart really  
 18 lies on this issue and that s I don t believe that the smolt  
 19 counts are accurate I believe that the forecast is probably  
 20 incorrect in that the impact from the spill will be zero  
 21 Q For all the other reasons you ve explained you don t think  
 22 there is any impact of the spill here?  
 23 A That s correct

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(1) isn t that right?  
 (2) A I don t know  
 (3) Q He was hired by Exxon you know that? You ve reviewed his  
 (4) report?  
 (5) A Yeah I ve reviewed his report I m not sure about the  
 (6) dates  
 (7) Q And Dr Cooper came to essentially the same conclusions  
 (8) that you did didn t he?  
 (9) A Similar conclusions  
 (10) Q And Dr Cooper in coming to those conclusions never  
 (11) studied any Alaska fisheries or water systems before he was  
 (12) hired by Exxon you re aware of that aren t you?  
 (13) A I m not absolutely certain of it That s my understanding  
 (14) Q And Dr Cooper was able to come to those conclusions never  
 (15) having any experience in Alaska fisheries and Dr Cooper was  
 (16) pulled as a witness isn t that right?  
 (17) A I believe that s correct  
 (18) Q Now let s talk for a minute if we could about Dr Levy  
 (19) David Levy You ve cited Dr Levy s report as authoritative  
 (20) isn t that right?  
 (21) A That s correct  
 (22) Q And Dr Levy also prepared a report for Exxon Corporation  
 (23) on the same subject that you testified on here today isn t  
 (24) that right?  
 (25) A The portion of his that I relied on had to do with

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(1) Q On the other hand if it turns out you are wrong or the  
 2 jury concludes that you are wrong what s the 778 000? Is that  
 3 the number of fish based upon this forecasting that we just  
 4 discussed a few minutes ago?  
 5 A Yeah that s the calculations we just went through  
 6 MR COOPER Your Honor I have no further questions  
 7 of Dr Carlson  
 8 THE COURT You may cross examine  
 9 CROSS EXAMINATION OF THOMAS CARLSON  
 10 BY MR O NEILL  
 11 Q Doctor have you ever heard the expression in order to  
 12 teach you have to entertain ?  
 13 A No I don t think I ever have  
 14 Q Well let s try to keep it in mind over the course of the  
 15 next 45 minutes  
 16 Who is Dr Cooper William Cooper?  
 17 A Bill Cooper is a - he s an aquatic ecologist a  
 18 professor I think it s at Ann Arbor Michigan  
 19 Q And he was under contract to Exxon like you were for a  
 20 while isn t that right?  
 21 A That s correct  
 22 Q And he prepared a report on the same subject you testified  
 23 to here today didn t he?  
 24 A Yes he did  
 25 Q And Dr Cooper was hired by Exxon in about April of 1993

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(1) predation in the sockeye salmon system  
 (2) Q Would it be fair to say that before he was hired by Exxon  
 (3) he had never heard the term overescapement before had he?  
 (4) A I can t say  
 (5) Q And in addition to hiring Cooper and Levy Exxon had Ernie  
 (6) Brannon do a report that you ve reviewed on the same subject  
 (7) that you testified here today?  
 (8) A I don t believe I ve seen his report no  
 (9) Q The Implications of Cyclic Dominance on Kenai River  
 Sockeye  
 (10) Population Abundance you ve never seen that?  
 (11) A I ve read that one I didn t think you were referring to  
 (12) that one  
 (13) Q And Dr Brannon was also pulled as a witness on this  
 (14) subject when it became apparent that he had no expertise in  
 (15) population dynamics isn t that correct?  
 (16) A I don t know the answer  
 (17) Q So you re the last of the four and let s talk about your  
 (18) expertise What did you do from 1980 to 1991?  
 (19) A 1980 to 1991 those were - that was the period of time  
 (20) when I was with BioSonic  
 (21) Q And from 1982 to 1988 you weren t a biologist but you  
 (22) were the vice president of marketing and sales for BioSonic  
 (23) isn t that right?  
 (24) A That was my title  
 (25) Q You were a salesman weren t you?

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(1) A That was part of what I did  
 (2) Q And from '88 to '90 you were the president of BioSonics  
 (3) isn't that right?  
 (4) A Yeah that was approximately in that time  
 (5) Q And from 1990 to 1991 you were the chairman of the board?  
 (6) A Yes that's correct  
 (7) Q And from - in the last two years you were with BioSonics  
 (8) you didn't spend any time on biology you spent it on legal and  
 (9) financial issues?  
 (10) A I spent the majority of my time on those issues  
 (11) Q Hundred percent isn't that right?  
 (12) A No that's not correct  
 (13) Q Go to your deposition would you? You stuck it behind  
 (14) you We're going to find out  
 (15) Let's go to Volume III which is bound  
 (16) A That's this one okay  
 (17) Q Let me reask the question The last two years at  
 (18) BioSonics were your duties related exclusively to legal and  
 (19) financial issues just hard core business management stuff?  
 (20) A The majority of my time was spent there but I'm not sure  
 (21) about exclusively  
 (22) Q What was Dr Mundy doing during that period of time? You  
 (23) know him don't you?  
 (24) A Yes  
 (25) Q He was doing research in fisheries and working for the

(1) A Yes that's correct  
 (2) Q So all the time you were talking about doing research with  
 (3) these ADF&G researchers in point of fact you were there  
 (4) looking over their shoulders on behalf of Exxon Corporation  
 (5) weren't you?  
 (6) A No that's not correct  
 (7) Q Let's talk for a minute about sonar counters and your two  
 (8) percent estimate  
 (9) A Of what?  
 (10) Q Undercounting  
 (11) A Okay  
 (12) Q Who is Bill Akers?  
 (13) A Bill Akers is a - was a business partner of mine  
 (14) Q He was a business partner of yours at BioSonics?  
 (15) A That's correct  
 (16) Q Who are your other business partners at BioSonics?  
 (17) A The other major partner was Alan Wartz (ph)  
 (18) Q Who is Dick Thorne?  
 (19) A Dick Thorne was a researcher at the University of  
 (20) Washington and then in the late '80s became an employee of  
 (21) BioSonics  
 (22) Q So both Thorne and Akers were colleagues of yours at  
 (23) BioSonics?  
 (24) A That's correct and before then  
 (25) Q And Bill Akers is of the opinion that the Bendix sonar

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(1) State of Alaska wasn't he?  
 (2) A I'm not sure about the exact dates  
 (3) Q Generally that's right?  
 (4) A Generally  
 (5) Q Dr Rogers what was he doing during the period of time  
 (6) that you were at BioSonics while you were vice president of  
 (7) marketing and sales he was working in fish research wasn't  
 (8) he?  
 (9) A That's correct  
 (10) Q Now you have no experience in counting salmon from a  
 (11) weir  
 (12) is that a correct statement?  
 (13) A Yes that's correct I've been on a weir but not counted  
 (14) salmon  
 (15) Q And you've never completed an escapement estimate from a  
 (16) tower is that a correct statement?  
 (17) A That's correct  
 (18) Q In the last two or three years since you left BioSonics  
 (19) who has paid your salary?  
 (20) A A number of clients  
 (21) Q Who are they?  
 (22) A The Department of Energy the Bonneville Power  
 (23) Administration and Exxon has also paid my salary  
 (24) Q And with regard to the work that you've done in Upper Cook  
 (25) Inlet Exxon paid your salary with regard to that isn't that  
 (26) correct?

(1) counters are off by 50 percent and you know that isn't that  
 (2) right?  
 (3) A That's his opinion yes  
 (4) Q And Dick Thorne your other colleague is of the opinion  
 (5) that the Bendix sonar counters are off 20 percent and you know  
 (6) that don't you?  
 (7) A They are - what they say actually - Akers says that it's  
 (8) within 50 percent and Thorne says within plus or minus 20  
 (9) percent  
 (10) Q And Ken Tarbox the ADF&G biologist is of the 20 percent  
 (11) view isn't that right?  
 (12) A Depends upon what your source is I guess  
 (13) Q Let's go to Mr Akers for a while What's Mr Akers  
 (14) background?  
 (15) A Bill is in electrical engineering  
 (16) Q Who worked on fish counters for a number of years for you  
 (17) with you?  
 (18) A With me that's correct  
 (19) Q And he's at 50 percent which is close to where Dr Rogers  
 (20) is at 60 percent isn't that right?  
 (21) A Yeah that would be correct  
 (22) Q Over the last ten or 15 years - you testified about how  
 (23) fish act in the Wood River and how fish act in the Nushagak  
 (24) River How much time have you spent on the Wood and the  
 (25) Nushagak rivers?

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A Limited amount of time

Q Very limited amount?

A None on the Wood and a couple maybe on the Nushagak

Q Dr Rogers would it be fair to say has studied fish

behavior well beyond your studies of fish behavior?

A Which system are you referring to?

Q Wood and the Nushagak Bristol Bay

A Bristol Bay I would agree

Q You were at the Fishery Research Institute for a while?

A Certainly was

Q What is Dr Rogers reputation? He is referred to as Dr Salmon isn't he?

A I've never heard that Excuse me for laughing that was inappropriate but he is known to be a determined and dedicated

professional fisheries scientist

Q The foremost fish forecaster in the world because he is one

of the only in the world that gets it right for the Port Moller

fishery isn't that right?

A I haven't looked at his numbers but I think his is the

same as any fisheries scientist It's black art and you're

lucky if you get it right

Q At this point I want to look at a couple movies I want to

talk about the fish counter estimates

Who is Paul Skvorc?

A Paul Skvorc is an ADF&G employee

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Q Let's take a look at Exxon's animation and we'll compare it to the Wood River videotape

A Certainly

MR O NEILL Can we play Exhibit - just a second

Can we play Exhibit 8989 please defendants? It's a

videotape If you could run it forward fast forward it until

we get to the part that I want

A little farther

Okay right here Run this slow Run it normal

(Videotape Played)

BY MR O NEILL

Q We've got them coming through like school kids in a line

don't we?

A Yes that's true There we have two together and here we

have two together and that's how they are lined up on Exxon's

videotape

Q Now we have a problem because we can't show the jury fish

from the Kenai and the whole problem resolves around the fact

that you can't visually count the fish on the Kenai isn't that

right?

A You can't see fish without sonar

Q Because it's occluded glacial occluded but you can see it

on the Wood River and let's see if they go through like

kindergarten kids

Plaintiffs 398 which is in evidence - and this is a

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Q His job in point of fact is he is the chief guy at ADF&G in charge of fish counters or was isn't that right?

A I'm not sure exactly Let's say that I have a great deal

of uncertainty about that statement

Q Do you know?

A I believe I know but it would be speculation on my part

about what his actual role is

Q He has complained about the accuracy of the fish counters

hasn't he?

A Complained and rescinded yes

Q He hasn't rescinded anything And in response to his

complaints the Institute of Electrical and Electronic

Engineering on March 18th of this year agreed with his

complaints about the fish counters on the Kenai didn't they?

A They agreed that he had data that indicated that absorption

might be a problem

Q Which would result in undercounting?

A If it were true it could but not necessarily absolutely

Q Now you did - we saw a movie here in which the fish went

through single file Do you recall that?

A Which part of the movie because there was one part -

Q You lined up two fish side by side Do you recall that?

A I recall that

Q Who produced that movie?

A That was an animation that was done by Exxon

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(1) portion of 398 - he's lost my videotape - the fish don't come

(2) through single file do they?

(3) A We could look at that section of videotape that we looked

(4) at earlier

(5) Q And that section of videotape shows three four five six

(6) across?

(7) A At that passage rate - hold everything Not five six

(8) across You might be stretching it a bit

(9) Q Now would it be fair to say of your partners and Rogers -

(10) who is Jack Soumala?

(11) A Jack Soumala is a retired researcher electrical

(12) engineering

(13) Q At MIT?

(14) A At Draper Langes (ph)

(15) Q Soumala Thorne Akers Skvorc you're in a minority?

(16) A I'm the only one that's done an analysis of the behavior

(17) Q Let's talk a little bit if we can about your report in

(18) this case and I find your report interesting for a couple

(19) reasons First thing I find interesting about your report and

(20) I'm going to put it on the Elmo is just generally where you

(21) cast blame

(22) This is the report that you did for Exxon isn't that

(23) right?

(24) A Uh huh That's correct

(25) Q Now in the second sentence of the report it says This

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1 escapement the 1989 overescapement resulted from the  
 2 management practices of Alaska Department of Fish & Game  
 3 following the Exxon Valdez oil spill in late March 1989 Do  
 4 you see that sentence?  
 5 A Yes I do  
 6 Q Resulted from the Exxon Valdez oil spill didn't it?  
 7 A Responses to that that's correct uh huh  
 8 Q Now you did this study on these photographs is that  
 9 right?  
 10 A Yes that's correct  
 11 Q And the study on the photographs is part of something you  
 12 brought here today for us and in your report you describe the  
 13 photographs studied and you say in 1955 photographs of  
 14 migrating adult salmon were taken at a frequency of 21 per  
 15 minute from July 4 to July 23 a period encompassing over 90  
 16 percent of sockeye escapement into the Wood River Do you see  
 17 that sentence?  
 18 A Yes I do  
 19 Q Why is the 90 percent important?  
 20 A I'd like to make one correction before we go on  
 21 Q Yeah  
 22 A It's not 21 That's a greater or equal to sign  
 23 Q Okay Greater or equal to sign I'm sorry  
 24 Why is the 90 percent important?  
 25 A The reason that it is important to me is I wanted to

11) this report The main difference between the Wood River and  
 12) the Kenai the main difference was that sockeye migrate upriver  
 13) almost equally along both banks of the Kenai while they  
 14) migrate exclusively along one bank of the Wood River  
 15) Do you see that?  
 16) A Almost exclusively  
 17) Q What does Dr. Matisen say about that do you know?  
 18) A Do you mean in his logs for the 1955 work or in his paper?  
 19) Q Uh huh  
 20) A In the logs they documented that the - I think it was  
 21) something like 90 percent of the fish pass along one bank  
 22) That's the reason that the passage rates were so high along  
 23) that bank  
 24) Q Dr. Matisen's report that was published said during  
 25) periods of heavy escapement they can be observed moving in  
 26) continuous advances close to both river banks Do you see  
 27) that?  
 28) A That's a very general statement and doesn't relate to what  
 29) actually happened in that period of record on the Wood River  
 30) Q How much time have you spent on the Wood River?  
 31) A I've spent very little time on the Wood River  
 32) Q You stated when these fish come through they don't come  
 33) through bumper to bumper or they don't come through like  
 34) bumper cars Do you recall stating that?  
 35) A They don't come through - no I don't recall stating that

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1 encompass that period of time when fish passage rates were the  
 2 highest and when the density of fish and the likelihood of  
 3 overlap was the greatest  
 4 Q And where did you get this 90 percent number?  
 5 A This was from the report by - from the paper by Ollie  
 6 Matisen and other documentation that I provided with the  
 7 report  
 8 Q Now who is Ollie Matisen?  
 9 A Ollie Matisen is a fishery scientist who is the person  
 10 that was responsible for that photo study  
 11 Q Now I'm going to state the proposition that you weren't  
 12 particularly careful with what you said but Dr. Matisen  
 13 reports instead of a 90 percent of the total of the Wood River  
 14 escapement it's 63 percent of the total Wood River  
 15 escapement  
 16 Do you see that in Dr. Matisen's paper? We got it on the  
 17 monitor  
 18 A Yes I was just reading it  
 19 Q So there wasn't a lot of care with regard to that 90  
 20 percent number was there?  
 21 A I'd have to go back and review it According to what  
 22 you've shown me here why then that would be true  
 23 Q Let's go to the bottom of the same page in your report  
 24 You're comparing the two streams and you've testified here as  
 25 an expert on the Wood River and you come in and you say in

11) exactly  
 12) Q Do for I took it down in my notes that you said that  
 13) today but Dr. Matisen says the fish formed a continuous band  
 14) and all fish moved at essentially the same speed similar to  
 15) automobiles riding bumper to bumper on a congested  
 16) highway Do  
 17) you see that?  
 18) A Yes I do  
 19) Q Let's go back and see if we can play my videotape and  
 20) compare what is on the videotape on the Wood River to the  
 21) school children going through single file on Exxon's  
 22) videotape  
 23) A Do you realize that videotape wasn't used in the analysis  
 24) or the animation I should say  
 25) Q We'll come back to your statement there  
 26) (Videotape Played)  
 27) Q That's a slug of fish coming through the Wood River isn't  
 28) it?  
 29) A Yeah At these passage rates you'd typically see that on  
 30) occasion uh huh  
 31) Q Now I want to go to if I could Exhibit 8687 Alpha  
 32) defendant's 8687 Alpha  
 33) Who made this exhibit?  
 34) A That's an Exxon exhibit  
 35) Q You had a little bit of trouble with it because you  
 36) stumbled when I listened to you over this computer word here

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didn't you?

- 1 A Uh huh that's correct
- 2 Q Because in point of fact that is not a modern day
- 3 computer but it's an old ladder wired box that was designed by
- 4 Menin in the '70s?
- 5 A That's correct. It has logics similar to what computer we
- 6 had
- 7 Q But it's years old?
- 8 A It's an old design uh huh
- 9 Q This system that we're talking about which has been jazzed
- 10 up to include a computer was described in King's study on the
- 11 1992 studies if we could have this a little bit differently
- 12 than you described it but he describes the current equipment
- 13 as having been in use since 1976 and while repairs and
- 14 modifications have been done by a retired Bendix employee on
- 15 contract to the state new equipment is no longer
- 16 manufactured. Not only is it becoming increasingly difficult
- 17 to obtain replacement parts but advances in acoustic
- 18 technology have made the equipment obsolete for some
- 19 project
- 20 objectives isn't that right?
- 21 A For some project objectives that's right
- 22 Q We're not talking about state of the art equipment when we
- 23 talk about the Bendix sonar are we?
- 24 A In terms of the electronics or the concept -
- 25 Q Electronics?

- (1) the Bendix side scan sonar counters on the Kenai your former
- (2) partner Thorne was concerned enough about it to write a
- (3) scholarly article about how they ought to be taken care of
- (4) isn't that right?
- (5) A I don't recall the article
- (6) Q You don't?
- (7) A No I don't
- (8) Q Let's see if we can find it
- (9) Have you ever read the Needs for Standards and
- (10) Hydroacoustic Measurements of Fish Entertainment by Richard
- (11) Thorne in June of 1990?
- (12) A I have read a draft of it I don't remember much about it
- (13) Q In the bottom paragraph of your former partner's report it
- (14) says It is important to calibrate systems and maintain
- (15) complete historical documentation of every system calibrated?
- (16) A That's correct
- (17) Q And that was not done with regard to the Kenai counters
- (18) was it and you know that?
- (19) A Well each year they have come up and checked the
- (20) performance of the systems
- (21) Q Were they calibrated every year?
- (22) A What they do there is they actually use what they consider
- (23) a standard target which is a float. Standard targets there
- (24) are two types of calibration. One type is where you actually
- (25) take the equipment into a laboratory

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- 1 A In terms of the electronics that statement would be
- 2 accurate
- 3 Q Now let's talk a little bit about its maintenance. I'm
- 4 sure if you were going to come in here and testify about its
- 5 accuracy you would have checked how it was maintained for
- 6
- 7
- 8
- 9
- 10
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- (1) Q That's what BioSonics did?
- (2) A Right. For fisheries systems the preferred method of
- (3) calibration is using a standard target. Higher accuracy can be
- (4) achieved
- (5) Q You've looked into whether there was a log about when
- (6) Menin
- (7) calibrated each of these devices and point in fact it's true
- (8) he didn't visit all sites all times and there is no record made
- (9) of these tests isn't that right?
- (10) A I know it's true that he didn't visit all sites. I believe
- (11) he's visited the Kenai site every year and in the records I
- (12) looked at I didn't see any note
- (13) Q I was interested in this comment that you made. You said
- (14) I spoke with Al Menin he spent some time looking at other
- (15) parts of the river looking to validate the distribution of the
- (16) fish. That's your statement?
- (17) A That's correct
- (18) Q You can't do that on the Kenai in the counting area because
- (19) you can't see into the river isn't that right?
- (20) A You can use sonar to look in different parts of the river
- (21) Q Let's talk a little bit about - you testified about some
- (22) tests that you claim validate the sonar counters and they were
- (23) the Anvik and what were the other two?
- (24) A There is Russian and then the Wood River most importantly
- (25) the Wood
- (26) Q Have you ever seen any reports from the Anvik the Russian

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11 or the Wood River?  
 12 A I've seen reports from the Wood River summaries  
 13 Q That validate the sonar counters? There are no reports  
 14 with regard to the Anvik are there?  
 15 A I don't believe I've seen one for the Anvik  
 16 Q There are no reports with regard to the Russian River that  
 17 validate the sonar counter isn't that right?  
 18 A I've seen diagrams and summaries of their experience  
 19 Q You haven't seen any data have you?  
 20 A I've seen the summary of the results of the experiments  
 21 Q Where are they published? I've looked for them never seen  
 22 them Where are they published?  
 23 A They are in early ADF&G reports  
 24 Q You didn't bring them here today did you?  
 25 A No  
 26 Q You didn't produce them to us with your reports?  
 27 A No I didn't  
 28 Q With regard to the Anvik Russian and Wood River you  
 29 didn't produce any of these studies that you're relying on in  
 30 the discovery process did you?  
 31 A I think that they may have been submitted I'm not  
 32 absolutely certain  
 33 Q You don't know?  
 34 A Not certain  
 35 Q With regard to the Nushagak study done by Dr. Rogers his

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11 A He showed it as he thought it was  
 12 Q You testified on some run size assessments right at the end  
 13 of your testimony?  
 14 A That's correct  
 15 Q Have you ever done any run forecasting for anybody before  
 16 in your life?  
 17 A I relied on the ADF&G forecast No I haven't  
 18 Q Have you done any run valuation before in your life for a  
 19 bank or anybody like that?  
 20 A No I haven't  
 21 Q So that was your sort of first shot at this?  
 22 A That was my first shot  
 23 Q And you have no and claim to have no expertise in the area?  
 24 A No that was my first shot  
 25 Q And you came in here and you presented to the jury as an  
 26 expert something that you didn't really have any experience in?  
 27 A I think it was a reasonable analysis  
 28 Q For a novice?  
 29 A For a first time uh huh  
 30 Q And Dr. Rogers has done that his whole career hasn't he  
 31 run size estimates?  
 32 A Run size forecasting that's correct  
 33 Q And Dr. Mundy has done that for a majority of his career  
 34 working with Alaska Fish & Game?  
 35 A Yeah The run size entry pattern that kind of stuff

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11 compilation of data -  
 12 A That's correct  
 13 Q - would it be fair to say that is the only complete  
 14 year by year multi year collection of data that we have that  
 15 compares actual visual counts to sonar counts?  
 16 A My feeling is that it's a flawed data set and is not  
 17 appropriate for that use  
 18 Q My question is is that the only set of data that we know  
 19 of that includes complete years and multiple years and visual  
 20 counts?  
 21 A Complete years multi years and visual counts? Such as  
 22 they are that's correct  
 23 Q You can agree or disagree with the data set but because it  
 24 encompasses the number of years it encompasses because it  
 25 encompasses complete years and because it actually  
 26 compares the  
 27 sonars to visual counts correct or incorrect it is the most  
 28 complete data base we have isn't it? You can argue with it  
 29 but it's the most complete?  
 30 A Under the presumption of correct or incorrect well then  
 31 that's acceptable  
 32 Q Dr. Rogers when he brought those results into this  
 33 courtroom to show to the jury he showed the jury the data as  
 34 it was no fooling around That's raw data point isn't it?  
 35 A He didn't show the data as it was  
 36 Q He sure did

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11 uh huh  
 12 Q Now I want to move to a new subject if we could I want  
 13 to move to the subject of fish study 27  
 14 A Is that the same as 136?  
 15 Q It's the 94/95 Kenai and Kodiak crash  
 16 A Okay  
 17 Q Counsel for Exxon Corporation was very careful when he  
 18 talked about that study in calling it the plaintiffs position  
 19 or plaintiffs hypothesis or Dr. Mundy's hypotheses but it's  
 20 more than that isn't it?  
 21 A It's a summary of studies conducted by ADF&G primarily  
 22 Q And the state and federal Trustees?  
 23 A They funded it that's correct  
 24 Q And you were a little critical of Dr. Mundy not having done  
 25 any hands on research yesterday but in fact he's a peer  
 26 reviewer for the state and federal Trustees?  
 27 A That's correct  
 28 Q And part of his job with the state and federal Trustees was  
 29 making sure studies like fish study 27 was done correctly and  
 30 he was aware of it and you're aware of that?  
 31 A That's true  
 32 Q With regard to fish study 27 the Trustees have come to the  
 33 conclusion that as a result of overescapement smolt  
 34 production  
 35 in the Kenai River system has declined as follows 1987 thr  
 36 million smolt 1990 six million smolt 1991 2.5 million



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1 smolt and in 1992 and 1993 less than one million smolt isn't  
 2 that right?  
 3 A Those were the published results from the smolt program  
 4 Q And indeed the Trustees have taken the position that  
 5 forecast for this year and next year is for escapement to be  
 6 below goals that's their position?  
 7 A Yes  
 8 Q And Exxon's position is different than the Trustees is  
 9 that right?  
 10 A That's correct  
 11 Q And who are the Trustees who supervised this?  
 12 A I don't know I'm sure you have a list there  
 13 Q Yeah I do They include the assistant secretary for Fish  
 14 Wildlife and Parks of the interior The director of the Alaska  
 15 Region of the National Marine Fisheries Service the  
 16 commissioner of the Alaska Department of Fish & Game the  
 17 commissioner of the Alaska Department of Environmental  
 18 Conservation the attorney general of the State of Alaska and  
 19 the regional forester for the United States Department of  
 20 Agriculture Is that consistent?  
 21 A That's the list you just read yeah  
 22 Q And I want to take a look at a couple of the exhibits that  
 23 you talked about  
 24 MR O NEILL Could you pull up 7113 please?  
 25 BY MR O NEILL

11 the oil spill - because the drift fleet couldn't fish so he  
 12 was partially blind because of the oil spill That's a correct  
 13 statement isn't it?  
 14 A I believe that's correct  
 15 Q Now if we could go to 8811 the two years in which we do  
 16 have any serious overescapement are years of oil spills is  
 17 that correct?  
 18 A Associated with them yes  
 19 Q And now with regard to the Trustees studies and Dr  
 20 Mundy's studies their conclusion isn't that it was cumulative  
 21 overescapement their conclusion was that '87 was okay and  
 22 '88  
 23 was okay the brood years and it is the problem that resulted  
 24 in '89 that causes the problem That's their conclusion isn't  
 25 it? Yours is different than that?  
 1 A I'm not certain about that being their conclusion  
 2 Q You didn't study their positions before you came in here  
 3 and testified to us about that?  
 4 A I studied a lot of things  
 5 Q And indeed the smolt outmigration the primary crash of the  
 6 smolt outmigration has to do with the 1989 brood year doesn't  
 7 it?  
 8 A Would you say that again please?  
 9 Q The primary crash of the smolt outmigration has to do with  
 10 the 1989 brood year?  
 11 A I don't agree with that

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1 Q I'm interested in 7113 and I'm interested in these  
 2 escapement levels Okay? Now the first thing is with regard  
 3 to the reasons for the overescapement in '87 and '89 '87  
 4 teaches us something about '89 because the '87  
 5 overescapement  
 6 was the result of an oil spill wasn't it?  
 7 A I believe that's true  
 8 Q It was a result of the oil spill SS Glacier Bay in Cook  
 9 Inlet and we've learned in '87 and you've come today to  
 10 testify as a fisheries expert that oil spills cause problems  
 11 with the fisheries management isn't that right?  
 12 A That's one of the results  
 13 Q So we know that in 1989 we have another problem with the  
 14 management of the fisheries as a result of an oil spill  
 15 That's a correct statement isn't it?  
 16 A I think there are differences but I think generally that's  
 17 correct  
 18 Q And indeed in Upper Cook Inlet the primary tool to manage  
 19 the Upper Cook Inlet fishery is the commercial fleet and to a  
 20 great extent the drift fleet is that right?  
 21 A It's the drift fleet and the setnets yes  
 22 Q In order to figure out how much escapement may go into the  
 23 river the primary piece of information are the early catch  
 24 results from the drift fleet?  
 25 A That's what I understand  
 1 Q And the fishery manager in 1989 had none of that because of

1 Q What's the Trustees view?  
 2 A The Trustees view I believe is that the sequence of  
 3 events cause something to happen in the Kuna system and  
 4 that  
 5 something is still a matter of speculation and investigation  
 6 Q Let's just parse out what you just said The Trustees  
 7 view is that the sequence of events - when you say the  
 8 sequence of events you mean the oil spill leading to the  
 9 closure caused something to happen?  
 10 A No I'm talking about the three years there and the high  
 11 escapement in the system  
 12 Q Trustee focus is on 1989 or do you know?  
 13 A I know the Trustees get all of their information from the  
 14 people doing the work in the field they aren't out there and  
 15 I know that in the field what people are looking at are models  
 16 like the Frazer Lake model to try to better understand and  
 17 focus their studies on those areas that might help explain what  
 18 happened  
 19 Q You disagree with fish study 27 don't you?  
 20 A What part of it?  
 21 Q How many people have worked on fish study 27?  
 22 A Quite a few  
 23 Q 20-30?  
 24 A Maybe  
 25 Q And fish study 27 has been reviewed by the top fishery  
 1 scientists and biologists in the United States peer review

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- (1) through the Trustee process isn't that correct?
- (2) A It's been reviewed by people that have those credentials
- (3) Yes
- (4) Q And you disagree with them too?
- (5) A I think that as far as that fish study is concerned there
- (6) is still no conclusive - there is still no definite conclusion
- (7) about what's happening in that system
- (8) Q And you're in here today to throw rocks at it aren't you?
- (9) A I'm here to say I disagree with some elements of it
- (10) MR O NEILL If we could take a break at this time
- (11) I've got another subject
- (12) THE COURT Take our second break at this point
- (13) (Jury out at 12:00)
- (14) (Recess from 12:00 to 12:15)
- (15) (Jury in at 12:15)
- (16) THE CLERK All rise
- (17) BY MR O NEILL
- (18) Q Ready sir?
- (19) A Yes I am
- (20) Q I'll try to finish in ten or 15 minutes I will finish in
- (21) ten or 15 minutes that's a better statement
- (22) In recent years the big harvests on the Kenai began in
- (23) about 1986 didn't they?
- (24) A I believe that's correct It was the '80s
- (25) Q And there have been years in the Upper Cook Inlet fishery

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- (1) when the fleet has harvested as many as nine million fish in
- (2) recent years isn't that correct?
- (3) A I'm not absolutely sure of the number but I know the
- (4) harvests have been high
- (5) Q Of that magnitude And if you assume the conclusions of
- (6) fish study 27 if you assume those there is in fact a
- (7) likelihood that the fleet won't fish in '94 or in '95 and if
- (8) it does fish it will be allocated very few fish if you assume
- (9) the fish study 27?
- (10) A If you believe the smolt estimates and if you believe
- (11) those I think that would be true
- (12) Q Now you mentioned briefly and we talked about the
- (13) opening
- (14) paragraph of this 1992 study in which the Bendix counter on the
- (15) Kenai was run at the same time a BioSonics counter was run?
- (16) A Yes
- (17) Q That study in no way validated the accuracy of the Bendix
- (18) counter did it the data was inconclusive?
- (19) A That wasn't the purpose of the study
- (20) Q It wasn't the purpose of the study I just want to be clear
- (21) of that
- (22) A Yes
- (23) Q And there were problems with the BioSonics counter which
- (24) is a more technically advanced animal to count the fish isn't
- (25) that right?
- (26) A No that's wrong

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- (1) Q What did the study conclude?
- (2) A The study concluded that ADF&G at this time with that
- (3) particular equipment wasn't able to proceed with their
- (4) evaluation and new technology because the technology is to
- (5) implement dual beam and target tracking which is a couple of
- (6) the features which they wanted to try to use They needed to
- (7) be able to process echoless from echo rams and because that
- (8) didn't work out in that particular year why then they
- (9) discontinued that study
- (10) Q They were looking for a new way to count fish on the Kenai
- (11) other than the Bendix side scan sonar counter and they were
- (12) shopping BioSonics and BioSonics had trouble in making the
- (13) sale because of problems with echo return?
- (14) A There were about three things there I kind of lost count
- (15) But the - as far as the Bendix side scan sonar is concerned
- (16) I've had quite a few discussions with the people who actually
- (17) manage that project Their attitude is if they can get new
- (18) equipment in other words equipment that will be available
- (19) over the long term that simply duplicates what the side scan
- (20) sonar does that that would satisfy them
- (21) Q I want to talk a little bit about the purpose of the
- (22) counter on the Kenai The purpose of the counter on the Kenai
- (23) its basic purpose is to provide the fish manager with relative
- (24) data on a year by year basis That's the most important
- (25) function that it serves Accuracy is secondary but it needs

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- (1) to provide standard year to year relative data isn't that a
- (2) correct statement?
- (3) A From what I understand that wouldn't be correct no
- (4) Q And the Kenai sonar counter was never designed in and of
- (5) itself to provide information to a jury to come up with a run
- (6) size estimate in a damage case was it?
- (7) A The development didn't anticipate this trial no
- (8) Q So if indeed the Kenai River sonar counter either
- (9) undercounted or overcounted by a range of 20 to 50 percent
- (10) but
- (11) did so on a year to year basis that provides the fishery
- (12) manager enough relative information to use that technique as
- (13) part of the whole universe he looks at in managing the fishery?
- (14) A I can't speak for the fishery manager but I do know the
- (15) way they actually operate that system is inconsistent with that
- (16) statement
- (17) Q You can't speak for the fisheries managers because you've
- (18) never managed a fishery?
- (19) A That's right
- (20) Q Now I want to talk about your photo study
- (21) A Okay
- (22) Q Very often when we select data points when we select out
- (23) of a general population we like to randomly select?
- (24) A In general that's correct
- (25) Q And indeed there are programs that allow you to randomly
- (26) select so out of thousands of photographs there are programs

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1) available to let you randomly select the photographs you want  
 2) to use?  
 3) A Depends on what you want  
 4) Q In this case you didn't use such a program but you had a  
 5) photo developer pick these out for you?  
 6) A Are you talking about the pilot study?  
 7) Q That's right  
 8) A That's true  
 9) Q That's true?  
 10) A In the pilot study that's true  
 11) Q Now I want to talk a little bit if I could - by the way  
 12) this is the conclusion of the 1992 King study that I have got  
 13) right here. The method of enumerating fish using existing  
 14) individual fish tracking software at all density levels  
 15) investigators would only investigate and count fish traces at  
 16) densities as great as ten fish per minutes and most fish were  
 17) concentrated within 15 meters of the transducers on both  
 18) banks. That's the conclusion of that study?  
 19) A That's the body of conclusion with respect to that  
 20) regarding the passage beyond 20 meters  
 21) MR COOPER Can I have the exhibit number?  
 22) MR O NEILL Defendants 8611  
 23) BY MR O NEILL  
 24) Q Now I want to talk a little about the concept of  
 25) overescapement making sure there is adequate escapement

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1) A We're getting into an area almost of philosophy  
 2) Q That's right and I'm asking That's a philosophical  
 3) question?  
 4) A Philosophical - there are several layers of issues but  
 5) the philosophical issues one of the ones that strikes at the  
 6) core of what you're talking about is the set limits and one  
 7) of the major discussions that's currently occurring in  
 8) fisheries is whether or not it makes sense to really manage it  
 9) that way whether or not there should be a feedback loop so  
 10) that you can better anticipate those times when you would need  
 11) more escapement those times when you would need less  
 12) Q Historically the reason for the upper limit is to avoid  
 13) problems with regard to the reproductive ability of the  
 14) fishery You know that and I know that isn't that right?  
 15) A It's not absolutely clear cut The primary reason for the  
 16) upper limit is to avoid taking fish out of the fishery In  
 17) terms of many systems like the Kenai and what have you the  
 18) escapement goal range is still evolving and probably will  
 19) always evolve  
 20) Q Is the proposition that I stated a generally accepted  
 21) philosophically with respect to fishery management?  
 22) A Would you restate that?  
 23) Q A reason for the upper limit is to make sure that we don't  
 24) have an overescapement that harms the long term  
 25) reproductivity ability of the fishery system of the river system?

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1) without overescapement that is - the escapement range is one  
 2) of the principal tenants of fisheries management Fisheries  
 3) managers in Alaska and in Upper Cook Inlet manage the whole  
 4) fishery around escapement levels don't they?  
 5) A Yes they want to assure continuity in the population  
 6) optimizing harvest  
 7) Q And they manage against a lower escapement level and a  
 8) higher escapement level?  
 9) A That's current policy  
 10) Q And a major reason for managing a fishery that way is so  
 11) you don't have overescapement that hurts the reproductive  
 12) abilities of rivers like the Kenai that is a major reason  
 13) isn't it?  
 14) A You don't want to - I'll say it the way that makes sense  
 15) to me and I hope it answers your question But basically you  
 16) don't want to overharvest the run You want to make sure that  
 17) enough fish get back into the system so that the run will be  
 18) perpetuated  
 19) Q That's the bottom end of the range?  
 20) A Uh huh  
 21) Q The top end of the range and the reason that they use this  
 22) harvesting power of a drift fleet and a setnet fleet and a  
 23) seine fleet is so that overescapement doesn't occur because  
 24) overescapement - it is a recognized fisheries fact that  
 25) overescapement can hurt fisheries?

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1) A That is a reason  
 2) Q And that reason has been a long time recognized reason  
 3) among fisheries managers a reason?  
 4) A There has always been the theory of density type effects  
 5) so that's a part of the theory  
 6) Q Point in fact the Trustees have concluded that that's just  
 7) the kind of disaster that's happened here with regard to the  
 8) Kenai River in 1994 and 1995 That's the Trustee conclusion  
 9) isn't it?  
 10) A That's their opinion at this time uh huh  
 11) MR O NEILL And with that I'll sit down Thank  
 12) you sir  
 13) THE COURT Mr Cooper  
 14) REDIRECT EXAMINATION OF THOMAS CARLSON  
 15) BY MR COOPER  
 16) Q Dr Carlson I just have a few points and let's see if we  
 17) can do them quickly here  
 18) Mr O'Neill asked you some questions about whether you were  
 19) up in the Kenai with these ADF&G folks being paid by Exxon to  
 20) look over the shoulders of these ADF&G people for Exxon?  
 21) A As a supersleuth?  
 22) Q Yes Were you a supersleuth?  
 23) A No I wasn't I've known the people who were running the  
 24) Kenai River projects for many many years and when I learned I  
 25) would be involved and I wanted to - what I really wanted to do

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- (1) was to investigate some years that were outside the range of  
 (2) the studies they were doing We began talking about  
 (3) possibilities and we developed a cooperative arrangement  
 (4) where  
 (5) the studies that I would perform would duck tail in with those  
 (6) that they were currently conducting In fact we exchanged  
 (7) equipment took turns driving the boats we did all those  
 (8) thin\_s bottom line being that any of the data or any of the  
 (9) reports that sort of thing would need to flow through ADF&G  
 (10) protocols for review and what have you and that s really where  
 (11) we are with those studies at this time  
 (12) Q So it s really a joint program between you and ADF&G  
 (13) although Exxon is paying for -  
 (14) A That s right We jointly discussed the design of the  
 (15) studies cooperated in the exchange of equipment and actually  
 (16) acquiring the data and now we re cooperating in the final  
 (17) stages  
 (18) Q Dr Carlson Mr O Neill asked you questions about some  
 (19) colleagues or former colleagues Mr Akers and Thorne I think  
 (20) was the other one?  
 (21) A Yeah  
 (22) Q Have they done the kind of careful analyses that you have  
 (23) done to see it in fact there is any undercounting by the sonar  
 (24) unit?  
 (25) A One of the absolutely most critical things regarding  
 (26) undercounting by the sonar is what the fish are doing whether

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- (1) they go through the beam and how they go through the beam  
 (2) Neither Bill Akers nor Dick Thorne have conducted the type of  
 (3) study I have to look at that in detail and quantify it  
 (4) Q Mr O Neill referred to some claims that were made by this  
 (5) fellow Mr Skvorc Do you remember that subject?  
 (6) A Yes  
 (7) Q He was an ADF&G employee at one time?  
 (8) A Still is  
 (9) Q And I believe Mr O Neill asked you questions about a  
 (10) report that was done by a trade association of engineers I  
 (11) can t recall the name of it but do you recall that?  
 (12) A Triple E  
 (13) Q Triple A?  
 (14) A Triple E  
 (15) Q Did the state appoint some panel to look into Mr Skvorc s  
 (16) claims?  
 (17) A Yes Juf Kounings convened an expert panel to take a look  
 (18) at these claims and to try to provide guidance to ADF&G and  
 (19) how  
 (20) they might pursue them  
 (21) Q Did that panel come to a conclusion make a report on Mr  
 (22) Skvorc s claims?  
 (23) A Yes they generated a report  
 (24) Q And you v seen that report?  
 (25) A Yes I have  
 (26) Q Did this conclude that the data reviewed concerning sonar

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- (1) counting in the UCI river systems did not indicate intolerable  
 (2) levels that the ADF&G used for monitoring escapement?  
 (3) A That s what they concluded  
 (4) Q Mr O Neill asked you some questions whether or not the  
 (5) passage rate or the time period that you looked at the data on  
 (6) the Wood River encompassed 90 percent versus 63 percent of  
 (7) the  
 (8) total count?  
 (9) A Yes that s correct  
 (10) Q Would it make any difference in the - any material  
 (11) difference in the outcome of your analysis if it was 63 percent  
 (12) instead of 90 percent?  
 (13) A No The period of record that was selected included that  
 (14) period where the passage rates were highest In my opinion it  
 (15) was extremely important to look at those situations where the  
 (16) fish were most tightly aggregated I was concerned about not  
 (17) making the error of looking or spending a preponderance of  
 (18) time  
 (19) looking at those situations where instantaneous densities were  
 (20) low and the likelihood of overlap was good  
 (21) Q Mr O Neill talked about the fish being bumper to bumper  
 (22) Do you recall that?  
 (23) A Yes that is correct  
 (24) Q If the fish are bumper to bumper that is end on as  
 (25) opposed to side by side would the sonar still count if it s  
 (26) bumper to bumper two fish?  
 (27) A Yes The sonar count would likely be better than almost

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- (1) any other  
 (2) Q So they got counted under the bumper to bumper situation?  
 (3) A That s correct  
 (4) Q Mr O Neill asked you questions with one or two of the  
 (5) exhibits and I think you indicated that those were exhibits  
 (6) that Exxon made What was your input into those?  
 (7) A Exxon made them but I designed them  
 (8) Q And you looked at them and made sure you were satisfied  
 (9) that the data that was correct?  
 (10) A I don t have the specialized expertise that would have been  
 (11) required to do those actually execute them  
 (12) Q Finally with respect to the - Mr O Neill asked you  
 (13) questions about your projection as to how many of the fish if  
 (14) you assume that the plaintiffs contentions are correct how  
 (15) many fish will there be in the harvest Who made the forecast  
 (16) that underlies your calculation?  
 (17) A The actual forecast?  
 (18) Q Yes  
 (19) A They re simply the ADF&G forecast  
 (20) Q What you did was apply some mathematics to that to isolate  
 (21) out the Kenai component?  
 (22) A That s right I just tried to present what I thought was a  
 (23) reasonable estimate based on that forecast  
 (24) Q Incidentally the Glacier Bay spill in 1987 that wasn t an  
 (25) Exxon vessel was it?

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1 A Not that I know no  
 2 Q Finally in response to a question Mr O Neill was asking  
 3 you about whether you had the photo developer pick some  
 4 photos  
 5 and I think you said in connection with the pilot study?  
 6 A That s correct  
 7 Q What did you mean by that?  
 8 A There were actually two phases to the study I conducted  
 9 It wasn t entirely clear when I started how I was going to  
 10 get - be able to measure the - or estimate spacial overlap  
 11 so I did a pilot study where I looked at a number of  
 12 photographs The purpose of that pilot study was to  
 13 investigate some of the premises that underlied the study I  
 14 would then in the future conduct  
 15 For that study what I did is I took in several rolls to a  
 16 photo finisher It had to be a photo finisher that had special  
 17 equipment because these rolls contained as many as 600  
 18 negatives and not many places can process that kind of - those  
 19 kinds of rolls  
 20 What I asked them to do was to go through and whenever they  
 21 encountered a photo that had two or more fish in it to simply  
 22 print it And the rolls that I selected however were rolls  
 23 for peak passage periods  
 24 Q So after you did the pilot study you then selected rolls  
 25 for the peak passage periods?  
 26 A For the following studies

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1 Q And that was your selection not the photo developers?  
 2 A Yes  
 3 MR COOPER No further questions  
 4 MR NEAL Mr Bruce King please  
 5 MS STEWART Your Honor before Mr King comes to the  
 6 stand defendants would like to read preadmitted documents  
 7 or  
 8 documents we would like to offer Defendants offer DX102 A  
 9 1725 -  
 10 THE COURT I m sorry very beginning 102 A?  
 11 MS STEWART DX1725 DX1726 DX3812 DX3824 DX5005  
 12 DX5026 DX5201 DX5235 DX5237 Alpha DX5242 Alpha  
 13 DX5392  
 14 DX6112 DX6114 DX6754 DX6759 DX6785 DX6854 DX6881  
 15 DX7156  
 16 DX9169 Alpha  
 17 (Exhibits 102 A DX1725 DX1726 DX3812 DX3824 DX5005  
 18 DX5026 DX5201 DX5235 DX5237 Alpha DX5242 Alpha  
 19 DX5392  
 20 DX6112 DX6114 DX6754 DX6759 DX6785 DX6854 DX6881  
 21 DX7156  
 22 DX9169 Alpha offered)  
 23 MR O NEILL We have no objection Your Honor  
 24 MR SANDERS Can I take you back on some we just  
 25 discussed?  
 26 THE COURT That first group of exhibits are  
 27 admitted  
 28 (Exhibit 102 A DX1725 DX1726 DX3812 DX3824 DX5005  
 29 DX5026 DX5201 DX5235 DX5237 Alpha DX5242 Alpha  
 30 DX5392  
 31 DX6112 DX6114 DX6754 DX6759 DX6785 DX6854 DX6881  
 32 DX7156

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1 DX9169 Alpha received)  
 2 MR SANDERS Offer DX3812 DX3824 DX5644 Alpha  
 3 DX6760 DX6763 Alpha we move to admit those  
 4 (Exhibits DX3812 DX3824 DX5644 Alpha DX6760  
 5 DX6763 Alpha offered)  
 6 MR O NEILL No objection  
 7 THE COURT That group of exhibits are also admitted  
 8 (Exhibits DX3812 DX3824 DX5644 Alpha DX6760  
 9 DX6763 Alpha received)  
 10 THE CLERK Mr King would you stand and raise your  
 11 right hand  
 12 (The Witness Is Sworn)  
 13 THE CLERK For the record sir state your full name  
 14 your address and spell your last name please  
 15 THE WITNESS My full name is Bruce Edward King  
 16 K I N G My address is - my business address is 34828  
 17 Kalifonsky Beach Road Kalifonsky Soldotna  
 18 DIRECT EXAMINATION OF BRUCE EDWARD KING  
 19 BY MR NEAL  
 20 Q You better sit up next to the microphone  
 21 I believe you re going to be a breath of fresh air You re  
 22 not a Ph D or engineer?  
 23 MR O NEILL Or a lawyer  
 24 BY MR NEAL  
 25 Q You re just a plain old working stuff?

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1 A Alaska Department of Fish & Game commercial fisheries  
 2 division  
 3 Q In what capacity?  
 4 A I m a biologist  
 5 Q Now you do have some education I believe?  
 6 A Yes  
 7 Q Tell the ladies and gentlemen of the jury what formal  
 8 education you have  
 9 A I have a bachelor s degree from Colorado State University  
 10 Q That s in Fort Collins Colorado right?  
 11 A Yes it is  
 12 Q And you ve done some postgraduate work?  
 13 A Yes I have also at Colorado State  
 14 Q And it s three years in something called terrestrial  
 15 biology?  
 16 A Yes  
 17 Q That doesn t study unidentified flying objects?  
 18 A No sir  
 19 Q Now I wanted to go back now and I ll be very brief  
 20 because as a result of the last witness we ve heard a lot about  
 21 sonars sonar counting of sockeyes and oscilloscopes and  
 22 spikes  
 23 and all of that so I m going to be very brief and ask you what  
 24 you do now What are your responsibilities in your job - tell  
 25 us your job again  
 26 A I m a biologist for the commercial fisheries division

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- (1) Q What are your - what - for the ADF&G correct?
- (2) A Yes
- (3) Q And what title do you have with the ADF&G other than
- (4) biologist?
- (5) A My title is assistant area research project leader
- (6) Q And with that title what are your responsibilities?
- (7) A I m responsible for the adult counting operations on the
- (8) four rivers in the Upper Cook Inlet that we monitor and I m
- (9) also responsible for the Kenai River smolt project
- (10) Q You re responsible for the adult counting process adult -
- (11) counting of adult sockeye salmon that go up these four rivers?
- (12) A Yes
- (13) Q And these four rivers are the to move this on a little
- (14) bit the Kenai which is the big one correct?
- (15) A Yes
- (16) Q The Yentna?
- (17) A Yes
- (18) Q The Kaslo? Am I pronouncing that correctly?
- (19) A Yes
- (20) Q And the Crescent?
- (21) A That s correct
- (22) Q How long have you been responsible - does that include
- (23) responsibility for the operation of the sonar counting sites on
- (24) these rivers?
- (25) A Yes it does

- (1) Q Four people?
- (2) A Yes
- (3) Q And how many shifts during this season?
- (4) A It varies but during the peak of the run when fish are
- (5) coming by in numbers it s three shifts full 24 hours or near
- (6) 24 hours of coverage
- (7) Q In your opinion do you have good crews and had good
- (8) let s say in 1989?
- (9) A Yes
- (10) Q Let me ask you this sir Do you have a general opinion as
- (11) to the accuracy of the sonar counting device the so called
- (12) what is it Bendix side scan sonar counter?
- (13) A Yes
- (14) Q Do you have a general opinion as to the accuracy of that
- (15) device with respect to counting sockeye as of 19 hundred and
- (16) 89 or during the period 1989?
- (17) A I think the numbers that we produced using that gear are
- (18) accurate
- (19) Q If there is any inaccuracy do you have an opinion as to
- (20) which way it would be on the Kenai?
- (21) A I don t think there is any data to indicate a substantial
- (22) number of fish over or undercounted from our estimate
- (23) Q As you sit there you believe that the jury may rely on the
- (24) general accuracy of the sonar counts of sockeye salmon going
- (25) up
- (26) those four rivers you ve mentioned for the year 1989?

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- (1) Q And does that include responsibility for the crews that
- (2) operate on those sites or operate the sonar counting devices
- (3) on those sites?
- (4) A Yes
- (5) Q By the way have you actually operated those counting
- (6) equipment yourself?
- (7) A Yes I have
- (8) Q I mean you ve actually gotten down there and done it
- (9) correct?
- (10) A Yes sir
- (11) Q Now how long have you been responsible for the operation
- (12) of the sonar counting sites on these rivers?
- (13) A I was assigned to that project in 1980
- (14) Q 14 years is that correct?
- (15) A Yes
- (16) Q Do you have crews there at these sites?
- (17) A Yes we do
- (18) Q Let me limit myself to the Kenai River What s the size of
- (19) your crew during the - we re talking about the season I ve
- (20) learned that is sometime - starts in July and goes for a few
- (21) weeks when the sockeye come back upstream and escape up the
- (22) rivers?
- (23) A Yes that s correct
- (24) Q What is the size of your crew at the Kenai River?
- (25) A Normally it s four people

- (1) A Well there are differences between rivers but with
- (2) respect to the Kenai River yes
- (3) Q Let me ask you with respect to the Kaslof River Do you
- (4) believe the sonar counters were generally accurate on that
- (5) river for the year 1989?
- (6) A Yes
- (7) Q And what about the Crescent?
- (8) A Yes
- (9) Q What about the Yentna?
- (10) A I think at the Yentna site we have occasions that
- (11) conditions make the counters somewhat less reliable
- (12) Q Yentna River is an extremely - if you take all the
- (13) escapement that the jury has heard for the year 1989 the
- (14) Yentna River is an extremely extremely small part of that is
- (15) it not?
- (16) A I m not sure about extremely small but it is a small
- (17) percentage of the total
- (18) Q The other three rivers you believe are accurate as to the
- (19) sonar count for 1989?
- (20) A Yes
- (21) MR NEAL Thank you You may examine
- (22) CROSS EXAMINATION OF BRUCE EDWARD KING
- (23) BY MR O NEILL
- (24) Q Now don t you get mad at me about this okay I am just
- (25) going to ask as gently and politely as I can about the base of

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your opinion I m going to try to do it in five minutes and sit down Okay?  
 A Sure  
 Q With regard to how the electronics of the sonar counter work you re not an expert in that?  
 A No sir  
 Q And you re not an expert in hydroacoustics that is from the transducers out into the water stream and you don t purport to be?  
 A No  
 Q And you have no engineering background you re a biologist?  
 A That s correct  
 Q And with regard to comparative studies of the Bendix versus other kinds of counting systems you yourself have done no comparative studies?  
 A I was involved in the 1992 study  
 Q But the 1992 study provides us no conclusive information about how the Bendix works against the real world?  
 A That s correct the study was not designed to compare one counter to the other  
 Q It wasn t I ve asked you before about all the studies that do exist and you said at that point in time that you weren t prepared to come in and talk about all those studies  
 A Are you prepared to talk about the Nushagak and the Anvik and all those today as we sit here?

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A No sir  
 Q And you re aware that other people including your boss is Ken still your boss?  
 A Yes he is  
 Q - have proposed error ranges that range anywhere from one percent in Ken s case 20 percent to 50 percent in the case of Bill Akers you re aware of that aren t you?  
 A Yes I am  
 Q Am I being direct and intelligent enough so far?  
 A You re doing fine  
 Q And the problem that we have in the Kenai is that the operator of the Bendix side scan sonar sitting on the Kenai can t actually see how many fish there are in the river to run the dial and correlate the echoes that are being counted against the fish That s inherent in the system isn t it?  
 A That s correct  
 Q From Fish & Game s perspective which is your perspective the most important thing is that the sonar counters provide good information of one year relative to another so that your management decisions can be made on a historically consistent basis? Do you understand what I m saying? Do you want me to try it again?  
 A Please  
 Q The most important aspect with regard to the counters is that we ve used them over a number of years so that they

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(1) provide a - at a minimum they provide a good relative index  
 (2) in comparing 85 to 86 to 87 to 88 Whether they are a  
 (3) hundred percent accurate or not they do provide that useful  
 (4) management information?  
 (5) A That is one aspect of the counting operation yes  
 (6) Q And indeed that s the most important counting aspect of the  
 (7) operation?  
 (8) A Our charge as commercial fisheries biologists provide  
 (9) estimates for managers to use  
 (10) Q They are just that they are estimates  
 (11) MR O NEILL I have no further questions  
 (12) REDIRECT EXAMINATION OF BRUCE EDWARD KING  
 (13) BY MR NEAL  
 (14) Q Mr King these people that Mr O Neill asked you about  
 (15) you don t consider a 50 percent error to be accurate do you?  
 (16) A I ve not seen any data that would support that  
 (17) Q And you haven t seen any data that would support a 20  
 (18) percent error have you?  
 (19) A No sir  
 (20) Q Your belief is that the sonars count the sockeye going up  
 (21) these rivers with a reasonable degree of accuracy is that  
 (22) correct?  
 (23) A Yes it is  
 (24) Q And -  
 (25) MR NEAL I think that s all

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(1) MR O NEILL Out of here Bruce  
 (2) MR SANDERS May it please the Court we call Mr  
 (3) James Brady  
 (4) THE CLERK Raise your right hand please  
 (5) (The Witness Is Sworn)  
 (6) THE CLERK Please be seated For the record sir  
 (7) state your full name your address and spell your last name  
 (8) please  
 (9) THE WITNESS My name is James Andrew Brady  
 (10) B R A D Y My address is 8731 Upper DeArmour Road  
 Anchorage  
 (11) Alaska  
 (12) DIRECT EXAMINATION OF JAMES ANDREW BRADY  
 (13) BY MR SANDERS  
 (14) Q Good afternoon Mr Brady By whom are you employed  
 sir?  
 (15) A I m employed by the Alaska Department of Fish & Game  
 (16) Q That s what we ve been calling the ADF&G correct?  
 A That s correct  
 (17) Q And you re here pursuant to a subpoena aren t you?  
 A Yes I am  
 (18) Q And you have been employed by ADF&G for how long sir?  
 A For a little over 13 years  
 (19) Q And before taking on that employment where were you  
 (20) educated?  
 A I was educated at the University of Alaska Fairbanks  
 (21) Q What degree did you get and in what area?

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- (1) A A bachelor s of science in biology
- (2) Q And what year did you graduate?
- (3) A 1979
- (4) Q And you started with ADF&G when?
- (5) A I started working temporary positions with ADF&G in the
- (6) 70s I started working with them as a biologist in 1980
- (7) Q And would you briefly describe for the ladies and gentlemen
- (8) of the jury and the Court the jobs that you ve had with ADF&G
- (9) up until about 1986 and then I ll stop you?
- (10) A Up to 1986?
- (11) Q Yeah
- (12) A I started working full time with the Department of Fish &
- (13) Game as an assistant area management biologist on the Yukon
- (14) River in 1981 and continued in that position for three years
- (15) Then I transferred in December of 1983 to Cordova and was the
- (16) assistant area management biologist for the Prince William
- (17) Sound management area and continued in that position until
- (18) about September of 1986
- (19) Q And in 1986 what did you become?
- (20) A In 1986 I became the area management biologist for
- (21) commercial fisheries
- (22) Q Now what does an area management biologist do in a
- (23) fishery?
- (24) A The responsibility of the area management biologist is to
- (25) manage the commercial fisheries within his area of

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- (1) A That s correct
- (2) MR SANDERS Could I have DX6854 please?
- (3) BY MR SANDERS
- (4) Q I want to take you back to the time 86 through 1991 when
- (5) you were area management biologist for Prince William Sound
- (6) and in a second or two there is going to appear on a screen
- (7) here and right there besides you and all over a map and I ll
- (8) ask you if you can describe what this map or chart depicts?
- (9) A This represents what we refer to as the Prince William
- (10) Sound management area for the commercial salmon fisheries
- (11) and
- (12) the described districts for management are those districts
- (13) Q This is the area that you were the manager of from 86 to
- (14) 91 and this is how it s subdivided how your district is
- (15) subdivided?
- (16) A That s correct
- (17) Q Now as the manager of this particular district or a -
- (18) this management area or as manager of any other fishery area
- (19) in the state of Alaska what is your primary mission? I think
- (20) you said it awhile ago but you said it described in the job
- (21) so let me ask you again
- (22) A With regard to salmon fisheries?
- (23) Q Yes
- (24) A With regard to salmon fisheries it would be to manage the
- (25) commercial harvest regulate the commercial harvest to ensure
- (26) that we can achieve biological escapement requirements for

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- (1) jurisdiction to ensure that adequate escapement is provided
- (2) for salmon or herring or whatever the species may be to
- (3) continue the long term sustained yield of those resources and
- (4) provide opportunity for the commercial industry to harvest any
- (5) available surplus
- (6) Q And as an area management biologist within the guidelines
- (7) of the law and the regulations you are the man who decides
- (8) when to open and close a particular season for a particular
- (9) species for a particular year type is that correct?
- (10) A That s correct
- (11) Q You re the man that makes the call?
- (12) A That s correct
- (13) Q And you held that position - well first you were an
- (14) assistant to the person who held that position from 83 until
- (15) September of 86 in Prince William Sound is that correct?
- (16) A That s correct
- (17) Q And then from 1986 to what time did you hold the position
- (18) of area management biologist in Prince William Sound or for
- (19) Prince William Sound?
- (20) A From September 1986 until March of 1991
- (21) Q Now in March of 1991 what did you become or where did
- (22) you
- (23) get promoted your job the one you ve got right now?
- (24) A I was promoted to the regional office here in Anchorage
- (25) and my title is regional management biologist
- (26) Q That s your job now?

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- (1) long term health and sustained yield of the resource
- (2) Q Is that another way of saying that would be that you have
- (3) to manage the catch so that you ensure enough escapement up
- (4) the
- (5) rivers so that the salmon can reproduce and come back again
- (6) year after year?
- (7) A That s correct
- (8) Q And is that a mission that s prescribed by law?
- (9) A Yes it is
- (10) Q Now I want to restrict my next questions and maybe all the
- (11) rest of them to pink salmon in Prince William Sound That s
- (12) what we re going to talk about
- (13) In 1988 was the return of the wild stock of pink salmon in
- (14) Prince William Sound strong or weak?
- (15) A It was weak
- (16) Q In 1989 was the return of wild stock pink salmon in Prince
- (17) William Sound strong or weak?
- (18) A It was weak
- (19) Q In 1990 was it strong or weak?
- (20) A It was strong
- (21) Q 1991?
- (22) A Wild stock we re talking about?
- (23) Q Yes sir
- (24) A It was above average
- (25) Q And in 92?
- (26) A Weak



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Q Now is it a management problem for the area biologist if the wild stock return is weak in a given year?

A It can be yes

Q What is that problem? Describe to us what causes the possibility of a problem

A Well if you have a fishery that is very complicated in terms of a mixture of stocks and species particularly it becomes a problem if one stock or a species is extremely weak and another stock may be strong

Q Let me stop you there just a minute I don't mean to interrupt you but is that the situation you had in '86 through '91 in the Prince William Sound pink salmon fishery or is that the situation you had -

A I was going to say that's the situation in Prince William Sound You're limiting your question to pink salmon but we're not ignoring the fact that we have other species and stocks in Prince William Sound

Q You're exactly correct and I don't mean to try to eliminate any but I want to focus on the pink salmon since that's why we subpoenaed you

Now Mr Brady describe very briefly as you can or take as much time as you need what is the nature of the management problem when you have different types of stock for example in

Prince William Sound you got hatchery and natural stock? A That's correct

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Q And when you got a strong hatchery and weak wild stock return tell us what the problem is or the potential problem

A Well action as we discussed previously our primary mission is to ensure that we meet our biological escapement objectives so we can ensure the long term health of the wild stocks and what happens in Prince William Sound is the wild stocks migrate into the Sound along the same passages and corridors as do the hatchery fish and they come in in similar time frames as well So those two stocks components are mixed

in the fishery and one may be quite strong the hatchery component while the wild stock component may be quite weak in

which case you allow a very liberal harvest rate on the hatchery fish but you try and protect or restrict the harvest rate on the wild stock fishes So that's what creates some of the management challenges you face in Prince William Sound

Q I want to pursue that a little bit but first I want to talk about - zero in on what exactly we're talking about here When we're talking about escapement and your objective or your mission under the statute we're talking about the wild stock correct?

A That's correct There is an escapement equivalent for the hatchery programs because they have two types of escapement

They need brood stock to operate their hatchery with to produce their fish from and they also have what is termed corporate escapement where they harvest a portion of the

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(1) return to that facility to generate revenues for operational costs

Q And usually that's kind of on a year to year basis unless they have a big year and this will pay for several years in advance?

A Well it's not that - quite that simple but it's regulated by management plans and negotiated

Q But when you're talking about making sure you have enough escapement to protect the biological wild stock you're talking about wild stock escapement correct?

A That's correct

Q And when you're zeroing in on this problem of two kinds coming in hatchery and wild stock and managing that so you get enough for the fishermen and enough wild stock to go up to keep the wild stock going in future years that's what we're talking about correct?

A That's correct

Q Now the problem is aggravated by the fact that at least as of '86 through '91 you couldn't tell them apart could you? If you looked down in the water or you looked at a given catch for a commercial fishermen you couldn't pick up a hatchery salmon

and a wild stock pink salmon and tell the difference by looking at them is that correct?

A That's correct In the commercial catch you're referring to in the areas where they were mixed together that's

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(1) correct

Q Now in recent years your department I believe has attempted a tagging system to help you do that but it wasn't in existence in '88 '89 was it?

A It was in existence in '88 and '89 but the analysis hasn't been refined to the point that we could generate estimates during the season and so that they could be applied to the management of the fishery

Q So it wasn't really a usable management tool for you in '88 and '89?

A That's correct

Q So we're back to the problem that you can't tell them apart when you pick them up and look at them?

A Right

Q Now in the time period '86 '87 '88 '89 when you had - as you've testified you had in '88 and '89 when you have a weak - well strike that

How do you go about making your decision on whether you've got a weak run or a strong run? How do you know?

A Well we monitor our returns in season through a number of indicators We're looking at the commercial catches the catch rates we're looking at escapement rates in the terminal areas For the wild stocks we're monitoring that through an aerial survey program

Q That's what I want to focus on Now what are you looking

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- (1) at to monitor the escapement of the wild stock into the stream?
- (2) A The aerial survey program I referred to is our primary
- (3) method and we have surveyors which I at that time was one of
- (4) the primary surveyors and we fly - well a subset of all the
- (5) spawning streams in Prince William Sound on a weekly basis or
- (6) sometimes twice weekly and come up with an index which is a
- (7) relative measurement of the magnitude of our wild stock
- (8) escapement
- (9) Q Let's take that apart a little bit You mentioned an
- (10) index In other words you don't try to go out you don't have
- (11) the time or the money to go out and look at every stream into
- (12) which pink salmon are escaping wild stock is that right?
- (13) A That's correct
- (14) Q So you take an index?
- (15) A We take a subset of all the streams
- (16) Q You call them the index maybe the number is the index?
- (17) A The number is the index
- (18) Q So you take a percentage of those streams and you use that
- (19) to tell you what your wild stock escapement is at any given
- (20) point in time like a week or twice a week or something like
- (21) that correct?
- (22) A That's correct
- (23) Q And of course that index is not of - of all the streams
- (24) it's simply an index used to predict or project what's
- (25) happening in all the other streams correct?

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- (1) A It's not used to predict or project It's used to give the
- (2) manager an assessment at that point in time when the surveys
- (3) are flown and it's compared to what is - the history - what
- (4) the historic mean has been at that point in time so a manager
- (5) can tell if it's behind or ahead on the scales
- (6) Q You've raised a very good point In order for this to be
- (7) meaningful you have to compare it to something don't you?
- (8) A That's correct
- (9) Q And what do you compare it to?
- (10) A We compare it to the historic mean performance of those
- (11) streams
- (12) Q And in order to do that you have to try to make everything
- (13) uniform in your process procedure and your counting don't
- (14) you?
- (15) A That's correct
- (16) Q And what did you do in order to have that uniformity so
- (17) that your comparison makes sense when you look at it every
- (18) week
- (19) or twice a week? -
- (20) A Well we do a number of things We try to standardize our
- (21) methodology as much as possible We have a - use the same
- (22) type of aircraft for the most part the same survey pilot
- (23) The surveyors themselves have a lot of communication with
- (24) each other and cross referencing so there is cross training there
- (25) I've developed a set of sort of flash cards if you will
- (26) that help surveyors in estimating groupings of fish from small

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- (1) aggregations to large aggregations There is a training
- (2) program along those lines to standardize the estimates from
- (3) year to year
- (4) Q Do you try to make sure that you take the same kind of
- (5) flight path over the rivers that serve as the basis for your
- (6) index so you're seeing the same thing from the same angle?
- (7) A Right
- (8) Q In the years '86 through '89 were you the surveyor the
- (9) principal surveyor?
- (10) A I was probably the principal surveyor I was one of two or
- (11) three surveyors during those years
- (12) Q And you did it continuously through that period of time?
- (13) A Yes
- (14) Q Indeed you did it up until when?
- (15) A Up until I left my position in Cordova and moved to
- (16) Anchorage in 1991
- (17) Q So if the process then is for you and another to do these
- (18) surveys on a regular basis and compare what you see in the
- (19) count to history?
- (20) A That's correct
- (21) Q And make a judgment on how the run is going as far as your
- (22) wild stock escapement?
- (23) A That's correct
- (24) Q Now we mentioned -
- (25) MR SANDERS May I have DX5005?

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- (1) BY MR SANDERS
- (2) Q We've mentioned the hatchery fish we've been talking about
- (3) the wild stock fish What are the pink salmon hatchery names
- (4) in Prince William Sound?
- (5) A Would be the Solomon Gulch hatchery the Cannery Creek
- (6) hatchery the Esther hatchery and the Armin F Koerning
- (7) hatchery
- (8) Q Is that a generally accurate description of where those
- (9) canneries are located in Prince William Sound?
- (10) A Yes it is
- (11) Q Did I say cannery?
- (12) A It's a common mistake
- (13) Q Where the hatcheries are located is that correct?
- (14) A That's correct
- (15) Q Now when pink salmon that are hatchery born and bred
- (16) return to spawn where do they go?
- (17) A The wild stock or hatchery fish?
- (18) Q Hatchery fish
- (19) A They return primarily to their hatchery of origin
- (20) Q And the wild stock return to the stream where they were
- (21) born and bred right?
- (22) A Yes There is some minor level of strain but for the most
- (23) part that's correct
- (24) Q Is there a strategy that you had as the area management
- (25) biologist to protect the wild stock run in those years in which

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- (1) in your judgment there was a weak run coming in of wild stock  
 (2) pink salmon?  
 (3) A Yes  
 (4) Q What was that strategy?  
 (5) A Well the strategy is to fish in the general waters of the  
 (6) Sound the broad waters of the Sound only to the extent that  
 (7) the strength of the wild stocks can sustain and if there is  
 (8) additional surplus of hatchery fish then to focus the harvest  
 (9) on those hatchery fish in terminal areas in front of the  
 (10) hatcheries  
 (11) Q And the purpose of that is to do what? Explain how that  
 (12) works?  
 (13) A Well the purpose is to harvest the hatchery returns in  
 (14) areas in front of hatchery where the interception of wild stock  
 (15) will be minimized to the greatest degree possible  
 (16) Q In other words you want the fishermen to fish where they  
 (17) are going to catch predominantly hatchery fish because they  
 (18) are  
 (19) strong as opposed to fishing up wild stock when the run is  
 (20) weak right?  
 (21) A That's correct  
 (22) Q And you found over experience that you can best do that by  
 (23) limiting the fishing in those situations where there is a weak  
 (24) wild stock run to right where the hatchery - the terminal is  
 (25) right?  
 (26) A Yes

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- (1) Q Now in 1988 was - you've said that there was a weak wild  
 (2) stock pink salmon run Was fishing restricted to these  
 (3) hatchery terminal areas?  
 (4) A Yes it was  
 (5) Q And in 1989 was it the same strategy - I'm not going to  
 (6) forget the oil spill but I'm talking about in terms of the  
 (7) wild stock run was it the same strategy employed in 1988 and  
 (8) in the past basically?  
 (9) A Had we not had all the other factors that the oil spill  
 (10) created we would have employed the same strategy  
 (11) Q And that strategy would have been to possibly permit very  
 (12) limited fishing in general waters depending upon what your  
 (13) surveys were telling you and upon what the catch was telling  
 (14) you?  
 (15) A That's correct  
 (16) Q And if I told you what you think it was telling you then  
 (17) to restrict the fishing for pinks in 1989 in Prince William  
 (18) Sound to those main terminal areas is that correct?  
 (19) A As I stated earlier to fish in those mixed general waters  
 (20) in the Sound only to the extent that the wild stock  
 (21) harvestable surplus would sustain it  
 (22) Q Right And in 1989 because of the weak run you would  
 (23) have checked - had a limited general waters fishery?  
 (24) A That's correct  
 (25) Q And then restricted it after that depending on what you

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- (1) found to these terminal areas correct?  
 (2) A That's correct  
 (3) Q Now let me show you a general map for 1988 and then I'm  
 (4) going to show you the same kind of map for 1989  
 (5) Well before I do that let's make sure we complete the  
 (6) picture on '89 Now in '89 you had an oil spill caused by the  
 (7) Exxon Valdez running aground on Bligh Reef and in fact you  
 (8) were not able to have any limited general waters fishery that  
 (9) you talked about awhile ago which may have been possible if it  
 (10) hadn't been for the spill correct?  
 (11) A That's correct There were some - you know the results  
 (12) of the oil spill required that we not open certain areas of the  
 (13) Prince William Sound  
 (14) Q And whereas it would have been possible in '89 under your  
 (15) strategy to have permitted some general waters fishery on a  
 (16) limited basis you couldn't do that because of the oil spill?  
 (17) A That's correct  
 (18) Q And you had a lot of other management problems caused by  
 (19) the oil spill but as far as the pink salmon fisheries there  
 (20) was a restriction to the terminal areas correct?  
 (21) A In 1989?  
 (22) Q In 1989  
 (23) A Yes  
 (24) Q And one terminal area that was open in '88 this one down  
 (25) here A F - is that Koerning?

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- (1) A Armin F Koerning hatchery  
 (2) Q That couldn't be opened in '89 whereas it was in '88?  
 (3) A That's correct  
 (4) MR SANDERS Could I have please DX5644 Alpha?  
 (5) BY MR SANDERS  
 (6) Q Now we've discussed the weak run in '88 and the strategy  
 (7) that was in fact employed by you as the area management  
 (8) biologist and I have a chart again here basically the same  
 (9) chart we had up before and in red we have indicated the red  
 (10) covers the closed regions in a general way Is that an  
 (11) accurate depiction of the areas that were closed to the best  
 (12) of your recollection in 1988?  
 (13) A Yes it is with the exception of the Eshamy district  
 (14) which is a small gillnet district  
 (15) Q I think Mr O Neill has hidden my - no I've got it  
 (16) Now I've got an arrow right up here Is this the Eshamy  
 (17) district where I've got the arrow?  
 (18) A Yes just in front of your arrow there  
 (19) Q Now there is another area that is not easy to see and I  
 (20) want to highlight it so there is no mistake about this That  
 (21) doesn't show up so well when you look at the map as a whole  
 (22) but there is a little blue shading here for an opening in this  
 (23) area in 1988 is that correct?  
 (24) A That's correct  
 (25) Q And that is down here where I got the arrow?

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- (1) A That s correct
- (2) Q And those openings were - those were - are terminal
- (3) openings is that correct hatchery terminal openings?
- (4) A That s correct That s a subdistrict that is called the
- (5) Port San Juan subdistrict and it s designed as a terminal
- (6) harvest area for the Armin F Koerning hatchery
- (7) MR SANDERS Now may I have Exhibit 6736 Alpha -
- (8) 6763-Alpha
- (9) BY MR SANDERS
- (10) Q This is the same idea red indicates the closed regions
- (11) and blue the open regions in the same sized chart same type of
- (12) chart To the best of your recollection is this an accurate
- (13) depiction of those areas that were closed in 1989?
- (14) A Yes it is
- (15) Q Now in 1989 I believe you permitted a little bit more
- (16) fishing in the northern district is that correct?
- (17) A A little bit more fishing?
- (18) Q Or kind of an opening fishing in the northern district? Am
- (19) I misreading your deposition there?
- (20) A There were openings in -
- (21) Q I m sorry I meant the eastern
- (22) A - the eastern district There were openings in the
- (23) eastern district yes
- (24) MR SANDERS Could I have so we know what we re
- (25) talkin\_ about can I have DX6854 back up please?

1 10

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- (1) closings and pursuing the strategy to protect the wild stock
- (2) correct?
- (3) A That s correct
- (4) Q And the purpose of setting a goal for escapement is by
- (5) history to give you enough salmon up that river in order to
- (6) guarantee or promote a return for two years hence on pink
- (7) salmon correct?
- (8) A You know the purpose is to assure that you have a level of
- (9) escapement that will give you an optimum return its largest
- (10) level of return not just two years down the road
- (11) Q I understand and much better stated than I said
- (12) Now if you found that you had undercut the number of fish
- (13) going up the river that wouldn t change the fact that you
- (14) needed at least a multiple of that to escape as your escapement
- (15) goal In other words you would have to increase your
- (16) escapement goal by four too wouldn t you?
- (17) A Well if - prior to Sam Sharr s studies we knew that the
- (18) aerial survey program just gave us an estimate of escapement
- (19) We still called it an index and Sam Sharr s study helped us
- (20) better refine what the relationship of that index is to the
- (21) true number of fish That index is still a valuable tool as it
- (22) was before and still is in the relative sense And you re
- (23) correct whatever that multiplier might be to correct the
- (24) escapement index to the true escapement number is somewhat
- (25) irrelevant because we are still looking at the relative

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- (1) BY MR SANDERS
- (2) Q Now the eastern district is the one where I ve got the
- (3) arrow correct?
- (4) A That s correct
- (5) Q Now the Copper River area down here that even though
- (6) it s not really within Prince William Sound that was part of
- (7) your management area correct?
- (8) A That s correct
- (9) Q And there was no oil related closure whatsoever in the
- (10) Copper River area correct?
- (11) A That s correct
- (12) Q Now there has been testimony in this case and I m sure
- (13) you ve heard about this this was a study done I think by a
- (14) colleague of yours Mr Sharr?
- (15) A Uh huh
- (16) Q Which concluded or maybe suggested whatever word is
- (17) appropriate th it the traditional way in which area management
- (18) biologists had judged escapement of wild stock in the stream
- (19) by
- (20) these aerial surveys was an undercount by a factor of one to
- (21) four of the actual number of salmon that were escaping up the
- (22) streams You ve heard about that study?
- (23) A Yes
- (24) Q Now and - strike that
- (25) When you - you didn t know about that of course in 1989
- (26) when you were making these decisions as to openings and

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- (1) differences relative magnitudes of escapement and our
- (2) management objectives are based on those historic
- (3) performance
- (4) Q And the key to do that is the comparison with the
- (5) historical performance?
- (6) A That s correct
- (7) MR SANDERS No further questions at this time
- (8) THE COURT You may cross examine
- (9) CROSS EXAMINATION OF JAMES ANDREW BRADY
- (10) BY MR O NEILL
- (11) Q Sir we ve never met before My name is Brian O Neill and
- (12) I ve always been a fan of yours
- (13) A Thank you
- (14) MR SANDERS Well so have I
- (15) BY MR O NEILL
- (16) Q He says stuff like that all the time The guy is
- (17) absolutely just - he does not have a real interest in
- (18) fisheries I want to tell you that right now I do and I m
- (19) going to talk about fisheries for a minute
- (20) This map that shows the closures in 1989 as a result of the
- (21) oil spill you talked about a minute ago but for the Exxon
- (22) Valdez oil spill would it be fair to say that much of this
- (23) territory would have been blue?
- (24) A That s correct
- (25) Q Would it be fair to say that but for the Exxon Valdez oil
- (26) spill the commercial fleet would have caught more fish and you

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(1) would have allowed them to catch more fish than they in fact  
 (2) caught?  
 (3) A It is my understanding it would have only taken that one  
 (4) opening to turn that red blue and there were harvestable  
 (5) surpluses of wild stock fish in those two districts and so  
 (6) you know that is what I would base that statement on In all  
 (7) likelihood we would have had some openings in those two  
 (8) districts  
 (9) Q And the oil spill had an impact on the management of the  
 (10) fishery on the quantity that was taken out of the fishery and  
 (11) of the quality of fish that came out of the fishery?  
 (12) A That is correct The harvestable surplus that was not taken  
 (13) in those two districts just contributed to the escapement for  
 (14) those areas and your second statement about quality was  
 (15) compromised as a result of the spill was also compromised  
 (16) Q Would you tell the jury how the quality was compromised?  
 (17) A One of the things that happened in the course of the  
 (18) management fisheries is we developed a memorandum of  
 (19) understanding with the Department of Environmental  
 (20) Conservation  
 (21) to guide the conduct of commercial fishing in the oil spill  
 (22) affected areas And the purpose of this was to ensure that we  
 (23) did not allow any fish to be harvested in areas where they  
 (24) might be contaminated by oil and create problems with the  
 (25) marketing of the fish so this memorandum of understanding  
 (26) -266  
 (27) some guidelines and stated that if we had any areas for

(1) A That is correct  
 (2) Q And indeed the rating for the quality of these fish for  
 (3) example for the Seward fisheries pack was that they were  
 (4) significantly lower than in prior years?  
 (5) A That is correct  
 (6) Q And the processors in fact every major Prince William  
 (7) Sound processor complained to you that he was getting less for  
 (8) his fish that year because of the quality of the fish than he  
 (9) had otherwise?  
 (10) MR SANDERS Objection hearsay  
 (11) THE COURT I'll allow the question  
 (12) BY MR O NEILL  
 (13) Q Do you understand the question?  
 (14) A That every Prince William Sound processor complained  
 (15) about  
 (16) the quality of the fish after the 1989 season?  
 (17) Q That is correct  
 (18) A That is correct  
 (19) Q And the problems that the quality of the fish had with  
 (20) regard to the impact on price?  
 (21) A Yes that was expressed  
 (22) MR O NEILL Thank you sir  
 (23) THE COURT Redirect  
 (24) REDIRECT EXAMINATION OF JAMES ANDREW BRADY  
 (25) BY MR SANDERS  
 (26) Q Did you hear those complaints from the fishermen?

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potential fisheries for which there was an appreciable  
 (1) likelihood that fish may be contaminated or fishing gear may be  
 (2) contaminated then we closed those districts  
 (3) And these three districts qualified because they were so  
 (4) heavily impacted by the oil spill so many beaches were heavily  
 (5) impacted by the spill  
 (6) Q And as a result of these closures the pinks were caught  
 (7) later?  
 (8) A That is correct they weren't taken in those areas And  
 (9) also what happened in the northern areas there was closures  
 (10) that took place during the course of the season as a result of  
 (11) oil that was encountered in areas that had been previously  
 (12) opened and that led to a ten or 11 day closure of the  
 (13) fishery for the stocks that were returning to two of the key  
 (14) hatcheries on the northern shore of the area And this ten or  
 (15) 11 day closure occurred right at the peak of the return to  
 (16) those two facilities and what happens is the quality of the  
 (17) fish is best when it first arrives at a terminal harvest area  
 (18) or terminal area such as a hatchery and it deteriorates  
 (19) through time as they mill in those areas  
 (20) So that ten day period of time that the areas was closed  
 (21) resulted in a large accumulation of fish and a deterioration in  
 (22) quality  
 (23) Q And the deterioration in quality means that the fish were  
 (24) worth less?

(1) A Yes I did  
 (2) Q Do you remember testifying in your deposition that you  
 (3) didn't hear any from fishermen but you heard some from  
 (4) processors?  
 (5) A I don't recall  
 (6) Q In terms of the quality issue isn't it a fact that every  
 (7) time that you restricted fishing to the terminal areas you  
 (8) heard the complaint about quality didn't you?  
 (9) A From fishermen or processors or both?  
 (10) Q Yes fishermen  
 (11) A That is a common concern you know that is expressed as a  
 (12) result of terminal fishing  
 (13) Q And the reason for that is the fish have to come a long  
 (14) way so the argument goes to get to the hatchery and by the  
 (15) time they get there they have started to change color and there  
 (16) is a quality problem correct?  
 (17) A That is correct  
 (18) Q And that problem has been presented to you as the area  
 (19) management biologist every time you've had any sort of  
 (20) restriction to the terminal areas correct?  
 (21) A I can't say every time but it has been presented  
 (22) Q Indeed you have developed strategies have you not to deal  
 (23) with those complaints so that - that you could cut down on  
 (24) complaints as to the restrictions to the terminal areas?  
 (25) A Strategies to cut down on the complaints? Our strategy is

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- (1) to harvest the fish in a very timely manner and what we have  
 (2) determined and this is from experience from hatcheries who  
 (3) harvest their sales fish in the most terminal areas  
 (4) possible - if fish are harvested in a timely manner as they  
 (5) first arrive in those areas in front of the hatchery quality  
 (6) is not a problem And the hatcheries have demonstrated this  
 (7) that they have sold their fish at competitive prices to what  
 (8) commercial fishermen sell at taken more distant from the  
 (9) hatchery  
 (10) But what happens is if those fish arrive at those terminal  
 (11) areas and are not harvested on the first day or the third day  
 (12) or not until the tenth day then you have a dramatic decline in  
 (13) the quality and it happens rapidly The further away you get  
 (14) from that terminal area the more latitude you have in terms of  
 (15) their quality There will be good quality fish if they are a  
 (16) hundred miles away from their hatchery for maybe the next five  
 (17) or six days but the first day they arrive at the hatchery  
 (18) they may only stay in that optimum quality condition for  
 (19) another 24 hours or less  
 (20) Q Maybe I overstated it as strategy but goal was to permit  
 (21) the fishing to occur in front of that hatchery to catch them  
 (22) just as they got there and then you didn't have a quality  
 (23) problem?  
 (24) A That's correct  
 (25) Q And if it occurred that there was a big rush of salmon

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- (1) which sometimes occurs into a given hatchery then that plan  
 (2) kind of went away because there was just too much there and  
 (3) there had to be that milling around That happened didn't it?  
 (4) A Well the strategy that we have in those situations is to  
 (5) allow very liberal fishing in those terminal areas so we're  
 (6) fishing seven days a week and so that we try to prevent that  
 (7) build up from happening  
 (8) Q But that's a problem that recurs if you get that build up  
 (9) then you get the quality problem?  
 (10) A That's right  
 (11) Q Now Mr O'Neill asked you some questions about - I'd like  
 (12) you to help me and the jury out I'd like to have Defendants  
 (13) Exhibit 5005 back up again about the fact that there would  
 (14) have been more blue on the 1989 map that we put up awhile  
 (15) ago  
 (16) if it - if there had been an opening such as you and I were  
 (17) discussing in direct Okay?  
 (18) A Uh huh  
 (19) Q In fact this is Montague here?  
 (20) A That's correct  
 (21) Q And this is the Montague district and kind of a line around  
 (22) that?  
 (23) A Yes  
 (24) Q And in 1989 you had an overescapement in Montague  
 (25) correct?  
 (26) A Yes  
 (27) Q And thus you would have permitted - but for the spill you

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- (1) would have permitted fishing in this district right here?  
 (2) A Yes  
 (3) Q And that would have made more blue?  
 (4) A Yes  
 (5) Q Now that fishery at Montague is that - compared to the  
 (6) other fishery areas in Prince William Sound is that a big  
 (7) piece of the pie or small piece of the pie?  
 (8) A It's a relatively small piece of the pie  
 (9) Q And if we had turned this area in here blue as you  
 (10) suggested was a possibility in 1989 and we talked about a  
 (11) limited general waters fishery I know it's hard to go back to  
 (12) predict what you would have should have could have done  
 (13) but  
 (14) do you have an idea what the limited opening there would have  
 (15) been there in the general waters at the start of this run but  
 (16) for the spill?  
 (17) A It would have been restricted maybe a couple days or  
 (18) something like that  
 (19) Q Could have even been a day or half a day correct?  
 (20) A That's correct  
 (21) MR SANDERS No further questions Thank you Mr  
 (22) Brady  
 (23) THE COURT Thank you Mr Brady  
 (24) MR LYNCH Your Honor Peter Nickerson  
 (25) THE CLERK Raise your right hand  
 (26) (The Witness Is Sworn)

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- (1) THE CLERK Please be seated For the record sir  
 (2) state your full name your address and spell your last name  
 (3) please  
 (4) THE WITNESS My name is Peter Nickerson  
 (5) N I C K E R S O N My address is 13231 Northeast 132nd  
 (6) Street  
 (7) in Bellevue Washington  
 (8) DIRECT EXAMINATION OF PETER NICKERSON  
 (9) BY MR LYNCH  
 (10) Q Mr Nickerson you'll probably be a breath of stale air  
 (11) because you do have a Ph D  
 (12) A I was a little worried about that comment but yes  
 (13) Q Well we'll see what we can do Would you tell the jury  
 (14) what you do for a living sir?  
 (15) A I'm an associate professor of economics at Seattle  
 (16) University and I also do consulting as a - on the side  
 (17) Q For how long have you been at Seattle?  
 (18) A I've been at Seattle University since 1984  
 (19) Q What is your educational background sir?  
 (20) A I have a bachelor's of science degree in economics from  
 (21) Washington State University and I have a master's and a Ph D  
 (22) from the University of Washington both in economics the Ph D  
 (23) was in 1984  
 (24) Q You are here today to talk about valuation of limited entry  
 (25) fishing permits?  
 (26) A Yes sir

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Q What background do you have relative to limited entry permits to harvest natural resources?

A I guess that's a broad question. I teach natural resources and environmental economics in graduate and undergraduate programs at the university.

A substantial portion of both of those - both of the classes that I teach in natural resources deals with fisheries and in particular we deal with the effects on limited entry permits of various sorts of regulation and harvest affects etcetera on the fishery.

I've also done in a research capacity a substantial amount of work dealing with the Washington State salmon fishery. Washington State salmon fisheries are considerably different than Alaska salmon fisheries in size they are much smaller. They have a virtually identical limited entry program that was instituted in the mid 70s and I've studied the effects on that particular program and the value of permits in conjunction with a court decision called the Bolt decision which divided the fishery between two different groups of individuals.

I also do - in my consulting work I do valuation in general either valuation of lost wages or particular assets whether they be financial assets or whether they are real assets.

Q Based on your study of Washington limited entry fishing

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(1) this case to help evaluate the value of fishing permits did you engaged in any additional research to inform yourself about

(2) the Alaska market and the way that fishing permits are dealt with in Alaska?

(3) A Well I've done an enormous amount of work to become familiar with particular details about the Alaska fishery

(4) I've read the depositions and been present at depositions of plaintiffs experts in this case the economists I've read a lot of the trade literature the Alaska Fishermen's Journal I think it's just the Fishermen's Journal I've subscribed to off and on for years Pacific Fishing and am a National Fishing member I've read a lot of things in there I requested and received various data sets actually from - through the attorneys but from the State of Alaska

(5) Q Data sets means - is a computer term for collections of records?

(6) A Those collection of records that are in fact computerized

(7) The state of Alaska in conjunction with commercial fishing keeps very very detailed records on individuals who fish. As a matter of fact they keep records on individual landings so if an individual made a landing on such and such a date in such and such a place in 1986 there is a record of that and the record will describe what the species was where it was caught how much it weighed and an estimate of what was paid for that

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(1) permits your research work your teaching work is the valuation process that applies to limited entry fishing permits relevant to a valuation of a fishing permits as opposed to some other kind of property like real estate or automobiles or going businesses?

(2) A I think the general valuation techniques across different sorts of assets are probably relatively the same. The institutional differences of course are there. There are certain rules and regulations in fisheries regarding who may own permits and how they are transferred and things like that and they come into the valuation process.

(3) Q Now prior to being engaged by Exxon to consult about the valuation of limited entry permits in this case did you have experience with Alaska fisheries?

(4) A In again going into teaching I used Alaska fisheries and have since 1986 used Alaska fisheries as an example not as an example as a major part of looking at the economics of fisheries. So I've used those in the classes and I've actually used it in other classes other than natural resources because of their particular attributes of interest.

(5) I've also as a consultant dealt at various times with individuals either fishermen or fishing companies in the state of Alaska and dealt with certain attributes of their activity for consulting purposes.

(6) Q Dr. Nickerson after being engaged by counsel for Exxon in

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(1) particular fish at that particular time

(2) Q Made a landing is the same as caught the fish?

(3) A Actually it's somewhat different. A landing - the computer actually has different codes for that there is a question of where you caught the fish and there is a question of where you landed it.

(4) The landing is actually - actually takes place when the fishermen brings the boat to a processor or a representative of the processor and turns it over to the processor for processing ultimately.

(5) Q When you speak of records relating to landings at least in my reading I would have thought that meant coming to shore like when Columbus landed in 1492?

(6) A No it's actually done from the boat.

(7) Q And you're talking about transferring fish off the boat?

(8) A Off one boat onto another boat.

(9) Q And these records indicate how many fish were caught?

(10) A Yes and weight very detailed records. I have a data set that have all the catch records for all fish then from 1984 to 1992. We have about 11 million records on that data. And we also have in conjunction with the requests I made to the attorneys asked the state for information I also have the information on - they are called vessel files.

(11) The Commercial Fisheries Entry Commission keeps vessel files of all the registered vessels used in fishing and there

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- (1) is quite a bit of detail on those. There is also a file called  
 (2) the permit file that is an annual file in computer language that  
 (3) describes who owns the permit and where the permit is and for  
 (4) what fishery the permit exists. And there is also something  
 (5) else called a permit transaction file that describes all the  
 (6) transactions that take place between fishermen when a permit is  
 (7) exchanged in one way or another so that the owner is always  
 (8) known by the Commercial Fisheries Entry Commission. And  
 (9) besides the owner being known, certain characteristics of the  
 (10) transaction are recorded in those computer files. We have all  
 (11) of those from 1975 through 19 - September 1993.  
 (12) Q In connection with the work you've done in this matter,  
 (13) have you analyzed and reviewed those computer records in the  
 (14) process of forming an evaluation of the way that limited entry  
 (15) permits are traded and their value in Alaska?  
 (16) A Yes, I have. I've looked at those records.  
 (17) MR. LYNCH: Your Honor, I tender Dr. Nickerson in the  
 (18) area of valuation of permits and specifically Alaska limited  
 (19) entry permits.  
 (20) MR. O'NEILL: I'd like to voir dire, if I could.  
 (21) VOIR DIRE EXAMINATION OF PETER NICKERSON  
 (22) BY MR. O'NEILL  
 (23) Q: Sir, you've testified in child support cases?  
 (24) A: Yes, I have.  
 (25) Q: You've testified in personal injury cases?

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- (1) A: A few.  
 (2) Q: You've never done any fishing-related work for an Alaska  
 (3) fisherman?  
 (4) A: I've done work related to losses associated with injury or  
 (5) discrimination in the fishing industry in Alaska.  
 (6) Q: But you've never done any permit or price work for an  
 (7) Alaska fisherman?  
 (8) A: Never did any specific permit work.  
 (9) Q: Never owned a limited entry permit, bought a limited entry  
 (10) permit, sold a limited entry permit?  
 (11) A: None of those.  
 (12) Q: Never worked for a permit broker, consulted for a broker?  
 (13) A: Correct.  
 (14) Q: You've never fished commercially?  
 (15) A: No.  
 (16) Q: You don't know how many commercial fishermen there are in  
 (17) Alaska?  
 (18) A: I know approximately how many.  
 (19) Q: How many? --  
 (20) A: I'd have to go through area by area and permit by permit to  
 (21) add the total up.  
 (22) Q: At the time of your deposition you didn't know, did you?  
 (23) A: I didn't know the absolute --  
 (24) Q: You were asked how many permits in Upper Cook Inlet, drift  
 (25) permits, you didn't get the number right?

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- (1) A: I was off.  
 (2) Q: You said 250 and there were 586?  
 (3) A: I don't have them all memorized.  
 (4) Q: And you don't know how many? Kodiak or southeast Alaska?  
 (5) A: Again, I can look at the records and give you an exact  
 (6) number.  
 (7) Q: -- or Prince William Sound or on the Kenai Peninsula?  
 (8) A: Again, I can look at those records.  
 (9) Q: And prior to March of this year you'd never been to Prince  
 (10) William Sound, Kenai Peninsula or Kodiak?  
 (11) A: Correct.  
 (12) Q: And at the time of your deposition you'd never talked to  
 (13) any permit brokers to find out what's been going on in the  
 (14) market?  
 (15) A: I talked to a permit broker named Oaks Smith, but he does  
 (16) not in fact deal with Prince William Sound permits.  
 (17) Q: And you didn't talk to any fish member to find out what's  
 (18) going on in the market?  
 (19) A: No, I think I'm precluded from talking with fishermen.  
 (20) Q: And it would have been useful to talk to a fisherman or  
 (21) permit broker, you agree with that?  
 (22) A: Yes.  
 (23) Q: And indeed you've never spoken to any one single person  
 (24) who  
 (25) has bought a limited entry permit that you know of?  
 (26) A: Not in conjunction with this case at all, no.

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- (1) Q: And you've never talked to anybody who sold a limited entry  
 (2) permit that you know of?  
 (3) A: Same answer.  
 (4) Q: And prior to working on this case you've never done any  
 (5) work with the impact of a catastrophic event on a marketplace?  
 (6) A: I'd never done anything to this scale.  
 (7) Q: But would it be fair to say that prior to May of 1993 you'd  
 (8) never read a Fish & Game report with respect to Prince William  
 (9) Sound, Upper Cook Inlet or Kodiak?  
 (10) A: Would you ask that again?  
 (11) Q: Prior to May of 1993 you had never read a Fish & Game  
 (12) management report with respect to Prince William Sound,  
 (13) Upper  
 (14) Cook Inlet or Kodiak?  
 (15) A: That's correct.  
 (16) Q: And you've never worked for the Commercial Fisheries Entry  
 (17) Commission?  
 (18) A: No, I have not.  
 (19) Q: And you've never actually gotten over to the Commercial  
 (20) Fisheries Entry Commission and rummaged through their data,  
 (21) but  
 (22) the data that's been provided to you has been provided by  
 (23) Exxon  
 (24) lawyers?  
 (25) A: Never rummaged, called them and asked them, compared the  
 (26) data they gave me and the printed versions of their data.  
 (27) Q: Have you ever been there?  
 (28) A: No, I haven't.



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Q Have you ever worked with the Commercial Fisheries Entry Commission?

A No

Q Have you ever worked with the department of Fish & Game that keeps the sets similar sets?

A No not specifically

Q Would it be fair to say at the time you were hired by Exxon Corporation to come in and do this analysis you'd never done any work in valuing Alaskan permits?

A That's true

MR O NEILL With respect to the particulars of this tender as an expert in Alaska limited fisheries entry permits we object

MR LYNCH Your Honor I believe that Mr O'Neill's voir dire would be premised apparently on the assumption that unless you're a fisherman or unless you've worked for the Alaska Department of Fishery Entry Commission you can't be qualified as an expert

Dr Nickerson has qualifications as a trained economist with background in valuation he has fully informed himself on the available data He is precluded by rules of legal ethics from some of the areas of inquiry about which Mr O'Neill inquired and I believe that he is quite well qualified to testify in valuation matters the issues that counsel has raised may be considered by the jury in evaluating whether or

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not Dr Nickerson's expertise transfers to Alaska  
THE COURT I will permit the witness to testify with respect to his economic analysis of the value of limited entry permits

MR LYNCH May I approach Your Honor?

THE COURT You may

CONTINUED DIRECT EXAMINATION OF PETER NICKERSON

BY MR LYNCH

Q Let me show you Dr Nickerson DX8993 for identification

MR O NEILL We have no objection

MR LYNCH Then I'll offer it PX3647 which is in evidence and DX9346

A This is Mr Brady's stuff

MR O NEILL We have no objection

THE COURT I lost the number of the last one

MR LYNCH 9346

THE COURT Defendants Exhibit 8993 and 9346 are admitted without objection --

(Exhibits 8993 & 9346 received)

BY MR LYNCH

Q Now perhaps the quickest way to do this Dr Nickerson would be to refer to PX3647 in evidence that has been identified as Dr Karpoff's printout reflecting his individual assessment of damages on sale of Alaska limited entry fishing

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(1) permits for 1989 91 92 and 93 you so understand that?

(2) A Yes sir

(3) Q Now did you take PX3647 and create an alternative document

(4) using your data base which would make it more easy to cross

(5) reference individual transactions?

(6) A Yes

(7) Q Is that 9346?

(8) A Yes 9346 is the exhibit I created by going through the permit transaction data base and pulling out the transactions that Dr Karpoff referenced in the plaintiffs Exhibit 3647

(10) Q Now quickly could you just tell us and tell the jury

(11) I've got page 1 of 9346 if you try to use the light pen there

(13) could you tell the jury what the various columns on this

(14) document mean because it will I think facilitate our later

(15) discussion of other documents?

(16) A This is the exhibit we're looking at is the exhibit I

(17) created The line at the top is peak fishery S O N E refers

(18) to a particular area and gear type and that's exactly the same

(19) as what Dr Karpoff had listed on the exhibit The exhibit --

(20) Q I mislead this and you can't use the highlighter on the

(21) Elmo so I'll get a highlighter S O N E is whose designation?

(22) A That's the department of -- Alaska Department of Fish &

(23) Game's S stands for salmon OI stands for a particular gear

(24) type which is seine and E is an area in this case which is

(25) Prince William Sound Dr Karpoff's exhibit is sorted by

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(1) fishery type which is what we would classify this particular caption as

(3) Q So what is listed on this page are all the transactions

(4) involving Prince William Sound seine permits that are covered

(5) by Dr Karpoff?

(6) A Actually there are five more on the next page

(7) Q And then we go to SO1H?

(8) A SO1K which is a seine permit in Kodiak

(9) Q Is SO1H the same on page 2 as SO1E?

(10) A You have SO1 -- I'm not sure if these are in the order they

(11) should be in SO1E is what starts on the first page and then

(12) on the second page -- these are not in identical order

(13) Q Not in identical order to Dr Karpoff's?

(14) A Correct at least in the order I have these no

(15) MR LYNCH Let me just approach if I may Your

(16) Honor

(17) Maybe I miscompiled the document

(18) THE WITNESS I'm sorry I was turning to the next

(19) page on the same document

(20) BY MR LYNCH

(21) Q So SO1H --

(22) A The -- actually at the bottom of plaintiffs Exhibit 3547

(23) but it's on the top of the exhibit that we're looking at up

(24) here

(25) Q And SO1H means what?

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- (1) A Salmon permit purse seine 01 stands for gear type purse  
(2) seine and it stands for Cook Inlet  
(3) Q And now let's go to the exhibit line number How does  
(4) exhibit line number relate to the plaintiffs exhibit?  
(5) A I simply added exhibit line numbers in consecutive order  
(6) because it's somewhat difficult - it's somewhat difficult for  
(7) me going through Dr Karpoff's exhibit He has a trade number  
(8) down there but the trade number is specific to the fishery  
(9) So it was much easier for me to refer to the exact exhibit line  
(10) number in Dr Karpoff's exhibit by putting a number next to it  
(11) Q And then the trade number column what does that  
(12) reference?  
(13) A That listed that specific fishery by Dr Karpoff  
(14) Q And then the next column is T date?  
(15) A T date is the recorded transaction date that appears in the  
(16) transaction files  
(17) Q So this tells us that the sale of this permit the first  
(18) exhibit line one in trade number one is June 5th 1989?  
(19) A Yes sir  
(20) Q Permit number?  
(21) A Permit number all of the limited entry permits in the  
(22) State of Alaska have a particular permit number associated with  
(23) them and this permit number is that number associated with  
(24) this particular permit  
(25) Q P price?  
(26) A P price I think stands for predicted price This is the

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- (1) price that Dr Karpoff said those permits sold at at the  
(2) particular point in time listed as the transaction date  
(3) Q And cost?  
(4) A Cost is the amount of money that's reported in the database  
(5) as being exchanged at the transaction date for that permit  
(6) Q Is that the equivalent of the actual price reported to the  
(7) CFEC?  
(8) A That's equivalent of what's actually reported to the CFEC  
(9) for this transaction  
(10) Q And the difference?  
(11) A The difference is D I F F is actually the number and the  
(12) same variable name that Dr Karpoff calculated by subtracting  
(13) this variable from the P price variable  
(14) Q With respect to the plaintiffs Exhibit 3647 all of the  
(15) data except exhibit line number is Dr Karpoff's data this is  
(16) just simply a program or a map to find your way through the  
(17) plaintiffs exhibit?  
(18) A Yes sir  
(19) Q Let me direct your attention then to Exhibit 8993 which  
(20) is a little bit more complicated which we'll be talking about  
(21) and perhaps you could just give us a quick explanation  
(22) I realize that this is too fine for anybody to read I'll  
(23) zoom in on it but just so you can see what's coming?  
(24) A I'll tell you in general how I created it I created this  
(25) exhibit to correspond with the transactions and the history of

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- (1) transactions for particular permits that Dr Karpoff listed in  
(2) his exhibit In order to do that I combined the annual  
(3) transactions permit computer records and just sorted out just  
(4) extracted records that corresponded to that particular permit  
(5) number and then sorted them so I had them corresponding  
(6) order This particular exhibit shows the permit number and  
(7) then the history of that permit since 1980  
(8) Q So what we have in the permit number column on this spread  
(9) sheet is permit by permit the permits that Dr Karpoff talked  
(10) about?  
(11) A Yes sir  
(12) Q And in the P F S H Y that just tells us the fishery that  
(13) it comes from?  
(14) A That's the particular fishery  
(15) Q Then the T date those are various transactions leading up  
(16) to the transaction or following the transaction that  
(17) Dr Karpoff talked about?  
(18) A Yes  
(19) Q And if we want to know where that transaction fits the  
(20) exhibit line gives us a way to relate that transaction to  
(21) DX9346?  
(22) A Yes  
(23) Q So just taking the first permit as an example what this  
(24) exhibit tells us about is all the transactions leading up to  
(25) the 1989 sale that Dr Karpoff asked about?

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- (1) A Yes sir  
(2) MR LYNCH Your Honor if I could just take a couple  
(3) more minutes to complete it we don't have to do it in the  
(4) morning  
(5) THE COURT Do the groundwork  
(6) BY MR LYNCH  
(7) Q And then you've got the sales price that's the equivalent  
(8) of cost on Dr Karpoff's form?  
(9) A Yes sir  
(10) Q And equivalents of D I F F on his form?  
(11) A Yes  
(12) Q Could you tell us what the relationship column is?  
(13) A There is a code in the CFEC transactions files I should  
(14) step back When the CFEC asks that these forms be filled out  
(15) by the people that are transacting these there is a form that  
(16) comes along with that  
(17) One of the questions is asked and what is recorded here is  
(18) what sort of relationship the transactors of the permit might  
(19) have Is there no relationship whatsoever are they immediate  
(20) family So if it's an immediate family transfer or is there  
(21) some other relative involved is another classification and  
(22) there is another classification called close friend So it's  
(23) trying to get information on what sort of relationship the two  
(24) parties have  
(25) Q And then and I think it will finish to day to everyone's

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(1) relief type of transaction what does the CFEC collect about the type of transaction?

(2) A CFEC asks the individuals again on a survey form what type of transaction is actually taking place between the parties And there are different types of transactions that CFEC categorizes

(3) There is a gift which means there is someone who actually gives it to someone else There is a trade which includes some other asset other than cash in the exchange of this particular permit There is a straight sale which the individuals classify as some sort of arms length sale although it is not always the case as it turns out There is also something called other which doesn't fit into one of the general categories

(4) There is also something called C which is a combining sale which there may or may not - if it's C means there may be other equipment involved either a vessel or some sort of gear or in the case of setnets I suppose there may be a site exchanged at the same time

(5) MR LYNCH Your Honor that may be a good place to stop

(6) THE COURT Adjourn ladies and gentlemen for the day we'll reconvene at 8 00 tomorrow morning Please remember

(7) instructions what you should or should not listen to or look at Would counsel remain for a minute please

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(1) (Jury out at 2 05 p m )

(2) THE COURT I have a very preliminary set of proposed instructions for you all to look at you're going to see them at the same time I do I've not looked at them yet but this is a first cut that we have done through the proposals that you gave to us I'd like to see counsel who are - your lead people for dealing with instructions at the same time tomorrow afternoon so that we could do some wrap up on this I'll leave them right here

(3) MR O NEILL Thank you Your Honor

(4) THE COURT Recess now subject to call unless you've got something else

(5) MR O NEILL No sir

(6) MR LYNCH No sir

(7) (Proceedings recessed at 2 08 p m )

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|  |
|--|
| (1) STATE OF ALASKA )  |
| (2) Reporter s Certificate   |
| (3) DISTRICT OF ALASKA )   |
| (6) I Leonard J DiPaolo 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   |
| ( ) LEONARD J DiPAOLO RPR  |
| Notary Public for Alaska   |
| (22) My Commission Expires 2 3 96                                  |

Look See Concordance Report

UNIQUE WORDS 2 822
TOTAL OCCURRENCES 14,100
NOISE WORDS 385
TOTAL WORDS IN FILE 42,293

SINGLE FILE CONCORDANCE

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 6081 2 3 9 13 14  
 15 17 18 20 6082 6  
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 19 6100 13 14 16 18  
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 year to-year [3] 6152 1 10  
 6179 3  
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zero [5] 6121 17 18 19 22  
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 zooming [2] 6050 8 6102 4  
 Zooplankton [2] 6093 2 3  
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 6093 13 17 18 6094 15 20  
 21 6095 2 3

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1) IN THE UNITED STATES DISTRICT COURT  
 2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No. A89-0095 CIV (HRH)  
 3) ) Anchorage Alaska  
 The EXXON VALDEZ ) Wednesday July 6 1994  
 4) ) 8:00 a.m.  
 TRANSCRIPT OF PROCEEDINGS  
 TRIAL BY JURY 39TH DAY  
 5) BEFORE THE HONORABLE H. RUSSEL HOLLAND, JUDGE  
 6) VOLUME 35 Pages 6225 6430  
 Realtime Transcription

APPEARANCES

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PROCEEDINGS  
 (Jury in at 8:00 a.m.)  
 1) (Call to Order of the Court)  
 2) THE CLERK All rise  
 3) THE COURT Good morning ladies and gentlemen This  
 4) is the continuation of trial in case A89 0095 civil in re the  
 5) Exxon Valdez  
 6) We have Dr Nickerson on the stand You understand you re  
 7) still under oath?  
 8) THE WITNESS Yes  
 9) CONTINUED DIRECT EXAMINATION OF PETER NICKERSON  
 10) BY MR LYNCH  
 11) Q Dr Nickerson you still have in front of you I believe  
 12) DX9346 and DX8993 is that correct sir?  
 13) A Yes sir  
 14) Q Now have you reviewed the report of Dr Karpoff on the  
 15) valuation of limited entry fishing permits in this case?  
 16) A Yes sir  
 17) Q And in that report Dr Karpoff makes the assumption does  
 18) he not that permits are a fungible property that ought to have  
 19) a consistent value a common value from permit to permit at any  
 20) given point in time?  
 21) A Yes  
 22) Q From your review of the CFEC data the hundreds of  
 23) thousands of records that you have in your computer and the

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(1) For Defendant DOUGLAS J SEROWELEY  
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 In Court  
 22) Deputy Clerk TOM MURTIASHAW  
 23) U.S. District Court  
 24) 222 W 7th Avenue #4  
 25) Anchorage AK 99513  
 26) Ph 907/271-4529  
 Reported by  
 27) LEONARD J DI PAOLO  
 28) Registered Professional Reporter  
 29) Midnight Sun Court Reporters  
 30) 2550 Denali Street Suite 1505  
 31) Anchorage AK 99503  
 32) Ph 907/258-7100

1) specific transaction records that are identified in DX9346 do  
 2) you find that in actuality this is a property or a species a  
 3) kind of property that has a common value from permit to permit  
 4) at the same set of market conditions?  
 5) A No it doesn't The price varies day to day by as much as  
 6) a hundred percent very often a couple thousand percent  
 7) Q Did you attempt to find an economic explanation for why or  
 8) how those differences come about?  
 9) A I did in the sense that I was able to look at the records  
 10) and see that transactions have different characteristics  
 11) Combination sales may have different values relative to sales  
 12) that appear to be just sales or family transactions or trades  
 13) but there is no definitive pattern across any of those  
 14) Q In the course of your study of this material did you look  
 15) into the question of differences in catch and ratios of catch  
 16) that are indicated by the landings data that you looked at?  
 17) A We did not go through the transactions files and match them  
 18) with individual landings files on a daily basis  
 19) Q But you did that on an area basis?  
 20) A We did on an area by area basis  
 21) Q Did you find that there are differences in the N ratios on  
 22) the type of fish catch in area to area?  
 23) A Yes and they are vast from different permit types to  
 24) different permit types  
 25) MR LYNCH Your Honor might Dr Nickerson come down

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- (1) to this sheet so he can walk us through some of these  
(2) transactions?  
(3) THE COURT Sure I think you're going to need to  
(4) move that a little closer to the jury  
(5) MR LYNCH Or loan them my glasses  
(6) BY MR LYNCH  
(7) Q Now this is the first page of DX9349 and these are the  
(8) transactions first 15 or so transactions in Dr Karpoff's  
(9) list?  
(10) A Yes  
(11) Q Now would you just sort of begin explaining what this  
(12) exhibit shows so the jury can use it about the nature of each  
(13) of those transactions and particularly the - what the CFEC  
(14) data tell you about factors other than the transfer of the  
(15) permit that go into the valuation?  
(16) A We started going through this a little bit yesterday This  
(17) trade number corresponds just to the exhibit line number that  
(18) Dr Karpoff had This is the permit number this is the  
(19) fishery in this case it's the Prince William Sound purse seine  
(20) fishery And then this is the exhibit line number again I'll  
(21) explain why they are different numbers in a second  
(22) This is the transaction date so that's the date at which  
(23) the sale is recorded by CFEC  
(24) Q This is the year this is the month and this is the day?  
(25) A Yes sir P price is not in the CFEC files that's the

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- (1) price that Dr Karpoff calculated as the price the permit  
(2) should have sold at I assume the P stands for predicated  
(3) price I'm not sure Sales price I believe appears as cost on  
(4) his exhibit actually listed as a sales price or net price in  
(5) the CFEC data files so this is actually in the data  
(6) This is the difference between these two numbers so this  
(7) is the loss Dr Karpoff calculated The next column - so in  
(8) this particular case Karpoff is calculating 239 000 this is a  
(9) sales price in the computer of 150 000 and there is a  
(10) difference of 89 000  
(11) This is a column that describes the computer field that  
(12) tells the relationship of the buyer and the seller N means  
(13) not related And then this E X P column is their comments at  
(14) various times through the computer record that allows someone  
(15) to write in a comment if someone had a comment on a  
(16) relationship In this case there are no comments  
(17) The type of transaction refers to actually the - a  
(18) classification of transactions that CFEC set up I think we  
(19) started to go through these yesterday A G is a gift which  
(20) is an actual gift between the two parties A T is a trade  
(21) which means that parties are trading something else besides  
(22) the permit In other words it's more than a monetary exchange  
(23) And you'll note another R over here sometimes there is a  
(24) comment listed about what is traded and there are other fields  
(25) in the computer records that say what is traded

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- (1) Q Try to keep your voice up  
(2) A The types of transactions I think are all on this page  
(3) G is a gift T is a trade S is an outright sale O is other  
(4) and C is some sort of combination sale These appear pretty  
(5) obvious as to what they would be When you go through the  
(6) records you find out that sometimes you will see a straight S  
(7) and next to it - or here is another that could be classified  
(8) as a trade and the person didn't write down trade he wrote  
(9) other and sometimes you will find a sale that will have a  
(10) traded item listed next to it in the explanation column so we  
(11) are never positive that these are absolutely right along the  
(12) way  
(13) The explanation - there is the explanation of the type of  
(14) transactions  
(15) Q Now this explanation data where did you get that?  
(16) A That comes right from the computer file  
(17) Q And it got into the computer file because it was provided  
(18) to the CFEC by the seller?  
(19) A Yes we think that It may be in some instances that CFEC  
(20) looks at the transaction and writes some explanation I don't  
(21) know for sure what the actual work in that way is  
(22) This is the seller the transferer This is the person  
(23) that's buying the permit and these are any - called an extra  
(24) comment field in the CFEC data file and actually you can see  
(25) at various times it lists various information 99 percent of

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- (1) the time it's information that could be contained through some  
(2) other source  
(3) Q Now Dr Nickerson is it fair to say that the information  
(4) in this exhibit DX9349 is simply the data that's in the CFEC  
(5) file recompiled by your computer in accordance with the  
(6) transactions listed by Dr Karpoff?  
(7) A Again with the exception of the P price and the difference  
(8) and the X line but the basic data is all the same  
(9) Q Now on the first transaction what do you conclude about  
(10) that transaction from what you can see in the CFEC file?  
(11) A Well looking at this transaction this permit is being  
(12) sold by a Mr Lewis it's a Prince William Sound seine  
(13) transaction He bought the permit on July 1 1985 for  
(14) \$100 000 and then sold it four years later for \$150 000 On  
(15) June 5th 1989 that's the first line of Dr Karpoff's  
(16) exhibit There are no comments type of transaction is a sale  
(17) and it's listed as not a relative  
(18) Q Now let's go to transaction two  
(19) A Transaction two is a transaction in -  
(20) Q That's indicated by - this is the transaction we're  
(21) talking about?  
(22) A Well this is the exhibit line number in Dr Karpoff's  
(23) exhibit This permit was sold on December 5th 1989 The  
(24) recorded price is \$100 000 As it turns out G stands for  
(25) immediate family in terms of a relative so this particular

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transaction has taken place between somebody that I assume is immediate - living in the household brother or sister or something. The type of transaction is classified as an other. And it is listed as a trade and in fact in this particular transaction they listed they traded an SO4E salmon permit. 04 stands for setnet and E stands for Prince William Sound. So the parties in this family Mr. Russell Williams and Gregory Williams were trading these two permits at that particular time and they put on the survey form that there was a hundred thousand dollars in this particular permit trade.

Q And Dr. Karpoff using his benchmarking technique assigned a value to all Prince William Sound seine permits of \$330,000 and concluded that it was damage of \$230,000?

A Yes.

Q Now why is this next transaction there in the transaction two block?

A Well when we looked at these particular files what we did was combined all the annual files in terms of transactions and what we found under this permit number was that this permit number was sold again on June 24th 1992 it actually appears as not the 30th line of Dr. Karpoff's exhibit and this time Gregory Williams is selling it to Larry Cabana and it appears to be a sale no relative between the two. It is again sold for a hundred thousand dollars so what is written down is the same amount of money. And Dr. Karpoff now has a predicated price

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238,000 and a loss associated with that sale of this permit for a second time of \$138,797.

Q So just on this one permit the damages claimed are not the 230 but \$368,000 plus?

A Yes.

Q Anything about transaction number three?

A Well transaction number three we don't know a lot about except we have a price of the sales price of \$280,000. This is 124,090 it is a combination sale and in these particular fields we don't know what is in there or how much is described between one asset or another asset. So this is a permit sale.

Q As an economic matter what significance do you ascribe to that piece of information?

A This particular number the 280,000 doesn't necessarily reflect any arm's length transaction. If there is a vessel involved and it may say someplace else. Actually in this one it doesn't say what it is. It may say someplace else in this computer file that something else was sold and what it was but we don't know how they are ascribing the dollar value so we don't know what this dollar value represents in terms of permit value.

Q Now this transaction number three occurs a little less than two months after transaction number one and a difference of \$180,000 between those two trades is that characteristic?

A It is pretty common. You can see it here. This one is

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taken place on 12/5/89 and it is a hundred thousand dollars in the record. This one is taking place 5/7/90 - excuse me this one is taking place 1/24/90 \$280,000 here is 260. These things bounce around.

Q Transaction number four?

A Transaction number four appears to be a pretty standard transaction number at least in the sense that it has the relationship - there is no relationship and it has an S.

Q There is no other information on it?

Q And five?

A Five happens to be a sale in which what is recorded as \$250,000 this is a close relative so it is a G. We can see the last names are the same so we can see this particular transaction is taking place between immediate family members, so we don't know what this 250 represents at this particular point in time.

Going down to six you have the same thing going on. You have a - this is where the problem comes in. If you look at five you see 6/29/90 this is being sold for 250,000. It is immediate family so we're not sure exactly what that means it may or may not be one thing or another. You go to the next transaction four or five days later 7/3/90 same type of permit Prince William Sound purse seine permit that one is being listed at \$200,000 and there is a G there so in a difference of four days there is a damage calculation that is

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different by \$25,000.

Q Now let me put this down you can resume the stand Dr. Nickerson.

The assumption made by Dr. Karpoff is that fishing permits ought to be like stock that they ought to have the same - every permit ought to have the same price at the same time.

Did you find other aspects of Dr. Karpoff's approach to valuation that you considered to be unrepresentative of real value in looking at these fishing permits?

A In terms of the individual data that is contained in his exhibit which is Exhibit 3647 you can wander through this whole exhibit and you're constantly faced with the dilemma that permits that are sold in very close proximity in terms of time vary by significant amounts sometimes as much as by a hundred thousand dollars in a couple days. So they are bouncing all over the place.

Q For the period covered by his report did Dr. Karpoff find that all transactions resulted in damage according to his method?

A No. One of the things we did when we got this exhibit is we went in and we pulled all these observations but the other thing we did was look to see if there were other transactions that were left out for some reason or another and what we found was that there were a number of transactions actually 19 of them. I believe that had - that were in fact sales that

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- (1) occurred across this period and across these fisheries that had  
 (2) dollar amounts written down and the sales price field in the  
 (3) computer files that was more than the benchmark so they were  
 (4) simply dropped. So we do see observations above and below  
 So  
 (5) they don't appear in this file at all  
 (6) Q You used the phrase benchmark could you explain what you  
 (7) mean by that?  
 (8) A Benchmark is a term that's been used in this case to  
 (9) reflect a particular or describe a particular methodology used  
 (10) by Dr. Karpoff to come up with a predicted price of a permit at  
 (11) a particular point in time. Essentially what Dr. Karpoff's  
 (12) done as he said some other permit in the Alaska fishery in  
 (13) particular the Bristol Bay drift gillnet permit and the  
 (14) southeast seine permit move in exactly the same way  
 (15) Q Let me direct your attention to DX5035. Does this chart  
 (16) explain what you mean by the assumption that the permits  
 would  
 (17) move in the same way at the same point in time?  
 (18) A Yeah this is a graph of a benchmarking technique that  
 (19) Dr. Karpoff described in which Bristol Bay is moving in a  
 (20) particular point in time and this particular benchmarking  
 (21) technique supposedly says that what happens is Bristol Bay  
 (22) moves by X percent and the Prince William Sound driftnet will  
 (23) move by the exact same percent that's how the system I think  
 (24) was originally set up. These are fairly close to parallel  
 (25) they are not exactly parallel because you're dealing with

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- (1) percent so they don't look exactly the same but this is the  
 (2) standard benchmarking idea that these things are moving the  
 (3) same  
 (4) Q So Dr. Karpoff's damage calculation is based on the premise  
 (5) that if you look at another type of permit in an area not  
 (6) affected by the oil spill the way it moves would be a fair  
 (7) indicator of what would have happened in the oil spill area if  
 (8) there had been no oil spill is that correct?  
 (9) A Yes exactly  
 (10) Q Now let me direct your attention to DX5035 with an  
 (11) additional line. What does the green line represent?  
 (12) A The green line in this particular exhibit shows the actual  
 (13) price time line of the Prince William Sound driftnet fishery  
 (14) So it shows that using '89 as a starting point that  
 (15) particular permit rises through the end - into the '89/'90  
 (16) period reaches a peak and then starts down. It's in fact  
 (17) rising while the Bristol Bay driftnet is in fact falling  
 (18) Q So in using the benchmark approach that Dr. Karpoff  
 (19) described in actuality the Prince William Sound driftnet did  
 (20) better than the benchmark for most of the period that he was  
 (21) claiming damage is that correct?  
 (22) A Yes  
 (23) Q How did - how was he able to arrive at a damage number  
 (24) like the numbers we were seeing on 9346?  
 (25) A Well he made two adjustments to this particular

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- (1) technique. The first adjustment was that if you look at the  
 (2) '88/'89 - '89/'90 period in which you have Prince William  
 (3) Sound driftnet going up faster than the Bristol Bay or in fact  
 (4) it's going up and Bristol Bay is going down you use a  
 (5) benchmark technique - straight benchmark technique over that  
 (6) period you would get no damages at all  
 (7) What Dr. Karpoff assumed was that the Prince William Sound  
 (8) driftnet price should have been six percent higher. So he just  
 (9) pushed that curve up and said the losses are simply that those  
 (10) prices should have been six percent higher than they actually  
 (11) were. And when he reaches the peak period the '89/'90 period  
 (12) which is the highest price these permits ever reached then he  
 (13) started benchmarking. From that particular period we see the  
 (14) driftnet Prince William Sound starting to go down. So he did  
 (15) two things he jacked up this initial period. And the second  
 (16) thing he did he started benchmarking once he reached the  
 peak  
 (17) of this particular price  
 (18) Q So he didn't start benchmarking at the time of the oil but  
 (19) some later time right after the Prince William Sound permits  
 (20) had reached their peak in value?  
 (21) A Yes sir  
 (22) Q And if you just looked at the benchmark from the date of  
 (23) the oil spill you'd get a picture like the one that's on the  
 (24) screen?  
 (25) A Yes

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- (1) Q Now did you look into the accuracy of the assumption or  
 (2) accuracy of the method that attributed the - to Bristol Bay or  
 (3) to some other part of Alaska a precedent setting a  
 (4) benchmarking characteristic for permits in Prince William  
 Sound  
 (5) or Cook Inlet or Kodiak?  
 (6) A Yes  
 (7) Q What did you find?  
 (8) A We found that in looking at whether or not Bristol Bay -  
 (9) actually we looked at whether Bristol Bay drift gillnets or  
 (10) southeast purse seines in fact fit - would fit the definition  
 (11) of a good benchmark for these other fisheries the oil area  
 (12) affected fisheries and we found that they didn't  
 (13) Q What led you to that conclusion?  
 (14) A The assumption that Dr. Karpoff uses is that these  
 (15) particular permits these different sets of permits the  
 (16) benchmark one which would be Bristol Bay or southeast purse  
 (17) seine compared with these other permits that he's calculating  
 (18) damages for move the same way all the time. So that one goes  
 (19) up the other one goes up. Not only do they go up in the same  
 (20) direction but by the same amount all the time  
 (21) When we look historically at whether these in fact  
 (22) benchmarked against each other whether you could predict  
 what  
 (23) was happening in one by looking at the other you find there is  
 (24) very little relationship at all. For a couple permits you do  
 (25) find that they move in the same direction often but not by the

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same amount and they just don't benchmark well. There is too much disparity across the variation.

Q Did you look into the question of why, in your judgment, it would be - the movement of prices in these benchmark permits didn't correspond to the movement of prices of permits of the non-benchmark?

A Yes, we looked to see why they don't move in the same direction at the same time all the time, why isn't that true within all fisheries in Alaska, and what we concluded was that these fisheries were very different. You started out that they are in different locations, so they have different costs associated with getting to them, and different areas get different prices for fish, they fish at different times of the year, so they may be getting different prices.

Copper River fish get a higher price than other sockeye salmon because they are an early run of sockeyes. They catch different stocks of fish and different species in those stocks, so one particular - for instance Bristol Bay, about 90 percent of the fish they catch, about 90 percent - over 90 percent of their revenues come from sockeye.

That's considerably different than other areas, and the same thing applies with Prince William Sound seine and southeast seine. Prince William Sound seine is - it's more than predominantly a pink fishery, it really is a pink fishery. Vast majority of its fish are pinks. And if you look

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at southeast, it has a relatively strong income from sockeye which is different from Prince William Sound, so there are a lot of differences.

MR LYNCH: Your Honor, offer DX5035.

(Exhibit DX5035 offered)

MR O NEILL: No objection.

THE COURT: Defendants 5035 is admitted.

(Exhibit DX5035 received)

BY MR LYNCH:

Q What I'll do, if you'll help me, is go through some charts that plot the differences that you were talking about. Before you on the screen is DX5186, and could you very briefly describe what that shows and what the relative importance of each of those areas is to the benchmarking technique that Dr. Karpoff used?

A I'll start with the benchmarking. The benchmarking technique that Dr. Karpoff used assumes that the Bristol Bay driftnet moves the same way in value as the - the permits moves the same way in value as the Cook Inlet driftnet and the Prince William Sound driftnet. We find that they don't really move the same way in value, they bounce all over the place. And one of the reasons that they may bounce all over the place is simply that these harvests vary tremendously.

If you look at the '92/'93 period, I'm picking a number because there is a big jump. Bristol Bay has a big increase in

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harvest between '82 and '93. Prince William Sound driftnet has a decrease in harvest. Cook Inlet is even. Over time and historically, what's going to affect permit prices is the income these fishermen can generate from their fisheries. And if you have big runs, or run size averages start to climb or fall, that's going to affect the values of these permits.

MR LYNCH: Offer 5186.

(Exhibit DX5186 offered)

MR O NEILL: No objection.

THE COURT: DX5186 is admitted.

(Exhibit DX5186 received)

BY MR LYNCH:

Q DX5442 is a comparison of seine fleets by catch species mix. Could you give us a quick explanation of what the two pie charts describe and their source, sir?

A Karpoff's assumptions are that these two seine fleets correspond in terms of value of permit with the southeast seine fleet, so you can draw the conclusion that these two are supposed to look the same, they should also look the same as southeast, which they don't. But you can see the Prince William Sound fishery, this is the purse seine fishery, it's predominantly a pink fishery.

Kodiak fishery has a lot of pinks, although that number has been declining in the last few years. It's got a large proportion of sockeye and a large proportion of chum. The mix

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of fish is different, which means their income is going to be different. If we put up the income from these two, the sockeye are bringing a lot more income than the pinks are. So you end up with different revenues flowing into these particular fisheries.

MR LYNCH: 5442, Your Honor.

(Exhibit 5442 offered)

MR O NEILL: No objection.

THE COURT: Defendants 5442 is admitted.

(Exhibit 5442 received)

BY MR LYNCH:

Q 5508. Is that a similar set of pie charts showing the catch differential between Bristol Bay gillnet and Prince William Sound gillnet drift gillnet?

A Yeah, this is the same sort of thing, only two different fisheries. As I mentioned, Bristol Bay is predominantly a sockeye fishery and that's what this shows. Prince William Sound is another mix of fish, and in fact coho and chum constitute a large part of their income of that particular fishery.

MR LYNCH: Offer 5508, Your Honor.

(Exhibit 5508 offered)

MR O NEILL: No objection.

THE COURT: Defendants 5508 is admitted.

(Exhibit 5508 received)

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- (1) BY MR LYNCH  
 (2) Q Show you Defendants 6094 and ask you if you would explain  
 (3) what this pie chart shows and what - the source of the  
 (4) information is on which it was prepared?  
 (5) A This particular pie chart shows the percent of income or  
 (6) earnings, these are gross earnings that flow into the Kodiak  
 (7) seine fishery from the Red and Akalura Lake sockeye fisheries  
 (8) My understanding the reason I looked at this particular  
 (9) set of data is that the claims that the Kodiak fishery's permit  
 (10) has gone down in value is somehow related to loss of future  
 (11) harvest and the future harvest is the Red and Akalura Lake  
 (12) systems Those systems although 13.6 percent are not a large  
 (13) part of this they are relatively a good size part of this  
 (14) fishery but they are not a dominate size of the fishery and you  
 (15) wouldn't expect losses in this fishery related to the permit to  
 (16) exceed what the income was in this fishery under any set of  
 (17) circumstances  
 (18) MR LYNCH Offer DX6094  
 (19) (Exhibit DX6094 offered)  
 (20) MR O NEILL No objection  
 (21) THE COURT Exhibit DX6094 is admitted  
 (22) (Exhibit DX6094 received)  
 (23) BY MR LYNCH  
 (24) Q DX4855 Alpha  
 (25) A This is another pie chart this represents the CFEC

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- (1) information on shares of earnings of the various species of  
 (2) salmon in the Prince William Sound drift gillnet fishery This  
 (3) data is from the 1984 through 1992 CFEC landings file So we  
 (4) went back to the original landings file and actually compiled  
 (5) what this was by species and we left out 1989 because that was  
 (6) the oil spill year  
 (7) What we find is as pink harvests or actually earnings from  
 (8) pink salmon in the Prince William Sound drift gillnet fishery  
 (9) are only 5.6 percent of all the earnings made by this  
 (10) particular fishery The reason I was looking at this this  
 (11) particular fishery gets a vast majority of its income fishing  
 (12) the Copper and Bering River deltas which were not in any way  
 (13) impacted by the oil and I wanted to look and see how much of  
 (14) that fishing was actually done down there  
 (15) The next thing that I wanted to do was look and see given  
 (16) that the claim in Prince William Sound is that the fishery that  
 (17) was damaged was the pink fishery how that would impact this  
 (18) particular permit Even if you completely took away - the  
 (19) Department of Fish & Game said you can no longer fish pinks in  
 (20) this particular fishery and if that was forever you would  
 (21) have a very small change in the permit price  
 (22) This is probably - for the most part this is an incidental  
 (23) fish an after the main season fish It's more costly to catch  
 (24) per fish because it brings in less money It's very  
 (25) insignificant The pinks in this particular fishery are very

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- (1) insignificant and it doesn't seem to me reasonable to assume  
 (2) you could have damages to a permit in this particular fishery  
 (3) that are caused by the oil spill if what we're talking about is  
 (4) damages to some sort of pink harvest  
 (5) Q Dr Nickerson is it your understanding that in this case  
 (6) plaintiff's claim in part that the oil spill caused a decline of  
 (7) prices through 1991 is that correct?  
 (8) A Yes  
 (9) Q Have you looked into the question of whether price would be  
 (10) a factor in affecting the valuation of limited entry fishing  
 (11) permits?  
 (12) A In the sense that we've looked at permit prices in the '89  
 (13) and '90 and '91 periods the answer is yes  
 (14) Q I'm showing you DX5420 and is that a plot of the price  
 (15) average price that Prince William Sound drift gillnet salmon  
 (16) permit holders would receive on the combination of their catch  
 (17) based on your data?  
 (18) A Yes  
 (19) Q What's the source of the price information?  
 (20) A This is from the Commercial Fisheries Entry Commission  
 (21) Table 1 A  
 (22) Q Now sir applying the typical economic analysis that you  
 (23) would to a valuation problem what is the significance of these  
 (24) price data?  
 (25) A Fishermen generate income from their permits by catching

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- (1) fish and selling them There are two things that they are  
 (2) concerned with and have to be concerned with one is how big  
 (3) their harvest is and the other is the price of the fish that's  
 (4) generating the gross income that's where they get all their  
 (5) gross income So price is half of what they are looking at  
 (6) When they get a high price they are going to get a high price  
 (7) regardless of what their harvest is So price fluctuations and  
 (8) trends in price fluctuations are going to have effects on what  
 (9) permit prices actually are  
 (10) Q Did you find - well let me ask you if you would to look  
 (11) at DX -  
 (12) THE COURT Excuse me Mr Lynch referring to some of  
 (13) your exhibits did you mean to offer 4855 A?  
 (14) MR LYNCH Yes I did  
 (15) (Exhibit 4855 A offered)  
 (16) MR O NEILL No objection  
 (17) MR LYNCH And 5420  
 (18) (Exhibit 5420 offered)  
 (19) THE COURT Any objection?  
 (20) MR O NEILL None  
 (21) THE COURT It's admitted  
 (22) (Exhibits 4855 A and 5420 received)  
 (23) MR LYNCH I'm going to show Dr Nickerson 5643 Alpha  
 (24) for identification and I do not mean to offer it it's  
 (25) strictly for demonstrative purposes

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- 1) BY MR LYNCH  
 Q What is the significance of that that is just a hypothetical calculation?  
 A Yes  
 Q What is the significance of that calculation?  
 A This is just a description an example of the effect of changes in price on a fisherman's gross earnings. So in both instances here we're looking at 46,000 pounds of fish. The difference in price is \$2.20 and 84 cents a pound, so gross earnings are 102,000 in one instance and 39,000 in another instance.  
 Q Based on your valuation experience and your training, what effect would you expect a foreseen decline of that nature to have on permit value?  
 A Anytime you see decreases in the price of fish anywhere in that range, it's going to have a downward effect. Fishermen are not going to earn as much and prices are going to fall.  
 MR LYNCH: Let me put up DX5704. And Your Honor, I'll offer 5704.  
 (Exhibit DX5704 offered)  
 MR O NEILL: No objection.  
 THE COURT: Admitted.  
 (Exhibit DX5704 received)  
 BY MR LYNCH  
 Q What is plotted on 5704?

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- A CFEC's published numbers of permit prices between 1977 and 1993 for the Prince William Sound drift gillnet.  
 Q Now Dr. Nickerson, let's spend a second on the permit price side of the column here, because you and I talked about the fact that the prices that you see in the individual records vary very widely. How is that number, the CFEC price number, calculated, if you know?  
 A Well, it changed in 1980, so the numbers and the bars to the left of 1980 are different than the bars to the right. CFEC goes in and it looks to see if their gifts or transactions over - under 500, excuse me, and they exclude them, and they take a running average of what's left.  
 Q In that average, do they include gift transactions?  
 A They don't include gifts. And in the '79 period, they did other things.  
 Q But from '80 onward, they - are there other transactions which they exclude because they do not consider them to be indicative of an arm's length transaction?  
 A Whenever a transaction is under \$500, it might be a gift, if it's not listed as a gift.  
 Q So transactions under \$500 are excluded from this average?  
 A Yes.  
 Q And I'm putting DX5420 over DX5604, if I can get it there, and that superimposes the price experience of holders of drift permits in Prince William Sound with the CFEC - this isn't

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- going to work - the CFEC permit data, and what conclusions did you draw from that? Maybe if I just bring this up to you.  
 THE COURT: Somebody had a piece of cardboard on top of your TV, and I think that's what blocks out the overhead lights.  
 MR LYNCH: Who says that lawyers don't know how to do engineering?  
 MS WAGNER: Or judges.  
 BY MR LYNCH  
 Q That's approximate. What significance does that have from the standpoint of attempting to value limited entry fishing permits?  
 A Well, when you look at it like this, you see that the Prince William Sound drift gillnet salmon prices moves up. If you look at the pre-'89 years, it moves up prior to the permit price actually changing. There seems to be some lag effect in terms of permit price. Makes no sense. Fishermen get a fish price in a given year, and that's going to affect their future view of what the price is going to be.  
 If you pull it over and lag it a year or two, and none of these are perfect, if we were to do all the fisheries and line it up, get perfect matches, but they would differ a bit. You can do this across the fisheries in Alaska, shift this fish price and permit price a little bit, and these graphs start to line up. This is sort of every man economics.

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- And what I did originally when I was doing this, I held them up to a light and see if you could start doing that, which is typical, get a first brush impression. There appears to be a good relationship between fish price and permit price. As a matter of fact, it appears to be a better benchmark than you would have for other things in this case.  
 Q So did you find - I think you told us earlier that when you looked at the benchmarking process, you found that the Prince William Sound permits had gone up after the oil spill?  
 A Yes.  
 Q And that was a time of falling price?  
 A Yes.  
 Q Did you find that the permits in the oil affected areas reacted to price immediately after the oil spill?  
 A The oil area affected permit prices after the oil spill, go up after the oil spill to historic highs. They don't seem to be reacting in that event window sort of scenario where you see some downfall on permit prices. In fact, all of these continue to go up and reach historic highs quite a bit of time after the oil spill. So we're not seeing price effects, we're not seeing lots of different effects, we're seeing some other effect going on there.  
 Q Did you see any evidence of an explanation of why prices in Prince William Sound, in particular, did not seem to react to the fall in salmon prices immediately after the oil spill?



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- (1) A Well we've postulated and I think Roger Lohrer supported  
(2) this in his deposition and comments when the oil spill  
(3) occurred there was an awful lot of money flowing into Prince  
(4) William Sound and Cook Inlet and in Kodiak in terms of  
clean up  
(5) and things like that and there was just a lot of cash  
(6) available  
(7) There were also options related to whether or not there was  
(8) going to be compensation associated with that so these  
permits  
(9) took on other value in that these people were making lots of  
(10) money and there was lots of cash flowing around they didn't  
(11) want to sell their option to be in that fishery at that  
(12) particular point in time  
(13) Q Let me direct your attention to DX2961 or a portion of  
(14) DX2961 Is this the permit news entry that you were referring  
(15) to?  
(16) A Yes  
(17) Q And this is a column published by Roger Lohrer the broker  
(18) who testified for the plaintiffs in this case?  
(19) A Yes  
(20) Q And from your analysis of the statistical data does Mr  
(21) Lohrer's suggestion or indication that he thought that prices  
(22) had been held up or bowed up by the oil spill bear out when  
you  
(23) do the statistical analysis?  
(24) A Yes Roger Lohrer is saying that some areas have inflated  
(25) values and the areas we find seem to be above them higher

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- (1) than you normally think they would be the oil affected areas  
(2) and then he goes on to explain  
(3) Q Do you have an opinion as to whether it is realistic or  
(4) possible to create a true estimate of the value of fishing  
(5) permits on an across the board basis given the data that's  
(6) presently available?  
(7) A I think given the data that we have from CFEC on  
(8) transactions and the huge variability associated with the  
(9) prices that are recorded that we can't on an individual by  
(10) individual basis say that this permit lost X dollars and this  
permit lost Y dollars  
(11) Q Do you think there is an across the board basis that is  
(12) possible?  
(13) A No  
(14) Q Did you at my request attempt to develop an economic  
(15) estimate of what might be a reasonable way to estimate  
possible  
(16) affects of the oil spill on the value of limited entry fishing  
(17) permits?  
(18) A I did but that estimate is based on some fairly strict  
(19) assumptions that I don't necessarily think would apply here in  
(20) their entirety  
(21) Q Let me hand you my only copy of 9349 Alpha is that a  
(22) printout that you prepared from the data that you had compiled  
(23) from the CFEC files?  
(24) A Yes sir  
(25)

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- (1) Q Now would you describe what you did to create that  
(2) printout?  
(3) A What I did was to start off with was assume that this  
(4) particular set of assets these fishery permits acquired their  
(5) value because they generate future income that's a standard  
(6) technique for looking at the value of assets stocks generate  
(7) income that way amounts generate income that way et cetera  
(8) And the normal way of valuing an asset like that is to look  
(9) at the present value of their future stream of income So for  
(10) instance if this asset is going to generate a hundred thousand  
(11) dollars of income this year and a hundred thousand dollars of  
(12) income next year and a hundred thousand dollars of income the  
(13) following year and there is a stream that you think it's going  
(14) to generate income it has certain value there is a typical  
(15) way of valuing what an asset or a business actually is  
(16) You take the present value of those net flow of income  
(17) And I applied that to this particular market in the following  
(18) way I first of all looked to see what the actual claims were  
(19) from the fishermen's perspective in terms of losses that might  
(20) be associated with a permit And the losses that I looked at  
(21) in particular were losses associated with future harvest  
(22) particularly the future harvest loss in the Kenai system in  
(23) 1994 and 1995 And the alleged loss of fish in the Prince  
(24) William Sound period starting in 1994 the pink fishery and  
(25) going on for an indefinite period

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- (1) Q Let me interrupt you In Dr Karpoff's report what  
(2) significance did he give to those perceived or those possible  
(3) future losses in - as a basis for his valuation?  
(4) A I don't think he talked specifically about reasons for his  
(5) particular valuations He centered strictly on this  
(6) benchmarking concept  
(7) Q Excuse me for the interruption could you continue to  
(8) describe?  
(9) A I then looked at what Dr Carlson and Dr Brannon put down  
(10) as their maximum number forecast for lost fish on those  
(11) particular fisheries the Kenai was 778 000 fish was the  
(12) number they came up with after looking at ADF&G forecasts for  
(13) 94 and 95 and the Prince William Sound fishery it was  
(14) 1 830 000 fish I believe And then I simply took the price of  
(15) fish that plaintiffs had used as a basis for lost value harvest  
(16) and applied that to gross revenue  
(17) So basically I'm saying if there are ten fish loss and  
(18) those fish are a dollar a piece fishermen would have lost ten  
(19) dollars so I applied that to all the numbers And then I  
(20) distributed those losses across the different fisheries So in  
(21) Prince William Sound I took those pink losses and applied it to  
(22) the seine fishery and in Cook Inlet I applied it to the - I  
(23) distributed it in a historical way the way those fisheries are  
(24) historically divided among the driftnet fishery the seine  
(25) fishery and the seine fishery and then simply said okay

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those losses will occur in '94 and '95 in the Cook Inlet fishery or they might occur they are alleged to occur and they are alleged to occur for an indefinite period of time in the Prince William Sound fishery and I simply calculated what those harvest losses would mean to a permit holder given that we start with a 1990 which is for the most part the maximum permit price for these particular permit holders and see what that means as a loss to their permit value if they lose that harvest

I had to go from a gross revenue loss to a net revenue loss. In order to do that what I simply assumed was that every dollar of gross net revenue loss would result - well no. One percent loss in gross revenue would result in 1.25 loss in net revenue trying to be conservative in fixed costs involved

Q Did you calculate the difference that that would mean at various points in time? So if you were selling in '90 it would be different in '91?

A Yeah if you look at '90 '91 or '92. As you go towards '94 and '95 these losses become more serious to you so I looked at those particular aspects of it also

Q Are you acquainted with the testimony of Mr. Lohrer and Ms. Moore that the decline in permit prices was attributable to the concern that fishermen had about lost - future lost harvest?

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A Yes I am

Q And that information according to them began - can have an affect on the market in 1991?

A Yes

Q And is it true as you told us that you didn't find any affect from declining prices before 1991?

A Yes

Q What if any judgments did you make in your calculation regarding gear type differences that is were there gear types which you felt were less likely to be impacted by these lost future harvests than others?

A I did not make calculations for the Prince William Sound drift gillnet fishery. I simply don't think given the very small size of the pink earnings in that fishery that any change in permit price would be abnormal in that fishery. It's only five percent of revenues. Anyhow you'd have to lose all those revenues to have a five percent affect at all. I don't think we're seeing that

Q So your belief is that the projected biological effects that Mr. Lohrer and Ms. Moore referred to really wouldn't affect the drift gillnet fishery in Prince William Sound?

A Right

Q Were there any other gear types that you put in that category?

A Kodiak seine fishery I did the same. Although Carlson and

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Brannon say they show no effects so there was zero harvest losses there

Q So you didn't do calculation for permits of those types?

A No

Q And based on the document in front of you what total impact did you calculate could be at least from a theoretical economic standpoint attributed to the prospect of loss of harvest?

A This number includes 156 permits that were sold in '91 '92 and '93 and were not sold - were not part of a second or a third or a fourth sale and that's \$493,937

Q Now under that method you're assuming that any one of those sellers would have gotten some larger number over their actual selling price?

A Yes

Q You don't attempt to apply a standard price and then deduct their actual selling price is that correct?

A Correct

Q And what's the advantage of that over the method that Dr. Karpoff used?

A Well again I have to put a caveat on this. I'm making some fairly strong assumptions here about what the actual base price would be et cetera but what this says is that people that sold at about the same time period sold for the same - had an equal loss so somebody that's selling in 1991 at Prince

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William Sound seine permit is going to lose the same amount of money as somebody else selling in 1991 in Prince William Sound

seine permit Dr. Karpoff's numbers are just all over the place and I can't come to terms with those

Q So under Dr. Karpoff's approach the damages from the very same spill to the very same kinds of permits vary widely because of his reliance on actual prices?

A Yes

Q Now you excluded second sales is that correct?

A Yes

Q From the standpoint of an economic analysis if a buyer purchases a permit at a lower price than would obtain in the market does that buyer realize a benefit?

A Yes

Q And is it appropriate for that buyer to seek or to be entitled to damages on a subsequent sale if the permit was bought at an artificially low price?

A Not from an economic point of view no

MR LYNCH Nothing further

THE COURT Cross examination

CROSS EXAMINATION OF PETER NICKERSON

BY MR O NEILL

Q Doctor most of the consulting work you do is related to what area?

A Most of the work I do is probably dealing with large data

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- (1) sets it s across - I do a lot of labor work and  
 (2) discrimination work  
 (3) Q So you work primarily in the labor discrimination or the  
 (4) employment area?  
 (5) A Most of the cases I ve dealt with  
 (6) Q And you work in personal injury area on occasion?  
 (7) A Very little  
 (8) Q And you get programs or have participated in programs to  
 (9) lawyers on how to be an expert witness continuing legal  
 (10) education programs?  
 (11) A Sort of My wife is an attorney she does the same thing  
 (12) you do for a living so I get dragged into her CLE  
 (13) periodically  
 (14) Q And there is something called the National Institute for  
 (15) Trial Advocacy?  
 (16) A Yes  
 (17) Q That s a school to teach trial lawyers to do what I do I  
 (18) probably should have gone but not having gone in any event  
 (19) you teach lawyers how to work with experts at the National  
 (20) Institute for Trial Advocacy?  
 (21) A Twice I ve been involved in programs that my wife has been  
 (22) involved in and I ve served as an instructor in various parts  
 (23) of that program  
 (24) Q One of your areas of expertise is child support in the  
 (25) State of Washington?

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- (1) A Well my expertise in that particular area is actually  
 (2) fairly narrow I was appointed to the Child Support Commission  
 (3) when they wanted to rewrite the child support laws and as a  
 (4) commission we developed a new child support schedule which  
 (5) went  
 (6) into effect in 88 and was changed considerably I haven t done  
 (7) any child support work in probably three years  
 (8) Q Three years?  
 (9) A Somewhere around there I ve consulted off and on  
 (10) Q And with regard to the specifics of Alaskan fisheries you  
 (11) don t know much do you?  
 (12) A I wouldn t say that I ve been teaching fisheries and  
 (13) using Alaska as an example for eight years now  
 (14) Q Do you want to talk about the specifics of the Upper Cook  
 (15) Inlet fishery and the gear types and the harvests and the  
 (16) dates can you do that?  
 (17) A Well we can put all the data down I don t think I m  
 (18) prepared to give you point by point and day by day I do think  
 (19) that I probably know this data now and the market for these  
 (20) fisheries certainly better than Dr Karpoff and maybe anybody  
 (21) else in the world  
 (22) Q Is that right?  
 (23) A Yes  
 (24) Q How many years has Dr Karpoff spent studying Alaska  
 (25) permit  
 (26) prices?  
 (27) A My impression is that Dr Karpoff did studies in the early

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- (1) 80s Whether Dr Karpoff has looked at anything else since  
 (2) the early 80s -  
 (3) Q You don t know?  
 (4) A Well -  
 (5) Q Who published the seminal model work on Alaska permit  
 (6) prices?  
 (7) A Dr Karpoff  
 (8) Q He published how to model Alaska permit prices in peer  
 (9) review journals in the early 80s?  
 (10) A Yes  
 (11) Q And you haven t published any?  
 (12) A No I haven t but I did have lunch with Dr Karpoff  
 (13) two and a half years ago and as we were discussing an Alaska  
 (14) fishery he said you probably know more about this than I do  
 (15) because I haven t done much work recently  
 (16) Q Prior to 1993 you haven t read a Fish & Game management  
 (17) report?  
 (18) A Not in the -  
 (19) Q You never did any work with the impact of the catastrophic  
 (20) events on a marketplace had you?  
 (21) A Not specifically related to fishery no  
 (22) Q Let s talk a little bit about - who are the two primary  
 (23) permit and boat brokers in the oil impacted areas who are the  
 (24) two primary ones?  
 (25) A Rosalyn Moore and Roger Lohrer

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- (1) Q And with regard to the specifics of what is actually going  
 (2) on in the market they work in that every day don t they?  
 (3) A Yes they do  
 (4) Q And they came here and shared with us their wisdom you re  
 (5) aware of that aren t you?  
 (6) A Yes  
 (7) Q So between Karpoff and Moore and Lohrer we have the  
 (8) expert  
 (9) who did the seminal work on modeling Alaska permit prices and  
 (10) the two most prominent permit brokers in the state in the oil  
 (11) impacted areas in the State of Alaska isn t that right?  
 (12) A Yes  
 (13) Q And we have you?  
 (14) A Yes  
 (15) Q Now I was interested in your testimony about how the  
 (16) permit prices are all over the place Have you ever done any  
 (17) shooting?  
 (18) A Yes  
 (19) Q Are you aware of the expression a shot pattern?  
 (20) A Yes  
 (21) Q Let me see if I can find my targets I have gotten some  
 (22) exhibits from the defendants that may be yours and I want to  
 (23) look at them and I m going to place in front of you what was  
 (24) given to me as Defendants Exhibit 5476B Do you know what  
 (25) this is?  
 (26) A These are - this is a scatter plot of Cook Inlet salmon

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- 1 setnet gillnet permit transactions from 1980 through 1993  
 2 calculated from the CFEC permit transfer files and looking at  
 3 only the transactions from which it's permit only and unrelated  
 4 parties  
 5 Q And would it be fair to say that we see the permits  
 6 clustered along this general line they generally rise until  
 7 about 1991 and then they drop and there is a large cluster  
 8 here in 1992 and '93 is that a fair statement?  
 9 A I think it speaks for itself. When we get into the '87 or  
 10 '89 period I wouldn't say you have a general rise they are  
 11 much more varied but you have an upward trend from 1987 to  
 12 '90  
 13 and a downward trend then  
 14 Q Go to 5477 B we see the same kind of clustering don't we?  
 15 A Yes  
 16 Q And indeed for '92 and '93 what one might describe as a  
 17 pretty tight shot pattern?  
 18 A Yes  
 19 Q And with regard to the Prince William Sound salmon drift  
 20 gillnet permits in Exhibit 5478 B again we see general trends  
 21 isn't that right?  
 22 A Yes  
 23 Q And we see a drop don't we?  
 24 A Yes  
 25 Q And with regard to Kodiak salmon purse seine permits in  
 26 5184 B we again see trends and clusters and indeed clusters

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- 27 around the same prices?  
 28 A Yes  
 29 Q And these are your exhibits aren't they?  
 30 A Yes  
 31 Q And with regard to Prince William Sound salmon purse seine  
 32 permits in Exhibit 5185 B we see essentially the same  
 33 phenomenon and essentially the same kind of shot pattern  
 34 don't  
 35 we less frequently because we don't have as many data  
 36 points?  
 37 A Yes  
 38 Q Now I wanted to talk if we could for a minute. You  
 39 testified a little bit about fish price and how you looked into  
 40 fish price. Would you agree with the proposition on fish price  
 41 that the connotation of taint is always negative?  
 42 A Yes  
 43 Q And by taint we mean the possibility - the presence of oil  
 44 in a fishery isn't that right among other things?  
 45 A It could mean that. Taint has a negative connotation to  
 46 it.  
 47 Q And you would expect - you're of the opinion that the  
 48 Exxon Valdez oil spill may have had an impact on permit prices  
 49 in the oiled fishery aren't you?  
 50 A Yes  
 51 Q And you would expect that information regarding the  
 52 long term negative impact from the oil spill would have a  
 53 negative impact on permit prices in Prince William Sound?

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- 54 A Would you do that slowly?  
 55 Q You would expect information regarding the long term  
 56 negative impact from the oil spill would have a negative impact  
 57 on permit prices in Prince William Sound?  
 58 A It could  
 59 Q And this is the kind of event which could trigger lower  
 60 permit prices you'd agree with that proposition?  
 61 A It could yes  
 62 Q Now you wrote a report in this case and before the report  
 63 you didn't do anything to attempt to determine how the spill  
 64 impacted the various fisheries is that a correct statement?  
 65 A You came to your conclusions wrote a report and at the time  
 66 you wrote a report you didn't look at the various fisheries?  
 67 A That is the preliminary report yes  
 68 Q So you formed your views and at the time you initially  
 69 formed your views you had looked at none of the fisheries?  
 70 A I think at the time I wrote that report I was addressing  
 71 strictly the benchmarking technique and whether these things  
 72 appeared to be good benchmarks so in that sense I did look at  
 73 the fisheries  
 74 Q You've made no attempt yourself other than accepting what  
 75 Brannon and Carlson say to take a look at how the spill  
 76 impacted these fisheries you just take what Brannon and  
 77 Carlson say at face value don't you?  
 78 A I've been checking to see if the 1994 runs are coming in

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- 79 Q They are not are they?  
 80 A Well -  
 81 Q 89 fish abode in the inlet?  
 82 A Pardon me?  
 83 Q Only 89 fish abode in the inlet off the Anchor Point test  
 84 fishery isn't that right?  
 85 A My impression is somewhat different there is now  
 86 escapement in the Red Lake area they have reached  
 87 escapement  
 88 Q Are you an expert in escapement?  
 89 A No I'm not  
 90 Q Are you an expert on run forecasting?  
 91 A No That the Cook Inlet fishery was expecting 35,000 to  
 92 40,000 fish and they got somewhere in excess between 50 and  
 93 70,000 fish  
 94 Q Where when?  
 95 A This was last Friday I believe  
 96 Q Do you know how that fits on the curves that they use with  
 97 regard to measuring the fishery?  
 98 A I don't know exactly  
 99 Q You don't have any idea do you?  
 100 A My impression is - actually I do have an idea. If they  
 101 were expecting 35 - 30 to 40,000 and they got more than that  
 102 they got more than they were anticipating  
 103 Q Who caught them the drift fleet or the setnet do you  
 104 know?

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- (1) A I believe that was a drift fishery  
 (2) Q How many fish are projected this year in the Upper Cook  
 (3) Inlet fishery?  
 (4) A I don't know the exact number  
 (5) Q A million and a half two million 500 000?  
 (6) A I just don't recall  
 (7) Q And what's the biggest year that that fishery has ever had  
 (8) do you know?  
 (9) A 1991  
 (10) Q 1991 or 1987?  
 (11) A I think in terms of income in that fishery according to  
 (12) CFEC data, I think it was 1991  
 (13) Q I think it was 1987 9 million fish 2 55 a pound You  
 (14) don't know do you?  
 (15) A Well we could go look at Table 1 A but I believe 1991  
 (16) was - I'd have to look at that table to get the exact number  
 (17) Q So now you're an expert in valuing fisheries?  
 (18) MR LYNCH Your Honor I don't think it's appropriate  
 (19) for Mr O'Neill to ask him a question and when he answers the  
 (20) question then he abuses him for answering the question  
 (21) MR O NEILL I don't abuse him I'm entitled to know  
 (22) the -  
 (23) THE COURT Mr O'Neill you led him into the subject  
 (24) now you're kind of criticizing him for responding to your  
 (25) question

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- (1) BY MR O NEILL  
 (2) Q Let's discuss what you've done How many Fish & Game  
 (3) reports have you read?  
 (4) A I've gone through four or five of those in different areas  
 (5) Q Have you talked to any of the Upper Cook Inlet fisheries  
 (6) managers?  
 (7) A No  
 (8) Q Have you ever managed a fishery?  
 (9) A No  
 (10) Q Other than a reading of four or five Fish & Game  
 (11) management  
 (12) reports have you gotten out any textbooks with regard to how  
 (13) to manage a setnet or driftnet gill fishery?  
 (14) A No  
 (15) Q How many fathoms does a drift boat fish do you know?  
 (16) A Don't know  
 (17) Q Have any idea?  
 (18) A No  
 (19) Q How big is a drift boat do you know how many feet?  
 (20) A Depends on the fishery they vary  
 (21) Q How about Upper Cook Inlet do you know?  
 (22) A I don't recall the exact average but we've gone through  
 (23) that number it's in the 30 foot range  
 (24) Q It's in the 40 foot range isn't it?  
 (25) A Depends on the fishery Bristol Bay has a limit on it  
 (26) Prince William Sound drift gillnets are smaller

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- (1) Q How about Cook Inlet?  
 (2) A I don't know the exact number off the top of my head  
 (3) Q What kind of boats do they use at a setnet site?  
 (4) A My impression is setnet sites they simply use boats to go  
 (5) out if they need to go out in skiffs  
 (6) Q Have you been to a setnet site?  
 (7) A Pardon?  
 (8) Q Have you been to a setnet site?  
 (9) A No I haven't  
 (10) Q Do you know a setnetter?  
 (11) A No I actually set a metnetter (sic) at a party  
 (12) Q Now I want to talk a little bit about these exhibits and  
 (13) I want to talk about what happened to price and what happened  
 (14) to permit values and I've done the same thing Mr Lynch did  
 (15) although mine don't match up quite as good but I've attempted  
 (16) to take your two exhibits and overlay them and we see two  
 (17) things from overlaying these exhibits don't we? We see that  
 (18) after 1988 and after the oil spill the price of salmon dropped  
 (19) precipitously didn't it?  
 (20) A Yes  
 (21) Q It crashed didn't it?  
 (22) A That's a good description  
 (23) Q That's a good description?  
 (24) A Yes  
 (25) Q And with regard to permit prices while the price crashed

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- (1) for the three years after the permit prices held steady?  
 (2) A In this particular area yes  
 (3) Q And then they dropped precipitously didn't they?  
 (4) A Yes  
 (5) Q And there is an event that happens between this year and  
 (6) this year isn't there that's relevant to this discussion?  
 (7) A There is lots of events going on in these fisheries  
 (8) Q But we know that between this year and this year fishermen  
 (9) and the public were made aware of the fact that there were  
 (10) problems potential problems with the long term health of the  
 (11) Prince William Sound fishery isn't that right?  
 (12) A I think there is information coming out in the press that  
 (13) there are various things going on in the Prince William Sound  
 (14) fishery I think that's true  
 (15) Q And it isn't good is it?  
 (16) A No  
 (17) Q And we can go to another fishery we can go to the Cook  
 (18) Inlet drift gillnet fishery and we can take a look at the  
 (19) exhibits and we see again roughly matching up the years is  
 (20) this close enough do you think?  
 (21) A Close enough  
 (22) Q The overlay the scales I got on the exhibits weren't quite  
 (23) the same but again we see from the year 1988 before the spill  
 (24) the price dropping precipitously isn't that right?  
 (25) A Yeah fish price falls in those periods yes

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Q Crasnes?  
 A Yes  
 Q And again we see the permit prices holding for a year or two after the spill and then with regard to this Upper Cook Inlet fishery what information becomes aware - is made public between here and here (indicating) do you know?  
 A I think there is lots of pieces of information out there  
 Q How about Fish Study 27?  
 A Fish 27 officially comes out in the beginning of '92 but I think people have said that it was coming out before then or hits and prices  
 Q And it hits the presses in late '91 isn't that right  
 rumors about -  
 A Late '91 beginning of '92  
 Q And that information becomes public in Upper Cook Inlet between here and here (indicating) doesn't it?  
 A In the beginning of '92 so the '91/'92 period yes  
 Q And with regard to Kodiak we see the same pattern with regard to both price and with regard to permit prices isn't that right?  
 A Yes  
 Q And you reviewed both Lohrer and Moore's trial testimony?  
 A I did not review their trial testimony  
 Q Did you review their depositions?  
 A Yes

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Q And in your report do they not state that the often cited reason that buyers - sellers wanted to sell but buyers didn't want to buy the discussions that took place on the marketplace in the years that we see the drop in permit prices was Fish Study 27 information on Prince William Sound uncertainty on the health of the fishery that's what they report from the marketplace isn't it?  
 A Among other things yes  
 Q And indeed in Mr Lohrer's regular newsletter and this is Defendants Exhibit 2962 and you're aware of this issue I'm sure he specifically reports that the Prince William Sound salmon and herring purse seine prices are also being further affected by the long term damage due to the oil spill isn't that right?  
 A I'll say that he writes that yes  
 Q And he also reports that you can buy and this is in early this year you can buy a Prince William Sound salmon permit for the bargain price of 45 to \$50,000 and he describes it as a give away price due to fishermen's concern over the long term uncertainty of this fishery because of the Exxon Valdez oil spill that's what he writes isn't it?  
 A Yes  
 Q Permit News is one of the few - he says the same thing with regard to Kodiak doesn't he?  
 A Yes

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Q This is - with regard to Alaska permits this is one of the new trade publications we have isn't it maybe the only one?  
 A I would say yes Pacific Fishing is more generic  
 Q Now I want to take a diversion for a minute you did me a favor and I want to thank you for the favor and we're going to talk about the favor that you did  
 I asked Mr Lynch to ask you to go through the Karpoff database and have you pull out all of those sales which you think are second and third sales and you did that for me didn't you?  
 A Yes  
 Q And this is a copy of Plaintiff's Exhibit 3645 which is in evidence and you went ahead and ran the numbers for me pulling out what you believed to be second or third sales and I'm going to give you your run and if you could give me the number I'm going to mark this exhibit with a pen and take out the second and third sales and what number do you get using Karpoff's benchmark analysis and the data points he used taking out the second and third sales?  
 A The number I got was \$20,200,657  
 Q 20,200,657?  
 A Yes  
 MR O NEILL And I've written Plaintiff's Exhibit 3645 A and I would offer 3645 A

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(Exhibit 3645 A offered)  
 MR LYNCH No objection  
 THE COURT Plaintiff's 3645 A is admitted  
 (Exhibit 3645 A received)  
 BY MR O NEILL  
 Q Would it be fair to say that you do not have an opinion as to why the Prince William Sound permit prices declined dramatically in 1993 while those in the southeast did not?  
 A I don't think there are absolutely clear reasons that you can attach specific dollar points to specific event but I think there are certain things going on in the fisheries that affect their prices  
 Southeast purse seine fishery is the only seine fishery in the state that's seen increases in pink revenues and seen increases in sockeye revenues over the last three years It's one of the few fisheries that's seeing increases in revenues at all so we won't expect that to be comparable to a Prince William Sound fishery where they have seen decreases in harvest and decreases - significant decreases in prices over the same three years None of that is necessarily related to the oil spill especially in the southeast case  
 Q At your deposition you were asked the question Other than the low projected runs in Prince William Sound -  
 MR LYNCH Page?  
 MR O NEILL 191

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- (1) BY MR O NEILL  
 (2) Q – what other explanation do you have as to why permit  
 (3) prices in Prince William Sound would plummet more than 30  
 (4) percent in 1993 while those in southeast Alaska would go up?  
 (5) And the answer you gave I don't have an opinion about  
 (6) why For instance in Prince William Sound in January the  
 (7) estimated value published by the Commercial Entries  
 Commission  
 (8) is 91 000 and goes to 102 for six months and then drops to  
 (9) 69 600 at the end of the year I haven't looked at that  
 (10) particular year I can't give you an opinion  
 (11) You were asked that question and you gave that answer at  
 (12) your deposition isn't that right?  
 (13) A Yes  
 (14) Q You call it the Commercial Entries Commission and you did  
 (15) in your testimony here today but nobody else refers to it as  
 (16) the Commercial Entries Commission?  
 (17) A It's Commercial Fisheries Entry Commission CFEC  
 (18) Q You don't know what caused the permit prices to fall in  
 (19) Kodiak in 1993 do you?  
 (20) A I think I know what's contributed to that fall I think if  
 (21) you look at CFEC records regarding the Kodiak fishery you'll  
 (22) find that the Kodiak fishery is seeing a significant drop As  
 (23) a matter of fact it's seeing a 45 million dollar drop in  
 (24) revenues over the '90 to '92 period in pink revenues and chum  
 (25) revenues It's actually seen an increase in sockeye revenues

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- (1) but that's a big chunk out of their fishery and it's got to  
 (2) have an impact in their permit price  
 (3) Q Your deposition at page 197 at line 7 of page 197 the  
 (4) question is What I'm getting at Mr Nickerson as we sit  
 (5) here today and we try to figure out put on our Sherlock  
 (6) Holmes outfits and try to figure out what happened in Kodiak  
 (7) to permit prices in 1993 we know they had a record harvest of  
 (8) pinks and we know that the price was relatively stable and my  
 (9) question to you is what specific fact can you point to that's  
 (10) causing permit prices to drop other than the low projection for  
 (11) future runs?  
 (12) And your answer is I don't know of a particular event  
 (13) that caused these prices to fall between January and  
 December  
 (14) Was that the question and the answer?  
 (15) A That's the question that reads here and the answer here  
 (16) Q And that's the question that was asked and the answer that  
 (17) you gave?  
 (18) A Here in the deposition yes  
 (19) Q And you were under oath in the deposition?  
 (20) A Yes  
 (21) Q Indeed at the time of your deposition you had no  
 (22) explanation for the differential increases in the permit prices  
 (23) in southeast and Kodiak in '90 or in '91 did you?  
 (24) A I think the same trends I've never known and I still  
 (25) don't know what's causing monthly changes across these  
 permits

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- (1) Q Would you agree with the proposition that a projection of  
 (2) decreased run sizes will have a negative impact on permit  
 (3) prices?  
 (4) A It can  
 (5) Q And the projection of smaller runs in specific fisheries  
 (6) such as Prince William Sound and Upper Cook Inlet have a  
 (7) negative impact on permit prices?  
 (8) A It can  
 (9) Q Let's talk a little bit about these permits They have in  
 (10) addition to the ability to buy and sell them people used to be  
 (11) able to borrow money on them isn't that right?  
 (12) A Yes  
 (13) Q So that – it was like mortgaging a house almost and there  
 (14) is one or two state – sort of state private entities that are  
 (15) allowed by law to lend on permits?  
 (16) A I think there are two  
 (17) Q And as a result of the information that came to light in  
 (18) late '91 and early '92 they quit lending fishermen money on  
 (19) their permits didn't they?  
 (20) A I believe they did yes  
 (21) Q And the reason that they quit didn't have to do with low  
 (22) prices their stated reason was we're not going to lend on  
 (23) your permits anymore because of things like Fish Study 27 and  
 (24) the problems in Prince William Sound isn't that right?  
 (25) A I don't know that

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- (1) Q Who are the two entities that loan is one CFAB?  
 (2) A Yes  
 (3) Q Who is the other one?  
 (4) A I forget the exact name of the group  
 (5) Q It is their business in making these loans or not making  
 (6) the loans to make value judgments on information on things  
 (7) like Fish Study 27 and problems in Prince William Sound isn't  
 (8) that right?  
 (9) A Yes  
 (10) Q So a fisherman today – four years ago any fisherman could  
 (11) have gone to CFAB and taken out a loan against his permit in  
 (12) order to get through the year buy a new boat work on his  
 (13) house and they can't do that today can they?  
 (14) A No  
 (15) Q And indeed the fact that you can no longer borrow on a  
 (16) permit has an impact on the value of that permit doesn't it  
 (17) because that's one more thing that you can't do isn't that  
 (18) right?  
 (19) A Yes  
 (20) Q And that impact is not a positive impact that's a negative  
 (21) impact isn't it?  
 (22) A Yes  
 (23) MR O NEILL You made the statement that – well  
 (24) thank you sir and thank you for helping with the  
 (25) calculation

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THE COURT Mr Lvn h  
 (1) MR LYNCH Your Honor I would offer DX9349 Alpha  
 (2) (Exhibit DX9349 A offered)  
 (3) MR O NEILL No objection  
 (4) THE COURT Defendants 9349 Alpha is admitted  
 (5) (Exhibit DX9349 A received)  
 (6) REDIRECT EXAMINATION OF PETER NICKERSON  
 (7) BY MR LYNCH  
 (8) Q Now Mr O Neill asked you about these charts which one of  
 (9) the interesting things about this examination is we both seem  
 (10) to like your charts both sides seem to like your charts  
 (11) Dr Nickerson Shot pattern I don't shoot What kind of  
 (12) weapon produces a shot pattern?  
 (13) A A shotgun  
 (14) Q Shotgun Is that a recognized valuation tool?  
 (15) A No sir  
 (16) Q If you were trying to hit a bull's eye and you got a good  
 (17) shot pattern how would that score in a shooting match?  
 (18) A I don't think you'd have that kind of shooting match with a  
 (19) shotgun  
 (20) Q Now this shot pattern here in '93 these little red dots  
 (21) are individual transactions?  
 (22) A Yes  
 (23) Q And they are at or about the same point in time?  
 (24) A Yes sir

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(1) Q And the range is what can you roughly - somewhere below  
 (2) hundred thousand?  
 (3) A 80 to 90 000 to 110 000 120 000  
 (4) Q Now would shot patterns of this kind be consistent a  
 (5) valuation that assumes that each and every permit has exactly  
 (6) the same value at the same point in time?  
 (7) A No  
 (8) Q And if you were - as a matter of professional valuation  
 (9) is it appropriate in your judgment to ascribe to every permit  
 (10) in a market like this the same identical value and use that as  
 (11) the basis for determining whether someone has been injured  
 (12) when  
 (13) they sell it at a price that they have negotiated?  
 (14) A No I think we need more information  
 (15) Q Now you did this calculation for Mr O Neill which resulted  
 (16) in him changing one of his exhibits That consisted of taking  
 (17) out second sales correct?  
 (18) A Yes sir  
 (19) Q Subsequent sales Now you've done that you're still using  
 (20) Dr Karpoff's data?  
 (21) A Yes  
 (22) Q Is this a listing that you prepared in comparing that of  
 (23) the actual transactions?  
 (24) A Yes  
 (25) Q Look at the transactions being around December 14th of  
 (26) 1989 and just read say for a month or a month and a half how

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(1) much variation there is a ording to that calculation in the  
 (2) supposed impact on individual permit holders?  
 (3) A These are for Cook Inlet sections starting at 12/12/1989  
 (4) Dr Karpoff's calculated damages on 12/12/89 of 8 686 on  
 (5) 12/14/89 of \$13 686 12/18/89 28 686 On 9/1 - excuse me  
 (6) on January 4th 1990 of 10 300 And on the 16th of January  
 (7) there are two calculations of \$81 000 and on the 30th of  
 (8) January there is a calculation for \$3 800  
 (9) Q Now that is another shot pattern Is that consistent with  
 (10) the valuation approach that assumes as Dr Karpoff does that  
 (11) all of these permits have a constant value at the same point in  
 (12) time?  
 (13) A No  
 (14) Q In that listing that you did for Mr O Neill and the  
 (15) listing continues to include gift transactions?  
 (16) A Yes  
 (17) Q Does it continue to include combination transactions?  
 (18) A Yes  
 (19) Q Did it continue to include trades where one permit was  
 (20) traded along with cash?  
 (21) A Yes  
 (22) Q Now you were asked some questions about your  
 (23) acquaintance  
 (24) with Dr Karpoff and his pioneering work on his initial work on  
 (25) permit valuation and I understand that you read his  
 (26) deposition did you say that?

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(1) A Yes  
 (2) Q In connection with the work that led to this particular  
 (3) latest shot pattern we were talking about  
 (4) A Yes  
 (5) Q Did Dr Karpoff testify at his deposition that he hadn't  
 (6) done that evaluation work?  
 (7) A Yes  
 (8) Q All he did was review somebody else's work?  
 (9) A Yes  
 (10) Q And came in to stand up for it in court?  
 (11) A Yes  
 (12) Q So that work wasn't done by any innovator studying permits  
 (13) in Alaska was it?  
 (14) A No  
 (15) Q Who actually was it that did the work?  
 (16) A I'm not absolutely sure but I think it's a Mr Freeberg  
 (17) Q At NRC?  
 (18) A Yes  
 (19) Q He didn't come in to testify about how he got them did he?  
 (20) A No  
 (21) Q Now Mr Lohrer Mr Lohrer writes this column Permit News?  
 (22) A Yes  
 (23) Q And this particular column is dated March of 1994 correct?  
 (24) A Yes  
 (25) Q That was after Mr Lohrer had agreed to work for the



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- (1) plaintiffs in this case correct?  
 (2) A Yes  
 (3) Q And after he gave his deposition which you read?  
 (4) A Yes  
 (5) Q And it was pointed out to him in that deposition that all  
 (6) the time from the oil spill until the deposition never once in  
 (7) his column had he written anything to indicate that the oil  
 (8) spill had something to do with permit prices and what was in  
 (9) his next column?  
 (10) A This is his next column  
 (11) Q Now I asked you to make an effort to determine what would  
 (12) be a consistent measure to estimate the effects of Fish Study  
 (13) 27 did I not?  
 (14) A Yes  
 (15) Q And to estimate the effects from a sound economic basis of  
 (16) the impacts of the reported biological problems in Prince  
 (17) William Sound?  
 (18) A Yes  
 (19) Q Is that the basis on which you chose the decline in harvest  
 (20) in those areas in generating the valuations that you testified  
 (21) to here on direct?  
 (22) A Yes  
 (23) MR LYNCH Thank you sir  
 (24) THE COURT Thank you sir You may step down  
 (25) MR LYNCH Your Honor Richard Deriso

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- (1) THE CLERK Would you raise your right hand please  
 (2) (The Witness Is Sworn)  
 (3) THE CLERK Please be seated For the record sir  
 (4) state your full name your address and spell your last name  
 (5) please  
 (6) THE WITNESS Yes That s Richard Bruce Deriso  
 (7) D E R I S O and the address is 13414 Barbados Way Del Mar  
 (8) California  
 (9) MR LYNCH Almost had to fake a heart attack Your  
 (10) Honor because I couldn t find my notes but I found them so  
 (11) my voice is a little off for a minute  
 (12) DIRECT EXAMINATION OF DR RICHARD DERISO  
 (13) BY MR LYNCH  
 (14) Q Dr Deriso you are a doctor?  
 (15) A Yes  
 (16) Q And so more stale air You re chief scientist for the  
 (17) Inter American Tropical Tuna Commission located in La Jolla  
 (18) California?  
 (19) A Yes  
 (20) Q What is the Inter American Tropical Tuna Commission?  
 (21) A Yes we re located on the campus of Scripps Institution of  
 (22) Oceanography and there we are responsible for the  
 (23) assessment  
 (24) and management for tunas and billfishes in the eastern tropical  
 (25) Pacific Ocean  
 (26) Q And management means what has been talked about seeing

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- (1) that enough fish stay out there in the ocean that they can  
 (2) reproduce and the fishery stays in existence?  
 (3) A Yes maintaining the long term health of the resources  
 (4) Q Billfishes are marlin and swordfish?  
 (5) A Yes  
 (6) Q Are those biological relatives of tuna or did they get  
 (7) thrown in?  
 (8) A Well they are fishes but it goes back quite a ways before  
 (9) you get a connection  
 (10) Q Did you also teach at Scripps?  
 (11) A Yes I do  
 (12) Q What do you teach?  
 (13) A I teach quantitative population dynamics with a colleague  
 (14) of mine Professor Sukahara (ph)  
 (15) Q You took a Ph D in biomathematics at the University of  
 (16) Washington?  
 (17) A That s correct  
 (18) Q When was that bestowed?  
 (19) A 1978  
 (20) Q What got you interested in biomathematics?  
 (21) A Well I had my master s degree in mathematics and I was  
 (22) looking for a place where I could apply mathematics to natural  
 (23) resources University of Washington had a wonderful school  
 (24) there which allowed me to apply mathematics they have a  
 (25) quantitative ecology pathway that I specialized in

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- (1) Q Have you had experience in management of fisheries in the  
 (2) North Pacific and the Gulf of Alaska?  
 (3) A Yes I was on the scientific staff for the Pacific Halibut  
 (4) Commission from 1980 through 1988 I was a population  
 (5) dynamicist there and I also was and continue to be affiliated  
 (6) faculty with the University of Washington School of Fisheries  
 (7) so I taught population dynamics course for the University of  
 (8) Washington as well  
 (9) Q Have you had occasion to work with Alaska Department of  
 (10) Fish & Game on matters relating to fish population dynamics?  
 (11) A Yes I have  
 (12) Q What work is that?  
 (13) A A colleague and I taught two short courses on fishery stock  
 (14) assessment to ADF&G back in the mid 1980s A course in  
 (15) Anchorage and another one on Kodiak  
 (16) Q Do you have a background or training relating to Alaska  
 (17) salmon?  
 (18) A Yes I do  
 (19) Q What is that sir?  
 (20) A Yes part of my Ph D dissertation did an analysis  
 (21) involving eight sockeye salmon populations and there were  
 (22) four  
 (23) in Bristol Bay region Ugashik Naknek Igiugig Nushagak and  
 (24) the Kodiak region the Karluk stock Two in British Columbia  
 (25) Fraser and Skino (ph) and the Columbia River stock down in the  
 Lower 48

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Q Were you engaged by counsel from Exxon in this case to conduct some research relating to the effects of the Exxon Valdez oil spill on what would have happened or what fishing could have been expected to be if there had been no oil spill?  
 A Yes I was  
 Q What additional study or research did you undertake in that connection?  
 A Yes this is - I've easily spent more time working on this problem than any other single assessment problem and read an enormous amount of material a lot of ADF&G reports material which is in our library things which weren't there and I requested from counsel a lot of scientific literature awful lot of reading  
 Q And that was easily done did you say?  
 A No hardly  
 MR LYNCH Your Honor I'll offer Dr Deriso on the fish population projection and fish population dynamics  
 MR O NEILL Whatever that means we have no objection  
 MR LYNCH I had to read it myself Your Honor  
 THE COURT I won't try and repeat it Dr Deriso's qualification in the area of fish populations dynamics and projections whatever are accepted  
 BY MR LYNCH  
 Q I believe that DX7156 is in evidence Dr Deriso and

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consists of a map showing the - some of the fisheries areas that are involved in this case and I'd like to as I've said to you in discussing this take a salmon like counterclockwise walk around these areas beginning with Cook Inlet  
 Have you prepared an estimate of the - that represents your judgment as to the number of fish that - of various kinds that would have been caught by commercial fishermen in Upper Cook Inlet if there had been no loss due to the Exxon Valdez oil spill?  
 A Yes I have  
 Q And that indicated in DX8975 Alpha which I'll hand to the witness if I may Your Honor?  
 A Yes that's it  
 Q And I believe I have a large copy of that here  
 MR LYNCH Where do you recommend that I put this?  
 THE JURY Turn it right side up  
 MR LYNCH Well I'm not a fish population dynamicist  
 BY MR LYNCH  
 Q Now we're talking about the fishing in Upper Cook Inlet where I'm pointing to right here  
 A Yes  
 Q And that's the area particularly sockeye salmon return to the Kenai River?  
 A Yes

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Q And the Kasilot or the Kasilot?  
 A Yes  
 Q And the Yentna and the Susitna?  
 A Yes  
 Q That's the area we're talking about And the estimate this chart indicates or maybe you could just tell the jury what is indicated in DX8975 Alpha  
 A Yes on the left hand side there what we have is estimated driftnet sample harvests for each of the five salmon we got sockeye pink coho chum and kings down at the bottom And then you got some bars there The links of those bars is proportionate to the estimated lost harvest The numbers that went into the bars are over on the right hand side they are in three columns there The first column are the estimates of the plaintiffs the second column are estimates provided by ADF&G in this case there were none and then the last column was my estimates  
 MR LYNCH Let me just try to spin this around a little bit for the Court's convenience Does that help at all Your Honor?  
 THE COURT That's no problem go ahead  
 BY MR LYNCH  
 Q What does the yellow indicate Dr Deriso?  
 A Yes if there is yellow indicated on the graph then that means that the estimate is based on ADF&G run size estimate -

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run size that refers to the number of fish returning to a system in a given year Made up basically of the catch plus the fish which escape the fishery or escapement In some cases the escapement is only estimated in monitored proportions so there are expansion factors to include the unmonitored parts of the system  
 Q So you've yellowed this number to indicate that you derive this starting with the ADF&G run size number?  
 A That's correct  
 Q And where yellow appears on this or subsequent charts that's what it's meant to indicate?  
 A That's correct  
 MR LYNCH Offer 8975 Your Honor  
 (Exhibit 8975 offered)  
 MR O NEILL No objection  
 THE COURT It is admitted  
 (Exhibit 8975 received)  
 BY MR LYNCH  
 Q Now this number is Dr Rogers estimate?  
 A Well actually that's the numbers on the plaintiffs claim I think that Dr Rogers preferred method actually would be 4 019 000  
 Q This number is in Dr Rogers report?  
 A Yes  
 Q And it's been adopted in the plaintiffs summary exhibit

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- (1) is that what you mean?  
 (2) A Yes  
 (3) Q And this is your number?  
 (4) A That's correct  
 (5) Q Let's start with your number. How did you arrive at your  
 (6) estimate which is somewhat below Dr. Rogers' estimate or the  
 (7) plaintiffs' estimate?  
 (8) A Yes, what I did was I constructed a recent series of  
 (9) catches and run sizes and then basically used the historical  
 (10) recent historical relationship between catch and run size to  
 (11) estimate what the catch would have been given the current run  
 (12) size.  
 (13) Q So we've heard before about regression. Is that a  
 (14) regression type of analysis?  
 (15) A Yes, it's a simple linear regression.  
 (16) Q Let me put up on the screen and remind us all. Is that a  
 (17) chart, DX5630 Charlie, which simply illustrates how you go  
 (18) about developing a regression?  
 (19) A Yes, this illustrates the concept here.  
 (20) Q And that's been done before in this case, but just to  
 (21) relate it to what you did, the little open boxes, those are  
 (22) what?  
 (23) A That would be the catch and the run size for a given year.  
 (24) Q Is that estimated or is that based on historical data?  
 (25) A Based on historical data.

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- (1) Q So each of those open boxes is a historical - the  
 (2) historical report of actual catch based on fish brought ashore?  
 (3) A That's correct.  
 (4) Q And then what do you do in your mystical fish population  
 (5) dynamicist way to relate those numbers to what could be  
 (6) projected for another year?  
 (7) A Well, basically you fit a line through the open circles  
 (8) there. You leave out the 1989 data point because that's the  
 (9) one you're trying to estimate what the foregone catch is for  
 (10) but for the other data points, you use this regression  
 (11) procedure, fit a line through the data, and then the line right  
 (12) above the data point for 1989 tells you what the expected catch  
 (13) would have been in 1989, so all you have to do is just take  
 (14) that distance between the line and the actual value for 1989  
 (15) that gives you the estimate for foregone catch of - for the  
 (16) combined fisheries.  
 (17) Q So Dr. Rogers explained this in another context, but if you  
 (18) know one of these two things you can go out and find a place  
 (19) on the line and it will tell you the other thing?  
 (20) A That's the concept, yes.  
 (21) Q What is the thing you thought you knew or you thought you  
 (22) had available to you for 1989 that you considered reliable and  
 (23) that you used to estimate what the fishermen would have  
 (24) caught?  
 (25) A Yes, it's the ADF&G run size estimate.  
 (26) Q So you took the ADF&G run size estimate over here?

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- (1) A No, it's on the bottom there.  
 (2) Q I'm sorry. And you went up and that's where you think it  
 (3) should be?  
 (4) A Correct.  
 (5) Q But this is the big - colored in red box is the actual?  
 (6) A That's the actual.  
 (7) Q And you show a difference of about 475,000 fish?  
 (8) A Yes, that's correct. And in the case of the Upper Cook  
 (9) Inlet, they have had an increasing escapement goal range, so  
 (10) there was an adjustment in this analysis to account for that  
 (11) factor.  
 (12) Q Now I want to refer to the - you've got 475,000 foregone  
 (13) fish and you've got 3,290,000 lost fish, where did the other  
 (14) 3.27 million come from?  
 (15) A Well, the heading there says driftnet, and the analysis is  
 (16) on the combined gear, so the setnet fishery has a very large  
 (17) catch in 1989, so what I've done then is partition the total  
 (18) expected catch between what the driftnet would have been  
 (19) expected to catch, the two gear type, setnet and drift, and  
 (20) based on that that's where you get the 3.2.  
 (21) Q So what you did is you took - you calculated that about  
 (22) 475,000 more fish would have been caught than actually were  
 (23) caught?  
 (24) A That's correct.  
 (25) Q So you added that number and calculated what you think  
 both

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- (1) types of fisheries would have caught?  
 (2) A That's correct.  
 (3) Q And then you redivided that, not the way it actually  
 (4) happened in 1989, but the way it would have happened in a  
 (5) normal year?  
 (6) A That's correct.  
 (7) Q And is that just exactly what Dr. Rogers did in his  
 (8) calculation?  
 (9) A Yes, I mean he takes his totally foregone catch and  
 (10) partitions it using a 60/40 split between drift and setnet  
 (11) yes.  
 (12) Q And you used his numbers for that purpose?  
 (13) A Yes, I've used his numbers to keep things the same.  
 (14) Q Now we've heard a lot about sonar counters and whether Dr.  
 (15) Rogers is or is not right about how many fish were gutting  
 (16) passed the sonar counters. Is there a difference, aside from  
 (17) the sonar counters, that explains the difference between  
 (18) 4,365,000 fish and 3,290,000 fish?  
 (19) A Yes, there is.  
 (20) Q What is that?  
 (21) A Well, that figure right there is calculated on the  
 (22) assumption that the fishery would have harvested all of the  
 (23) fish in excess to the escapement goal.  
 (24) Q In other words, that the fishermen would have caught just  
 (25) the right number so that the ones that went up the stream are

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what ADF&G wanted to go up and the stream and no strayers  
 not away?  
 31 A Yeah it would have been perfect  
 1 Q Did Dr Rogers comment on that?  
 51 A Yes his preferred method the number that I mentioned  
 6 earlier does make that assumption His assumption is in  
 fact that that would not have occurred  
 8 Q So Dr Rogers preferred method produced what number?  
 91 A 4 019 000  
 101 Q And this number assumes perfect management of the  
 fishery?  
 111 A In the sense that they nailed that escapement goal on the  
 121 nose yes it does  
 131 Q And you indicated when we were talking about your  
 141 qualifications that you've read a lot of material and data  
 151 about ADF&G performance In your independent judgment is it  
 161 reasonable to believe that there would be perfect management  
 of  
 171 the fishery and no fish would get away other than just the ones  
 181 that were meant to get away?  
 191 A No that's not reasonable  
 201 Q Now with reference to the other statistics here those were  
 estimated by Dr Ruggerone?  
 A That my understanding  
 211 Q There is one other question I wanted to ask you about this  
 221 fishery some of the fish that are - that would like to get  
 231 into the Kenai River or the Kaslof River or the Yentna River

11 A They - I guess they assumed all those fish die  
 12 Q Did they count them for the Kodiak fishermen?  
 13 A Yes they counted them for the Kodiak fishermen  
 14 Q Could they also get back the Kodiak fishermen and up to  
 15 Cook Inlet?  
 16 A Yes sir they are counted twice I don't understand it  
 17 Q So there is no deduction in the plaintiffs figures for the  
 18 fact that they are assuming that Kodiak fishermen will catch  
 19 some Cook Inlet bound fish?  
 20 A No  
 21 Q Now with reference to the - Dr Rogers figures on  
 22 escapement he as I understand it had made some  
 23 adjustments  
 24 to the ADF&G run size estimate because he believed in part that  
 25 the sonar counter was inaccurate on the Kenai River?  
 26 A That's correct  
 27 Q Did he also make an estimate based on the overall  
 28 exploitation rate in Upper Cook Inlet did that go into his  
 29 calculation?  
 30 A That was part of his justification for making the  
 31 adjustment on the sonar yes  
 32 Q Did you check his figures with reference to that subject?  
 33 A Yes I did  
 34 Q And in - did you agree with him?  
 35 A Well I think the procedure is quite interesting Well  
 36 it's similar to the procedure I used which would be that he

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2 make the mistake of swimming in the vicinity of Kodiak or  
 3 Shelikof Strait?  
 4 A That's correct  
 5 Q What happens to some of those fish?  
 6 A Yes I omitted that We'll talk about this later and we're  
 7 looking at Kodiak but there is a north Shelikof Strait  
 8 interception fishery there which harvests sockeye which are  
 9 destined to Upper Cook Inlet  
 10 Q Let me see if I can put the map back up for you Doctor I  
 11 don't know if you can get that light pen to work  
 12 A Yeah that would be this interception fishery here in the  
 13 northern Shelikof Strait area here  
 14 Q So you have sockeye that are trying to go back to the  
 15 Kenai and as they swim by those fishermen down near Kodiak  
 16 they are caught?  
 17 A That's correct  
 18 Q And how does that bear on these calculations?  
 19 A Well the fish which are caught in that fishery calculated  
 20 an estimate of 230 000 of those would have been caught in  
 21 1989  
 22 and since those fish are caught in that fishery they wouldn't  
 23 have been available to the Upper Cook Inlet fishermen so I  
 24 subtracted that amount out of the run size estimate for 1989 to  
 25 adjust for interception  
 26 Q And what did the plaintiffs do with regard to the north  
 27 Shelikof Strait interception fishery?

11 looked at basically catches and run sizes from a lot of other  
 12 systems and basically based on the relationship between  
 13 those  
 14 draw a conclusion that the harvest rate was too high in the  
 15 Upper Cook Inlet in comparison to other areas  
 16 Q And in making that calculation did you agree with the  
 17 inputs for his calculation?  
 18 A I didn't double check all of his numbers for the other  
 19 systems I looked in the Upper Cook Inlet number and that  
 20 particular one there had omitted that in fact there were more  
 21 fish which go into that system than those just into the monitor  
 22 systems ADF&G estimate is about 15 percent additional  
 23 escapement  
 24 Q So let me put - you said earlier that in some cases in  
 25 estimating run size you try to count the fish directly and some  
 26 cases you have some monitored streams and you have an  
 27 expansion  
 28 factor?  
 29 A That's correct  
 30 Q And in looking at Dr Rogers report and his calculations  
 31 did it appear to you that he neglected to look at these  
 32 additional 15 percent?  
 33 A Yes that had been omitted  
 34 Q What effect does that have on your choice to use the ADF&G  
 35 run size?  
 36 A Well if you make the adjustment then the exploitation rate  
 37 in the Upper Cook Inlet is no longer out of the range of the

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- (1) exploitation range that you see in other sockeye systems in  
(2) Alaska  
(3) Q In other words if Dr Rogers had calculated this  
(4) additional 15 percent in he would have found that the Upper  
(5) Cook Inlet exploitation rate is a lot like the other  
(6) exploitation places he was looking at?  
(7) A In the Chignik and Igigig yes  
(8) Q Now are there other points of difference you have with the  
(9) plaintiffs estimates on these other species?  
(10) A Yes you can see since there is no willows there all my  
(11) analyses use ADF&G run sizes whenever they were available  
but  
(12) for many species they don't have estimates of escapement so  
(13) you can't construct one  
(14) What I've done when there are no estimate of run sizes  
(15) available I use the recent catches reflecting the recent  
(16) status of the resource In their case they don't do that  
(17) What they have done in these cases here is use an assumption  
(18) that the setnet fishery operated normally in 1989 and based on  
(19) historical proportions of setnet to driftnet catch use that to  
(20) estimate what the driftnet fleet would have caught in 1989  
(21) MR LYNCH Your Honor this would be a good time for  
(22) a break  
(23) THE COURT Take our recess now ladies and  
(24) gentlemen We will be in recess for 15 minutes  
(25) (Jury out at 10 01 a m )

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- (1) (Recess at 10 01 a m to 10 16 a m )  
(2) (Jury in at 10 16 a m )  
(3) THE CLERK All rise  
(4) THE COURT Mr Lynch you may continue  
(5) MR LYNCH Your Honor DX9384 DX6114  
(6) DX8973 Charlie DX5447 Baker DX5548 Baker DX5446  
(7) DX8978 Alpha DX8977 Alpha DX8976 Alpha DX8976 Charlie  
Your  
(8) Honor I think I inadvertently read 8976 Alpha and that is not  
(9) intended to be read 8976 Charlie is the correct number  
(10) DX6760 DX8979 Charlie and that's the extent of the offered  
(11) at this time  
(12) (Exhibits DX9384 DX6114 DX8973 C DX5447 B DX5548 B  
(13) DX5446 DX8978 A DX8977 A DX8976 C DX6760 DX8979 C  
offered)  
(14) MR O NEILL I object to all of them I'm kidding  
(15) We have no objection I just wanted to see if I could get a  
(16) reaction No objection Judge  
(17) MR LYNCH Got one from me  
(18) THE COURT The exhibits announced by Mr Lynch are  
(19) admitted  
(20) (Exhibits DX9384 DX6114 DX8973 C DX5447 B DX5548 B  
(21) DX5446 DX8978 A DX8977 A DX8976 C DX6760 DX8979 C  
(22) received)  
(23) MR LYNCH After almost losing the notes for Mr  
(24) Deriso I can't take two shocks in the same day  
(25) BY MR LYNCH

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- (1) Q I'd like if I could to put up on the Elmo now DX9384  
(2) Now when we broke you were explaining that this figure is your  
(3) estimate of what driftnet fishermen would have caught in Upper  
(4) Cook Inlet in 1989 if there had been no closures?  
(5) A That's correct  
(6) Q And you pointed out that your regression which is kind of  
(7) reduced here estimated about 476 000 fewer fish were caught  
(8) than should have been caught?  
(9) A That's correct  
(10) Q And this is the actual number?  
(11) A Yes that's the actual harvest  
(12) Q And that's 5 010 000 plus fish?  
(13) A Correct  
(14) Q And according to your run regression the correct number is  
(15) 5 482 000 total fish?  
(16) A Yes  
(17) Q So the difference is the 476 or about 476 000?  
(18) A That's correct  
(19) Q Could you explain to the jury what you've done here?  
(20) A Yes that is a rough approximation of the historical  
(21) partitioning that is percentage of fish caught by the setnet  
(22) fleet and the percentage of fish caught by the driftnet fleet  
(23) Q So if you looked at a normal year with no closures and the  
(24) driftnet fishermen out there fishing you'd expect the setnet  
(25) fishermen to catch about 40 percent of the catch driftnet

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- (1) fishermen to catch about 60 percent?  
(2) A That's correct  
(3) Q So if there were no closures if there were no oil spill it  
(4) would have been about 2.2 million?  
(5) A That's correct  
(6) Q And their actual catch was 5 million so they caught more  
(7) than double their normal catch?  
(8) A That's correct  
(9) Q So for that particular group of fishermen as I believe Dr  
(10) Rogers testified there was a windfall due to the oil spill?  
(11) A Yes he said there was a bonanza  
(12) Q Now let me put up if I may DX6114 Have you calculated  
(13) on this chart the other species caught by the - caught in  
(14) Upper Cook Inlet as that would have been divided between  
setnet  
(15) and driftnet in a normal year?  
(16) A Yes I have  
(17) Q And so the - this is the breakdown as between these  
(18) species?  
(19) A Yes it is  
(20) Q And did the setnet fishermen have a bonanza or a windfall  
(21) in 1989 in pink coho chum and chinook?  
(22) A They certainly did  
(23) Q That means they did better than they would have done if  
(24) there had been no oil spill?  
(25) A That's correct

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Q Because they had no competition from the driftnet fishermen?  
 A That's correct  
 Q That takes me back to DX8975 Alpha. You were explaining that these figures by the plaintiffs were premised on the assumption that what the setnetters actually caught in 1989 was 40 percent?  
 A Well, with the exception of chum, and also there is different percentages for each species. It's 55/45 in one case; it depends on the species, what the historical proportions are.  
 Q But excluding chum, the plaintiffs assumed that the driftnet fishermen would have caught that proportion of the setnet catch that they typically caught?  
 A That's correct.  
 Q Even though the catch in that year occurred without any competition from the driftnet?  
 A That's correct.  
 Q And in your judgment that would have what effect on this driftnet estimate?  
 A It would overestimate it.  
 Q And result in the driftnet catch - resulting in a higher catch overall?  
 A That's correct.  
 Q Now, did you attempt to calculate how much - by how much

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but is in the ADF&G column in various places and in the plaintiffs' column in one place, and that indicates that these particular estimates were based on the ADF&G run size estimates for 1989?  
 A That's correct.  
 Q Now, what is the basic difference between you and the plaintiffs' expert, Dr. Ruggerone, on sockeye in Chignik?  
 A Yes, the difference there is that in the Chignik area you have two lakes that support sockeye: Black Lake, Chignik Lake. And the runs come in, there is a transition period where they overlap; the fishery harvested both of them. Black Lake is early and Chignik Lake is the later one. And what Dr. Ruggerone has done is a separate analysis for the two runs as though they could have been managed separately.  
 Q And you treated them as a single run?  
 A I treated it as a single run.  
 Q And what was the basis for your choosing the single run approach as opposed to Dr. Ruggerone's approach?  
 A As I said, there was a transition period; the fish are mixed in there, 50/50 mixtures in some days. In fact, they don't even know what stocks they are dealing with until after the season, then they have scale analysis that partitions them.  
 Q Is it possible in the real world for the fishing managers to manage in the way Dr. Ruggerone has done?  
 A No.

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the setnet catch in 1989 would have been greater - the actual catch would be greater than the would-be catch if we used Dr. Rogers' figures?  
 A Yes, I did.  
 Q What figure did you arrive at?  
 A According to his estimates of what the foregone catch is, and again applying the 40 percent figure, the harvest would have been approximately 2.9 million.  
 Q The set harvest?  
 A Yes.  
 Q So the overcatch or the excess catch for 1989, if you believe Dr. Rogers, for the setnetters was somewhere in the area of 2 million fish?  
 A 2.1 million.  
 Q 2.1 million fish?  
 A That's correct.  
 Q Now I'm going to put this map back up just to - for orientation purposes, and I would like to take up next Chignik.  
 Referring to DX8973 Charlie, is that your calculation of your estimate as compared to the plaintiffs' estimate and the ADF&G estimates for what would have been caught by the fishermen in 1989 if there had been no oil spill?  
 A That's correct.  
 Q And in this instance, the yellow isn't only in your column

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Q Referring to the chum estimate where there is a very large difference between your number and Dr. Ruggerone's number, what's the basic difference there?  
 A The plaintiffs have chosen to reject ADF&G's estimates of run size.  
 Q And what is the consequence of that rejection, how does the number that Dr. Ruggerone estimates would have been caught compare to the total number of fish that ADF&G thinks were available to be caught in 1989?  
 A Yeah, his estimate of catch is about twice what ADF&G has estimated the entire run to be in that year.  
 Q Now let's turn to coho. What's the basic difference between you and Dr. Ruggerone on coho salmon?  
 A Yes, coho is a situation where you have the harvest of fish going to spawn in the Chignik area, but there is also an interception fishery of fish, particularly out on the capes in the outside area.  
 Q Could you show on the map where you're talking about?  
 A Yes, this is out in this southern cape region of Chignik, it is where this interception fishery occurs.  
 Q Now, just let me - these are fish that are swimming in this direction toward Chignik?  
 A Some of them are.  
 Q And others are swimming away from Chignik?  
 A That's correct.

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- (1) Q What does the interception fishery have to do with the coho calculation?
- (2) A Well this is similar to the analysis that they did in Upper Cook Inlet. What they did is they assumed that the fishery to the south of them in this area down here was not affected in 1989 and they used historical relationship between the catches in the two areas and then based on the performance of the fishery in the southern peninsula area in 1989 they estimated what the catch would have been interception catch in the Chignik area.
- (3) Q Let me just review that. There were in fact people able to go out and fish for coho salmon in this southern area?
- (4) A Yes south of the Chignik area.
- (5) Q Were there fishermen allowed to fish up here north of them?
- (6) A No not out in the cape areas.
- (7) Q So the effect was that the fishermen who might be intercepting southbound fish weren't taking those fish out of the water?
- (8) A That's correct.
- (9) Q And there were more fish free to swim down here and get caught in the south area?
- (10) A That's correct.
- (11) Q And you believe that would be reflected in a higher actual catch in the south than what would have otherwise occurred?
- (12) A Yes I think the south fishery was more successful in 1989

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- (1) because they didn't have any competition from the Chignik fishermen.
- (2) Q And Dr. Ruggerone took what the people in the south caught and said historically they catch some percent what is the percent do you know?
- (3) A Actually it's a regression relationship that he uses it's a little more complicated.
- (4) Q Some kind of ratio?
- (5) A It depends on one year to the next it varies quite a bit.
- (6) Q But he based that on the assumption that they were catching with competition when in fact they were not?
- (7) A That's correct.
- (8) Q And what method did you use in your calculation?
- (9) A Yes what I did is I - there are estimates of the escapement into the Chignik area and so I was actually able to do catch versus run regression on the local fish. And then for this interception part which is where the big difference occurs and what I did was use the average catch in recent years.
- (10) Q The average catch taking into account the competition?
- (11) A The average catch correct.
- (12) Q Have you had a chance to run your regression for sockeye salmon in Chignik against actual data to see how it looked?
- (13) A Yes this was interesting. The data I used went through 1991 data. They had a fishery strike it was not a normal

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- (1) year but 1992 looked like a pretty normal year and I used the run size estimates for 1992 and then plugged that into the equation that I developed for this work here and predicted what the catch would have been and the actual catch deviates from the predicted by about two percent.
- (2) Q What does that indicate to you as a biomathematician and a fish population dynamicist?
- (3) A It's nice to verify things.
- (4) Q Let me use the TV for this next chart before I break something. This is DX8978 Alpha. Does this relate to your calculation of lost harvest to the Balboa Stepovak fishery?
- (5) A Stepovak. It's an interception fishery yes those are my estimates yes.
- (6) Q So you estimated and ADF&G estimated that there would be no fishery or no additional fish caught?
- (7) A That's correct.
- (8) Q And in fact were there any fish caught in Balboa Stepovak?
- (9) A There were 4 or 5 000 before the July 25th date. After July 25th they were quite successful down there.
- (10) Q And the plaintiffs have estimated something like 29 000 additional fish?
- (11) A That's correct.
- (12) Q Now let's put the map back up and could you explain to the jury the basis for your conclusion that there would have been no additional fish caught? Where are we talking about the

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- (1) Balboa Stepovak fishery?
- (2) A We have - we've got the arrow pointed in the right general vicinity. This is the southern peninsula fishery.
- (3) Q It's down here?
- (4) A Yeah. And that fishery for management purposes they estimate that prior to July 25th 80 percent of the fish in the outside areas there are Chignik bound fish.
- (5) Q So the managers assume that fish swimming through this area are bound for up here?
- (6) A That's correct.
- (7) Q And what management rules result from that assumption?
- (8) A Yes they have two catch criteria. On July 8th Chignik area needs to have caught 300 000 sockeye on July 25th they need to catch 600 000 sockeye and escapement goals need to have been met or on their way to being met for both the Black Lake and Chignik Lake runs.
- (9) Q And in the event that those goals are not met what are the rules for the Balboa Stepovak fishery?
- (10) A They do not open.
- (11) Q Now what assumption did you make and what assumption did ADF&G make about 1989 assuming no oil spill?
- (12) A Well I did essentially catch versus run regression on run sizes through July 8th and through July 25th and then based on again historical performance estimated that the catch criteria wouldn't have been met.

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- 1 Q Would not have been met?  
 A Would not have been met And the reason is the early run  
 3) the Black Lake run was weak in 1989 In fact after the season  
 4) with their post season analysis they have determined that in  
 5) fact the run was below their minimum escapement goal for that  
 6) year  
 Q Now let's go on to DX8977 Alpha Does this chart blow up  
 8) your calculations regarding Kodiak?  
 9) A Yes  
 10) Q And in this case all of the estimates of all of the parties  
 1) are based on ADF&G run size figures?  
 2) A That's correct  
 3) Q And what is your fundamental difference what led you to  
 4) adopt the numbers you used as opposed to the ones that the  
 5) plaintiffs have put forward?  
 6) A Yes I have in all situations where the run size  
 7) information is available used the historical catch versus run  
 8) relationships the historical evidence produced these  
 9) relationships and then used that method for estimating what  
 10) the catch would have been  
 1) Q What method did the plaintiffs use for Kodiak?  
 2) A Yes it's a variety of methods In the sockeye pink and  
 3) chum case there - what they have assumed is that the  
 managers  
 4) would have hit a particular point in their escapement goals  
 5) Q Is this the perfect manager concept?

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- 1) A It's hitting a spot in the escapement goals  
 Q Did you consider that to be a reasonable assumption?  
 3) A No if that were the way the fishery historically - the  
 4) relationship had been between catch and run size that's what  
 5) would have been estimated from my regression  
 6) Q So your data are based on what's happened in the fishery  
 and this is based on a hypothetical management performance?  
 7) A That's correct  
 8) Q And the historic data doesn't support that assumption?  
 9) A No  
 10) Q Is there another - well we've talked about the  
 1) interception fishery in Kodiak as it relates to Upper Cook  
 2) Inlet is that correct?  
 3) A Yes we have  
 4) Q Let me go on then to Prince William Sound  
 5) DX8976 Charlie Does this chart present your opinions as to  
 6) what fishermen in Prince William Sound would have caught of  
 the  
 8) various species if there had been no oil spill in 1989?  
 9) A For the common property commercial fishery yes  
 10) Q Could you explain what you mean by that the common  
 1) property commercial fishery?  
 2) A Yes The fish there they have hatchery operations in  
 3) Prince William Sound and the fish can either be harvested in  
 4) post recovery operations for the hatchery or else it's in the  
 5) common property fishery

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- 1) Q Now in 1989 there was a cost recovery fishery?  
 2) A Yes there was  
 3) Q And in that fishery was part of the total catch in a run  
 4) size evaluation?  
 5) A Yes it was  
 6) Q But in your judgment that was larger than it would have  
 7) been if there had been no oil spill?  
 8) A Yes it was  
 9) Q So what you did is charge back or in effect tried to give  
 10) back to the fishermen the fish you think they would have caught  
 11) if they would have been free to fish in 1989?  
 12) A That's correct  
 13) Q Now there has been a lot of discussion about closures to  
 14) protect the wild stock in Prince William Sound and what  
 15) closures would or would not have occurred  
 16) In generating your data particularly for pink salmon did  
 17) you limit yourself to years in which there was only a terminal  
 18) fishery?  
 19) A No  
 20) Q So this figure 2 155 000 fish is that based on historical  
 1) performance even when the entire Prince William Sound  
 2) management area is open?  
 3) A Yes it is  
 4) Q And that's the actual performance of the fishery over a  
 5) period of years?

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- 1) A That's correct  
 2) Q Based on - and that's based on the assumption that the  
 3) ADF&G run size is accurate?  
 4) A That's correct  
 5) Q There has also been discussion of the fact that some work  
 6) done in 1992 or 1991 and published in 1992 indicated that the  
 7) people who flew over these streams in Prince William Sound  
 and  
 8) looked down and tried to count the fish weren't counting  
 enough  
 9) fish are you familiar with that work?  
 10) A Yes  
 11) Q Did you take that work into account in arriving at this  
 12) estimate of run size?  
 13) A Yes  
 14) Q What if any significance did you give to that  
 15) information?  
 16) A Well I've done this analysis the run size using run sizes  
 17) which are adjusted for this aerial observer effect and stream  
 18) life effect and I reached the same conclusions that I had  
 19) reached with another data set earlier  
 20) Q So even if you consider Mr Parker's approach and increased  
 1) the number of fish that you count that are escaping into the  
 2) wild streams if you do that and use a regression analysis you  
 3) get the same result?  
 4) A As long as you do it for all the years I mean this is  
 5) what Mr Brady was talking about yesterday it's all relative



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- (1) I mean the escapement is an index and if you're going to save  
 (2) okay it represents four times as many fish as we thought it  
 (3) used to represent as long as you do that throughout the  
 (4) history of the fishery then you reach the same conclusion  
 (5) Q Do you also increase the escapement goal accordingly?  
 (6) A Yes you would increase the escapement goal by that same  
 (7) factor  
 (8) Q Now according to your research what interpretation has  
 (9) ADF&G placed on that?  
 (10) A It hasn't altered their management practices  
 (11) Q So this number is consistent with ADF&G practice even after  
 (12) the 1992 data become available?  
 (13) A Yes  
 (14) Q Let me move on to the herring fishery DX8979 David  
 (15) MR LYNCH Your Honor I think that's a change from  
 (16) the letter suffix I gave you  
 (17) THE COURT I think it is too  
 (18) MR LYNCH Let me show it to Mr O'Neill because I'm  
 (19) not sure what the difference would be  
 (20) (Exhibit DX8979 D offered)  
 (21) MR O NEILL Looks pretty to me no objection  
 (22) THE COURT Do we substitute 8979 D for 8979 C?  
 (23) MR LYNCH Yes Your Honor  
 (24) (Exhibit DX8979 D received)  
 (25) THE WITNESS Yes that one has the two the Prince

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- (1) William Sound wild roe and the pound roe on kelp are  
 separated  
 (2) on into two categories rather than the earlier version  
 (3) MR LYNCH It separates the roe on kelp into two as  
 (4) opposed to Charlie which had them combined is that correct?  
 (5) BY MR LYNCH  
 (6) Q Is this your calculation of the probable harvest of herring  
 (7) eggs on various sorts of things - in various sorts of things  
 (8) in 1989 if there had been no Exxon Valdez oil spill?  
 (9) A Yes  
 (10) Q Can you use your regression analysis approach to alleviate  
 (11) these figures?  
 (12) A No that's not available for those  
 (13) Q Could you tell the jury how you arrived at these figures?  
 (14) A Yes What I've done is use the set guideline harvest  
 (15) levels for the various herring fisheries and what I did was I  
 (16) looked at the recent history and tried to get years which were  
 (17) comparable to 1989 and computed the percent deviation from  
 (18) guideline harvest  
 (19) In recent years they have gone over For example the  
 (20) ADF&G numbers you see there those are guideline harvest  
 (21) levels And you can see for example in this Prince William  
 (22) Sound sac roe the really big one in the middle you can see  
 (23) that adjusting it upwards for how far over they have gone over  
 (24) these guideline harvest levels you get 50 percent upward  
 (25) adjustments quite easily

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- Q So both you and the plaintiffs are above the ADF&G as to  
 this major quantity of the fish catch is that correct?  
 (3) A As compared to the guideline harvest levels yes  
 (4) Q Now I'm interested in the difference between you ADF&G on  
 (5) the Kodiak sac roe question What if any basic difference  
 (6) exists that led you to conclude that 450 ton was the right  
 (7) number as opposed to the 697 that the plaintiffs estimated?  
 (8) A The plaintiffs estimate is based on the assumption you've  
 (9) seen this a couple times in the salmon context what they had  
 (10) was some closed areas and open areas and the assumption for  
 (11) their estimate was that the open area performed normally in  
 (12) 1989 but I believe you had one of the Kodiak fishermen here  
 (13) who was talking about how he couldn't fish in his normal area  
 (14) in Kodiak so he went and fished in a different area so I  
 (15) didn't think that the open areas were normal in 1989 so I  
 (16) didn't use that approach  
 (17) Q So just again to summarize this is an example of a  
 (18) situation maybe a little bit of the reverse In some of the  
 (19) cases we talked about areas that didn't have competition from  
 (20) fisheries further upstream or downstream were treated as  
 (21) normal even though they did better than normal?  
 (22) A That's correct  
 (23) Q And this would be a case where the amount of fish taken out  
 (24) of any given area would be greater than average because there  
 (25) was more people fishing that area?

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- (1) A Exceeded the guideline harvest yes  
 (2) Q So your figures rely closer to the normal experience that  
 (3) you had seen in history?  
 (4) A Yes it does  
 (5) MR LYNCH That you very much Dr Deriso no further  
 (6) questions  
 (7) CROSS EXAMINATION OF RICHARD DERISO  
 (8) BY MR O NEILL  
 (9) Q Housekeeping I want to review with you if I could for a  
 (10) minute your - you worked on this project on salmon and  
 (11) herring?  
 (12) A Correct  
 (13) Q Now with the tuna commission which takes up most of your  
 (14) time you work on tuna?  
 (15) A I work on other species as well  
 (16) Q You did some early work on salmon and herring as part of  
 (17) your studies?  
 (18) A Yes  
 (19) Q And then in the mid 80s did you some work on salmon and  
 (20) herring I think from looking at your resume?  
 (21) A That's correct  
 (22) Q And then from the mid 80s to this project you didn't have  
 (23) a focus on salmon or herring your focus was on tuna halibut  
 (24) and other kinds of things like that?  
 (25) A Well as I said before I teach a graduate courses in

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population dynamics so I use herring and salmon in the courses

7) Q Now I want to ask some philosophical questions just tell you where I'm going We're here making estimates of what the fish runs would have been but for the oil spill is that a correct statement?

8) A No

9) Q We're not?

10) A I'm not

11) Q What the harvest would have been but for the oil spill?

12) A That's correct

13) Q And the reason that we have to make those estimates isn't the fishermen's fault is it?

14) A No

15) Q The reason that we have to make the estimates is because Exxon spilled the oil and Exxon has placed us in a situation where we have to make the estimates isn't that correct?

16) A Yes

17) Q And you're here today on behalf of Exxon?

18) A Yeah

19) Q You get paid by Exxon?

20) A Oh yes

21) Q And with regard to all of these approaches in your reports on these approaches you describe your approaches as conservative don't you?

1) A Yes

2) Q Have you ever been to Sand Point Balboa Stepanak?

3) A No

4) Q How many times have you been to Chignik?

5) A Once

6) Q And the one time that you went to Chignik was after you made your estimates and you went to Chignik with Mr. Cooper?

7) A Yes

8) Q You've been to Kodiak twice?

9) A Yeah I think twice

10) Q You taught a course there in the mid 1980s and then after you made your run size estimates you went to Kodiak with Mr. Cooper?

11) A Yes

12) Q Now the Upper Cook Inlet management area other than Anchorage how many times have you visited the Upper Cook Inlet management area?

13) A Once

14) Q And that was with Mr. Cooper?

15) A Yes

16) Q And Prince William Sound how many times have you been to Prince William Sound?

17) A Once

18) Q And that was with Mr. Cooper?

19) A Yes

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1) A Yes

2) Q And with regard to these approaches you indeed took in your view the most conservative approach to catch valuation that you thought was available?

3) A I followed the ADF&G estimated run sizes

4) Q And when we say conservative your approach being conservative that means lowest possible numbers doesn't it?

5) A It means I followed ADF&G's estimates of run sizes

6) Q You described your approach in your reports as a conservative approach?

7) A What I say in my report is that I'm not going to deviate from ADF&G's estimates of run size unless I have strong evidence to indicate that

8) Q And you would agree with me philosophically anyway that there is or may be a great deal of difference philosophically in your conservative approach and in ensuring full compensation to the fishermen?

9) A I've tried to be fair

10) Q Let's talk a little bit about all of the subjects that you testified here today on You testified on salmon and herring?

11) A Yes

12) Q In a variety of different Alaska fisheries?

13) A Yes

14) Q Let's talk about whether you've been to any of those fisheries?

1) Q And that was after you made your run size estimates?

2) A Yes

3) Q Now with regard to herring would you agree with the proposition that herring is a very valuable commercial species and that it has been stated that the largest effects of oil could be caused by beaching oil during the spawning of herring It is possible that more than half of a year class can be killed and the annual harvesting of roe might fail?

4) A I don't recall where that's from

5) Q Does that help?

6) A Oh yeah this is from that paper where they were looking for the downside sort of worse case scenario

7) Q Yes

8) A That's a quote directly out of the study that I was reviewing there so I included the quote in here I'm not an expert on this whether it can separate out the degree or not because I was doing a review so I was trying to bring in the stuff

9) Q I read from a paper by you didn't I?

10) A Yes

11) Q Now I want to talk a little bit about the people who are doing these evaluations Now you know a lot of the people one way or the other who are doing these evaluations don't you?

12) A Yes

13) Q And let's take for example Phil Mundy?

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- (1) A Yes  
 (2) Q You and Dr Mundy are the authors of a Washington sea grant technical report dealing with fishery dynamics harvest management of sampling?  
 (3) A Yes  
 (4) Q Along with Terrance J Quinn II?  
 (5) A That's right  
 (6) Q And Dr Mundy wrote among other things the chapter on salmon fishing in Alaska?  
 (7) A Yes  
 (8) Q And you wrote a chapter on stock assessments with regard to halibut?  
 (9) A That's correct  
 (10) Q And you're aware of the fact that Dr Mundy who is one of the scientists biologists who have helped us with our run size assessment was the chief fisheries scientist for the State of Alaska you're aware of that?  
 (11) A Yes  
 (12) Q And that he has long experience both in managing Alaskan fisheries and estimating the size of runs in Alaska fisheries?  
 (13) A Yes  
 (14) Q And with regard to Ken Parker you're aware of Ken Parker's long long history as the director of commercial fisheries and the deputy director of commercial fisheries and as a hip boot biologist coming up through the ranks you're aware of that?

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- (1) A Yes  
 (2) Q And indeed when you and Ian Fletcher were doing some work on spawner recruit theory and you wanted some information from Alaska on spawner recruit ratios in Alaska you went to Ken Parker?  
 (3) A Yes he was in the Bristol Bay region then and that's correct yes  
 (4) Q And you're aware again that with regard to both the management of Alaskan fisheries and with regard to run size enumerations in Alaskan fisheries that Parker has years of experience?  
 (5) A Yes  
 (6) Q And when you were at the Fisheries Research Institute did you ever study with Dr Rogers?  
 (7) A No  
 (8) Q You're aware of who he is aren't you?  
 (9) A Yes  
 (10) Q And you're aware -- you're probably the best one to ask even this question I've asked it to other people but Dr Rogers runs the Port Moller test fishery?  
 (11) A Yes  
 (12) Q And the Point Moller test fishery is one of the great successes in predicting run size?  
 (13) A Well it's almost an inseason indicator it's not a forecaster of a year ahead

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- (1) Q It's a half a year ahead or three months?  
 (2) A Yeah the run has already established itself basically it's another fishery yeah  
 (3) Q But in point of fact that is one of the great success stories with regard to enumerating fish the Point Moller test fishery it's famous for that?  
 (4) A I think it's had a good track record as a test fishery  
 (5) yeah  
 (6) Q And you're aware that Dr Ruggerone who testified on Chignik regularly does run forecasts as part of his year to year work in Chignik?  
 (7) A Those are year ahead forecasts that's a lot different than what we're dealing with here  
 (8) Q He deals with fish run numbers in Chignik as part of his daily business?  
 (9) A Yes  
 (10) Q And with regard to -- got them all written on my hand I'm going to eventually get to the back With regard to Steve Hughes who testified on your -- your numbers and Hughes numbers are pretty close on herring aren't they?  
 (11) A Yes  
 (12) Q But Hughes as a major part of his business runs --  
 (13) A I don't know  
 (14) Q The rest of them you know by reputation?  
 (15) A Yes

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- (1) Q And I'm just about finished we'll get you off of here let's see if I can finish by top of the hour okay?  
 (2) A Okay  
 (3) Q The problem with the setnet fishery in Upper Cook Inlet is two fold They caught and sold the fish and we can't take the fish back can we and it wouldn't be right to take the fish back would it?  
 (4) A No we can't take the fish back  
 (5) Q That's just something we have to live with right?  
 (6) A Yes  
 (7) Q And with regard to exact splits between the setnet fishery and the Upper Cook Inlet driftnet fishery because of the dynamics of the way that drift gillnet fishery operates in the middle of Upper Cook Inlet it is a tough tough problem to come in here with mathematical precision and split out what the harvest would be between that drift fleet and what that setnet fleet but for the oil spill to do that with mathematical precision because of all of the unknowns that go with a season that's just a tough tough job isn't it so you do the best you can with averages and regression and that kind of thing?  
 (8) A I make my best estimates  
 (9) Q That's right and that's what Parker Mundy Rogers Ruggerone and Hughes did too didn't they they made their best estimates?  
 (10) A Those are their best estimates

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- 1 MR O NEILL And - I ran out of time I have more  
 2 questions but I made a promise and I'll stick with my promise  
 3 Thank you sir  
 4 THE COURT Mr Lynch  
 5 REDIRECT EXAMINATION OF RICHARD DERISO  
 6 BY MR LYNCH  
 7 Q Just a few follow up questions Mr O'Neill has a way of  
 8 cross examining on behalf of all of his friends that makes  
 9 every cross examination into a commercial  
 10 Dr Mundy that you talked about you were here talking  
 11 about 1989 fish projections that's correct?  
 12 A Pardon?  
 13 Q Projected catch for 1989?  
 14 A Right  
 15 Q Dr Mundy didn't testify about a single one - not one of  
 16 those numbers on those charts were produced by Dr Mundy?  
 17 A No  
 18 Q They were produced by other people?  
 19 A That's correct  
 20 Q Plaintiffs didn't choose to use the great Dr Mundy for  
 21 1989 figures?  
 22 A No  
 23 Q Now Mr Parker who you know about and for whom you  
 were  
 24 once grateful for information you provided  
 25 A Yes

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- 1 Q Mr Parker did an analysis correct?  
 2 A That's correct  
 3 Q And he said in his analysis that he had a preferred number  
 4 didn't he?  
 5 A Yes  
 6 Q And what number did the plaintiffs put on their chart for  
 7 summarizing damages the one that Mr Parker -  
 8 A Excuse me you mean Rogers?  
 9 Q I'm sorry I mean Rogers  
 10 A That's what I thought you were talking about  
 11 Q I'm going to ask you about Mr Parker I don't have them  
 12 written on my hand  
 13 A In the case of Mr Rogers right they did not put his  
 14 preferred number  
 15 Q They didn't use the number that Dr Rogers told them was  
 16 the preferred number did they?  
 17 A No  
 18 Q And when Mr O'Neill was asking you about how difficult it  
 19 is to split between the driftnet fishery and the setnet  
 20 fishery whose numbers did you use to make that split?  
 21 A Alaska Department of Fish & Game  
 22 Q Did you use the actual numbers as you derived them I'm  
 23 talking about the 60/40 split where can you get that number?  
 24 A That one that's actually Dr Rogers rough approximation  
 25 of the split

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- 1 Q And you chose to defer to Dr Rogers numbers?  
 2 A Yes  
 3 Q And in the case of Mr Ruggerone Dr Ruggerone are you  
 4 aware when he testified he testified that he was told to take  
 5 a catch number and use it for a projection even though his own  
 6 projection for Chignik was totally different did you know  
 7 that?  
 8 A No  
 9 Q So you don't know whether he was testifying to his best  
 10 estimate or not do you?  
 11 A No  
 12 Q Now the word conservative has a lot of meanings When you  
 13 said in your record that you were trying to be conservative  
 14 did you mean you were trying to come up with the lowest  
 number  
 15 you could possibly come up with?  
 16 A No  
 17 Q And in many cases in your report you came up with numbers  
 18 I think we saw one here with just the herring fisheries you  
 19 came up with numbers that were higher than what ADF&G came  
 up  
 20 with They came up with 6700 tons and you came up with 9600  
 21 tons?  
 22 A As far as their guideline harvest yes  
 23 Q And you were just a few tons under the plaintiffs own  
 24 estimate?  
 25 A Yes

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- 1 Q And in some cases you came up with numbers that were  
 2 substantially above ADF&G catch estimates is that right?  
 3 A Yes  
 4 MR LYNCH Thank you Doctor  
 5 THE COURT Thank you sir You may step down  
 6 MR COOPER Your Honor defendants would call  
 7 Dr Walter Pearson  
 8 THE CLERK Would you raise your right hand sir  
 9 (The Witness Is Sworn)  
 10 THE CLERK Please be seated For the record sir  
 11 state your full name your address and spell your last name  
 12 please  
 13 THE WITNESS I'm Walter Pearson I live at 332 View  
 14 Crest Avenue in Port Angeles Washington And my last name  
 is  
 15 spelled P E A R S O N  
 16 THE CLERK Thank you  
 17 MR COOPER Good morning Dr Pearson  
 18 Your Honor instead of trying it with one contact  
 19 lens I'll try it with my glasses Mr Lynch suggested if I  
 20 could see the exhibits I might try this faster  
 21 DIRECT EXAMINATION OF WALTER PEARSON  
 22 BY MR COOPER  
 23 Q Now Dr Pearson we've heard expert witnesses come in  
 here  
 24 and talk about pink salmon sockeye salmon you're going to  
 25 tell us about -

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- (1) A Herring  
 (2) Q - herring I think this is the third and the last of the  
 (3) species that are at issue here  
 (4) Could you state what your current employment is?  
 (5) A I kind of have two jobs right now Program director for  
 (6) Western Washington's environmental studies program that just  
 (7) started in Port Angeles I also work for the Battelle Marine  
 (8) Sciences Laboratory which is about 15 miles away  
 (9) Q Western Washington is the university?  
 (10) A Yes it is  
 (11) Q Now can you tell us in connection with your role at Battelle  
 (12) Marine Sciences -  
 (13) A Yes  
 (14) Q - what your position is there?  
 (15) A I'm currently a senior research scientist  
 (16) Q And what kinds of things do you do just generally in that  
 (17) role?  
 (18) A I run large multi disciplinary projects that investigate  
 (19) environmental impact I specialize in fisheries issues and  
 (20) the effects of contaminants and I've been 15 years studying  
 (21) the effects of oil on fish and shellfish  
 (22) Q You don't mean just studying - that's not all you've done  
 (23) in the last 15 years?  
 (24) A That's not all I've done but that's one of the things I've  
 (25) done

- Oregon coast  
 (1) Q That's something different than oceanography?  
 (2) A Oceanography was what the degree was in What I talked  
 (3) about was my Ph D thesis I also received training at Oregon  
 (4) State in statistics  
 (5) Q Now you mentioned oceanography can you explain what  
 (6) that  
 (7) is?  
 (8) A Oceanography is the study of the ocean and in the course  
 (9) of study there I looked at courses in physical oceanography  
 (10) chemical oceanography geological oceanography biological  
 (11) oceanography and I had heavy aspects on the biological  
 (12) oceanography I had specific course work in radio ecology  
 (13) which dealt with the effects of radio isotopes on marine  
 (14) organisms and I did work on marine pollution and course work  
 (15) on marine pollution and the effects of pollution on marine  
 (16) organisms  
 (17) Q Now you mentioned that you didn't - I guess you didn't  
 (18) get - you didn't go right into your doctorate program for your  
 (19) Ph D after you received your masters?  
 (20) A That's correct  
 (21) Q What were you doing in between that time?  
 (22) A I worked in a - I was actually in the Army at that time  
 (23) between my masters and my Ph D and I worked in a laboratory  
 (24) outside Washington D C where I did - I ran a water and case  
 (25) water - a water and waste water chemistry laboratory for the

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- (1) Q Now can you give us a quick summary of your education BS  
 (2) degree from Bates?  
 (3) A Yes  
 (4) Q In?  
 (5) A 19 - I got to remember here 1967  
 (6) Q What was the subject?  
 (7) A Biology sir  
 (8) Q And then you went to University of Alaska?  
 (9) A That's correct  
 (10) Q Here in Anchorage?  
 (11) A No Fairbanks or college in those days now they call it  
 (12) Fairbanks  
 (13) Q What did you study - well what degree did you receive  
 (14) there?  
 (15) A I received a masters of science degree in biological  
 (16) sciences from the University of Alaska  
 (17) Q Was there a marine emphasis on that?  
 (18) A Yes I did I studied salt marshes in southeastern  
 (19) Q Then did you go ahead and obtain your Ph D doctor  
 (20) degree?  
 (21) A Later I did yes at Oregon State  
 (22) Q When did you receive that?  
 (23) A I believe 1977  
 (24) Q And what was your area of study for your Ph D?  
 (25) A Oceanography I looked at the effects of contaminants  
 (26) PCPs on the behavior of a small shore crab that lives along the

- (1) environmental health and engineering section It was an Army  
 (2) medical lab  
 (3) Q Was there a time when you also did some work for NMFS  
 (4) National Marine Fisheries?  
 (5) A Yes that was near the end of my Ph D at Oregon State I  
 (6) took the position with National Marine Fisheries Service as a  
 (7) research fisheries biologist I worked at the Sandy Hook lab  
 (8) in New Jersey studying the effects of oil on the behavior of  
 (9) fish and crab  
 (10) Q Did you also look at the effects of water temperature on  
 (11) fish behavior there?  
 (12) A Actually on crab behavior  
 (13) Q Now since you've been at Battelle have you done - well  
 (14) have you done any studies that involved impacts or assessing  
 (15) impacts of oil or hydrocarbons on sea life?  
 (16) A Yes I have  
 (17) Q Briefly what have you done?  
 (18) A I've looked at the effects of oil on the behavior of fish  
 (19) and crab for some time now We have done - I've done work  
 (20) with the blue crab back east I've done work with the  
 (21) Dungeness crab on the west coast I've done work with sand  
 (22) lance or candlefish which is a fish which buries in the  
 (23) sediment and I looked at effects of oil on that tissue I  
 (24) looked at effects of oil on red hake which is a commercial fish  
 (25) back east I've also looked at the effects on clams and the

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- (1) polychaete worms that live in the sediment And I did a study  
 on the effects of oil on herring and in specific on herring  
 (2) reproduction  
 (3) Q Who funded that research for the study?  
 (4) A That was funded by a variety of clients that included the  
 (5) NOAA National Marine Fisheries Service NOAA OCEP (ph)  
 EPA  
 (6) DEC  
 (7) Q This is all government organizations?  
 (8) A Yes as well as two studies for oil one was for the API  
 (9) and one was for Exxon  
 (10) Q The Exxon is the one that brings you here today the Exxon  
 (11) Valdez spill?  
 (12) A Well it's a previous study with Exxon I thought you were  
 (13) talking about previous to this claim  
 (14) Q You mentioned - well let's deal with that one what was  
 (15) that study the previous one?  
 (16) A That was a study of the effects of dispersed oil on crab  
 (17) and clams I looked at a predator prey relationship between  
 (18) Dungeness crab and protothaca staminea which is the little  
 (19) neck  
 (20) clammed  
 (21) Q You mentioned a study for the API API is American  
 (22) Petroleum Institute?  
 (23) A That's correct  
 (24) Q That's an organization funded by the petroleum companies?  
 (25) A That's my understanding

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- (1) Q What kind of work did they ask you to do?  
 (2) A They asked me specifically to look at the behavior of  
 (3) spawning herring They also asked me to look at the effects of  
 (4) petroleum hydrocarbons oil on egg development and  
 (5) hatching  
 (6) success  
 (7) Q And you did those studies when?  
 (8) A The studies were performed in 1982 and 1983 and reported  
 (9) in  
 (10) 1985  
 (11) Q Now let's see have you done any work at all having to do  
 (12) with lesions in herring?  
 (13) A In 19 - one of the outcomes of the API study was the  
 (14) ability to look at larval fish which hadn't been looked at in  
 (15) terms of disease to that point My colleague Ralph Elston  
 (16) (ph) and I reared some larval out of those experiments  
 (17) examined them for lesions and found in one year that the larval  
 (18) fish did in fact have some stomach lesions or stomach  
 (19) abnormalities  
 (20) Q Now Mr Elston is also -  
 (21) A Dr Elston  
 (22) Q He's also with Battelle?  
 (23) A That's correct  
 (24) Q What is his area of specialty?  
 (25) A He was trained in veterinary medicine from Cornell  
 (26) certified pathologist He does a lot of work in diseases and  
 (27) viruses He's one of the people that examines material that

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- (1) comes into the State of Washington for the presence of  
 (2) disease Before they can be put into aquaculture situations  
 (3) He's also consulted heavily by the aquaculture people in the  
 (4) Pacific Northwest including people from Alaska about disease  
 (5) problems in aquaculture He's done extensive work relating the  
 (6) effects of contaminants to disease and to changes in the tissue  
 (7) structure the pathology of organisms  
 (8) Q Has he been helping you also in connection with the project  
 (9) that brings us here today the Exxon Valdez oil spill project?  
 (10) A Yes he has sir  
 (11) Q Is that typical for a scientist like you to utilize other  
 (12) persons who you work with colleagues for specialized  
 (13) knowledge in particular areas?  
 (14) A Absolutely Battelle prides itself being able to put  
 (15) together multi disciplinary teams Many environmental  
 (16) problems especially in the modern year require more  
 (17) knowledge  
 (18) than just one discipline And one of the things I do is lead  
 (19) multi discipline projects where I have to draw on the expertise  
 (20) of different people Physical oceanographers various people  
 (21) physical modelers all kinds of people would be put into the  
 (22) projects  
 (23) Q Now you did a study in connection with an oil spill in -  
 (24) A Port Angeles  
 (25) Q - Puget Sound?  
 (26) A Port Angeles the Strait of Juan de Fuca

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- (1) Q That was the ARCO Juneau?  
 (2) A That's correct  
 (3) Q You have authored or co authored scientific articles?  
 (4) A Yes  
 (5) Q About how many?  
 (6) A On the order of 40  
 (7) Q You have given presentations at scientific conferences?  
 (8) A Yes  
 (9) Q Have you ever - well you chaired an expert panel to  
 (10) advise the Corps of Engineers on fisheries issues associated  
 (11) with dredging operations?  
 (12) A Yes I have  
 (13) Q Can you just describe generally - well did you consider  
 (14) yourself to be an environmental scientist?  
 (15) A I consider myself to be an environmental scientist with  
 (16) specific expertise in toxicology of oil herring biology fish  
 (17) biology fisheries issues and I've done a lot of work to  
 (18) figure out why - what the potential effects of oil are on  
 (19) marine organisms  
 (20) Q Including at the population level?  
 (21) A Yes fisheries level yeah  
 (22) MR COOPER Your Honor I would tender Dr Pearson as  
 (23) an expert environmental scientist with particular expertise in  
 (24) fisheries biology general marine biology toxicology and  
 (25) effects of hydrocarbons on marine fish

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- (1) MR JAMIN I wonder if I might have Dr Pearson  
(2) briefly on voir dire  
(3) THE COURT You may  
(4) VOIR DIRE EXAMINATION OF WALTER PEARSON  
(5) BY MR JAMIN  
(6) Q Dr Pearson I'd like to take a moment to qualify the areas  
(7) in which your expertise is and it is not all right?  
(8) A Yes  
(9) Q All right Now immunotoxicology is a term that refers to  
(10) the immune system being harmed by toxic compound?  
(11) A Yes  
(12) Q And you don't consider yourself to be an expert in  
(13) immunotoxicology?  
(14) A No  
(15) Q And genotoxicology is the toxic insult on the genetic  
(16) organisms?  
(17) A Yes  
(18) Q And you don't consider yourself an expert in that area?  
(19) A That's correct  
(20) Q And you don't consider yourself an expert in cytotoxicity?  
(21) A That's correct  
(22) Q And that has to do with the effect of a toxin on the cell?  
(23) A Yes  
(24) Q And you don't consider yourself a virologist do you?  
(25) A No

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- (1) Q And that has to do with the study of viruses?  
(2) A That's correct  
(3) MR JAMIN Your Honor with the understanding that  
(4) Dr Pearson is being qualified but not in the areas by his  
(5) own admission of immunotoxicology genotoxicology  
(6) cytotoxicology or virology and I'll accept Mr Cooper's offer  
(7) THE COURT Court will do the same  
(8) CONTINUING DIRECT EXAMINATION OF WALTER PEARSON  
(9) BY MR COOPER  
(10) Q Now Dr Pearson when were you asked to become involved  
(11) first become involved in the Exxon Valdez oil spill litigation?  
(12) A In April of 1989  
(13) Q Actually it wasn't even in litigation then was it?  
(14) A That's correct  
(15) Q What were you asked to do?  
(16) A I was asked to - initially to design a study and send in a  
(17) rough outline or proposal to do a study of the effects of the  
(18) oil spill on Pacific herring in Prince William Sound  
(19) Q And you did do that?  
(20) A I did do that and they invited me to do the work  
(21) Q And basically this is Exxon that asked you to do this work?  
(22) A Actually it was Dames & Moore that were the company  
(23) working  
(24) for Exxon on I guess the biological side of things that asked  
(25) me to do this for Exxon  
(26) Q Now the work that you have done can you just give us a

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- (1) quick overview of what you - essentially what you did? Let's  
(2) take the 1989 - start in 1989  
(3) A Okay In 1989 we went to Prince William Sound and we  
(4) looked at three major things We looked at - we had three  
(5) major tasks One involved a prespawning adult herring trying  
(6) to collect samples of these fish for histological and chemical  
(7) examination and to try and do an artificial spawning test We  
(8) did a lot of work on the eggs taking eggs on kelp samples from  
(9) Prince William Sound bringing them back to the laboratory for  
(10) analysis We also did a small amount of work on larvae in  
(11) 1989  
(12) Q In 1990 -  
(13) A In 1990 we did an aerial survey and did more work with eggs  
(14) on kelp And we also added Sitka on our list of places to look  
(15) at  
(16) Q Now the jury has already heard a fair amount about the fact  
(17) that in 1993 and 1994 earlier this year the herring came back  
(18) in very disappointingly low numbers you're familiar with that?  
(19) A Yes  
(20) Q And have you also looked at that phenomena to try to  
(21) understand why that may have occurred?  
(22) A Yes before that we had also done work looking at the  
(23) Alaska Fish & Game data on run size and that kind of thing and  
(24) doing work in general herring biology background pieces  
(25) And  
(26) then when the untoward events in 1993 happened we were  
(27) again

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- (1) asked to take samples of Prince William Sound herring and take  
(2) a look at what might the probable cause be and we did similar  
(3) work this past year in 1994 Dr Elston helped me with that  
(4) Q Now Dr Pearson one thing we've learned on pink salmon  
(5) and sockeye salmon you have to start with what their life cycle is  
(6) because that's important is that important for herring too?  
(7) A Yes it is  
(8) Q You've helped us prepare some exhibits to demonstrate that  
(9) life cycle?  
(10) A Yes  
(11) Q Life cycle of herring is not the same as a pink salmon or  
(12) sockeye salmon is it?  
(13) A That's absolutely correct  
(14) Q Dr Pearson I think you have up there a set of exhibits  
(15) if I may approach Your Honor  
(16) Let me show you Dr Pearson 9169 A  
(17) A Yes  
(18) Q And 5242 A  
(19) A Yes  
(20) Q Those are exhibits that show the life cycle of the herring?  
(21) A The first exhibit yes they both show aspects of the life  
(22) cycle  
(23) MR COOPER If we could have 9169 A  
(24) (Exhibits 9169 A and 5242 A offered)  
(25) THE COURT Any objection?

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- 1) MR JAMIN No objection  
 2) THE COURT They are admitted  
 3) (Exhibit 9169 A and 5242 A received)  
 4) BY MR COOPER  
 5) Q I guess one thing we have learned Dr Pearson is that you  
 6) generally start a life cycle with an egg?  
 7) A Yes sir  
 8) Q What is the difference between an egg and embryo?  
 9) A The egg is the whole structure The embryo is the  
 10) biological structure inside it that is going to become a  
 11) larvae So it is the animal that is inside the egg  
 12) Q Where do we start with here then the eggs on kelp?  
 13) A We can start with the eggs on kelp  
 14) Q We've seen some video and photographs I think before of  
 the  
 15) herring eggs actually on kelp fronds How do the herring  
 spawn  
 16) on to the kelp?  
 17) A The herring come into the shallow water where the  
 18) vegetation is The female then moves over the vegetation and  
 19) the eggs are extruded and sometimes go in rows or clumps and  
 20) build up The males come and release milt into the water it is  
 21) kind of a free for all  
 22) Q When did that occur what time of year?  
 23) A That occurs in April of the year Generally the peak of  
 24) spawning in Prince William Sound is in the middle part of  
 25) April

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- 1) Q Perhaps with the light pen that I think you have up there  
 2) do you see one?  
 3) A Yes  
 4) Q Can you indicate on the year scale at the bottom there  
 5) where we're starting here?  
 6) A The spawning time and incubation time is this very thin  
 7) area right here in the first part of the life cycle  
 8) Q In the first year?  
 9) A Pardon?  
 10) Q In the first year?  
 11) A In the first year  
 12) Q About how long do the eggs incubate before they hatch?  
 13) A About 20 days in Prince William Sound  
 14) Q And then when they hatch they become -  
 15) A Larvae which is this animal here You can see this  
 16) particular one has a yolk sac They are in the yolk sac stage  
 17) for on the order of six to ten days  
 18) Q Which then what happens?  
 19) A The yolk sac is absorbed and at that time they have to be  
 20) able to feed on the plankton They grow up in Prince William  
 21) Sound and sometime towards the fall they metamorphose or  
 22) change their structure or shape and become juvenile herring  
 23) Q About when what stage are they on your time line here in  
 24) the larvae stage? That is the thin blue line?  
 25) A That is that thin blue line

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- 1) Q And then they become juveniles where the green starts on  
 2) the time line?  
 3) A Yes that is correct  
 4) Q So they remain as juveniles then for about how long?  
 5) A That depends on how fast they grow but generally about  
 6) three years Some fish come into a sexual maturity at two  
 7) years most a good number at three and then a bit more at  
 8) four and then by the time they are five or certainly by six  
 9) most fish are sexually mature That is what this -  
 10) Q Slant on the green is?  
 11) A That is what that is trying to show you  
 12) Q Then once they reach sexual maturity they become adults?  
 13) A Yes  
 14) Q And about how long does a herring live?  
 15) A Something on the order of 12 to 14 years  
 16) Q And how long do they continue to spawn?  
 17) A They are repeat spawners They are unlike salmon in this  
 18) regard they come back every year to spawn from the time they  
 19) reach sexual maturity until they die So something on the  
 20) order of six to eight years  
 21) Q Do they -  
 22) A They are spawning  
 23) Q They are also unlike salmon in that they do not spawn in  
 24) the streams?  
 25) A They don't spawn in the streams they lay their eggs on the

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- 1) vegetation that is on the intertidal and subtidal zones The  
 2) intertidal is the part of the beach that comes out of the water  
 3) at low tide  
 4) Q I put another exhibit which I believe is 5242 A  
 5) MR COOPER If we could have that exhibit up  
 6) please I guess you can't try it  
 7) BY MR COOPER  
 8) Q Now what have we got here?  
 9) A This is a look see at what the fish are like the egg  
 10) structure of the fish in the fishery In this case the spring  
 11) fishery The -  
 12) Q This is what year 1987?  
 13) A This is 1987 What we're trying to depict here is when you  
 14) look at all the fish in Prince William Sound or all the fish  
 15) in the fishery they are not all the same age and the  
 16) different ages appear in different proportions And in order  
 17) to understand some of the fisheries dynamics with herring you  
 18) have to understand that you have some year classes which are  
 19) those fish that are all born in the same year that are very  
 20) much more abundant than other year classes  
 21) Q Now what we've done here is indicate colors use colors to  
 22) indicate the age of the fish?  
 23) A That is correct So for example an eight year old fish is  
 24) kind of purple and you can see that there are a small number  
 25) here Whereas you can see that when you go to these light



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(1) blue fish which are three year olds there is a good number of  
 (2) them So the three year olds in 1973 were a lot more abundant  
 (3) than the eight years old  
 (4) Q You said 73 do you mean 87?  
 (5) A I m sorry 87  
 (6) Q Now you have a video that deals with this concept of what a  
 (7) fishery looks like?  
 (8) A Yes it does and the video also indicates how the egg  
 (9) structure changes from year to year and there is regular  
 (10) patterns having to do with biology of the fish that produce  
 (11) that changing egg structure  
 (12) MR COOPER That I believe is 8595  
 (13) (Exhibit 8595 offered)  
 (14) MR JAMIN No objection Your Honor  
 (15) THE COURT Plaintiffs 8595 is admitted  
 (16) (Exhibit 8595 received)  
 (17) BY MR COOPER  
 (18) Q Can you narrate this tell us what we re seeing?  
 (19) A The data that you re going to see is taken from the Alaska  
 (20) Department of Fish & Game documents Most of it is from this  
 (21) document by Wayne Donaldson and others in 1992 and it s  
 going  
 (22) to depict the pattern of year class strength for age  
 (23) composition  
 (24) Q What we re going to show is how this gets built up?  
 (25) A Right So we start with the fish in Prince William Sound

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(1) and in 92 it switched The 88 year class is now the dominant  
 (2) year class the 84s are fading away It s normal in Prince  
 (3) William Sound to have a strong year class emerge every four  
 (4) years  
 (5) This data is Alaska Fish & Game data It s recent data for  
 (6) 1993 And you can see that the 88 year class is a dominant  
 (7) year class but the 84 year class is still there So you can  
 (8) see how the year class strong year classes move through the  
 (9) fishery through the population through the fishery  
 (10) Q Over time?  
 (11) A Over time This is a depiction of the herring harvest in  
 (12) Prince William Sound from the early 70s through the 90s and  
 (13) you can see that in 1990 and 91 and 92 90 was an above  
 (14) average harvest and 91 and 92 were record harvests  
 (15) Q So before we had the very low runs in 1993 and 94 they  
 (16) had some record harvests after the spill?  
 (17) A That s correct sir  
 (18) Q Now I wanted to ask you a few questions on something you  
 (19) mentioned this dominant year class concept  
 (20) What I d like to do is use a poster board of that basic  
 (21) year class marching through time if I don t lose my voice  
 (22) first and this is Exhibit 5239 B  
 (23) (Exhibit 5239 B offered)  
 (24) MR JAMIN No objection  
 (25) THE COURT Defendants Exhibit 5239 B is admitted

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(1) and they are of different ages  
 (2) Q They are not really this color?  
 (3) A No I ve heard of red herring but not purple ones So  
 (4) you have a structure where the fish are swimming around out  
 (5) there and they are all different ages Now we re going to  
 (6) figure out how much are two year olds three year olds and four  
 (7) year olds  
 (8) Q We re going to group them by age?  
 (9) A Yes and stack them on top of one another to produce a bar  
 (10) graph And as you can see the three year old fish were by far  
 (11) the most dominant fish in 1987 And then we have converted  
 (12) that to the kind of bar graphs we re going to look at later  
 (13) Q So these three year old fish would have been ones that were  
 (14) born in 1984?  
 (15) A That s correct and the next year they become four year  
 (16) olds but you note that they are still the dominant year class  
 (17) Q This is percentage of the harvest by weight so the higher  
 (18) the bar the bigger the percentage to others?  
 (19) A Yes Now we re moving to 1989 the year of the spill and  
 (20) the 1984 year class is the dominant year class that year So  
 (21) we stack them up now for three years 1990 fish are six year  
 (22) olds and the 84 year class is still the dominant year class  
 (23) As we move to 1991 look at the three year olds the 88 year  
 (24) class are starting to emerge as an abundant year class so the  
 (25) 84 is starting to fade and the 88s are starting to emerge

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(1) (Exhibit 5239 B received)  
 (2) BY MR COOPER  
 (3) Q Now Dr Pearson you mentioned this concept of a four year  
 (4) dominant cycle or year class?  
 (5) A Yes  
 (6) Q What are you referring to there?  
 (7) A If you look at that you can see that the dominant year  
 (8) class before the spill at the time of the spill and just  
 (9) after was the 84 year class And you can see that it was an  
 (10) abundant year class when it emerged in - as three year olds  
 (11) became the dominant year class when they were four five six  
 (12) and seven years olds  
 (13) Q What we have is the age class down here so in 89 the 84  
 (14) year class as five years olds?  
 (15) A Were the dominant  
 (16) Q Made up by far the largest percentage of that herring  
 (17) biomass that came back to spawn that year?  
 (18) A Right And what happens as the fish become mature they  
 (19) start to enter the fishery Let s take a three year old The  
 (20) three year old is about - something on the order of 20 or 30  
 (21) percent of them are sexually mature and come into the fishery  
 (22) The next year when they become four years olds more of them  
 (23) are sexually mature so more of them come into the biomass  
 the  
 (24) spawning population and into the fishery And then by the time  
 (25) they are five and six year olds almost all of them are

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1 sexually mature  
 2 So the year class builds in the fishery in the population  
 3 as the fish become sexually mature. Then after they become  
 4 fully recruited to the population, natural mortality, rather  
 5 than this maturation process, becomes the dominant force  
 6 governing their abundance, and as natural mortality takes  
 7 action, the year class starts to fall in strength.  
 8 So they kind of come in, peak around five or six years of  
 9 age, and then fade. And this process happens in Prince William  
 10 Sound about every four years, and that's what's depicted in the  
 11 chart here. If you look back in the records into the 70s, you  
 12 can see the same kinds of patterns with different year classes.  
 13 Q Do herring biologists know why it happens to be on a four  
 14 year cycle?  
 15 A That is the subject of much debate, and little light.  
 16 Q One of those many things that remains a mystery in Mother  
 17 Nature?  
 18 A Yes, at this time.  
 19 Q What about the class after the dominant fourth year class,  
 20 what tends to happen with the age group born the year after  
 you  
 21 have the spawn that becomes a dominant year class?  
 22 A It's never going on - those year classes are typically not  
 23 very strong, and in fact, if you look at the relationship at  
 24 three year old fish, the stronger the dominant year class is at  
 25 three year olds, the less strong is the year class that follows

(1) THE WITNESS I'm sorry. Versus the 90 and the 91  
 (2) and look at the 88 versus the 89. And you can see that  
 (3) generally the bigger this bar is, the smaller this second bar  
 (4) is. This particular estimation is from Dr. Fung's estimation  
 (5) in 1993. He's since gotten new data and rerun his model, and  
 (6) he's not sure that it's quite this high for the 88 year class.  
 (7) Q Dr. Fung is an ADF&G employee?  
 (8) A Yes, he's the biometrician for herring for the State of  
 (9) Alaska.  
 (10) Q And you've had a lot of conversations with him and talked  
 (11) with him on the subject of the herring in Prince William Sound?  
 (12) A Yes, I have, sir.  
 (13) Q Now what was the year class of herring that was spawned in  
 (14) the year of the spill, 1989, is obviously the 89 year class,  
 (15) correct?  
 (16) A That's correct.  
 (17) Q And then it was one of these year classes that followed a  
 (18) dominant year class, i.e., the 88 year class?  
 (19) A The 88 year class was expected to be the dominant year  
 (20) class, and the 89 year class followed it.  
 (21) Q So we're going to be talking a fair amount about what  
 (22) effect the spill may have had on that 89 year class, as well as  
 (23) some of the others, but was the 89 year class ever destined to  
 (24) contribute much to the total population of herring in Prince  
 (25) William Sound?

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1 them in terms of numbers of fish.  
 2 MR COOPER: I think we have an exhibit to illustrate  
 3 that, 6113.  
 4 (Exhibit 6113 offered).  
 5 MR JAMIN: No objection.  
 6 THE COURT: Defendants' 6113 is admitted without  
 7 objection.  
 8 (Exhibit 6113 received).  
 9 BY MR COOPER:  
 10 Q Can you explain, using this visual, what happens with the  
 11 year after the dominant year class is born?  
 12 A If you look at the 84 year class here, you can see that  
 13 this is a depiction of the numbers of three year old fish, and  
 14 this is the numbers of fish in the 84 year class at the time  
 15 they were three years old, and you can see that it was a strong  
 16 year class. And when you look at the 86 year class, you can  
 17 see the same thing, that this year class (indicating) if you  
 18 look -  
 19 Q Did you say the year - you were looking at which year  
 20 class?  
 21 A Let's just look at the 84 right now. Look at the 84 year  
 22 class versus the next year class, which is the 85. You look  
 23 at the 86 year class.  
 24 THE COURT: You're saying 85 when you're pointing to  
 25 86.

(1) A Based on the historical patterns, no, it was never destined  
 (2) to contribute much to the population.  
 (3) MR COOPER: I'd like to show you Exhibit 6112.  
 (4) (Exhibit 6112 offered).  
 (5) MR JAMIN: No objection.  
 (6) THE COURT: Defendants' 6112 is admitted without  
 (7) objection.  
 (8) (Exhibit 6112 received).  
 (9) MR COOPER: Your Honor, I think I offered the  
 (10) preceding one, 6113, if I didn't -  
 (11) THE COURT: You did.  
 (12) BY MR COOPER:  
 (13) Q Now what have you depicted here, Dr. Pearson?  
 (14) A This was taken from the Fish & Game forecast, and it was an  
 (15) indication of the year class strength in 1993, as a percentage  
 (16) of the total biomass projected, and it's done by weight and  
 (17) number of herring. And you can see that the sum of the  
 (18) projection indicates that somewhere between three and four  
 (19) percent of the population would be made up by the 89 year  
 (20) class in that - in 1993.  
 (21) Q So does that mean that regardless of whether there had been  
 (22) a spill or not, even if there hadn't been one, the 89 year  
 (23) class that was present - that was born basically in the year  
 (24) of the spill, was not projected to amount to more than three to  
 (25) approximately four percent of the total herring biomass in

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- (1) 1993?  
 (2) A Based on historical patterns that's correct but this  
 (3) particular one Dr Fung is using his - the sum of all his  
 (4) data which include that which follow the spill  
 (5) Q So you believe this is an accurate forecast?  
 (6) A Oh yes  
 (7) Q And 1993 was the year the first year that the herring run  
 (8) turned out to be so frustratingly low?  
 (9) A Yes  
 (10) Q Let's leave that subject for a moment but we will want to  
 (11) come back to that and what I wanted to do was to ask you  
 (12) about  
 (13) the basic timing of events in 1989 that is to say the spawning  
 (14) event in relationship to when the spill occurred  
 (15) A Okay  
 (16) Q I think that everybody here is probably pretty aware of the  
 (17) time that the Exxon Valdez ran aground March 24th 25th  
 (18) A Yes  
 (19) Q Now when do the herring start to show up in Prince William  
 (20) Sound - when did they start to show up in Prince William Sound  
 (21) in 1989 the year of the spill?  
 (22) A The first indication of spawning in Prince William Sound  
 (23) was in the northeast part of the Sound that occurred around the  
 (24) 31st or - 31st of March or the 1st of April Then other parts  
 (25) of the Sound according to the typical pattern that one has in  
 (26) the Sound spawning starts in the northeast and spreads to

- (1) Q So what I'd like to do is show that video and maybe we  
 (2) ought to just alert people that what it is that they ought to  
 (3) be looking for here This model that everybody has seen  
 (4) before on at least two or three occasions starting at the time  
 (5) of the spill and we will see the oil?  
 (6) A You'll see the oil start to move from the tanker on Bligh  
 (7) Reef The oil will move to the southwest and start to spread  
 (8) out And then eventually it will start to move out of the  
 (9) Sound and then what you'll see is that as you mentioned  
 (10) you'll see just a little spot of spawn in the upper northeast  
 (11) part of the Sound on the 31st of March or April  
 (12) Q Now what would we be looking for there?  
 (13) A What happens in the video is that the first time that  
 (14) spawning occurs you'll see it flash and it will flash for  
 (15) about a day And then the next time the spawning first occurs  
 (16) in an area it will flash for about a day and it will be just  
 (17) highlighted there I believe it's white or yellow you can see  
 (18) when the colors come up And spawning may still be occurring  
 (19) there over that time frame but it only flashes when spawning  
 (20) first occurs in an area so you kind of have to watch for that  
 (21) flash and it will tell you where the spawning is starting to  
 (22) occur and I'll point that out as we go along  
 (23) Q One thing you're interested in is when the timing of when  
 (24) the spawn occurred in relationship to when and where the oil  
 (25) was?

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- (1) other parts of the sound kind of moving south from the  
 (2) northeast coordinate quadrant particularly in Prince William  
 (3) Sound  
 (4) So in 1989 a similar pattern occurred where the spawning  
 (5) started in the northeast and then started to occur in other  
 (6) portions of the Sound and last started to occur at the Montague  
 (7) Island area which is the southern part of the Sound The peak  
 (8) of the spawning was around the middle of April The fish show  
 (9) up generally about a week or so before they start to spawn on  
 (10) the beaches and they hold in the nearshore areas before they  
 (11) go on to the beaches  
 (12) In some cases like at Montague you don't see many fish  
 (13) right before they spawn but they are probably in the deeper  
 (14) water off Montague and then kind of coming right to the beach  
 (15) to do their spawning  
 (16) Q Now you're familiar with what we've been calling the Gault  
 (17) videotape?  
 (18) A Yes sir  
 (19) Q That's a videotape that was produced by -  
 (20) A Gerry Gault - the model was produced by Gerry Gault of  
 (21) NOAA but the videotape was produced within the - by the  
 (22) Exxon  
 (23) graphics people or visual arts people based on Dr Gault's  
 (24) model and you'll see in this particular one we've added the  
 (25) spawn locations and timing based on the Alaska Department of  
 (26) Fish & Game records for 1989

- (1) A That's correct sir  
 (2) Q And are there any other basic things now that we should be  
 (3) looking at here?  
 (4) A The big thing is to understand the relationship of the  
 (5) passage of the oil in the spill trajectory and how that  
 (6) relates in time and space to where the spawning occurred  
 (7) MR COOPER Your Honor I would like to show that  
 (8) DX102 A  
 (9) (Exhibit DX102 A offered)  
 (10) MR JAMIN No objection to its admission or  
 (11) publication  
 (12) THE COURT Admitted  
 (13) (Exhibit DX102 A received)  
 (14) MR COOPER It might be easiest Your Honor if the  
 (15) witness could move to the Barco to point out some things on it  
 (16) here  
 (17) THE COURT That's fine  
 (18) (Video played)  
 (19) THE WITNESS The oil spill occurred up here each one  
 (20) of these dots represents 100 gallons of oil And this is on  
 (21) the 24th of March We haven't had any spawning in Prince  
 (22) William Sound yet The spill is moving to the southwest and  
 (23) starting to spread  
 (24) BY MR COOPER  
 (25) Q This shows it at three hour increments?

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A I think that s correct On the 27th it s spread out near Naked Island on this date down here - on the 27th it s down near Smith and the north end of the Knight Island archipelago

Q You can see that it s moved essentially apart by Naked Island and is moving down along each side of Knight Island

Q Do we have any spawn yet?

A No You re going to want to watch right up here to see the first spot of spawn which you ll start showing up here There you go in the Boulder Bay region

Q And that s on March 31?

A That s on March 31 The oil is down here at this point and this is very little around Naked Island at that point Now you re going to have to go a few days some time around the 7th before you see the next part of the spawn occurring

Q I don t know if we can speed that up a little bit or not until we get to the 7th

A Okay you see spots up here in the northeast and the first spot of spawn at Naked Island

Q Now incidentally the oil movement on here this is not showing oil that s stranded on the shoreline?

A No it isn t it s showing the oil from Dr Gault s model We start have spawning up in the Fairmount Bay some more spawning in the northeast Nothing down here at Montague Well go a few more days to the 11th and then we ll start seeing more spawning show up More spawning here up here

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Granite Bay more on the backside of Bligh Reef Nothing yet down on the Montague area

Here we go on the Montague on the 12th more at Naked Island more at Fairmount more at Tatitlek Narrows This is about the peak of spawning in Prince William Sound more at Montague again some more at Naked Island a little bit of a dot in the Wells Bay region and some more around the Tatitlek

Some more on Glacier Island a little bit more again on Naked a little bit on the outer part of Rocky Bay on Montague and more on Zaikof now on the 15th

Where it s flashing is all new spawn you can see where the white is that indicates where the spawn is and these eggs are now incubating 16th seems to be a slow date I think

Q The model as I recall only runs until the 25th is it?

A Yes and as you can see the bulk of the slick has passed out of the Sound

Q You still have it on some of the shorelines?

A You ll have it on some of the shorelines and you ll see these spots of oil here and these represent some that still is around plus some that may be refloating off the beaches

Dr Gault did put some refloating in his model

Q If it refloats off it would appear on this model?

A That s my understanding from reading Dr Gault s paper

Q Maybe we can just speed it up Is that the last of the spawn?

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A I think you ll find the last of the spawn was around the 20th of April and from that point on a little - I don t think there was anymore observations of new spawning, and you re looking at the eggs incubating

Q All right very good Now that we ve shown that little bit of perspective what I d like to do is take a little bit different tack here for a moment and have you talk about - tell us what kind of risks natural risks confront herring I guess maybe the place to start is - let me ask you this question Does Mother Nature have a way of protecting herring against risk?

A Yes it does One of the reasons that herrings lay so many eggs and in the course of a lifetime of a herring they may lay a hundred thousand to 200 000 eggs and they do it every other year or every year and they repeat spawn They also as you can see come in in waves That spawning didn t all occur in the same week and in some cases and some places the fish came in and spawned in waves

All of these behaviors are to adapt the whole process of laying the egg having the egg hatch out and the larvae come into the water column at a time when the larvae can survive

Now nature isn t perfect in its cycles and those cycles vary and the timing of the spring plankton bloom may be off by a week temperature can be colder from one year to the next and this whole set of behavior in terms of the spawning and the

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biology and the timing of how the eggs ripen in the female and how that s related to the temperature and all of this has been evolved over the thousand years that herring has been around

allow the herring to hedge their bets as it were they don t put all their eggs in the same basket

Q Now as long as you mentioned that let me come back to that You said the herring a female herring will produce about how many eggs?

A A hundred thousand to 200 000

Q How many of those have to survive to adulthood in order to replace the parents?

A Well you ve got to have two of those eggs in order to maintain the population you have to have at least two of those eggs reach adulthood one to replace herself and one to replace a mate or a male

Q So that suggests there is probably a lot more herring eggs laid than make it through?

A Yes it does

Q What percentage - I know you told me this the other day what percentage of herring eggs never make it through to survive as adults?

A Something on the order of 99 9993 percent don t make it

Q Ask that s just - that s just in nature?

A That s just in nature that s just taking a look at what they call the fecundity or the amount of eggs that the female

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- (1) produces over her lifetime and looking at - I m sorry  
 (2) Q I didn't want to interrupt you if you hadn't finished  
 (3) A That's looking at the average fecundity  
 (4) Q Did you do some calculations to get a rough handle on what  
 (5) that means in terms of what kind of a chance an egg has of  
 (6) surviving until adulthood?  
 (7) A Approximately one in 70 000 something like that  
 (8) Q Not a real good chance of making it ultimately?  
 (9) MR COOPER Your Honor it's straight up at noon  
 (10) THE COURT Take our second recess we'll be in recess  
 (11) for 15 minutes  
 (12) (Jury out at 12 00 p m )  
 (13) (Recess taken 12 00 p m to 12 15 p m )  
 (14) (Jury in at 12 15 p m ) 12 15  
 (15) THE CLERK All rise  
 (16) BY MR COOPER  
 (17) Q Dr Pearson we were talking about this large number of  
 (18) eggs that are deposited that never make it to adulthood What  
 (19) implication does that have in trying to assess what effects if  
 (20) any the oil spill may have had on herring?  
 (21) A It makes it difficult to extrapolate things that might have  
 (22) happened at the egg stage to the adult population and that you  
 (23) can have considerable buffering The reason that there is all  
 (24) these eggs is that it buffers the population from  
 (25) protuberances (ph) that can happen at the egg stage and the

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- (1) larval stage from having effects at the population level  
 (2) Q Now I think you mentioned also some other factors natural  
 (3) factors that can affect herring You mentioned temperature as  
 (4) I recall?  
 (5) A Are we speaking of the eggs now?  
 (6) Q Yes  
 (7) A Temperature extremes both hot and cold affect both the  
 (8) survival of the embryo and can produce malformed larvae from  
 (9) being the larvae that hatch from such eggs Oxygen is also an  
 (10) important variable to consider and that can play a major role  
 (11) when the density of the eggs the thickness of the deposition  
 (12) of the eggs gets high You can have the inner eggs that are  
 (13) kind of on the bottom of the pile get low oxygen and they can  
 (14) actually die They can also produce abnormal larvae or in  
 (15) some cases if it isn't too bad they come out okay but they are  
 (16) underdeveloped compared to other larvae that hatch  
 (17) Q And there is scientific literature that describes this the  
 (18) natural kinds of deformities and so forth?  
 (19) A Yes  
 (20) Q One of those is by somebody named Galkeena?  
 (21) A Yes  
 (22) Q And you've looked at that that's an article?  
 (23) A Yes  
 (24) Q And it has a photograph of some of these herring that have  
 (25) been deformed by virtue of just natural occurring phenomena?

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- (1) A Yes In this case he's looking at the thickness of the  
 (2) deposit the number of eggs deposited How many layers have  
 (3) the herring laid their eggs in So the ones on the bottom have  
 (4) trouble  
 (5) Q What I'd like to do is just show a xerox copy which is not  
 (6) a very good copy and I apologize of some of those larvae  
 (7) referred to in Dr Galkeena's study Exhibit 9382  
 (8) (Exhibit 9382 one page offered)  
 (9) MR JAMIN No objection to it being shown to the  
 (10) jury  
 (11) THE COURT Defendants Exhibit 9382 is admitted  
 (12) (Exhibit 9382 one page received)  
 (13) MR JAMIN 9382 is the entire document I have no  
 (14) objection to this page  
 (15) MR COOPER That's all I need  
 (16) THE COURT If need be mark that page as the exhibit  
 (17) so we don't later get confused and think the whole thing is  
 (18) admitted  
 (19) BY MR COOPER  
 (20) Q What is that photograph?  
 (21) A That is a photograph of different kinds of larvae that  
 (22) Dr Galkeena found when he looked at the different layers in  
 (23) the herring spawning that he looked at and the top one here -  
 (24) Q I think you have to touch that to the part over there on  
 (25) the side that says color - you won't be able to produce any

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- (1) color because we're operating off of this The top one here  
 (2) A The top one deals with normal larvae One of which is a  
 (3) little bit underdeveloped The second one there being a little  
 (4) bit underdeveloped compared to the very top one Then he has  
 (5) different other abnormalities that are in there and that  
 (6) mixture And then towards the bottom he actually has some  
 (7) that  
 (8) are dead and decaying and these larvae actually died while  
 (9) they were in the egg But during the process of hatching you  
 (10) wonder why a dead larvae gets to hatch  
 (11) Well it turns out that the life larvae are producing  
 (12) enzymes that help break down the egg cases to make it easier  
 (13) for the eggs to hatch for the larvae to get out of the eggs  
 (14) and also all these eggs are kind of glued together so that  
 (15) when you rip open one you can also rip open another So these  
 (16) dead and decaying larvae come out when these other ones  
 (17) come  
 (18) out and hatch  
 (19) Q There was also an article by Alderdice and Belsen having to  
 (20) do with temperature effects  
 (21) A Temperature and salinity effects  
 (22) MR COOPER What I'd like to do Doctor is show you  
 (23) one of the photographs out of that that's Exhibit DX9383 the  
 (24) page following 1545 We'll substitute the single page  
 (25) (Exhibit DX9383 one page offered)  
 (26) MR JAMIN No objection as to that page  
 (27) THE COURT DX9383 is admitted with the understanding

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that we're dealing with the one page  
 (1) (Exhibit DX9383 one page received)  
 (2) BY MR COOPER  
 (3) Q Can you explain what is shown here now?  
 (4) A This deals with the effects of temperature and salinity on  
 (5) the amount of -- or the abnormalities that might occur in the  
 (6) larvae subjected to extremes of either high or low temperature  
 (7) or low salinity. And the upper left hand corner depicts a  
 (8) larvae that was subjected or incubated where the egg was  
 (9) incubated under somewhat optimal conditions and then in the  
 (10) other pictures you can see where the larvae was malformed  
 (11) In particular this picture here shows that the jaw is not  
 (12) well developed and that particular situation had both low  
 (13) salinity and low temperature. Dr Valson's paper deals with  
 (14) the fact that there is an optimal temperature and salinity  
 (15) range where the larvae develop well and if you get out of that  
 (16) range you start to see abnormalities of the larvae that hatch  
 (17) out of the eggs.  
 (18) Q Was there also a study by Dr Purcell that dealt with this  
 (19) general topic?  
 (20) A Yes he looked at the larvae that were in the water column  
 (21) after hatching in the field in a British Columbia bay and she  
 (22) found that you can find larvae that had hatched out that have  
 (23) malformed jaws or reduced jaws. She found an average in her  
 (24) study of 24 percent of the larvae that she looked at over the

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(1) whole study had malformed jaws and some days and some  
 (2) collections she had up to 68 percent of the larvae had  
 (3) malformed jaws. This is a natural occurring event.  
 (4) Q What did she attribute that to what kind of phenomena?  
 (5) A She attributed that to a situation in which you had sunny  
 (6) days higher insulation calm weather and warm temperatures  
 (7) and the tides that were in the mid day so that the larvae that  
 (8) were in the intertidal zone were getting a lot of warm  
 (9) temperatures and solar insulation.  
 (10) Q What does the fact that these phenomena can occur for all  
 (11) these different kind of reasons have to do with or what does  
 (12) it tell you when you're trying to assess the impact of an oil  
 (13) spill on herring?  
 (14) A There is two major things that you got to think about  
 (15) here. One is just because you see an abnormality you cannot  
 (16) automatically assume it's due to chemical exposure. The other  
 (17) issue is that when you go into design your studies you have to  
 (18) take those kinds of conditions that are likely to produce  
 (19) abnormalities into account your study design.  
 (20) You have to worry about the density of the eggs you have  
 (21) to worry about what the temperatures were whether there was  
 (22) temperature or salinity shock involved and you have to take  
 (23) these natural factors into account otherwise you can attribute  
 (24) chemical process you can see the abnormalities and attribute  
 (25) it to a chemical process when in fact it's really due to some

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(1) other natural processes that's going on. This is kind of a  
 (2) classic situation in environmental science where you have to  
 (3) separate out what's going on from natural -- due to natural  
 (4) factors due to those due to man's activities.  
 (5) Q Now let me ask you one other kind of related question  
 (6) here. We've heard a lot about the run failures in '93 and '94  
 (7) for the herring already. Are there fluctuations in herring  
 (8) populations herring stocks?  
 (9) A Absolutely.  
 (10) Q I think you had mentioned to me earlier an example of  
 (11) Sitka can you explain to me what happened there and when?  
 (12) A There was some changes in the Sitka population in 1988 or  
 (13) '89 where the population or the biomass level was at about  
 (14) 68,000 tons one year and it dropped the next in the order of 29  
 (15) or 30,000 tons. And there was also issues having to do with  
 (16) poor growth of the fish at that time.  
 (17) Q Now Sitka is southeast Alaska?  
 (18) A It's southeast Alaska.  
 (19) Q There was no Exxon Valdez oil spill down there was there?  
 (20) A No.  
 (21) Q Let me come back to where we were starting with the Gault  
 (22) video. Now incidentally that Gault video how sure are we  
 (23) that the oil movement that's reflected in that Gault video is  
 (24) in fact what happened?  
 (25) A We're not absolutely totally positively a hundred percent

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(1) for sure but that Dr Gault has been doing this kind of thing  
 (2) for many many years. He's really regarded in the field and  
 (3) this is NOAA data in the NOAA publication. He works for NOAA.  
 (4) And that's about the best you're going to get right now.  
 (5) Q Now we were talking about -- we were talking about with  
 (6) that video the relationship of the spawn in terms of time as  
 (7) well as where the oil was. Have you done any calculations to  
 (8) try to figure out to what extent there was any overlap between  
 (9) beaches where oil ended up on the one hand and where the  
 (10) spawn  
 (11) was on the other hand?  
 (12) A Yes we did.  
 (13) MR COOPER And I think we have a map that may help  
 (14) demonstrate that 5214 D.  
 (15) (Exhibit 5214 D offered)  
 (16) MR JAMIN No objection.  
 (17) THE COURT Defendants 5214 D is admitted.  
 (18) (Exhibit 5214 D received)  
 (19) BY MR COOPER  
 (20) Q Now this is on the system that I think will allow you to  
 (21) use the light pen if you want to.  
 (22) A Yes.  
 (23) Q Can you explain what you've shown on here?  
 (24) A Yes this is a map that depicts the oiled shoreline against  
 (25) the shoreline along which there was spawn. And the purple is  
 (26) the shoreline along which there is spawn and no oiling. The

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- (1) magenta is the shoreline along which there is oiling but no  
 (2) spawn and the yellow is the shoreline along which both -  
 (3) where you have both oiling along the shore and spawn along  
 the  
 (4) shore  
 (5) This particular data set for the shoreline oiling includes  
 (6) both years 1989 and 90 where all the observations were along  
 (7) the shoreline of oiling And it includes work that was done by  
 (8) a joint team that went along in the field doing that and work  
 (9) that was done by ADEC the Alaska Department of  
 Environmental  
 (10) Conservation  
 (11) Q Have you then calculated to what extent there was overlap  
 (12) between the spawn and the oil on the beaches?  
 (13) A Yes sir  
 (14) Q And what kind of a number do you come up with for that?  
 (15) A Nine percent  
 (16) Q In other words about nine percent of the places where  
 (17) there was spawn there was oil on the beach opposite that?  
 (18) A Nine percent of the total length of spawn that Fish & Game  
 (19) talked about had oil along the beach  
 (20) Q Is that primarily a function of the fact that there - a lot  
 (21) of the spawn occurred up in the northern -  
 (22) A The north and northeast that's part of it  
 (23) Q These areas (indicating)?  
 (24) A Yes but also if you look at Naked Island  
 (25) Q I think you've got it now

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- (1) A Also if you look at Naked Island and at Montague Island  
 (2) you'll see that there are purple which indicates where there  
 (3) was spawn and no oiling and yellow where there was both  
 and  
 (4) then some magenta where there was oiling and no spawn  
 (5) So even within these areas Naked Island and Montague where  
 (6) there was oiling and spawn there still is many cases where you  
 (7) don't have oiling along the same beach where the spawn was  
 (8) Q You're not saying are you that the oil couldn't have had  
 (9) some impact on the spawn even if there wasn't an exact  
 (10) correlation between oil on the beach and where the spawn was?  
 (11) A That's correct This is trying to get an assessment of the  
 (12) risk that the eggs had to whether or not they could get oiling  
 (13) and it's clear that if you had oil right there on the beach  
 (14) the eggs along that beach had a much higher risk of getting oil  
 (15) on them than if they were at some distance  
 (16) There was some spots in Bass Harbor where in fact the  
 (17) oiling may not have been picked up on the beach survey but  
 (18) that we found spots of oil or brown films on our eggs  
 (19) Q So the results of the studies that you've done which we'll  
 (20) come back to later indicates that was some but not a whole  
 (21) lot of instances where oil would get on the eggs when there  
 (22) wasn't an oiled beach right opposite that?  
 (23) A That's correct and there is also instances where we had an  
 (24) oiled beach and didn't have oil on the eggs so this is a rough  
 (25) number

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- (1) Q Now incidentally on that number have you had any  
 (2) communications with the Trustees Council Chief Scientist  
 (3) Dr Spies about the extent of the overlap?  
 (4) A Yes  
 (5) Q What has he said to you on that point?  
 (6) A He did a similar analysis on what we did and he came out  
 (7) with an estimate of five to ten percent of the spawning areas  
 (8) the spawning beaches had some evidence of or degree of  
 oiling  
 (9) Q So that's pretty close to your numbers?  
 (10) A Yes  
 (11) Q We've been talking about some of the elements of exposure  
 (12) here with respect to eggs or embryos Let's talk for a minute  
 (13) about exposure in the water column itself This is a matter  
 (14) that Dr Neff addressed last week and I don't want to repeat  
 (15) it what he has indicated already but have you considered that  
 (16) possibility?  
 (17) A Yes  
 (18) Q And you've - you work with Dr Neff?  
 (19) A I've known him for quite some time  
 (20) Q Can you just summarize generally what you understand the  
 (21) situation to be with respect to the amount of oil that may have  
 (22) been in the water column itself?  
 (23) A Yes In the time frame that we're talking about let's  
 (24) just take April the amount of oil in the water column and  
 (25) they used a technique that captured the oil whether it was

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- (1) dissolved whether it was present there as droplets or whether  
 (2) it was present there bound to articulate matter that oil level  
 (3) was something on the order of one and two parts per billion  
 (4) and certainly in all cases except perhaps one less than five  
 (5) parts per million This level is one that would pose no threat  
 (6) to the adult juvenile or larval herring and if there were no  
 (7) droplets present would pose no threat to the eggs The issue  
 (8) on whether the eggs is is if you get droplets on the eggs  
 (9) Q If you get oiled droplets on the eggs that's what harms the  
 (10) eggs?  
 (11) A Yes sir  
 (12) Q But the levels of oil that were dissolved in the water  
 (13) column -  
 (14) A The levels that were dissolved in the water column as  
 (15) dissolved material would not have posed a threat to eggs  
 (16) Q So we're really talking about two different things One is  
 (17) oil components that may be dissolved in the water those are  
 (18) the VOAs and the PAHs that we've heard?  
 (19) A Yes  
 (20) Q And the other is droplets that are not dissolved in the  
 (21) water?  
 (22) A That's correct  
 (23) Q And if you're a herring egg that's what you worry about is  
 (24) the droplets as opposed to the small concentrations of  
 (25) dissolved material?

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(1) A Yes  
 (2) MR COOPER Let me show you 5719 B 8895 and 8888  
 (3) which are some of the Dr. Nuff's water sample concentrations  
 (4) (Exhibits 5719 B 8895 and 8888 offered)  
 (5) MR JAMIN If they are not in they may be admitted  
 (6) THE COURT Are they already admitted?  
 (7) MR COOPER Your Honor I'd have to dig out a list  
 (8) and look on that  
 (9) THE COURT Is there any objection?  
 (10) MR JAMIN Not at all  
 (11) THE COURT You may go ahead and use them  
 (12) (Exhibits 5719 B 8895 and 8888 received)  
 (13) BY MR COOPER  
 (14) Q What do we have here Dr. Pearson?  
 (15) A On this chart we have three panels. The first panel deals  
 (16) with where the spawn was in 1989 in April and it has these red  
 (17) dots that indicate the water sampling stations. And then we  
 (18) have PAH samples and VOA samples of the water column.  
 (19) Q I think you'll need to use the light pen there if you want  
 (20) to point on there.  
 (21) A So here is our sampling locations and here is the Exxon  
 (22) NOAA data on the water column.  
 (23) Q And we're looking at sampling stations that were basically  
 (24) in the general migratory path of herring?  
 (25) A We don't know much about the exact path they take. There

(1) petroleum hydrocarbons in the mussels  
 (2) Q Let me show you DX8888. This one indicates or has some  
 (3) information on it with respect to 1990 and '91 as well as '89?  
 (4) A That's correct.  
 (5) Q And the results?  
 (6) A If you look at them this repeats the material that you saw  
 (7) in that previous graph for 1989 and it shows you that at most  
 (8) you had four PPB. Then when you go to 1990 you have  
 something  
 (9) down around less than two and then in 1991 you're even less  
 (10) than that. So there is a considerable fall moving from '89 to  
 (11) '90 and then essentially back in '91.  
 (12) Q Now you talked about the phenomena that the eggs can be  
 (13) damaged by oil droplets. Do you have any - is there any  
 (14) information available on that to indicate to what extent that  
 (15) phenomena can occur?  
 (16) A There is two experimental studies that have been done that  
 (17) address that. One that I did before the oil spill in 1982 and  
 (18) '83. And another study done by Dr. Doug Hayes, who is a  
 (19) herring biologist from British Columbia.  
 (20) Q And those studies indicated that hydrocarbons can damage  
 (21) eggs if you have droplets on the eggs?  
 (22) A You need to have direct intimate contact between the egg  
 (23) and the hydrocarbon in the oil in order for the - in this case  
 (24) the production of abnormal larvae.  
 (25) Dr. Hayes brought in material from the field that had been

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(1) is a supposition that they come from the south and move to the  
 (2) north.  
 (3) Q And the bottom line with respect to the samples is that all  
 (4) but one of them are below the Alaska aromatics limit of ten  
 (5) PPBs?  
 (6) A That's correct.  
 (7) Q If we could have 8895. This shows the concentration of  
 (8) PAHs in the water at Naked Island?  
 (9) A In the vicinity of Naked Island, yes, around Naked Island.  
 (10) Q And this was an area that was within the general trajectory  
 (11) of the spill?  
 (12) A That's correct.  
 (13) Q And what kind of water quality are we seeing in those  
 (14) samples?  
 (15) A You can see that all of them are below five PPB from Naked  
 (16) Island and this includes samples that were taken in April  
 (17) May, June, and then through July and August of 1989. You can  
 (18) see that there seems to be a little bit of a rise here in the  
 (19) fall. Through the summertime there is two kinds of samples.  
 (20) Each of these dots represents an individual water sample but  
 (21) there is a lot of superimposing. There is a lot of dots on top  
 (22) of one another on this graph. The ones that are diamonds the  
 (23) red diamonds are water samples. The other is where we have  
 (24) taken the NOAA data and Dr. Nuff has that calculated what the  
 (25) water column concentration would be based upon the observed

(1) involved in an oil spill that occurred off the Washington  
 (2) coast. The material had been weathered for some time  
 (3) approximately three months. He did an artificial fertilization  
 (4) experiment. We put eggs on the oiled vegetation and then  
 (5) watched them to see how they would develop and hatch and  
 what  
 (6) kind of larvae they had.  
 (7) For an egg that was directly deposited on to the oil it  
 (8) would have adverse effects for the egg that was on top of the  
 (9) egg that was deposited on the oil. The next layer up from the  
 (10) oil you would not have effects.  
 (11) Q Now you, as part of the work that you did, which we'll be  
 (12) coming to, but you went out and actually took samples in 1989  
 (13) at the time of the spawn or shortly after the spawn?  
 (14) A Yes.  
 (15) Q And you took samples of - you actually took the kelp with  
 (16) the eggs on it?  
 (17) A That's correct.  
 (18) Q And you analyzed a number of those samples for, among  
 other  
 (19) things, the presence of oiled droplets or film?  
 (20) A In the field we examined them for the presence of tarry  
 (21) deposits or oiled deposits or brown films. We examined them in  
 (22) the laboratory and we - when we split the samples for  
 (23) incubation for some and density measurements for others we  
 (24) also sent some to the chemistry laboratory so that we would  
 (25) have a handle on the hydrocarbon concentrations on both the



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- (1) eggs and kelp  
 (2) Q Give us an idea of the number of samples you took in the  
 (3) oiled areas and how many of those samples actually had  
 droplets  
 (4) on them?  
 (5) A I think we had on the order of 190 samples that we examined  
 (6) in the field  
 (7) Q Was that from both oiled and unoiled?  
 (8) A I'm sorry that's from both oiled and unoiled areas. But  
 (9) the bulk of those were probably from oiled areas. And of those  
 (10) we found three samples with tarry deposits and in those  
 (11) samples they were later confirmed to have high levels of  
 (12) hydrocarbons and two of those samples also were confirmed to  
 (13) have Exxon Valdez oil. We also had 16 samples that had some  
 (14) sort of brown film on them and one of those samples later  
 (15) showed to have Exxon Valdez oil associated with it.  
 (16) Q Those were all in 1989?  
 (17) A Those were all in 1989.  
 (18) Q Not in 1990 when you did -  
 (19) A We have no evidence of visible oil on the kelp in 1990.  
 (20) Q So if I understood you correctly about 19 or so samples  
 (21) out of the 190 did I count wrong?  
 (22) A That's correct.  
 (23) Q Had some indication of droplets or film on them?  
 (24) A Correct.  
 (25) Q This is with respect to that year class we're talking

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- (1) about the '89 year class now?  
 (2) A That's correct.  
 (3) Q The one that was never destined to be but two, three or  
 (4) four percent of the herring biomass in 1993?  
 (5) A Correct.  
 (6) Q Have you looked to see whether the 1989 year class when it  
 (7) did return or at least in part in 1992 and 1993 was in the  
 (8) expected or anticipated proportions with respect to the entire  
 (9) biomass?  
 (10) A Yes.  
 (11) Q What did you find out there?  
 (12) A That the '89 year class is returned within expectation.  
 (13) Q You're talking about in terms of percentages of the  
 (14) biomass?  
 (15) A Yes.  
 (16) Q Not necessarily in terms of absolute numbers?  
 (17) A Correct.  
 (18) Q What does that suggest to you then to be the extent to  
 (19) which the '89 year class may have been impacted especially as  
 (20) in this egg stage by oil or oil droplets?  
 (21) A The sum of the data indicates to me that there was low  
 (22) exposure and only minor effects and that these did not  
 (23) translate to a population level impact. It didn't affect them  
 (24) in terms of their strength as running adults.  
 (25) Q Now have you also given some thought to whether or not

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- (1) there could have been exposure to herring around the time of  
 (2) the spill at the microlayer?  
 (3) A Yes.  
 (4) Q And first you better just remind us what the microlayer is?  
 (5) A The microlayer is that part of the ocean or the sea surface  
 (6) that's right at the top. Depending on who you read it could  
 (7) be from a millimeter to a micron thick. This page is about or  
 (8) the average page is about 140 microns thick. So if it was a  
 (9) millimeter you'd have maybe five of these pages stacked  
 (10) together that's the very top surface of the ocean.  
 (11) Q Put it in scientific terms very tippy top of the ocean?  
 (12) A I guess.  
 (13) Q Is that - why is that of concern why do you want to know  
 (14) what might be happening at the microlayer?  
 (15) A Because it tends to accumulate pollutants and you can find  
 (16) pollutants there in greater concentrations than you can in the  
 (17) water column beneath.  
 (18) Q Even if you don't find a spill?  
 (19) A Even if you don't find a spill. Many microlayers from  
 (20) industrialized areas have increased contaminant loads in them.  
 (21) The work in our laboratory at Sequim has demonstrated that for  
 (22) Elliott Bay which is the bay upon which the city of Seattle  
 (23) sits.  
 (24) Q Now have you or anybody else actually done a specific  
 (25) study to try to figure out though if there was any exposure

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- (1) to herring as a result of the Valdez spill at the microlayer?  
 (2) A We did not do any specific studies and I do not believe  
 (3) anyone else did either.  
 (4) Q Have you given some thought to whether or not there may  
 (5) have been some substantial exposure to herring at the  
 (6) microlayer that you just described?  
 (7) A Yes I have.  
 (8) Q Can you give us your thoughts on that?  
 (9) A In the absence of the data that you would like to have you  
 (10) have to look at the behavior and biology of the herring to try  
 (11) and assess the risk that they might have to exposure and  
 (12) effects from the microlayer. One of the natural factors that a  
 (13) herring larvae and juvenile and adult herring have to face  
 (14) that they have to eat without being eaten this is the big  
 (15) problem they have later in life. And - or through all of  
 (16) their life after they hatch out of the eggs.  
 (17) And the herring have evolved a behavior that involves  
 (18) vertical migration so they lay low as it were during the day  
 (19) they are in deep water essentially on the bottom or close to  
 (20) the bottom during the day when the visual predators could pick  
 (21) them off and then at dusk and dawn they come up into the  
 (22) surface waters the upper 20 meters or so of the water column  
 (23) and there they are going to looking for food.  
 (24) So they come up in the water column at a point where they  
 (25) can see their food but at a time when the ability of their

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predators to see them is somewhat reduced. So that their exposure to the microlayer is going to be had they come up to the surface waters and at best or worse I should say it's going to be intermittent. It's not going to be a continuous exposure. Then they have to come up and actually touch the microlayer where they either ingest portions of the microlayer or they are going to move their gills through the surface of the water so that some portion of the microlayer coats their gills. This is a situation that would be an intermittent one at worst.

The other thing as I mentioned this is a thin layer we're talking about so the amount of petroleum hydrocarbons in the microlayer even though it's concentrated compared to the water column is not a big amount.

Q So when you add all that together are you very - do you think that there was a very large exposure of the herring to the - or to the microlayer?

A We can't say for sure but I think it's low. I myself my professional opinion is that it's low and intermittent.

Q And does the information about the run size or the harvest size after 1989 help you come to a conclusion on that?

A That's consistent with that.

Q And what was the run size or the biomass size like after - in the first few years after the oil spill?

A After the oil spill you had an above average biomass and

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above average harvest in 1990 and then in 1991 and 92 you had an all time record biomass and all time record harvest.

MR COOPER I'd like to show you 4946 A.

(Exhibit 4946 A offered)

MR JAMIN No objection.

THE COURT Defendants 4946 A is admitted without objection.

(Exhibit 4946 A received)

BY MR COOPER

Q Is this the heart of the harvest starting in '73 through '93?

A Yes sir.

Q Now this is harvest information not run size?

A That's correct.

Q But the harvest is primarily a function of the run size a certain percentage?

A That's correct.

Q And we have the oil spill obviously in '89 which meant there was virtually no harvest because the fishery what is not allowed to operate?

A The spring fisheries were closed but the bait fishery was held.

Q The bait fishery is a much smaller fishery that takes place?

A It's a much smaller fishery and it occurs in the fall.

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Q Now you've got highlighted in yellow those '90 '91 and '92 years. What's the significance of that?

A These are the harvests that occurred after the spill and if you -

Q I think if you hit the one that says color you have to hit the side of the screen itself.

A So if you look at the - where the harvests were before then you can see that the events of 1990 1991 and '92 the amount of herring harvested for '91 and '92 is clearly above any other year and for '90 is one of the ones that's pretty strong compared to any of the other years.

Q So that if there was some kind of exposure to the fish that were coming back in those years which would have been juveniles and adults in '89?

A Correct.

Q It didn't stop them from coming back in record numbers?

A That's correct.

Q I'd like to cover a few more things here with respect to adult herring. When the adults were coming into spawn in 1989 which would have been shortly after the oil spill am I right so far?

A My mind drifted in that would you start again?

Q I want to focus on when the adults were coming in for the spawning event in 1989.

A Okay.

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Q When would they have been migrating in relationship to when the oil spill occurred?

A You know in the weeks previous to spawning so around the time of the spill and after the time of the spill.

Q Now when they are coming in to spawn like that where are they in the water column? This is before they actually go towards the beaches to spawn but when they are just migrating through?

A Just before spawning about a month to six weeks before spawning the herring stop feeding and so most of their time is probably spent at depth. Then just before spawning and this can be in terms of days or a week or so they come in to the shallow water just off the beaches where they are going to spawn and they aggregate into large schools.

Q If they stay deep when they are at that period when they are not eating because they are coming in to spawn does that help protect them from predators?

A Yes sir.

Q And they don't need the food which tends to be more towards the surface?

A Correct.

Q So with respect to potential exposure of those migrating adults how likely do you think it was that they were very substantially exposed as they were migrating in preparing for the spawning event?

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- (1) A As Dr Neff's study and the NOAA data show the water  
(2) column concentrations were very low so that they wouldn't have  
(3) very much exposure during that time that they were coming in  
(4) Q If there had been some kind of a large population level  
(5) exposure to those fish are there things you would have  
(6) expected to have seen?  
(7) A Yes  
(8) Q What would you have expected?  
(9) A The major thing we would have expected to see is to see  
(10) some shift in the age structure or run size in the fish that  
(11) were adults at that time so we would have expected to see the  
(12) 89 year class in particular to come back at a less higher  
(13) level than expectation  
(14) Q You say the 89 year class?  
(15) A I'm sorry the 84 year class  
(16) Q That was the one in 89 that was the dominant year?  
(17) A Correct  
(18) Q Did it come back in some kind of disproportionate level?  
(19) A It came back as expected  
(20) Q Would you have expected if there would have been some  
(21) sort  
(22) of massive exposure to have seen some evidence of fish kills?  
(23) A There had been massive exposure yes  
(24) Q Are you aware of any reports of massive fish kills?  
(25) A The Fish & Game literature says there was no reports of  
(26) fish kills

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- (1) Q Did you take some samples of adult herring and look for  
(2) tissue damage of one kind or another?  
(3) A Yes we did  
(4) Q And that was in what year?  
(5) A That was in 1989  
(6) Q What did you look for?  
(7) A We looked for a - we examined a set of tissues and we were  
(8) looking for any kind of tissue alteration or pathology that  
(9) would indicate some sort of damage  
(10) Q Did you find any?  
(11) A There were macrophage aggregates in the livers of the fish  
(12) but they were associated with the parasite  
(13) Q Let's see if we can just explain that real fast  
(14) Macrophage aggregates if I lose my voice you're going to have  
(15) to do that all by yourself Macrophage aggregates are what?  
(16) A They are a structure that you see in the liver that's part  
(17) of the natural process by which a wound is healed These are  
(18) cells that come to that spot and aggregate and then ingest  
(19) debris They also come when there is bacteria or parasites  
(20) So if a cell had died or a group of cell had died then  
(21) the macrophage would aggregate there take that debris  
(22) engulf  
(23) it and start to digest it  
(24) Q So it's kind of a natural - it's a sign like a Band Aid  
(25) natural Band Aid that you can look at to see if something  
(26) happened in the past?

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- (1) A It's part of the healing process and it's evidence of a  
(2) previous injury  
(3) Q And you say you did find some indication of macrophage  
(4) aggregates?  
(5) A Yes  
(6) Q Did you find out what they were associated with?  
(7) A They were associated with a coccidian parasite  
(8) Q As opposed to any hydrocarbon exposure?  
(9) A We looked at it in two bays Galena Bay and Rocky Bay and  
(10) I don't recall a significant difference  
(11) Q Did you also look for hepatic necrosis?  
(12) A Yes we did  
(13) Q And that briefly is what?  
(14) A That's actually the wound that would happen where a group  
(15) a single cell or a group of cells has died and started to  
(16) degenerate  
(17) Q Did you find any indication of that?  
(18) A We did not  
(19) Q We've talked about the eggs we've talked about the  
(20) adults Let me ask you about the juveniles These are the  
(21) fish that are beyond the larvae stage but are not sexually  
(22) mature?  
(23) A Correct  
(24) Q Is there a - well you've given some consideration to  
(25) whether or not there was a significant impact of the spill on

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- (1) juveniles?  
(2) A Yes  
(3) Q And where do you start on that inquiry?  
(4) A Well I would want to know where they were in 1989  
(5) Q Now there a particular class you'd be interested in knowing  
(6) that?  
(7) A Since the 88 year class was predicated to be the dominant  
(8) year class and the fact that the fisheries rest on having  
(9) dominant year classes emerge when they are supposed to  
(10) what  
(11) happened to the 88 year class was a particular concern  
(12) Q In other words you're talking about this year class?  
(13) A Yes sir  
(14) Q That would be expected to emerge as the dominant year  
(15) class?  
(16) A Yes sir  
(17) Q And at the time of the spill in 1989 that year class was  
(18) obviously one year olds?  
(19) A Correct  
(20) Q And as one year olds they are not participating in the  
(21) spawn event because they are not sexually mature?  
(22) A That's correct  
(23) Q Have you tried to find out where those one year olds  
(24) generally are at the time that they are one year old?  
(25) A Yes  
(26) Q What have you found out about that?

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1 A No one knows for sure There were no specific studies  
 2 done and Fish & Game has not done specific studies on where  
 3 the juveniles are so the information about where the juveniles  
 4 might have been is sketchy but there are indications from  
 5 earlier work that was done in Prince William Sound and I'm  
 6 talking about the 20s and 30s and 40s based on fishing  
 7 locations when juveniles were part of the reduction fishery  
 8 that they can be in the bays in the southern part of the  
 9 Sound  
 10 There is also indications from the Fish & Game literature  
 11 for Lower Cook Inlet previous to the spill in I believe '87  
 12 or '88 that there is a supposition that a good part of the  
 13 juveniles that eventually become adults in Prince William Sound  
 14 actually spent their juvenile years in the Lower Cook Inlet  
 15 districts called the outer district and the eastern district  
 16 which is essentially the outer coast of the Kenai Peninsula  
 17 the Gulf of Alaska coast of the Kenai Peninsula  
 18 There was a Fish & Game study reported by Henry Uwin (ph)  
 19 and others that was done in 1989 to look at the presence of  
 20 juvenile - or to look at the presence of herring in July in  
 21 the Kenai region and he found herring in six locations and  
 22 those herring were like 98 percent or a hundred percent one  
 23 year old fish He found them in large numbers  
 24 And when you look at the tonnage that he reported which  
 25 totaled something on the order of 65 000 tons or so you look

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1 at the weight of the fish that were juveniles at that time and  
 2 figure out how many fish that were that was 3.6 billion  
 3 Q So it looks like that is probably a large portion of the '88  
 4 year class that was down there?  
 5 A That is considerably larger than what you'd see returning as  
 6 adults in that region so they have to be going someplace  
 7 Q What I'd like to do is show you Dr Pearson Exhibit 6146  
 8 which I believe is information concerning the water quality  
 9 along the Kenai Peninsula where these one year olds general  
 10 area where they were  
 11 (Exhibit 6146 offered)  
 12 MR JAMIN No objection to 6146  
 13 THE COURT It is admitted if it isn't already in  
 14 (Exhibit 6146 received)  
 15 BY MR COOPER  
 16 Q What are you depicting here now Dr Pearson?  
 17 A This particular graph has a panel and then - two panels  
 18 on the graph First panel shows the sample locations it's the  
 19 red dots  
 20 Q The red dots is where the water quality was sampled?  
 21 A Where the water quality or mussel samples came from The  
 22 yellow arrows are the locations of where Mr Uwin reported the  
 23 juvenile herring in July of 1989  
 24 In this panel you have the water column concentrations that  
 25 derive from those samples they include discrete water column

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1 concentrations and there is - you know they have about 300 or  
 2 over 400 samples so there are a lot of dots superimposed here  
 3 and you can see it's all less than two parts per billion  
 4 What you have here are mussel data where the - Dr Neff  
 5 has taken the mussel data and done a calculation to figure out  
 6 what the water column concentration would have been  
 7 associated  
 8 with the tissue burdens in those mussels  
 9 Q So what conclusion do you draw about the likelihood of  
 10 exposure to this important 1988 year class?  
 11 A It was low and not of sufficient amount to be approaching  
 12 lethality or other effects  
 13 Q Now in fact how did this '88 year class - well did this  
 14 '88 year class start showing up in the spawning biomass in  
 15 '91?  
 16 A It showed up yes It returns starts to show up in '91,  
 17 and becomes the dominant year class in '92  
 18 Q And I think we have that on this poster When it came  
 19 back or started coming back some of them started coming  
 20 back  
 21 did they basically return in '91 and '92 as expected?  
 22 A The emergence was - they were on time which is good to  
 23 see and they were in good numbers They were very strong  
 24 year  
 25 class  
 26 Q And here we have the indication of tons of the total  
 27 biomass but in 1991 and 1992 they had pretty good biomass  
 28 numbers?

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1 A Yes But both the harvest and the biomass was high and  
 2 supported by the '88 year class  
 3 Q It wasn't until 1993 that the numbers went way down?  
 4 A That's correct  
 5 Q So the fact that the class came back well in '91 and '92  
 6 does that confirm your belief that there was not much exposure  
 7 to the oil spill in that '88 year class?  
 8 A The timing and strength of their return is quite contrary  
 9 to - you know that tells me that there was little exposure  
 10 and little effect  
 11 Q Dr Pearson what I would like to do now is talk a little  
 12 bit more about the 1989 year class the one that was only going  
 13 to be three to four percent in any event of the biomass?  
 14 A Okay  
 15 Q That's the year class that you and Trustee Council  
 16 scientists put a lot of effort in studying?  
 17 A That's correct  
 18 Q Was that because it was your belief that since that was the  
 19 year class that was present the egg stage and the larvae stage  
 20 and the young stage around the time of the spill that it would  
 21 be the most vulnerable?  
 22 A Based on the work that we had done before and our  
 23 understanding of herring biology and the way oil spills act it  
 24 was clear to me that the egg stage was going to be the one  
 25 where we would have the potential for the most problems

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- (1) That s the one where if you have intimate contact between the  
 (2) oil and the egg you re going to have untoward effects and  
 (3) that s the one that s going to mostly likely come into the  
 (4) contact with the oil particularly when it s stranded on a  
 (5) beach  
 (6) Q Could you describe generally what - you ve already given  
 (7) us some information about the nature of the studies you did  
 (8) but you essentially collected the eggs on kelp you collected  
 (9) samples of that?  
 (10) A Yes We went out into Prince William Sound we had bays  
 (11) that we looked at and then we sampled the bays by setting up  
 (12) transects and along the transects we took observations And  
 (13) we had seven stations along the transects from the intertidal  
 (14) zone to the subtidal zone where we took samples of the eggs on  
 (15) kelp There was a shore party and diver party and there were  
 (16) 35 or 36 of these transects in 89  
 (17) MR COOPER Let me just put up a map of the study  
 (18) sample locations 5026  
 (19) (Exhibit 5026 offered)  
 (20) MR JAMIN No objection  
 (21) THE COURT 5026 is admitted  
 (22) (Exhibit 5026 received)  
 (23) BY MR COOPER  
 (24) Q Now this depicts the places where you took your samples?  
 (25) A This depicts the places where we took the samples in two

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- (1) years 1989 and 1990 In 1989 we were only in Prince William  
 (2) Sound The areas to the north and east here were areas that  
 (3) were reference areas and then Naked Island and Montagu  
 (4) were  
 (5) where we took samples in both 89 and 90 And in 90 we also  
 (6) took samples at Smith and Green because they were spawning  
 (7) there in 1990 although there was no spawning there in 1989  
 (8) In 1990 we also went to Sitka to obtain a reference area  
 (9) that was outside of Prince William Sound  
 (10) Q After you collected these samples did you take them back  
 (11) to the laboratory then and do various analyses on them?  
 (12) A Well in the field we took a look at them to as I  
 (13) mentioned before to see if there were signs of tarry deposits  
 (14) or any kind of oily film on them then they were packaged  
 (15) appropriately and shipped by air to our laboratory where we  
 (16) again looked at them  
 (17) And then they were processed to produce samples from the  
 (18) same piece of kelp that went into different analyses and those  
 (19) analyses were examination of them for the density of eggs how  
 (20) thick were the eggs deposited on the piece of kelp because we  
 (21) needed that information later  
 (22) Also examined for the percent development how many of  
 (23) those eggs were developed at that point We also put eggs into  
 (24) incubation that is we put them into a constant temperature  
 (25) salinity flowing seawater system and held until the eggs  
 (26) hatched out We then collected the larvae and examined the

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- (1) larvae We also sent portion of the kelp from the same samples  
 (2) to the chemistry laboratory where the chemistry petroleum  
 (3) hydrocarbon chemistry was examined  
 (4) Q I want to show a few photographs here and if you could  
 (5) give us a one line description what s happening in connection  
 (6) with your studies  
 (7) MR COOPER Exhibit 1725  
 (8) (Exhibit 1725 offered)  
 (9) MR JAMIN No objection Your Honor  
 (10) THE COURT 1725 is admitted  
 (11) (Exhibit 1725 received)  
 (12) BY MR COOPER  
 (13) Q These are collecting the eggs on kelp from the intertidal  
 (14) zone?  
 (15) A This is a shore party collecting the eggs on kelp and  
 (16) taking shore observations The surveyor there is set out as a  
 (17) quadrant and we were taking observations within that  
 (18) quadrant  
 (19) Here is the deck of the vessel where we re engaged in  
 (20) processing the samples examining them on the table that you  
 (21) can see there and packaging them appropriately putting some  
 (22) blue ice in with the samples and getting them ready for  
 (23) shipment  
 (24) Two of our people in the laboratory examining specimens  
 (25) upon receipt in the laboratory to make records of their

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- (1) condition on receipt to inventory the samples  
 (2) Q Those are the kelp leaves and eggs?  
 (3) A In the glass jars there are kelp leaves with eggs on them  
 (4) yes  
 (5) This is an example of the sub sampling that went on earlier  
 (6) where the gentleman is cutting out a square that was chosen by  
 (7) a random grid that was put over the samples and that s - I  
 (8) don t know where that particular square is going to go but  
 (9) those squares of material will go into the different analyses  
 (10) This is a picture of our incubation setup The pipes that  
 (11) you see there deliver flowing seawater and oxygen or air to  
 (12) the different jars the different jars contain the eggs on kelp  
 (13) samples and they are being incubated they are in a water bath  
 (14) because this allows us to hold the samples at constant  
 (15) temperature This is an example of a piece of kelp being  
 (16) examined  
 (17) Q Are those eggs on kelp?  
 (18) A Those white dots there are the eggs on the kelp and we re  
 (19) counting the eggs to determine the density at that point We  
 (20) are also examining the eggs to see whether they are developed  
 (21) or not  
 (22) Q Have you ever tasted that stuff?  
 (23) A I was tempted actually because I was seeing all these  
 (24) things that were forming in 1989 and boy I really should  
 (25) taste this but then I said no I ll get in trouble with my

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scientific collecting permit and I resisted the temptation  
 (1) Q Then I won't ask you under oath what it tastes like  
 (2) A I've tasted it in restaurants it's kind of crunchy and  
 (3) salty as one might expect  
 (4) Q Let's see I think you have prepared an exhibit that  
 (5) summarizes the results of what you found in these studies?  
 (6) A Yes  
 (7) THE COURT I understand that the previous pictures  
 (8) were all 1725?  
 (9) MR COOPER Yes Your Honor  
 (10) MR JAMIN What was shown was a portion of 1725 is  
 (11) it your intent to put in that portion of 1725?  
 (12) MR COOPER Yes that's my intent  
 (13) MR JAMIN We'll work that out  
 (14) THE COURT We had four pictures out of 1725 or was  
 (15) there five?  
 (16) MR JAMIN Six Your Honor  
 (17) THE COURT I must have had my mind going  
 (18) MR COOPER Six it is Your Honor  
 (19) THE COURT Thank you  
 (20) BY MR COOPER  
 (21) Q Dr Pearson I'd like to show you Exhibit 5197  
 (22) (Exhibit 5197 A offered)  
 (23) MR JAMIN No objection Your Honor  
 (24) THE COURT 5197 A admitted

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(1) area there are even Cabin Bay samples that don't show this  
 (2) phenomena but for those if you took the length of spawn in  
 (3) Cabin Bay and said that was all impacted you're looking at  
 (4) about two percent of the total spawn length that year  
 (5) Q Cabin Bay was on Naked Island?  
 (6) A That's correct sir  
 (7) Q Let's see in 1990 you also looked at the percent that  
 (8) hatched?  
 (9) A Yes  
 (10) Q And what does the no mean there?  
 (11) A That we found no relationship between the percentage of  
 (12) hatch and the hydrocarbon burden the amount of hydrocarbon  
 (13) on  
 (14) the eggs on kelp sample  
 (15) Q We have also got with respect to eggs, percent of empty  
 (16) egg cases that's how many egg cases there were?  
 (17) A Yes  
 (18) Q And no significant oil effect there?  
 (19) A That's correct  
 (20) Q And you looked at larvae for various phenomena?  
 (21) A We looked at the percentage alive and hatching we looked  
 (22) at the percentage that had different kinds of abnormalities we  
 (23) looked at the percentage that were abnormal and then the live  
 (24) normal larvae at the bottom was the normal line if it were  
 (25) those larvae that were alive and normal and having gone  
 through  
 (26) all the gauntlet of being deposited developing and hatching

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(1) MR COOPER A?  
 (2) THE COURT Yes  
 (3) (Exhibit 5197 A received)  
 (4) BY MR COOPER  
 (5) Q Does this reflect the results Dr Pearson of the analyses  
 (6) that you did on all these samples that you described?  
 (7) A Yes this is a summary chart  
 (8) Q And you looked to see what percent of the eggs developed?  
 (9) A Yes  
 (10) Q Were you then looking to see if there was a difference  
 (11) between oiled and unoled areas?  
 (12) A In this case we were looking to see whether the percent of  
 (13) development was significantly related to the hydrocarbons that  
 (14) we found in the egg sample  
 (15) Q The amount of hydrocarbons?  
 (16) A The amount of hydrocarbons yes  
 (17) Q What did you find?  
 (18) A That for the percent development that there was a  
 (19) significant relationship between the amount of hydrocarbons in  
 (20) the sample and the percent development If there were  
 (21) hydrocarbons in the sample the percent development went  
 (22) down  
 (23) Q And can you then relate that to some idea of the magnitude  
 (24) of that sort of an event? In other words how much of that did  
 (25) you find?  
 (26) A We only found it in one limited entry Cabin Bay and that

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(1) and being free of abnormalities  
 (2) Q And you were unable to find any effects with respect to  
 (3) those categories?  
 (4) A No relationship to the hydrocarbon burden, yes  
 (5) Q So the basic effect that you found was with respect to some  
 (6) of the eggs from one of the bays Cabin Bay?  
 (7) A Correct  
 (8) Q Do you believe that was due to droplets oil droplets?  
 (9) A Yes I do Those samples were ones that had tarry deposits  
 (10) on them in the field and they were also samples that showed  
 (11) high levels of hydrocarbons when you got them back into the  
 (12) laboratory and did the chemistry on them and when you did  
 (13) fingerprinting they were related to Exxon Valdez  
 (14) Q Now with respect to this 1989 year class you found that  
 (15) effect you were just describing you said in about if you  
 (16) extrapolated it out over the entire spawn about two percent  
 (17) did I hear you say?  
 (18) A Over the total spawn length yeah but these were  
 (19) intertidal eggs and about 40 percent of the eggs in Prince  
 (20) William Sound over the years and in 1989 were intertidal eggs  
 (21) so there was some subtidal eggs where this phenomena  
 (22) probably  
 (23) didn't occur so I'm probably stating a worse case stating a  
 (24) higher percentage than might be the case  
 (25) Q Now in 1989 year class although it was never going to be  
 (26) about three or four percent of the biomass in '93 did you look

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- (1) to see whether it came back as expected after 1980?  
 (2) A I'm sorry my mind drifted again on that one  
 (3) Q Well did you check to see whether the proportion in which  
 (4) the 89 year class returned when it first started returning  
 (5) if its relationship in terms of percentage or proportion to the  
 (6) rest of the biomass was out of line?  
 (7) A Yes we did  
 (8) Q And what did you find?  
 (9) A It's not out of line  
 (10) Q So what does that then tell you about your studies here?  
 (11) A That my -- that these impacts that we've examined here were  
 (12) not sufficiently large enough to produce an effect at the  
 (13) population level so the buffering effect that I talked about  
 (14) earlier indicated or was active here to help us or help the  
 (15) herring population buffer itself from this insult  
 (16) Q Now I think you said that in 1990 you also looked at the  
 (17) situation in Sitka?  
 (18) A You mean 1990 yes sir  
 (19) Q What I'd like to do is show you DX7289 A  
 (20) (Exhibit DX7289 A offered)  
 (21) MR JAMIN No objection  
 (22) THE COURT It is admitted  
 (23) (Exhibit DX7289 A received)  
 (24) BY MR COOPER  
 (25) Q Can you tell us what you're depicting here?

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- (1) A I'm depicting here the very -- the different stages that  
 (2) the egg has to go through before it can produce a normal viable  
 (3) larvae And when you look at each set of bars the first one  
 (4) is percent developed then this is of total eggs so starting  
 (5) with a total number of eggs  
 (6) Q This is all the eggs that you studied?  
 (7) A The total number of eggs from Prince William Sound that is  
 (8) in this oiled area category And there were six bays here and  
 (9) six bays here and six bays here Of those total eggs how many  
 (10) were developed and that turns out to be about 93 percent and  
 (11) then how many were hatched of those eggs and how many had  
 (12) a particular abnormality some pericardials that I was  
 (13) particularly interested in getting a background grade on and  
 (14) how many were actual viable larvae normal and alive at hatch  
 (15) And then this depicts the situation for Prince William Sound  
 (16) oil areas Prince William Sound reference areas --  
 (17) Q If I can stop you there When you say reference do you  
 (18) mean unoiled is that the same thing?  
 (19) A Yes sir  
 (20) Q So -- well go ahead and then we'll come back to it  
 (21) A Essentially what you see here is that the Sitka area is  
 (22) showing the same sorts of pattern as the Prince William Sound  
 (23) oiled and reference And in fact if you put these two together  
 (24) you have something that's almost virtually identical to Sitka  
 (25) Also for those as we mentioned earlier in 1990 there was

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- (1) no significant relationship between the biological end points  
 (2) which includes these ones as well as others and the PAH  
 (3) petroleum aromatic hydrocarbon in the egg samples  
 (4) Q So based upon your studies and what you've described so  
 (5) far do you have a professional opinion to a reasonable  
 (6) scientific certainty as to whether or not the oil spill caused  
 (7) any kind of a significant population level impact on herring?  
 (8) A The data suggests -- or the data tells me that there is no  
 (9) impact at the population level  
 (10) Q Now I'd like to talk to you for a moment about some of the  
 (11) work that Dr Kocan who testified here earlier on behalf of  
 (12) the plaintiffs has done You're familiar generally with what  
 (13) he has done?  
 (14) A Yes  
 (15) Q What I'd like to do is to focus in on the laboratory study  
 (16) that he did which he described when he was here that's the  
 (17) one in which he exposed herring embryos as I recall it --  
 (18) A Yes  
 (19) Q -- to different concentrations of Exxon Valdez crude oil?  
 (20) A To a fraction yes  
 (21) Q You're familiar with that study?  
 (22) A Yes  
 (23) Q You've seen what Dr Kocan has to say about it in his  
 (24) written work and in his deposition testimony?  
 (25) A Yes

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- (1) Q Do you have a belief as to whether or not the  
 (2) concentrations of crude oil that Dr Kocan exposed those  
 (3) herring embryos to correlated with the concentrations that were  
 (4) actually measured in Prince William Sound?  
 (5) A He was exposing them to much higher levels in the  
 (6) laboratory than what were present in Prince William Sound  
 (7) Q When he was here testifying I did kind of a freely  
 (8) hand drawn little chart of what he was saying his exposure  
 (9) levels were and I think you've improved considerably on that  
 (10) I'd like to show you Exhibit 8983  
 (11) (Exhibit 8983 offered)  
 (12) MR JAMIN No objection  
 (13) THE COURT Defendants Exhibit 8983 is admitted  
 (14) (Exhibit 8983 received)  
 (15) BY MR COOPER  
 (16) Q Now he as you understood it used several different  
 (17) exposure levels or concentration levels?  
 (18) A Yes he did  
 (19) Q And did this exhibit depict information about his lowest  
 (20) concentration level?  
 (21) A Yes  
 (22) Q In other words this is the one where he claims that he saw  
 (23) some effects but the lowest level at which he claims he did?  
 (24) The look on your face I didn't ask that question very  
 (25) well Let me ask you what do you understand this represents

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(1) in terms of his exposure levels?  
 (2) A This is his lowest exposure level  
 (3) Q Maybe you can explain what these various peaks and so  
 forth  
 (4) signify on this chart  
 (5) A Okay  
 (6) Q Before you start that let me ask you one question We all  
 (7) have seen a lot of these graphs we looked at some earlier that  
 (8) show the state of Alaska water quality standard of ten parts  
 (9) per billion for total aromatics?  
 (10) A Yes  
 (11) Q In here you've got a column hydrocarbon concentrations in  
 (12) PPB so this is parts per billion down the left hand side?  
 (13) A Yes  
 (14) Q And you're going to be looking at this over time Why  
 (15) don't you go ahead and explain and then if you could also be  
 (16) sure you tell us what these terms mean that are written on  
 (17) there?  
 (18) A Okay Dr Kocan had two different analyses that he looked  
 (19) at in terms of looking at the petroleum hydrocarbons that were  
 (20) in his stock solutions And one analysis allowed him to find  
 (21) out what the high molecular weight hydrocarbons were These  
 (22) are just that the hydrocarbons that have high molecular  
 (23) weight The low ones were what another analysis gave him  
 (24) These included some of the material that are benzenes  
 xylenes  
 (25) toluenes that are part of the analysis that you see in the

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(1) every 48 hours he's given them a fresh shot  
 (2) Q This isn't weathered oil it's fresh oil?  
 (3) A This is fresh oil So he's giving a brand new shot of  
 (4) fresh oil through his incubation period which was 18 days So  
 (5) he's got one two three four five six seven eight, nine  
 (6) shots  
 (7) Q Kind of like nine oil spills every other day?  
 (8) A Kind of  
 (9) Q And the total amount of concentration in terms of PPBs is  
 (10) substantially higher than the PPBs that were measured by Dr  
 (11) Neff and NOAA?  
 (12) A Yes  
 (13) Q As actually being out there in the field?  
 (14) A Yes The measurements as you recall from the previous  
 (15) graphs are down in the order of five PPB at most and some of  
 (16) them down around two so you're looking something like that  
 (17) Q Now what I'd like to do is show you an exhibit that was  
 (18) used by Dr Kocan when he testified I don't believe it was  
 (19) admitted into evidence but it's PX499  
 (20) MR JAMIN No objection  
 (21) THE COURT Do you want it admitted?  
 (22) MR COOPER No Your Honor I'm happy to use it for  
 (23) illustrative purposes here  
 (24) BY MR COOPER  
 (25) Q This is an exhibit that he used Dr Pearson I think

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(1) field called VOA  
 (2) Q VOA?  
 (3) A Yes there isn't a hundred percent overlap because he has  
 (4) some saturate hydrocarbons in his system as well What the  
 (5) graph depicts is that he stated that he had about an average of  
 (6) 9.7 PPB in stock solution and when you take his dilutions to  
 (7) his lowest level that would translate to 9.7 PPB He also  
 (8) talked about -  
 (9) Q That's 9.7 PPB of the high molecular weight hydrocarbons?  
 (10) A Yes  
 (11) Q But that's not all that he had in there?  
 (12) A That's not all that he had But I'm trying to put in this  
 (13) perspective here And you can see this is a little bit lower  
 (14) here than the ten mark  
 (15) Over and above that or in addition to that he also had low  
 (16) molecular weight hydrocarbons and at the time he put it into  
 (17) the solution or put the eggs in with that it was about 64 or  
 (18) so so you add this up and you get something in the order of 74  
 (19) PPB total hydrocarbons in the system  
 (20) Now those VOAs as you may know volatilize evaporate into  
 (21) the atmosphere so they are going to fall out over time of his  
 (22) system and that's what this line depicts So at 48 hours he  
 (23) still had some there and that's what this indicates  
 (24) And as it were he mixed up solutions and then changed the  
 (25) solutions every 48 hours This is all fresh oil too So

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(1) you've seen this before and my question really is where he's  
 (2) showing these chromosome damage here at where between  
 what is  
 (3) the level here?  
 (4) A The level is over here (indicating) and he's talking about  
 (5) it at .01 PPB which is equivalent to - .01 PPM which is  
 (6) equivalent to ten PPB or parts per billion  
 (7) Q So somewhere between ten PPBs and 24 PPBs he's saying  
 he's  
 (8) seeing the chromosome damage?  
 (9) A Yes that's where he's starting to see it  
 (10) Q Are you saying that .01 PPM or ten PPB to do the  
 (11) conversion that he had a lot more than that in the solution?  
 (12) A That's what the previous graph said He's only reporting  
 (13) the high molecular weight but he had the lower molecular  
 (14) weight hydrocarbons in his system Even though there was a  
 (15) decline in those they didn't go all the way down to zero So  
 (16) at the beginning here for example at the beginning of his 48  
 (17) hours he had 74 PPB and he ended something on the order of  
 20  
 (18) or above So at the very least this number should be something  
 (19) on the order of 20 But maybe not as high as 74  
 (20) Q And the other thing as I think you pointed out is that  
 (21) not only was the concentration higher but it was renewed with  
 (22) fresh oil every two days?  
 (23) A That's correct And if you recall from the graphs the  
 (24) eggs would have received oil that had been floating around on  
 (25) the water if they had received that for some time on the



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- (1) order of at least a week maybe even longer perhaps up to  
(2) three weeks  
(3) Q You're saying that the oil in the field -  
(4) A The oil in the field was weathered sir  
(5) Q I wanted to ask you one other thing about that study When  
(6) Dr Kocan was here and testified I asked him about whether he  
(7) had oil droplets in his concentration and as I recall his  
(8) testimony he said in essence that he did not and if he did  
(9) have oil concentrations - or oil droplets I'm sorry if he  
(10) had droplets in his concentration and if he did he said that  
(11) that would throw his measurements all off Have you done  
(12) anything to try to determine whether in fact he had droplets in  
(13) this what he was calling water soluble fractions?  
(14) A Yes  
(15) Q What did you look at to see if you could answer that  
(16) question?  
(17) A Two things I looked at his methodology and I looked at  
(18) the gas chromatograms that came from the analysis that was  
(19) done  
(20) on his stock solutions  
(21) Q What did you look at for his methodology and what do you  
(22) find out?  
(23) A When you look at his methods he used a separator to  
(24) funnel I think he showed you a picture of that in his  
(25) testimony And in that funnel he put water and over that he  
(26) put oil and then he shook it over for five minutes and then he

- (27) drain - pull the cork out of your tub you can sometimes see a  
(28) vortex So you want that at just the right level I don't want  
(29) it to go too far down  
(30) And depending on the particular protocol stir it for an  
(31) hour maybe two hours And then you turn the stir bar off  
(32) Then again you're going to wait so that any oil that might be  
(33) down low will separate out Then you come back perhaps the  
(34) next day 16 hours or 20 hours later and siphon off the water  
(35) from beneath down near the bottom of your carboy  
(36) Q What does all that assure?  
(37) A That you don't get droplets mixed in and you're looking at  
(38) getting just the dissolved fraction for the water soluble  
(39) fraction There is one more step that's done and that's to  
(40) pressure filter the material just to ensure that you don't have  
(41) any droplets  
(42) Q And he didn't pressure filter the material that he used?  
(43) A No he did not  
(44) Q Did you also look at some of his data to figure out whether  
(45) he had droplets?  
(46) A Yes we examined the gas chromatographs  
(47) Q We're probably coming to the moment in the trial that  
(48) everybody has been breathlessly waiting for we're going to see  
(49) a trace of a gas chromatograph unless Mr Jamin objects?  
(50) A MR JAMIN Not at all  
(51) BY MR COOPER

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- (1) let it stand And then came back later and siphoned off water  
(2) that was underneath and that became the stock solution which  
(3) he sent to the laboratory for analysis another which he  
(4) diluted with more seawater to produce his exposure media  
(5) which  
(6) he put into the exposure chambers with his egg samples That  
(7) particular method does in fact produce droplets into the water  
(8) column It's supposed to separate out he talked about that  
(9) the reason he let it scull for 20 hours he wanted to see the  
(10) separation between the oil and the water leaving behind the  
(11) dissolved hydrocarbons that were actually dissolved in the  
(12) water and he did not filter the water after he drew it off  
(13) There are other methods that are used this particular  
(14) method was - had a lot of problems with it in terms of getting  
(15) a good batch and a consistent batch every time So it was  
(16) abandoned in favor of other methods later on in the 70s  
(17) And the methods other methods use a different thing where  
(18) you have a huge carboy about this big maybe this round you  
(19) have a magnetic stirrer beneath it and you have a big bar  
(20) maybe this big maybe this big it's a magnet it's coated with  
(21) Teflon you put that in the bottom you put your seawater in  
(22) and then you put a long siphon in so you've got all this water  
(23) in the siphon in before you add the oil Then you pour oil  
(24) over the top and then you start - and then you cap it and  
(25) then you start the stir bar turning and that produces what  
(26) they call a vortex like a little tornado that when you

- (1) Q While we're trying to do that can you just explain in 25  
(2) words or less what a gas chromatograph is?  
(3) A A gas chromatograph is an instrument used to measure  
(4) petroleum hydrocarbons And in particular it gives you a  
(5) measurement for several kinds of hydrocarbons And it's  
(6) essentially a long tube In fact it's a coil it's in a  
(7) machine and there is a gas that runs through the coil and you  
(8) identify the hydrocarbons by the time at which they come out of  
(9) the coil As the gas runs through the oil  
(10) So you inject your sample and then you heat the thing up  
(11) and run the gas through it So you're going to see a trace  
(12) then as the different hydrocarbons come out they run by a  
(13) detector and when they are detected there is a big peak  
(14) And so when you look at a gas chromatogram and you see all  
(15) these peaks you're looking at the different hydrocarbons The  
(16) analyst also puts in some hydrocarbons that he knows about so  
(17) he can then judge which particular hydrocarbons he's looking  
(18) at  
(19) when he's looking at the gas chromatogram  
(20) Q So what this enables you to do is figure out which  
(21) components of the crude oil is present?  
(22) A Correct  
(23) Q Now there are certain types of hydrocarbons in crude oil?  
(24) A Yes  
(25) Q That won't really dissolve very well in water?  
(26) A Yes The saturate hydrocarbon or the alkanes have low

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- (1) solubility in water Tenthhs of a part per trillion  
 (2) Q That s all that would dissolve in water?  
 (3) A That s all  
 (4) Q That was trillion with a T?  
 (5) A That s trillion with a T  
 (6) Q So if you get a gas chromatograph back with what you  
 (7) thought was just water soluble fraction and you see some of  
 (8) those things in there at concentrations higher than that little  
 (9) one you just mentioned what does that tell you?  
 (10) A That you had those hydrocarbons present in a state other  
 (11) than dissolved  
 (12) Q Because they won t dissolve?  
 (13) A Because they have a - they are measured at levels above  
 (14) the solubility level  
 (15) Q If it isn t dissolved then it s basically droplets?  
 (16) A Correct  
 (17) Q We asked Dr Kocan to produce his lab notes  
 (18) A Yes  
 (19) Q And the analysis that came back from the laboratory that  
 (20) examined his solution  
 (21) A Correct  
 (22) Q And you ve looked at that?  
 (23) A Yes  
 (24) Q What I ll show you is this terribly exciting gas  
 (25) chromatograph

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- (1) THE COURT There is an objection to 1978  
 (2) MR JAMIN I don t know whether it s offered for  
 (3) admission or demonstration  
 (4) MR COOPER Just offer the one page  
 (5) (Exhibit 1978 one page offered)  
 (6) MR JAMIN For admission?  
 (7) MR COOPER YEs  
 (8) MR JAMIN Page number?  
 (9) MR COOPER I don t think it has a page number  
 (10) Maybe we can work it out  
 (11) MR JAMIN Can I take a look? No objection  
 (12) THE COURT The single page out of 1978 which you will  
 (13) identify later is admitted  
 (14) (Exhibit 1978 one page received)  
 (15) MR COOPER Thank you Your Honor Just for the  
 (16) record I ll note it s with respect to sample 8510 E 2 (ph)  
 (17) BY MR COOPER  
 (18) Q Now Dr Pearson what is it on this that tells you that he  
 (19) must have had oil droplets in his solution?  
 (20) A This is one of his samples that had been settled or  
 (21) separated for 20 hours and if you look at - in doesn t write  
 (22) I m sorry  
 (23) Q If you want to you can point it out here on the Barco if  
 (24) the Court doesn t mind  
 (25) A If you look at this peak here This is saturate

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- (1) hydrocarbon peak or surrogate hydrocarbon peak this is one  
 of  
 (2) those peaks that comes from a hydrocarbon that the man who is  
 (3) running the machine man or woman running the machine  
 injects  
 (4) so they are sure they know exactly what they got  
 (5) And if you look to the left here you ll see some peaks  
 (6) and they have a number on them and that s the - what they  
 (7) call the elusion time and that tells us what that hydrocarbon  
 (8) is And the hydro that s seen here are C22 C23 C24 alkane  
 (9) hydrocarbons The limit in this type of analysis is one PPB  
 (10) So he s seeing some hydrocarbons at least at that level that  
 (11) are these long change high molecular weight that was a  
 (12) solubility of less than a part per trillion  
 (13) Q And he s finding it in much greater concentration He has  
 (14) much greater concentration than that in his solutions?  
 (15) A That s correct sir  
 (16) Q Now Dr Pearson Dr Kocan did a couple of other studies  
 (17) and I don t want to spend a whole lot of time on them I want  
 (18) to ask you just very briefly He did an in situ study?  
 (19) A In 1991 yes  
 (20) Q And generally what did he do there?  
 (21) A What Dr Kocan did in 1991 was he went to ten sites in  
 (22) Prince William Sound excuse me and took eggs from herring  
 (23) that he had caught took sperm mixed them together then put  
 (24) these onto - actually put the eggs on to the glass slides and  
 (25) then exposed them to the sperm To fertilize them you put the

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- (1) glass slides into a cassette that held them and put those into  
 (2) the water with a buoy system so that they were suspended at  
 ten  
 (3) locations in Prince William Sound  
 (4) Q Did he purport to find differences between the ones that he  
 (5) had put into areas that had been oiled a few years earlier in  
 (6) 89 versus ones that had not been?  
 (7) A There were differences in hatch and abnormal larvae but  
 (8) when it came down to the viable larvae that is those larvae  
 (9) that are live and normal he had virtually the same - no  
 (10) significant differences and virtually the same rate I think  
 (11) he had 37 percent from the oiled area and 35 percent from the  
 (12) unoiled area He did report some differences in weight I  
 (13) believe  
 (14) Q So to the extent that there may have been differences that  
 (15) would show that there were differences between the two areas  
 (16) but does that indicate that it was because of an oiling effect  
 (17) that might have happened?  
 (18) A As you recall from the earlier graphs that we showed about  
 (19) the water quality in Prince William Sound that in 1991 when he  
 (20) did his experiment the levels were essentially back down to  
 (21) background So the sum of the experiment which he caveated in  
 (22) his manuscript indicates that he s got an experiment that  
 (23) looked at natural comparability in herring eggs in Prince  
 (24) William Sound that s my judgment  
 (25) Q And it doesn t really show any oiling effect?

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- (1) A Doesn t show an oiling effect
- (2) Q Now the other one that I wanted to ask you about he also
- (3) did a reproductive success study as he called it?
- (4) A That s correct in 1992
- (5) Q What did he do there briefly?
- (6) A He was looking at essentially egg viability He wanted to
- (7) look especially at egg viability in 1988 year class so he
- (8) tried to capture fish that were essentially four year old
- (9) fish He had two locations one in the northeast area that we
- (10) talked about earlier on the big map and one I can t remember
- (11) whether it was Naked Island or Rocky Bay but one of the two
- (12) oiled areas Rocky Bay and he had two samples from two
- (13) different times at Rocky Bay so he had a total of three
- (14) samples And he did report that there was some differences
- (15) between the different samples in terms of percentage of viable
- (16) larvae
- (17) Q What are your views as to whether that study really
- (18) indicates or shows that that s the case?
- (19) A He s really only got two locations and one sample from one
- (20) location and two samples from the other The only smaller
- (21) sample size you could get in that situation was only one sample
- (22) from the oiled area That doesn t - that s not a very strong
- (23) sample size for me The other is more important is that it
- (24) assumes that the fish have some sort of spawning fidelity
- (25) Q By spawning fidelity you mean?

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- (1) A Similar to homing in salmon but there is no evidence that
- (2) herring home like salmon do We don t know if you re a herring
- (3) and born at Rocky Bay that you re going to grow up and come
- (4) back to Rocky Bay We do know that places like Rocky Bay
- (5) receive herring spawn generally year after year although that
- (6) breaks down when you look at the long term records and in
- (7) some
- (8) areas of Prince William Sound where it received a lot of spawn
- (9) for some years and all the sudden it stops and moves to other
- (10) areas of the Sound so the premise that he had that there was
- (11) some sort of spawning fidelity was incorrect
- (12) In his manuscript he talks about this being a preliminary
- (13) study and that s because he didn t know about spawning
- (14) fidelity he couldn t draw any fast and hard conclusions
- (15) Q And you would agree with that?
- (16) A And I agree that s the case
- (17) Q And he was purporting to measure an effect in the 1988 year
- (18) class and how did that year class do when it started coming
- (19) back in 91 and 92?
- (20) A It was a very very strong year class and contributed to
- (21) the record high biomass and the record high harvest in 1992
- (22) Q Dr Pearson I want to ask you some questions now about
- (23) something that we heard about from Dr Kocan and this has to
- (24) do with virus VHS and lesions Can you shift gears to that
- (25) subject matter?
- (26) THE COURT Mr Cooper you re going to start a new

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- (1) subject let s call it a day
- (2) MR COOPER Happy to
- (3) THE COURT Ladies and gentlemen please remember my
- (4) instructions to you don t listen or read anything about the
- (5) case in our recess We will reconvene tomorrow at 8 a m I ll
- (6) see counsel whoever is up on jurv instructions in chambers
- (7) (Jury out at 2 00 p m )
- (8) (Off the record)
- (9) THE COURT Mr Cooper was there something you wanted
- (10) on the record before we close?
- (11) MR COOPER Your Honor I was - we were going to
- (12) have to have a side bar first thing tomorrow morning so I
- (13) thought if we could do it right now I don t think it needs to
- (14) be on the record at least at this point
- (15) (Proceedings recessed at 2 05 p m )

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- (1) I N D E X
- (2) CONTINUED DIRECT EXAMINATION OF PETER NICKERSON 6227
- (3) BY MR LYNCH 6227
- (4) CROSS EXAMINATION OF PETER NICKERSON 6260
- (5) BY MR O NEILL 6260
- (6) REDIRECT EXAMINATION OF PETER NICKERSON 6281
- (7) BY MR LYNCH 6281
- (8) DIRECT EXAMINATION OF DR RICHARD DERISO 6286
- (9) BY MR LYNCH 6286
- (10) CROSS EXAMINATION OF RICHARD DERISO 6320
- (11) BY MR O NEILL 6320
- (12) REDIRECT EXAMINATION OF RICHARD DERISO 6329
- (13) BY MR LYNCH 6329
- (14) DIRECT EXAMINATION OF WALTER PEARSON 6332
- (15) BY MR COOPER 6332
- (16) VOIR DIRE EXAMINATION OF WALTER PEARSON 6341
- (17) BY MR JAMIN 6341

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(1) CONTINUING DIRECT EXAMINATION OF WALTER  
 PEARSON 6342  
 (1) BY MR COOPER 6342

(1) 4946 A offered 6386  
 ( ) 6146 offered 6394  
 (3) 5026 offered 6397  
 (4) 1725 offered 6399  
 (5) 5197 A offered 6401  
 (6) DX7289 A offered 6405  
 (7) 8983 offered 6408  
 (8) 1978 one page offered 6418

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(1) EXHIBITS  
 ( ) DX5035 offered 6242  
 (3) DX5186 offered 6243  
 (4) 5442 offered 6244  
 (5) 5508 offered 6244  
 (6) DX6094 offered 6245  
 (7) 4855 A offered 6248  
 (8) 5420 offered 6248  
 (9) DX5704 offered 6249  
 (10) 3645 A offered 6276  
 (11) DX9349 A offered 6281  
 (12) 8975 offered 6292  
 (13) DX9384 DX6114 DX8973 C DX5447 B DX5548 B DX5446  
 (14) DX8978 A DX8977 A DX8976 C DX6760 DX8979 C offered  
 6302  
 (15) DX8979 D offered 6317  
 (16) 9169 A and 5242 A offered 6344  
 (17) 8595 offered 6349  
 (18) 5239 B offered 6351  
 (19) 6113 offered 6354  
 (20) 6112 offered 6356  
 ( ) DX102 A offered 6360  
 ( ) 9382 one page offered 6367  
 ( ) DX9383 one page offered 6368  
 ( ) 5214 D offered 6372  
 ( ) 5719 B 8895 and 8888 offered 6377

(1) DX5035 received 6242  
 ( ) DX5186 received 6243  
 (3) 5442 received 6244  
 (4) 5508 received 6244  
 (5) DX6094 received 6245  
 (6) 4855 A and 5420 received 6248  
 (7) DX5704 received 6249  
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 (13) DX8979 D received 6317  
 (14) 9169 A and 5242 A received 6345  
 (15) 8595 received 6349  
 (16) 5239 B received 6352  
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 (18) 6112 received 6356  
 (19) DX102 A received 6360  
 ( ) 9382 one page received 6367  
 ( ) DX9383 one page received 6369  
 ( ) 5214 D received 6372  
 ( ) 5719 B 8895 and 8888 received 6377  
 ( ) 4946 A received 6386  
 (25) 6146 received 6394

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| (2) 1725 received          | 6399 |
| (3) 5197 A received        | 6402 |
| (4) DX7289 A received      | 6405 |
| (5) 8983 received          | 6408 |
| (6) 1978 one page received | 6418 |

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(1) STATE OF ALASKA )  
 (2) Reporter s Certificate  
 (3) DISTRICT OF ALASKA )  
 (6) I Leonard J DiPaolo 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) LEONARD J DiPAOLO RPR  
 Notary Public for Alaska  
 (22) My Commission Expires 2 3 96

Look See Concordance Report

UNIQUE WORDS 2,929
TOTAL OCCURRENCES 14,299
NOISE WORDS 385
TOTAL WORDS IN FILE 42,955

SINGLE FILE CONCORDANCE

CASE SENSITIVE

NOISE WORD LIST(S)
NOISF NOI

INCLUDES ALL TEXT OCCURRENCES

IGNORES PURE NUMBERS

WORD RANGES @ BOTTOM OF PAGE

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(1) IN THE UNITED STATES DISTRICT COURT  
 (2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No A89 0095 CIV (HRH)  
 (5) ) Anchorage Alaska  
 The EXXON VALDEZ ) Thursday June 7 1994  
 (6) ) 8 00 a m  
 TRANSCRIPT OF PROCEEDINGS  
 TRIAL BY JURY 40TH DAY  
 (9) BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE  
 (10) VOLUME 36 Pages 6431 6632  
 Realtime Transcription

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(1) PROCEEDINGS  
 (2) (On record 8 02 jury not present)  
 (3) THE COURT Good morning ladies and gentlemen  
 (4) MR O NEILL Good morning  
 (5) MR COOPER Good morning  
 (6) THE COURT Mr Cooper?  
 (7) MR COOPER Your Honor I thought we probably should  
 (8) have on the record the matter that we discussed at side bar at  
 (9) the end of the day yesterday where it indicated that I wanted  
 (10) to ask Dr Pearson about matters concerning the theory of Dr  
 (11) Kocan s that the run failures of 93 and 94 resulted from  
 (12) this virus and the lesions that it caused  
 (13) If my memory is correct when we discussed that at side  
 (14) bar Your Honor indicated that as much as Dr Pearson had not  
 (15) seemed to be qualified in those matters that I would not be  
 (16) permitted to do that I wanted to -  
 (17) THE COURT That s what I said  
 (18) MR COOPER I just wanted to make a record on that  
 (19) one Your Honor and also then raise a related request Your  
 (20) Honor the timing of this is as follows Your Honor may recall  
 (21) in Dr Kocan s cross-examination I pointed out in his  
 (22) deposition in January of this year I asked him specifically if  
 (23) he had an opinion whether the virus and the lesions associated  
 (24) with it had caused the low runs in 93 and 94 and he  
 (25) testified I have no opinion on that

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 In Court  
 (15) Deputy Clerk TOM MURTIASHAW  
 U S District Court  
 (16) 222 W 7th Avenue #4  
 Anchorage AK 99513  
 (17) Ph 907/271 4529  
 Reported by LEONARD J DIPADLO  
 (19) Registered Professional Reporter  
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 (20) 2550 Denali Street Suite 1505  
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(1) The first time we heard about this fact that he did have an  
 (2) opinion, and that this was now his theory was just a couple  
 (3) days before June 16, when I - we received some additional  
 (4) materials from him Then I took his deposition again on June  
 (5) 16th about six days before he went on the stand on June 22  
 (6) and at that point he testified that his theory now was this  
 (7) Given that timing Your Honor and given the fact that he  
 (8) told us as early as January that he did not have an opinion on  
 (9) the matter what I would like to do if we can arrange it and I  
 (10) haven t yet been able to contact him, is to ask Dr Elston the  
 (11) colleague of Dr Pearson who is a disease - fish disease  
 (12) expert virologist and so forth to testify on that subject  
 (13) Looks like we probably won t finish tomorrow if we can put him  
 (14) on tomorrow or Monday perhaps before final argument There  
 is  
 (15) no expert report from Dr Elston given the timing of it  
 (16) Obviously it was quite short for that  
 (17) THE COURT We re getting two things mixed up together  
 (18) and I don t deal with things well that way Is there anything  
 (19) which the plaintiffs wish to put on the record concerning my  
 (20) ruling about Dr Pearson s testimony? Mr Jamin?  
 (21) MR JAMIN Thank you Your Honor Only Your Honor  
 (22) that when Dr Kocan testified in this area as to his expertise  
 (23) in the area of virology and the area of immunology he was  
 (24) found to be an expert in those areas and specifically with  
 (25) respect to the mechanism that Dr Kocan explained led to the

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- (1) outbreak of the virus and that is the genetic mechanism  
 (2) Dr Pearson has by his own admission no expertise in this  
 (3) area and it is our feeling that to explain the mechanism  
 (4) either for the disease occurring or to reject it takes  
 (5) expertise in this area and that is why we think that - and  
 (6) this goes to the core of the expertise required That s why we  
 (7) believe it is inappropriate for Dr Pearson to express opinions  
 (8) in this area With respect to the second -  
 (9) THE COURT No I don t want to deal with that second  
 (10) thing We ll take it up later  
 (11) Mr Cooper what precisely is it that you want to ask  
 (12) Dr Pearson?  
 (13) MR COOPER Your Honor I would want to ask  
 (14) Dr Pearson what his opinion is with respect to Dr Kocan s  
 (15) claim that the virus was - is what caused the run declines in  
 (16) 1993 and 1994  
 (17) THE COURT As to that subject area I do not believe  
 (18) that Dr Pearson has been qualified We expressly excluded  
 (19) from his qualifications the subject of what, genetic -  
 (20) MR JAMIN And virology  
 (21) THE COURT And virology Based upon those  
 (22) exclusions I will sustain the implicit objection here by the  
 (23) plaintiffs to Dr Pearson answering questions in the area which  
 (24) you suggest  
 (25) Now as to this second procedural problem having to do with

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- (1) another witness do the plaintiffs have a view on that?  
 (2) MR O NEILL We have no expert report He has not  
 (3) been disclosed as an expert and we re - this testimony on  
 (4) these subjects has gone on and on and on So we object both  
 (5) on  
 (6) disclosure reasons and on a shortness of life grounds  
 (7) THE COURT I don t know about the shortness of life  
 (8) ground but as to the other matters Mr Cooper I would  
 (9) probably cut you some slack on this if this were a situation  
 (10) which unfortunately comes up once in awhile where you  
 (11) literally got surprised by this witness offering a new opinion  
 (12) for the first time from the witness stand Inasmuch as you ve  
 (13) had an opportunity although I was not aware that it was still  
 (14) going on to do discovery before he testified I think it comes  
 (15) too late at this point I m not going to allow a new expert  
 (16) who has not been examined by anyone apparently to come up  
 (17) with new opinions  
 (18) Anything further we need to take up before we call the  
 (19) jury?  
 (20) MR O NEILL One housekeeping matter Your Honor and  
 (21) we ve cleared this with the defendants On June 20th 1994  
 (22) the trial transcript erroneously recorded pre admitted  
 (23) Plaintiffs Exhibit Number 3754 as 3704 On June 21  
 (24) Plaintiffs Exhibit 3754 was withdrawn by the plaintiffs  
 (25) Neither Plaintiffs Exhibit 3754 nor Plaintiffs Exhibit 3704  
 (26) should be in evidence

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- (1) THE COURT That s agreed Mr Lynch? Somebody?  
 (2) MS STEWART Yes Your Honor  
 (3) MR O NEILL And Exhibit 269 which is the Rainier -  
 (4) THE COURT Plaintiff or Defendant?  
 (5) MR O NEILL Plaintiffs 269 Your Honor which is the  
 (6) Rainier videotape should not be in and Exhibit 247-Alpha  
 (7) should be in  
 (8) MS STEWART Agree  
 (9) THE COURT Plaintiffs Exhibit 269 is not in  
 (10) evidence Plaintiffs 247 is by agreement admitted  
 (11) MR O NEILL 247 Alpha  
 (12) THE COURT I m sorry 247 Alpha  
 (13) (Exhibit 247-A received)  
 (14) MS STEWART In addition Your Honor, just to take -  
 (15) THE COURT Just a second please  
 (16) I m back with you now  
 (17) MS STEWART We have a small list of exhibits to  
 (18) which plaintiffs have no objection DX2047 DX2052 DX3006  
 (19) DX3008 DX4848 DX6101 Alpha  
 (20) MR COOPER 8989 which is the video sonar animation  
 (21) that we showed with Dr Carlson  
 (22) MS STEWART And that would be DX8989  
 (23) MR O NEILL We have no objection  
 (24) THE COURT They are all admitted  
 (25) (Exhibits DX2047 DX2052 DX3006 DX3008 DX4848

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- (1) DX6101 Alpha DX8989 received)  
 (2) (Jury in at 8 12)  
 (3) THE COURT Good morning ladies and gentlemen We re  
 (4) ready to continue trial in case A89-0095 in re the Exxon  
 (5) Valdez  
 (6) Mr Cooper do we need Dr Pearson back?  
 (7) MR COOPER Yes Your Honor I think Dr Pearson will  
 (8) be back on the stand  
 (9) THE COURT You understand you re still under oath  
 (10) sir?  
 (11) THE WITNESS Yes  
 (12) CONTINUING DIRECT EXAMINATION OF WALTER PEARSON  
 (13) BY MR COOPER  
 (14) Q Good morning Dr Pearson  
 (15) A Good morning  
 (16) Q Dr Pearson I would like to turn to a new subject now and  
 (17) this subject is the 1993 1994 very low runs in Prince William  
 (18) Sound for the herring  
 (19) A Yes  
 (20) Q Now have you - have you generally looked at run failures  
 (21) of herring and other fish?  
 (22) A Yes I have  
 (23) Q And can you describe generally what you have - you have  
 (24) looked at the scientific literature on these matters?  
 (25) A Yes

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- (1) Q Generally what have you found?
- (2) A We looked at 56 run failures throughout the world 45 of
- (3) which were involved herring 71 percent of those declines or
- (4) failures were associated with overfishing and then somewhere
- (5) on the order of 40 percent were associated with either food
- (6) supply problems or temperature problems There were other
- (7) natural factors that were involved too changes in the
- (8) oceanographic regime particularly changes in currents that
- (9) would not allow the larval fish to get into their prime feeding
- (10) grounds disease - there was one case out of the 45 that
- (11) involved disease in the maritimes of Canada
- (12) Q Now if I heard you correctly you said -
- (13) A One more thing There was a small number that were
- (14) associated with changes in the predators on the herring
- (15) Q If I heard you right, I think you said 71 percent were
- (16) associated with overfishing?
- (17) A Correct
- (18) Q And then I heard you say 40 percent -
- (19) A It doesn't add up right That's because in some case
- (20) either food supply or temperature coupled with overfishing or
- (21) one of these other problems was there Very often these
- (22) failures are not due to any one single factor but due to the
- (23) building up of several factors
- (24) Q Now you've looked at some of these kinds of factors in
- (25) connection with Prince William Sound?

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- (1) A No That would be the forecast that Fish & Game made from
- (2) the 92 season moving to the 93 This is what they expected
- (3) to see in 93
- (4) Q And that's the year that the runs failed to materialize
- (5) anywhere near the expected numbers?
- (6) A That's correct The actual size was somewhere down around
- (7) here 30 000
- (8) Q Incidentally before I forget it how was the 1994 run
- (9) size given the size of the 93 run?
- (10) A What it appears to me is the event that was the problem
- (11) happened from 92 to 93 and that what you're looking at in
- (12) 94 is the fact that the fish have come down to a new biomass
- (13) level
- (14) Q In 93?
- (15) A In 93 And then they are moving to 94 with approximately
- (16) natural mortality Fish & Game feels the natural mortality is
- (17) around 68 - let me rephrase that They think 68 percent of
- (18) the fish survive from one year to the next that's the
- (19) survivorship figure that they use And if you take 30 000 tons
- (20) and apply that figure -
- (21) Q 30 000 tons was the 93 biomass?
- (22) A Correct Apply that 68 percent figure you get about
- (23) 20 000 tons in 94 and that's the approximate amount that they
- (24) report for the biomass in 94 So the events - you're not
- (25) looking at a second hit in 94 you're looking at something

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- (1) A Yes sir
- (2) Q And have you looked at the size of the biomass and the
- (3) trend and the size of the biomass?
- (4) A Yes
- (5) MR COOPER I'd like to show the witness 8524 A
- (6) I'll go ahead and offer it Your Honor
- (7) (Exhibit DX8524 A offered)
- (8) THE COURT Objection?
- (9) MR JAMIN No objection
- (10) THE COURT Defendants 8524 A is admitted
- (11) (Exhibit DX8524-A received)
- (12) BY MR COOPER
- (13) Q Can you tell us what you have got here on this exhibit and
- (14) what it signifies to you?
- (15) A Yes sir This exhibit is dealing with Prince William
- (16) Sound herring stock size or biomass and the red is the amount
- (17) of biomass that was harvested The yellow is that amount of
- (18) biomass that escapes harvest So the total biomass is the
- (19) total height of the bar And as you can see you had biomasses
- (20) on the order of 30 000 in the 70s They have increased in the
- (21) 80s to around 60 000 and then starting before the spill they
- (22) started to rise
- (23) Q Rob is pretty good about clearing that up
- (24) Now let's see we ought to take a moment the purple bar
- (25) the blue bar that's not an actual number?

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- (1) that happened from 92 to 93 with a continuation of the
- (2) biomass at a lower level after that
- (3) Q Now I kind of interrupted you Dr Pearson and you were
- (4) about to I think explain the significance of this increasing
- (5) biomass in your view
- (6) A Just that if you look at this trend you've got more and
- (7) more fish into the system over the last ten years maybe even
- (8) 15
- (9) Q Now have you also looked at weight information about the
- (10) weight of the herring over this same kind of a time frame?
- (11) A Yes we have
- (12) MR COOPER And let's see Exhibit 5331 B to help
- (13) illustrate that I'll offer it Your Honor
- (14) (Exhibit DX5331 B offered)
- (15) THE COURT The number again?
- (16) MR COOPER DX5331 B
- (17) MR JAMIN No objection
- (18) THE COURT It is admitted
- (19) (Exhibit DX5331-B received)
- (20) BY MR COOPER
- (21) Q Now can you explain what you have here Dr Pearson? And
- (22) maybe we should start with explaining what the vertical scale
- (23) is here
- (24) A The vertical scale here is the amount of weight that's
- (25) gained from one fishery to the other

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- (1) Q Now this is in - you're looking at a particular age of herring here?
- (2) A This particular one is for the six year olds going to become seven year olds. The bait fishery occurs in the fall or winter in Prince William Sound and normally the fish between the bait fishery in the fall and the spring fishery which is the sac roe fishery gain weight. But in recent years the amount at which they have gained that weight has declined.
- (3) Q They have been gaining less and less weight?
- (4) A They have been gaining less and less each year.
- (5) Q Between the fall and the following spring?
- (6) A Correct sir. And then in the 92/93 time frame they actually lost weight.
- (7) Q What does that signify to you that pattern?
- (8) A There are several things it can signify. Coupled with the high rise in the biomass it indicates that there may be a density dependent response dealing with growth in the fish. The other thing is there may be a problem with the food supply.
- (9) Q When you say density dependent can you explain what you mean by that?
- (10) A Sorry sir. Density dependent response is a response that has to do with the density of fish or other animals. So if the density goes up you get more fish in an area and some parameter like growth falls that's called the density dependent response. A density independent response is one

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- (1) that's not linked to the number or abundance of fish.
- (2) Q Now have you also looked at information about the food supply for herring in Prince William Sound?
- (3) A Yes we have.
- (4) Q There is some information available on that?
- (5) A Yes.
- (6) Q We have Exhibit 8896 DX8896 I'd like to show you.
- (7) MR JAMIN No objection.
- (8) MR COOPER I'd offer it.
- (9) (Exhibit DX8896 offered).
- (10) THE COURT Defendants 8896 is admitted.
- (11) (Exhibit DX8896 received).
- (12) BY MR COOPER.
- (13) Q This is the food supply information?
- (14) A This is one piece of information on the food supply in Prince William Sound. It was supplied to me by Dr Cooney of the University of Alaska. That is one that has kind of a longest time frame. This is other pieces of information out there but they are not as coherent as this one.
- (15) Q Can you explain what these bars are? And we'll start with the vertical axis on the left.
- (16) A What you're looking at here are the zooplankters essentially the volume of zooplankters per cubic meter. They take a plankton net and haul it through the water. This captures the zooplankters. And they have a meter in the net

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- (1) that tells them how much water they have filtered and then they can settle the volume of zooplankters and come and figure out what the volume of zooplankters are per cubic meter of water.
- (2) Q That's in milliliters?
- (3) A Milliliters of zooplankters per cubic meter.
- (4) Q So this has basically given you information or a picture of how much zooplankton there is in a given unit of water in the Sound?
- (5) A That's correct.
- (6) Q And this is information that's taken near the AFK hatchery?
- (7) A That's my understanding yes.
- (8) Q And what then does this information - what's its importance to you?
- (9) A There is two things here. One is the decline. With the possible exception of two years here you've had an overall decline to a new level here in the recent years and if you recall growth started to change from the other graph. That was in about 83 or 84 so there is something going on with food supply as well as growth and biomass.
- (10) Q Have you also looked at information concerning temperature in Prince William Sound?
- (11) A Yes we have.
- (12) Q Why is that of significance to you?
- (13) A Because of the potential for temperature to play a role

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- (1) both in growth and in terms of other things that may be involved in fisheries declines.
- (2) MR COOPER I'd like to show you DX8996 -
- (3) MR JAMIN No objection.
- (4) MR COOPER - which we'll offer.
- (5) (Exhibit DX8996 offered).
- (6) THE COURT Defendants 8996 is admitted.
- (7) (Exhibit DX8996 received).
- (8) BY MR COOPER.
- (9) Q Now does this reflect information concerning temperature?
- (10) A Yes it does sir.
- (11) Q Can you tell us what you're looking at here what temperatures you're looking at?
- (12) A We're looking at the three months that are the winter months December January and February from stations near Montague Island and Prince William Sound and some other stations near Sitka.
- (13) Q And these are -
- (14) A These are the monthly temperatures and for that block of time we've chosen the coldest monthly temperature and plotted that.
- (15) Q They are temperatures of what?
- (16) A The sea surface sir.
- (17) Q Not the air but the -
- (18) A Not the air the water

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- (1) Q And can you explain then what your graph here is showing?
- (2) A Well as you can see Sitka has shown some - Sitka has
- (3) shown variation in that range but you can see that the
- (4) temperatures have fallen in Prince William Sound and then in
- (5) 1992 and 93 they were 2 7 degrees centigrade The long term
- (6) averages for Prince William Sound are in this range here so
- (7) we ve had increasingly colder winters in Prince William Sound
- (8) Q So if I put back up DX5331 the weight change how does
- (9) that weight change trend and especially the part here in 1992
- (10) and 93 where it actually turns into a weight decrease
- (11) correlate with the temperature information that you looked at?
- (12) A This point here (indicating) is the point where you had the
- (13) coldest winter moving from 92 to 93
- (14) Q And it was after that coldest winter in 1993 the herring
- (15) run basically failed in Prince William Sound?
- (16) A That s correct sir
- (17) Q Now Dr Pearson do you think anybody - do you or
- (18) anybody
- (19) else as far as you know know for sure what caused the run
- (20) failure in 1993?
- (21) A I don t believe that anyone has the answer right now and I
- (22) agree with Fish & Game that it needs a lot more research
- (23) Q Based upon the information that you do have including this
- (24) information that you have described is it your - do you have
- (25) an opinion whether or not that run failure was due to natural
- (26) events?

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- (1) A I believe it was due to long term natural processes that
- (2) were going on in Prince William Sound
- (3) Q Let me see if you can sum up your opinions Dr Pearson
- (4) First with respect to exposure that may have occurred to the
- (5) oil in 1989 on the 1989 year class do you have an opinion on
- (6) that?
- (7) A Yes sir
- (8) Q And what s your opinion on that?
- (9) A I believe that the exposure in 1989 was low that the
- (10) effects were limited and that based on the return of the 89
- (11) year class later you don t have that being translated into a
- (12) population level effect that the effects were buffered by the
- (13) natural processes that herring had natural events that herring
- (14) had
- (15) Q How about with respect to possible exposure in 1990 the
- (16) year after the spill?
- (17) A I believe there is some potential for exposure in 1990 but
- (18) as we discussed and as some of the Trustee data shows there
- (19) is little or no effects in 1990
- (20) Q And no effect at the population level?
- (21) A And no effect at the population level
- (22) Q Dr Pearson let me show you one final exhibit here This
- (23) is part of the series that we had been trying to prepare for
- (24) the jury to help them guide through the verdict form
- (25) ultimately but this is Exhibit DX8981-A

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- (1) (Exhibit DX8981 A offered)
- (2) MR JAMIN No objection
- (3) THE COURT DX 8981 A is admitted
- (4) (Exhibit DX8981-A received)
- (5) BY MR COOPER
- (6) Q Dr Pearson this follows a format that the jurors have
- (7) seen before but essentially you have placed on here in the
- (8) column entitled plaintiffs slash Hughes is that your
- (9) understanding what the plaintiffs through Mr Hughes their
- (10) expert witness are claiming in the lost harvest for 93 and
- (11) 94 because of the oil spill?
- (12) A Yes I understand that the first two numbers come from view
- (13) graphs or exhibits that they have made The last two numbers
- (14) come from taking the amount of money that they talked about
- (15) dividing by the price to get the tonnage
- (16) Q And this is in tons of product?
- (17) A Yes
- (18) Q Let s see And you ve broken it down into roe on kelp for
- (19) 93?
- (20) A Correct
- (21) Q And if we just stuck with that one the plaintiffs
- (22) estimate - if there is an ADF&G estimate we ve been trying to
- (23) put that in Was there any ADF&G estimate?
- (24) A Not that I m aware of
- (25) Q And over here we reflect zero That s based upon your

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- (1) opinion that you just testified to?
- (2) A That the events are due to natural causes rather than the
- (3) Exxon Valdez spill
- (4) Q And the same then the same pattern with respect to 1993
- (5) sac roe 94 roe on kelp and 94 sac roe?
- (6) A Correct
- (7) MR COOPER Dr Pearson I have no further
- (8) questions Thank you
- (9) MR JAMIN Your Honor may I approach the witness?
- (10) THE COURT You may
- (11) CROSS EXAMINATION OF WALTER PEARSON
- (12) BY MR JAMIN
- (13) Q Dr Pearson by your right shoulder I ve put some exhibits
- (14) that we re going to talk about together and they are right
- (15) here If you want to move those out of the way that s fine
- (16) And I ve also sir given you your deposition which is here
- (17) Can we call 8981A which is the one that was just up
- (18) Dr Pearson let s start talking about this last exhibit
- (19) that Mr Cooper discussed with you during your direct Okay?
- (20) A Yes
- (21) Q Now is this a document you prepared sir?
- (22) A This was prepared for my testimony
- (23) Q It was prepared by someone else though?
- (24) A Yes
- (25) Q Who was it prepared by?



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- (1) A The graphics department  
 (2) Q That s the graphics department of Exxon?  
 (3) A Correct  
 (4) Q Now I see that 1989 is not up here You re not testifying  
 (5) that the closure of the fishery in 1989 which resulted in no  
 (6) fishery at all for commercial fishermen in Prince William Sound  
 (7) for herring was not related to the oil spill?  
 (8) A No but there was one small bait fishery in 1989  
 (9) Q That was in the fall?  
 (10) A Yes  
 (11) Q The main fishery in 1989 your testimony is that that is  
 (12) related to the Exxon Valdez oil spill isn t it?  
 (13) A The closure?  
 (14) Q Yes  
 (15) A Yes  
 (16) Q And the oil spill is a substantial factor is that right?  
 (17) A The oil spill was the reason for the closure  
 (18) Q Was the reason all right Let me take a look at the  
 (19) second to the last exhibit that Mr Cooper showed you the one  
 (20) about the food supply in Prince William Sound  
 (21) A Yes  
 (22) Q Now this data is exclusively from the area adjacent to the  
 (23) AFK hatchery isn t it?  
 (24) A Yes  
 (25) Q And the AFK hatchery is not an area where herring spawn is

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- (1) it?  
 (2) A No  
 (3) Q And Exxon has done no other work with respect to  
 (4) zooplankton abundance has it?  
 (5) A That s correct  
 (6) Q Now as I understand sir from your testimony yesterday  
 (7) before this litigation you had done work for Exxon and for the  
 (8) American Petroleum Institute is that right?  
 (9) A That s correct  
 (10) Q And your initial report in this litigation which was  
 (11) presented to plaintiffs was presented and prepared for  
 (12) submission to the Atlanta conference in April of 93 that AST  
 (13) conference?  
 (14) A Yes  
 (15) Q And prior to the presentation of that report it was  
 (16) reviewed by Exxon wasn t it?  
 (17) A It was internally reviewed by my people and given - and  
 (18) the client had review yes  
 (19) Q And the client is Exxon?  
 (20) A That s correct  
 (21) Q Which means Exxon reviewed it?  
 (22) A Yes  
 (23) Q And you ve worked with three Exxon scientists in connection  
 (24) with your papers Mr Al Mackey Mr Konkel and Mr Melton is  
 (25) that correct?

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- (1) A Mr Melton is the last one?  
 (2) Q Yes  
 (3) A Yes those three  
 (4) Q What was Mr Mackey s position with Exxon?  
 (5) A I don t know what his exact title was but he was the  
 (6) environmental coordinator for Exxon during the spill and then  
 (7) became kind of a chief scientist within the group that was  
 (8) dealing with the spill-related issues  
 (9) Q And who was - what was Mr Kunkel s position?  
 (10) A He was a study analyst He was the technical  
 (11) representative on the contract which is typical of all the  
 (12) contracts we work We have a technical representative  
 (13) Q Technical representative for Exxon?  
 (14) A Correct  
 (15) Q What was Mr Melton s position?  
 (16) A He came on later He was the successor of Mr Konkel  
 (17) Q And are any of those gentlemen in the courtroom here  
 today?  
 (18) A I thought I saw - yes Roger Melton is here and Al Mackey  
 (19) is here I don t believe I see Mr Konkel  
 (20) Q Now at the time of your deposition in September of 93  
 (21) you indicated that since the oil spill in 1989 about  
 (22) four and-a-half years before you had - before you were  
 (23) deposed the bulk of your funding about 80 percent of it had  
 (24) been in connection with the Exxon Valdez oil spill is that  
 (25) right?

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- (1) A That figure is about right  
 (2) Q And at the peak of Batelle s involvement as many as 60  
 (3) people were working on this herring study is that correct?  
 (4) A That s correct  
 (5) Q And that doesn t include the Batelle group that was related  
 (6) to Mr Neff or the other Batelle experts who have testified  
 (7) those 60 were in herring weren t they?  
 (8) A That s correct but I believe they also included people  
 (9) from other organizations as well  
 (10) Q Now when you started your field project let me see if I  
 (11) can get you to agree as to the design It was - the objective  
 (12) of the Pacific herring study is to ascertain whether specific  
 (13) aspects of herring reproduction show injury attributable to the  
 (14) oil contamination from the Exxon Valdez oil spill Is that a  
 (15) correct statement?  
 (16) A That s a correct statement  
 (17) Q Now as I understand it a larval study was started in May  
 (18) but it was not pursued because of the inability in May to find  
 (19) the larvae with the gear that was used Is that correct?  
 (20) A That s correct  
 (21) Q And you would have liked to have had more information on  
 (22) larvae wouldn t you?  
 (23) A Yes  
 (24) Q And one of the reasons was that you wished you had more  
 (25) information on the larvae but didn t is that they were -

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- (1) excuse me I m trying to use your words and sometimes they are  
 (2) a little confusing and sometimes I m a little confused  
 (3) One of the reasons you wish you would have had more on the  
 (4) larvae in particular where they were located later in the  
 (5) season isn t that right?  
 (6) A Yes  
 (7) Q And that was because it s your belief that there was a  
 (8) serious lack of information about where the juveniles are in  
 (9) general and in 1989 specifically?  
 (10) A You switched life stages on me  
 (11) Q Let s do larvae first Where the larvae are in 89 and  
 (12) where they were specifically – where they were specifically in  
 (13) 1989  
 (14) A Data would have been very useful yes  
 (15) Q Did the Trustees do a study where the larvae were in 1989?  
 (16) A Yes  
 (17) Q And that was Miss Norcross?  
 (18) A And Dr Gerst (ph)  
 (19) Q And that study was called Larval Fish Distribution and  
 (20) Abundance in Prince William Sound and Resurrection Bay in  
 (21) 1992?  
 (22) A Say that again  
 (23) Q The study was called Larval Fish Distribution and Abundance  
 (24) in Prince William Sound and Resurrection Bay?  
 (25) A I believe – I don t recall the exact title  
 (26) Q That was its subject matter?

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- (1) A Yes  
 (2) Q And Dr Norcross found that most of the larval herring that  
 (3) were taken in the trawls were taken primarily from the oiled  
 (4) areas the southwestern area of the Sound?  
 (5) A I believe that s correct  
 (6) Q And not the eastern and northern areas of the Sound is  
 (7) that right?  
 (8) A That s correct She s taking trawls that are out in the  
 (9) middle of these areas as opposed to near the spawning  
 (10) grounds  
 (11) Q And where she took the trawls and found the larvae were in  
 (12) the path of the oil weren t they?  
 (13) A Where the oil had gone through yes  
 (14) Q We ll talk about that a little bit more  
 (15) Now the 1988 herring were one-year-old fish or juvenile  
 (16) fish to clarify that at the time of the spill were they not?  
 (17) A Yes  
 (18) Q And you don t know with any certainty where those juvenile  
 (19) fish were physically located in March of 89 do you?  
 (20) A We have only supposition and some data  
 (21) Q But you don t know with any certainty?  
 (22) A Not absolutely for sure no  
 (23) Q In fact you didn t do any studies on juvenile herring at  
 (24) all did you?  
 (25) A That s correct  
 (26) Q And you didn t attempt with field work to determine whether

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- (1) or not the 88 year class had been exposed to oil did you?  
 (2) A No sir  
 (3) Q We talked about the larvae now we talked about juveniles  
 (4) In 89 when the oil spill occurred if history was repeating  
 (5) itself the 88 year class of herring would have been in the  
 (6) southern portion of Prince William Sound is that correct?  
 (7) A Based on the work that had been done in the 20s and 30s by  
 (8) Rosafeld (ph) but I also mentioned there was other work done  
 (9) by Fish & Game people in the Cook Inlet area  
 (10) Q So your claim is that some of these fish that were one year  
 (11) old were down in the outer and eastern districts of the Kenai  
 (12) Peninsula is that correct?  
 (13) A Yes  
 (14) Q And you say is it not – isn t it true sir that as we  
 (15) look at the areas where you say the 88 fish were you re  
 (16) telling us that some of them were in the Prince William Sound  
 (17) area and some were along the Kenai Peninsula is that right?  
 (18) A Yes  
 (19) Q And you re saying – you re agreeing with me the area where  
 (20) they were in the Sound was oiled is that right?  
 (21) A The southern end in Montague there was oiling through  
 (22) there yes  
 (23) Q And we re going to talk just a little bit about this Kenai  
 (24) Peninsula area  
 (25) Now isn t it true sir that in 1989 the Lower Cook Inlet

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- (1) was closed the outer and eastern districts were closed because  
 (2) of the presence of oil from the Exxon Valdez oil spill?  
 (3) A There was a closure there yes  
 (4) Q And herring was closed?  
 (5) A Correct  
 (6) Q So even if you re right that Prince William Sound herring  
 (7) were not just in the Sound but down along the peninsula that  
 (8) was in an area where there was oil and there were closures  
 (9) related to oil just like there were in the Sound?  
 (10) A Yes but it s all a matter of how much was in the water  
 (11) column  
 (12) Q All right And we ll talk about that for sure sir  
 (13) Now other than the issue of now attempting to determine  
 (14) the location of the 88 year class at the time of the oil  
 (15) spill you haven t done any other work on juveniles have you?  
 (16) A Say that again sir other than –  
 (17) Q Other than the issue of now attempting to determine the  
 (18) location of the 88 year class where you talked about some  
 (19) were in the Sound some were along the Peninsula you haven t  
 (20) done any other work studying juveniles is that correct?  
 (21) A That s correct  
 (22) Q Let s take a look at what effect if any the oil spill had  
 (23) on the herring that were coming into spawn in 89  
 (24) In 89 some adult herring samples were collected right?  
 (25) A Yes

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- (1) Q You collected some?  
 (2) A Yes  
 (3) Q And some adult work was done in 1989?  
 (4) A Correct  
 (5) Q And you started but did not complete that work is that  
 (6) correct?  
 (7) A In terms of the artificial spawn study?  
 (8) Q Yes sir  
 (9) A We only had fish from one bay  
 (10) Q And you didn't complete the work?  
 (11) A So it's incomplete yes  
 (12) Q And you did no studies on chromosomes at that time did  
 (13) you sir?  
 (14) A No  
 (15) Q And you would have liked to have completed that study?  
 (16) A I would have liked to have completed that work yes  
 (17) Q Now with respect to these fish coming back in '89 it's  
 (18) your understanding as well is it not that they come back into  
 (19) this area into the south and southwestern areas of Prince  
 (20) William Sound as they are returning to spawn?  
 (21) A The overwintering grounds - there may be overwintering  
 (22) grounds within the Sound as well so - but the general idea is  
 (23) that they are moving from the south to the north to get to the  
 (24) north and northeast parts of the Sound  
 (25) Q To get to this area the north and northeast area so they

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- (1) are coming up from the south?  
 (2) A Correct There are some up off Knoll's Head in the winter  
 (3) too  
 (4) Q Have you done any work to determine how many off Knoll's  
 (5) Head in the wintertime?  
 (6) A No  
 (7) Q Now let's take a look at what Exxon did Once they spawn  
 (8) near the intertidal or beach you would assume they would  
 (9) begin eating in earnest in those areas wouldn't you?  
 (10) A There is a period of time where they just hatch out when  
 (11) they still have the yolk sac  
 (12) Q I'm talking about the adults now So these are the fish  
 (13) that have spawned in '89 and as I understand it your  
 (14) testimony on direct was that when they come in they don't eat  
 (15) for a while before they spawn?  
 (16) A That's correct  
 (17) Q But when they are done spawning they are voracious eaters  
 (18) are they not?  
 (19) A I believe that's the word I used  
 (20) Q And they begin their voracious eating in the same area they  
 (21) spawned do they not?  
 (22) A It's probable  
 (23) Q And they continue eating elsewhere?  
 (24) A They move to the summer feeding grounds yes  
 (25) Q Now you've not done any specific analysis as to what the

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- (1) conditions were in '89 in Prince William Sound in terms of  
 (2) where the food was that they were eating have you?  
 (3) A No  
 (4) Q And you haven't done any specific analysis with respect to  
 (5) the food chain effects or accumulation through food chain  
 (6) effects?  
 (7) A We've looked at the literature on potential exposure  
 (8) through ingested food  
 (9) Q But what I'm focusing on here you didn't do any research  
 (10) in connection with that?  
 (11) A Field study?  
 (12) Q Field study  
 (13) A No sir  
 (14) Q Now you're aware of a paper by Mr Anderson on the  
 (15) cumulative effects of petroleum hydrocarbons on marine  
 (16) crustaceans?  
 (17) A Yes sir  
 (18) Q And you've found significant in that paper that it presents  
 (19) the concept that it's not only the total level of hydrocarbons  
 (20) that's important to consider but also the duration of  
 (21) exposure how long the fish or other species are near  
 (22) connected with this hydrocarbon is that right?  
 (23) A That's correct  
 (24) Q And will you agree with me sir that the species that are  
 (25) in an environment where there is these water borne

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- (1) hydrocarbons where the hydrocarbons are mixed with water  
 (2) that  
 (3) they bioaccumulate that they accumulate the hydrocarbons in  
 (4) their system?  
 (5) A Are you speaking of all species or just herring?  
 (6) Q Let's talk first about herring Would you agree that  
 (7) herring bioaccumulate?  
 (8) A They can pick up hydrocarbons from the environment yes  
 (9) Q And that's not exactly what I wanted to get and you know  
 (10) that they don't just pick them up but they accumulate them  
 (11) over time?  
 (12) A Yes  
 (13) Q And mussels do that too don't they?  
 (14) A Yes  
 (15) Q And there was a major study by Trustees on mussels?  
 (16) A Yes  
 (17) Q And the Trustees found that fish that stayed pretty much in  
 (18) the same place Species that stayed in the intertidal areas  
 (19) like cut throat trout, there was significant problems a year  
 (20) and two years after the spill with those species?  
 (21) A I don't know about the problem They found evidence of  
 (22) exposure by examining the bile  
 (23) Q And these species are pretty much say residents in that  
 (24) near-shore environment?  
 (25) A If I recall the paper that's true of some but maybe not  
 (26) all

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- (1) Q The cut throat trout that s true of?  
 (2) A I m not totally familiar with cut throat but I think  
 (3) that s correct  
 (4) Q Now Exxon didn t do any work to determine the duration of  
 (5) exposure to Exxon Valdez oil - to the herring from Exxon s  
 (6) oil did it?  
 (7) A The work that was done on water quality speak to those  
 (8) issues  
 (9) Q But that has to do with the water in the area I m  
 (10) focusing on the fish itself Did Exxon do any work sir to  
 (11) look at what was happening to the fish through  
 bioaccumulation?  
 (12) A Not that I m aware of  
 (13) Q Now let s take a look at the work that you did You did  
 (14) study eggs and you did some work studying larvae didn t you?  
 (15) A Yes  
 (16) Q And you did laboratory analysis of field samples?  
 (17) A Yes sir  
 (18) Q And you didn t do any kind of experimental exposures of the  
 (19) field eggs though where you would bring the eggs back to the  
 (20) lab and experiment with different concentrations of oil?  
 (21) A Not then That was the subject of the API study  
 (22) Q What?  
 (23) A That kind of work had been done under the API study  
 (24) Q In 1985?  
 (25) A 83 and 82

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- (1) Q And reported in 85?  
 (2) A Right  
 (3) Q But you didn t do any of that sort of work in connection  
 (4) with the review of the Exxon Valdez effects?  
 (5) A No sir  
 (6) Q Now you re aware of research conducted by Dr Rice and  
 (7) research conducted by Dr Kocan on events of exposure to  
 (8) herring on hydrocarbons in various amounts over varying  
 periods  
 (9) of time aren t you?  
 (10) A Yes  
 (11) Q And you didn t analyze your data in any equivalent manner  
 (12) did you?  
 (13) A I m not sure I follow that  
 (14) Q Well you didn t do the same sort of work that Dr Kocan  
 (15) did or that Dr Rice did?  
 (16) A The API study has some parallels with both pieces of work  
 (17) Q But I m talking about the 1989 Exxon Valdez oil spill You  
 (18) didn t do it in 1989 did you?  
 (19) A No  
 (20) Q Now I found it interesting that you began to focus  
 (21) yesterday on this microlayer Is that called a neuston?  
 (22) A No The neuston sir are the animals that live at the  
 (23) surface of the ocean  
 (24) Q Did scientists sometimes use the term neustonic layer?  
 (25) A Yes sir although microlayer is the fashionable one these

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- (1) days  
 (2) Q Well let s use the fashionable one The microlayer is at  
 (3) the very top part of the ocean isn t it?  
 (4) A Yes  
 (5) Q And I think you told us yesterday that some people use the  
 (6) term to describe it where it s a few microns thick up to a  
 (7) millimeter And Prince William Sound herring can feed in the  
 (8) microlayer can t they?  
 (9) A They can feed at the surface yes  
 (10) Q And just so that we re sure when I say they can feed at  
 (11) the microlayer you re agreeing with me that they feed at the  
 (12) microlayer?  
 (13) A For some portion of them they can do that yes  
 (14) Q And you agree if you have Exxon Valdez crude at the  
 (15) microlayer that s a place where the juveniles could have been  
 (16) exposed?  
 (17) A There is some exposure that can occur there  
 (18) Q Now yesterday you told us that it tends to accumulate  
 (19) pollutants it being this microlayer tends to accumulate  
 (20) pollutants and you can find pollutants there in greater  
 (21) concentrations than you can in the water column beneath Is  
 (22) that true?  
 (23) A That s true  
 (24) Q Now you know that Dr Neff proposed to do a quantitative  
 (25) sheen study And sheen is that layer right on top of the

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- (1) microlayer isn t it?  
 (2) A Well sheen is visible oil or other - it s where something  
 (3) on the water becomes visible to the naked eye  
 (4) Q So when we re seeing a sheen that s part of that  
 (5) microlayer?  
 (6) A Yes sir  
 (7) Q Do you know that Dr Neff proposed to do a quantitative  
 (8) sheen study with specifically designed sampling to sample the  
 (9) thin layer right under the surface where the oil drifted and  
 (10) where oil might be washing off the beaches to see whether they  
 (11) were a potential hazard to aquatic animals but that Exxon  
 (12) decided not to do the study don t you?  
 (13) A I believe that s the case yes  
 (14) Q You re aware of research sir which indicates that toxins  
 (15) concentrate in this microlayer from a hundred to 10 000 times  
 (16) higher than in the surrounding water?  
 (17) A Yes  
 (18) Q And Exxon did no experimental work on the neuston or on  
 (19) this microlayer is the word that we re using?  
 (20) A Yes sir that s correct  
 (21) Q In fact do you know that when Exxon sampled for water  
 (22) quality its contractors were under orders to try not to get  
 (23) sheen or the top layer of the water for those samples which  
 (24) were called samples at zero depth?  
 (25) A I m not sure that that s the case sir I think -

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- (1) Q You don't know?  
 (2) A I don't know that  
 (3) Q Now yesterday you remember we talked a little bit about gas chromatograms. Do you remember that?  
 (4) A Yes  
 (5) Q And you said that the document you referred to which I think we gave the number 1978 showed that Dr. Kocan must have had some whole oil in his sample rather than diesel range hydrocarbons. Do you remember that?  
 (6) A We were talking about the presence of alkanes above their solubility.  
 (7) Q But you did tell us that indicated there was whole oil?  
 (8) A That there would be droplets.  
 (9) Q Now you had come to that by looking at some of these gas chromatograms that were in Dr. Kocan's field notes?  
 (10) A Lab notes.  
 (11) Q And when you looked at those lab notes did you see other gas chromatograms one of which said or which was a gas chromatogram of crude oil in solution and another one which was diesel oil in solution? Did you come across those?  
 (12) A I believe those were in there yes.  
 (13) Q There is a document next to you sir where I've collected a few of those. Do you see that?  
 (14) A Yes.  
 (15) Q Now probably Mr. Cooper was right yesterday that the jury

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- (1) isn't particularly concerned about these gas chromatograms  
 (2) certainly not as much as I am but I want you to look sir for a moment at the diesel gas chromatogram and the crude oil gas chromatogram that are in that document  
 (3) A Yes  
 (4) Q Will you agree with me sir that the gas chromatogram that is displayed and that you talked about yesterday with Mr. Cooper and that's the one that has 1271 in the corner is essentially the equivalent of that for diesel oil?  
 (5) A You're going to need to walk me through it again  
 (6) Q I will. You might guess I've walked myself through them a couple times  
 (7) Here is the diesel oil one and that has a particular pattern of responses to these different hydrocarbon chemicals which make up crude oil and make up diesel which is some components of crude oil?  
 (8) A Right  
 (9) Q And then there is another one 1271 that Mr. Cooper referred you to yesterday  
 (10) A Yes  
 (11) Q And finally there is one for Valdez crude oil  
 (12) A Yes  
 (13) Q And the Valdez crude oil one reflects a bunch of peaks  
 (14) does it not -  
 (15) A Yes

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- (1) Q - that are in the upper chain that go up to the hydrocarbon chemicals that have 32 and 33 and 34 atoms of carbon in them?  
 (2) A Yes  
 (3) Q And there are distinct peaks in that range in the crude oil one?  
 (4) A Yes  
 (5) Q Now let's go back and look at the one that's diesel oil in solution. The peaks there stop around C 24 don't they?  
 (6) A I think that there are some that go out a little bit further than that  
 (7) Q A little bit further but not out to C 34. It's not a crude oil gas chromatogram is it?  
 (8) A It's cutoff a little bit at the higher ends yes  
 (9) Q It's not a crude oil gas chromatogram is it? The base line for the diesel fuel oil which is these dots stops and that's below C-24 right?  
 (10) A C-24 is here in the diesel  
 (11) Q Right the base line stops for the diesel and there is a C-24 peak right?  
 (12) A Well there is peaks beyond C 24  
 (13) Q Very low?  
 (14) A Yes  
 (15) Q Not consistent with crude oil right?  
 (16) A It doesn't go out as far as the crude oil yes

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- (1) Q Now will you agree with me that the gas chromatogram that you looked at yesterday and that for diesel oil which I put before you now are essentially the same? Will you look at them closely? And sir I'll add one more thing. If you don't know it's okay to say that  
 (2) A I'm looking at E 2 now?  
 (3) Q Yep That's the sample Mr. Cooper showed you yesterday  
 (4) A And the question is?  
 (5) Q Aren't the gas chromatograms for the diesel which is what Dr. Kocan said he was looking for and that Mr. Cooper showed you yesterday essentially the same?  
 (6) A In terms of where they stop?  
 (7) Q Yes sir  
 (8) A It appears that they are more similar yes  
 (9) Q So the one that Mr. Cooper showed you yesterday is not evidence that crude oil was in that sample is it? It's evidence that diesel was in that sample?  
 (10) A You mean diesel fractions?  
 (11) Q Diesel fractions you bet ya  
 (12) A He didn't use diesel oil for its preparations. What we're talking about is that the alkanes that were present in both diesel - or can be present in diesel and are also present in crude oil were in there  
 (13) Q But if whole crude oil sir had gotten into the solution wouldn't you see the equivalent of the crude oil sample that

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- (1) I've shown you?
- (2) A One would have to look at whether they cut the - you would
- (3) have to look at the methodology because sometimes -
- (4) because
- (5) some of these take a long time to elute a long time for the
- (6) higher fractions to come out of the machine They often cut
- (7) things off at different levels and when you look at the Valdez
- (8) crude oil the runs appear to be a bit longer on that analysis
- (9) than they do on the one that was done under the diesel
- (10) protocol
- (11) So without going back to the actual methodology I can't
- (12) really tell whether the supposition here - I need to do more
- (13) analysis
- (14) Q But will you give me sir that on the basis of the gas
- (15) chromatograms that what Mr Cooper showed you yesterday is
- (16) much closer to the gas chromatogram for the diesel fuel than it
- (17) is for crude oil?
- (18) A Based on sheer pattern you're correct but I don't think
- (19) that's the issue
- (20) Q Now remember yesterday we talked - or actually Mr Cooper
- (21) and you talked a little bit about another criticism that you
- (22) leveled at Dr Kocan for his work and we'll call that the
- (23) spike criticism You said that by putting fresh solution every
- (24) couple days into his samples that Dr Kocan was introducing
- (25) spikes?
- (26) A Yes that's what he was doing

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- (1) Q And your point was that they were artificial and so that
- (2) fouled up the experiment is that right?
- (3) A No that's not exactly the point
- (4) Q What was the point sir?
- (5) A The point was that when you look at that he only reported
- (6) for that particular concentration something on the order of ten
- (7) PPB - yes ten PPB when in fact for part of the time he had
- (8) something on the order of 70 and at the end of the 48 hours he
- (9) had something on the order of 20
- (10) Q Did you review Dr Kocan's testimony in this area sir
- (11) from the trial?
- (12) A Yes
- (13) Q And you remember when Dr Kocan said that this kind of
- (14) thing could definitely have happened out in the field?
- (15) A In the sense of - I don't recall that specifically
- (16) Q Well let's take a look and see whether we can get some
- (17) agreement here This is a picture sir that's been previously
- (18) admitted and will you give me this is an example of some of
- (19) the floating slick adjacent to a beach?
- (20) A I'm not sure I can discern all of that from that picture
- (21) but I will give you that they are slicks
- (22) Q Let me do this I'll show you the picture because I know
- (23) it's a lot easier to see from the stand
- (24) A I'm not sure what I'm looking at there That could be
- (25) shallow water with some vegetation

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- (1) Q Well let's just talk generally about slicks adjacent to
- (2) the shore then You're not sure this is oil adjacent to the
- (3) shoreline?
- (4) A No
- (5) Q Will you agree with me sir that when oil is on top of the
- (6) water that this capacity for evaporation of the VOAs is
- (7) decreased because there is a barrier and the barrier is the
- (8) oil?
- (9) A Well the VOAs are going to come out of the oil itself
- (10) evaporate out of the oil itself
- (11) Q But for the VOAs in the water it's easier for them to
- (12) evaporate when there is no oil on top?
- (13) A That's probably true
- (14) Q And the same thing is true for those polycyclic aromatics
- (15) those PAHs isn't it?
- (16) A For those that evaporate
- (17) Q Now yesterday you said that Dr Kocan's work was kind of
- (18) like nine oil spills every another day Do you remember that?
- (19) A Yes
- (20) Q And you'll also agree with me will you not that when the
- (21) oil is on top of the water floating around moving through the
- (22) water that in addition to some evaporation of the lighter
- (23) components from the oil that some of the oil is being
- (24) dissolved into the water that's adjacent to the oil isn't it?
- (25) A That's correct

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- (1) Q So for an area that has the oil going through it like we
- (2) saw on that HAZMAT video yesterday and we're going to take a
- (3) look at that but for an area that has it going through it and
- (4) it's going through it for two weeks or three weeks every day
- (5) every hour there is this dissolution into the water this
- (6) solution process isn't there?
- (7) A Yes it dominates at the beginning part and becomes less
- (8) later
- (9) Q But sir you'll give me that that first week that second
- (10) week that third week as the oil was moving through Prince
- (11) William Sound that's the early stage of the process isn't it?
- (12) A The first week certainly
- (13) Q So if we're at a particular spot and the oil is passing
- (14) through it it feels like there was an oil spill every day for
- (15) seven days or two weeks isn't it in terms of the solution of
- (16) the oil into the water?
- (17) A As the slick is passing?
- (18) Q Yes sir
- (19) A Yes sir
- (20) Q So if Dr Kocan was interested in getting a feel for what
- (21) it was like for animals either feeding larvae that are
- (22) underneath this slick those spikes what you called spikes
- (23) they are not out of the ordinary are they they are what we
- (24) would expect?
- (25) A Not necessarily over an 18-day time frame though

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- (1) Q Okay I'll take the not necessarily  
 (2) Now let me take a couple seconds Do you have 247-A?  
 (3) This is a tape sir that Mr Rosenthal put together that s  
 (4) in evidence I'm just going to show you about five seconds of  
 (5) it  
 (6) (Videotape played)  
 (7) Q It was only about three seconds Did you see that?  
 (8) A Yes  
 (9) Q Now that was a fellow picking up some of the spawn that  
 (10) had oil on it?  
 (11) A He was picking up spawn I don't recall -  
 (12) Q Well let me represent to you that Mr Rosenthal's  
 (13) testimony was that he was taking a picture of a fellow picking  
 (14) up spawn with oil on it  
 (15) A All right  
 (16) Q If the spawn is oiled that's where you agree there is an  
 (17) event with the oil directly in contact with the embryos?  
 (18) A Yes sir  
 (19) Q That was what you got from your '85 research?  
 (20) A Correct and Dr Hayes work  
 (21) Q Now if that picture that we just saw was at low tide and  
 (22) I'm going to represent to you that it was and later seawater  
 (23) covered it as the tide came in and seawater covered it then  
 (24) the percentage of oil in the water might not tell us the whole  
 (25) story about those embryos right because they were already

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- (1) oiled?  
 (2) A Are you talking about the water column concentrations?  
 (3) Q The water column concentrations that's right  
 (4) A That's correct  
 (5) Q In fact water column concentrations in that situation  
 (6) might be deceptive because some water might have come in  
 (7) that  
 (8) was relatively clean to that area which had previously been  
 (9) oiled?  
 (10) A It's clear from my API work that the droplets are - the  
 (11) intimate contact with the oil and the eggs are the issue  
 (12) Q I understand that sir but with respect - I don't think  
 (13) that was an answer to my question  
 (14) A I'm sorry  
 (15) Q I'm asking whether if water comes in and the water is  
 (16) fairly clean there aren't a whole bunch of VOA and PAHs in it  
 (17) and we looked at water quality adjacent to the embryos that  
 (18) that might be deceptive because we know that as you pointed  
 (19) out in '85 the spawn are oiled and that's the real problem?  
 (20) A Yes sir  
 (21) Q Now let's take a look at one other thing that we talked  
 (22) about yesterday about Dr Kocan's work This was PX499  
 (23) Now Dr Kocan on this table is indicating is he not that  
 (24) at no oil in the water we would expect to find eight percent of  
 (25) this chromosome damage problem and that at 1 parts per  
 million - excuse me 01 parts per million which is about ten

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- (1) parts per billion we would expect to find about 18 or 19?  
 (2) A That's what I believe he said yes  
 (3) Q Now yesterday Mr Cooper asked you So somewhere in  
 (4) between ten this orange column and the blue column is where  
 (5) the problem starts Do you remember that? You were asked  
 (6) that  
 (7) question?  
 (8) A Yes  
 (9) Q And you answered Yes that's where he's starting to see  
 (10) it And you meant Dr Kocan right?  
 (11) A Yes  
 (12) Q But will you give to me sir with respect to the general  
 (13) approach to reading a table that if this area right here  
 (14) (indicating) is what happens when we're at zero and this area  
 (15) the orange part is what happens at 01 that the effect is  
 (16) starting someplace between the dark blue and the orange not  
 (17) the orange and the light blue?  
 (18) A You have to do it - you may want to do some statistical  
 (19) analysis to see which one of those bars is statistically  
 (20) different from the control or untreated situation but in  
 (21) general yes  
 (22) Q I mean yesterday you made a representation that it was  
 (23) between the orange and the light blue without any statistical  
 (24) analysis or error bars didn't you?  
 (25) A I believe I was trying to recall what he was saying and  
 there were two points at which he had referenced the beginning

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- (1) of abnormalities One was at the 250 PPB level for his  
 (2) morphological abnormalities which would be in another graph  
 (3) would be the bar the furthest to the right, and ten PPB for the  
 (4) chromosomes  
 (5) Q Sir again with respect I'm not sure you answered my  
 (6) question  
 (7) A Well I guess I've lost it  
 (8) Q Let me get you back on track  
 (9) Yesterday Mr Cooper said to you specifically somewhere  
 (10) between ten PPBs which is here and 24 PPBs and Mr Cooper  
 (11) was wrong This is really 240 PPBs isn't it?  
 (12) A Right  
 (13) Q He's saying he's seeing chromosome damage and Mr  
 (14) Cooper  
 (15) was talking about Dr Kocan and you said yes that's where  
 (16) he's starting to see it  
 (17) And now you'll agree with me that he was starting to see  
 (18) damage someplace between the sample with no hydrocarbons  
 (19) and 01 parts per million that's where he was starting to see  
 (20) damage isn't it?  
 (21) A He's starting to see damage by his observations at 10  
 (22) PPB and I believe that's the statement that he makes in his  
 (23) documents The morphological ones start at 24 the  
 (24) morphological abnormalities start at 240 PPB  
 (25) Q But you're agreeing with me now sir he's starting to see  
 it here (indicating)?

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- (1) A Yes
- (2) Q And that if this is 18 or 19 parts some of the problem is
- (3) happening before here isn't it? You know enough from the way
- (4) you do science it doesn't go in big steps it works up
- (5) gradually doesn't it?
- (6) A Yes but you don't know exactly where the threshold is
- (7) Q I agree with that But someplace between zero and 01?
- (8) A Ten PPB yeah
- (9) Q Now is it your understanding sir that Dr Marty found
- (10) that 20 percent of the Prince William Sound herring that he
- (11) examined following the oil spill had moderate or severe hepatic
- (12) necrosis?
- (13) A I'm not sure whether it was 20 percent of all the herring
- (14) or 20 percent from the oiled area
- (15) Q Now let me just bring you to your deposition and see if
- (16) that helps you refresh your recollection because I know it was
- (17) awhile ago since you've talked with us about this
- (18) One of the pages up there sir and it doesn't look like we
- (19) have to refer to this very often 426 12 to 16 Do you want
- (20) to take a look at that?
- (21) A Is it your understanding that Dr Marty found 20 percent
- (22) of the Prince William Sound herring that he examined had
- (23) moderate or severe hepatic necrosis?
- (24) Q What's your understanding?
- (25) A That's my understanding

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- (1) Q What is hepatic necrosis?
- (2) A It's a lesion that's found in the liver It can be either
- (3) single or multiple It's where a cell or a group of cells have
- (4) died
- (5) Q Your understanding was that Dr Marty was stating from the
- (6) results of his research that because of the oil spill and in
- (7) talking about 1989 now ten percent more herring died?
- (8) A I don't think he said that ten percent more herring died
- (9) I think he was saying that the mortality rate - based on his
- (10) observations the mortality rate would have gone up ten
- (11) percent but that was an estimate
- (12) Q Now John Wilcock Evelyn Biggs Brown both of ADF&G
- (13) joined Dr Kocan in disagreeing with you and opine that the oil
- (14) spill caused the 1993 and 1994 herring crashes don't they?
- (15) A Dr Kocan did I think probably Miss Biggs I don't know
- (16) about Mr Wilcock
- (17) Q Well in your deposition sir let me see if I can refresh
- (18) your recollection again Do you remember indicating that Dr
- (19) Wilcock of ADF&G during the international herring symposium
- (20) indicated that it may have been contributed?
- (21) A Yes but I didn't think that was as strong a statement as
- (22) what you were -
- (23) Q So he says it may have been contributed?
- (24) A Yes
- (25) Q And you'll give me that Dr Biggs Brown says that it

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- (1) contributed?
- (2) A And I'll give you that Miss Biggs also is of the opinion
- (3) that it's connected to the oil spill
- (4) Q Okay fair enough And you know that some of the herring
- (5) that returned in 1993 had more herring worms in their ovaries
- (6) than they should have correct?
- (7) A That was one observation
- (8) Q And those two researchers Moles (ph) and Mr Stan Rice
- (9) have concluded that at certain levels of oil exposure herring
- (10) have more parasites and the parasites that they have move to
- (11) other parts of their bodies is that correct?
- (12) A That's their study yes
- (13) Q And in your own 1989 field research you found that some of
- (14) the herring larvae had swollen pericardial abnormalities
- (15) didn't you?
- (16) A Yes
- (17) Q And this is a particular kind of abnormality which you
- (18) understood had theretofore been seen only under chemical
- (19) exposure in a laboratory or in an oil spill situation correct?
- (20) A Yes that was my understanding
- (21) Q And in your own 1985 research for the petroleum institute
- (22) your own work found that crude oil produced elevated levels of
- (23) abnormalities in larval herring is that correct?
- (24) A Yes
- (25) Q Now yesterday sir remember when you narrated a tape of

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- (1) that HAZMAT video that Mr Gault had put together the NOAA
- (2) fellow?
- (3) A Yes
- (4) Q And it showed us the oil in comparison to spawning?
- (5) A Yes
- (6) Q And the point you were trying to make was that there wasn't
- (7) much overlap between '89 spawning and I think you were real
- (8) careful here you said oiling of the beaches which were
- (9) adjacent to the spawn?
- (10) A Correct
- (11) Q And I think you said there was nine percent overlap?
- (12) A That was a rough figure yes
- (13) Q Now will you acknowledge that the Alaska Department of
- (14) Fish & Game says that 40 to 50 percent of the spawn in '89 were
- (15) exposed to the Exxon Valdez oil?
- (16) A I think they are talking about the areas
- (17) Q But you'll acknowledge they were saying that was the level
- (18) of exposure sir? They are not talking about the beaches are
- (19) they?
- (20) A They are talking about the whole area where the spawn
- (21) occurs compared to the spill
- (22) Q You'll agree that's their number?
- (23) A 40 to 50?
- (24) Q Yes
- (25) A Yes



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- (1) Q And you will acknowledge that ADF&G didn't rely on  
 (2) shoreline oiling data but on data from mussels that were in  
 (3) the water to tell if there was exposure or not?  
 (4) A I'm not sure that's entirely the case but I believe they  
 (5) also looked oil spill trajectory kinds of things  
 (6) Q But you will give me that they relied in part on mussels  
 (7) that were in the water to see whether oil was there?  
 (8) A Correct  
 (9) Q So they relied on trajectories and by that you mean where  
 (10) we would see the oil?  
 (11) A Right  
 (12) Q And where we would see the oil in the water right?  
 (13) A Yes  
 (14) Q And they also relied on these samples of mussels that were  
 (15) in the water and they would check to see by putting clean  
 (16) mussels in the water whether they would bioaccumulate is that  
 (17) right?  
 (18) A Yes  
 (19) Q And if the mussels were bioaccumulating oil then ADF&G  
 (20) said that looks to us as if there is oil there is that right?  
 (21) A Yes You do have to do some things to look - whether  
 (22) you're looking at diesel or some other kind of thing  
 (23) Q Sure Now yesterday - let's show that tape of March 31  
 (24) (Videotape played)  
 (25) Q I'm going to try and freeze it on March 31 sir because

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- (1) you testified to this  
 (2) We got it on April 1 but that's close enough Remember  
 (3) you said yesterday - let's go back to March 31 because I want  
 (4) to quote and I want to get it right  
 (5) There we go perfect You said yesterday that's on March  
 (6) 31st The oil is down here at that point and there is very  
 (7) little around Naked Island at that point Is that what you  
 (8) said?  
 (9) A I believe so  
 (10) Q Now did you have a chance to listen to Dr Jahns when he  
 (11) was here the fella that had been the Exxon head NRDA  
 (12) scientist?  
 (13) A No  
 (14) Q Did you look at his trial testimony at all?  
 (15) A No  
 (16) Q Well you're not trying to tell us sir that because the  
 (17) HAZMAT picture shows the surface oil down here that there  
 (18) wasn't a whole bunch of oil still on Naked Island?  
 (19) A No I wasn't  
 (20) Q And would you agree with me sir that roughly 40 percent  
 (21) of the oil or in excess of 40 percent of the oil that came out  
 (22) of the Exxon Valdez after striking Bligh Reef lodged itself or  
 (23) stranded itself on the beaches of Prince William Sound during  
 (24) the summer of 1989?  
 (25) A I believe that's to quote the number Doctor Wolf talked

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- (1) about  
 (2) Q And you don't know whether Dr Jahns talked about it or  
 (3) not?  
 (4) A I don't know specifically but that's for the whole of the  
 (5) Sound  
 (6) Q But this is the area down here this southwestern area that  
 (7) we're talking about?  
 (8) A Yes  
 (9) Q And Naked Island got a good shot of that didn't it?  
 (10) A It got some of it The bulk of it I think is on the Knight  
 (11) Island archipelago  
 (12) Q I'll agree with you there Now yesterday you also  
 (13) testified that by April 25 the bulk of the slick had passed out  
 (14) of the Sound Do you remember that testimony?  
 (15) A Was it April 25th or April 7th?  
 (16) Q Well let's see if I can -  
 (17) Let me show you from yesterday's transcript at 6362 this  
 (18) area that I've highlighted there in the red  
 (19) A The model as I recall runs until the 25th is that it  
 (20) yes and you can see that the bulk of the spill has passed out  
 (21) of the Sound  
 (22) Q So the model runs to April 25th or do you want to check  
 (23) that to make sure?  
 (24) A No the model runs to April 25  
 (25) Q So you told us yesterday that the bulk of the oil had gone

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- (1) out of the Sound by then?  
 (2) A Actually if you read Dr Gault's paper I think he talks  
 (3) of it going out in the first week of April  
 (4) Q But I want to focus on this idea of the bulk of the oil  
 (5) Wouldn't you agree with me that if roughly 25 evaporated and  
 (6) 40  
 (7) percent was on the beaches that only leaves 35 percent that  
 (8) worked its way out of the Sound to hit the Kenai Peninsula and  
 (9) Kodiak and 35 isn't the bulk?  
 (10) A To be more precise I should have said the bulk of the  
 (11) slick  
 (12) Q All right thank you sir And that's because 40 percent  
 (13) of that oil that was in the form of a slick up by Bligh Reef  
 (14) had lodged or stranded on the beaches is that right?  
 (15) A Yes  
 (16) Q So it was the bulk of the remaining slick?  
 (17) A Yes  
 (18) Q Would you agree with me sir that Prince William Sound  
 (19) herring fishermen earned very little income from that fishery  
 (20) in '93?  
 (21) A I don't know what their income was but the fishery did not  
 (22) return much  
 (23) Q Well you've characterized the 1993 Prince William Sound  
 (24) season as a crash haven't you?  
 (25) A Yes  
 (26) Q And there is no place other than Prince William Sound in

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- (1) the state of Alaska that suffered a herring crash in 1993 is there?
- (2) A Not that I m aware of as a crash
- (3) Q And you re not aware of any other herring fishery in the state of Alaska in 1994 where there were not enough herring to open the season are you?
- (4) A No sir
- (5) Q Back when your deposition was taken in January of 94 you characterized what happened in Prince William Sound with respect to herring in 1993 as unusual and unexpected didn t you?
- (6) A Yes sir
- (7) Q And you thought that we might see the fish come back in 1994 didn t you?
- (8) A Yes
- (9) Q And it was your opinion then that the 1994 season would be a return to something more normal?
- (10) A I don t think that s quite what I was trying to convey
- (11) What I was trying to convey if there were nutritional problems and the fish failed to elaborate eggs they still might be alive and not come back to the beach But what happened in 94
- (12) would tell us whether that explanation was credible or not
- (13) Q Let me ask you if you would turn to page 244 of your deposition
- (14) Are you with me on that sir?

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- (1) A Had to find the right volume
- (2) Q 244 and we ll start about line 1 Do you remember being asked this question Do you have a prediction as to what will happen in the 1994 herring season in Prince William Sound?
- (3) And you said I don t care to - I don t think anyone knows for sure Okay? I believe we didn t see fish killed I think they just didn t come to the beach and we may see them next year
- (4) And you were asked Which would mean it would be a large harvest or amount?
- (5) And you said It would be a return to something more normal let s say Were those your words?
- (6) A Yes
- (7) Q You don t hold that opinion any longer with respect to the 1994 season do you that s because the fish didn t show up in 1994?
- (8) A Correct
- (9) Q It s now your opinion that the fish are gone?
- (10) A Yes
- (11) Q Now I want to just do one more thing sir and I m going to have you off in less than an hour I know we listened to you over three hours on direct but I want to talk to you about this idea of temperature Okay?
- (12) As of your deposition about ten days ago you were trying to get data regarding water temperatures in support of your

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- (1) opinion that cold water affected herring is that right?
- (2) A That s correct
- (3) Q And in the last two weeks you ve worked ten to 12 hours a day with Roger Melton and Exxon scientists and others working on this theory that in 1993 and 1994 failures had to do with temperature is that right?
- (4) A I ve been doing other things besides that and the issue of temperature preceded coming here for the trial
- (5) Q Will you give me that you have spent a great deal of time working on this temperature theory over the last couple weeks?
- (6) A Yes
- (7) Q And working with Roger Melton?
- (8) A Yes as well as people in my own laboratory have been running stuff down
- (9) Q And you concluded that water temperature in Prince William Sound in the winter of 1992 and 93 was a problem?
- (10) A Yes
- (11) Q But you ll agree with me that the water in Prince William Sound in 1993 and 94 was normal?
- (12) A It went back up
- (13) Q And the temperature data that you reviewed went back to about 83 or 84?
- (14) A That s correct
- (15) Q And the reason you didn t go back any further in time was because of time constraints trying to get this job done over

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- (1) the last ten days?
- (2) A Correct
- (3) Q If you would have had the time you would have gone back and looked at temperatures at least back to the 70s is that right?
- (4) A That s correct
- (5) Q And during the time period you analyzed you determined that the winter of 88/ 89 was cold too?
- (6) A That s correct
- (7) Q And just about as cold as the 92/ 93 year?
- (8) A Just about not quite
- (9) Q And you didn t synthesize all the data for all the areas for which temperatures were reported in Prince William Sound to arrive at your minimal temperature figures did you?
- (10) A No
- (11) Q You focused on a particular spot?
- (12) A We focused on the area around Montague
- (13) Q And you didn t do any specific analysis of other areas of the temperature in other areas of Prince William Sound?
- (14) A No sir
- (15) Q Just wasn t time?
- (16) A Correct
- (17) Q And you didn t compare the temperature in other areas like Cook Inlet because there just wasn t time?
- (18) A Only Sitka was the only other area I looked at

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- (1) Q And you didn't compare information about temperatures in  
 (2) Kodiak because there wasn't time?  
 (3) A Correct  
 (4) Q And so you can't sit here today and discount the  
 (5) possibility that if you looked at Kodiak Cook Inlet further  
 (6) back in Prince William Sound and even further back in Sitka  
 (7) you would see over time there were instances like in '88 and  
 (8) '89 in Prince William Sound where the temperature dropped as  
 (9) much as two or three degrees for one winter or another and  
 (10) didn't affect herring can you?  
 (11) A I'm not sure I follow that all but I think if you're  
 (12) asking me whether there was similar temperature drops  
 elsewhere  
 (13) and no decline and I haven't examined that fully I think the  
 (14) answer is yes  
 (15) Q You just didn't look?  
 (16) A Correct  
 (17) MR JAMIN Thank you sir  
 (18) REDIRECT EXAMINATION OF WALTER PEARSON  
 (19) BY MR COOPER  
 (20) Q Dr Pearson let me try and run through some points here  
 (21) If we can reasonably quickly  
 (22) Mr Jamin asked you questions about some people from Exxon  
 (23) that helped you in pulling together the information -  
 (24) A Yes  
 (25) Q - that you've utilized?

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- (1) A Yes  
 (2) Q Is in fact that an accurate characterization what they did  
 (3) did they help you attain information that you were seeking?  
 (4) A That's correct  
 (5) Q Did you also have people working with you from your own  
 (6) organization Batelle?  
 (7) A Yes  
 (8) Q Who were some of those principal people that worked with  
 (9) you?  
 (10) A The person who was doing a lot of work in recent time was  
 (11) Mr Lee Attrum (ph) and he was assisted by Dr Collin at some  
 (12) points and by some of the physical oceanographers and  
 others  
 (13) Q About how many people all together from Batelle have  
 helped  
 (14) you with this project?  
 (15) A In the last year or so?  
 (16) Q Well all together as I recall the number right it was  
 (17) 60 70 something like that?  
 (18) A Over the whole time frame of the project something on the  
 (19) order of 80 people have been involved Some of those have  
 been  
 (20) from Batelle some of those have been from other  
 (21) organizations People have come in and out of the project  
 (22) depending on the skills that were needed at the time  
 (23) Q And these people were people who were not Exxon  
 employees?  
 (24) A That's correct  
 (25) Q Had Exxon dictated to you what you should have in your

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- (1) reports?  
 (2) A No sir  
 (3) Q Have you had a free hand to basically write and express the  
 (4) opinions that are your own?  
 (5) A That's correct sir  
 (6) Q In fact would Batelle accept an assignment under any other  
 (7) circumstances?  
 (8) A No sir  
 (9) Q Does Batelle normally accept assignments if it's going to  
 (10) involve litigation?  
 (11) A It does not normally do so  
 (12) Q It made an exception here?  
 (13) A Actually what happens if you come to ask us will you  
 (14) testify and that's all that was involved we would decline  
 (15) At the time we were asked to undertake this piece of work it  
 (16) was to do a long-term study in Prince William Sound where we  
 (17) would be doing a large research project The litigation aspect  
 (18) only came in later  
 (19) Q And your primary interest when this began was as a science  
 (20) project?  
 (21) A That's correct sir  
 (22) Q And you wouldn't let Exxon dictate to you what your science  
 (23) outcome would be would you?  
 (24) A I wouldn't let my client do that  
 (25) Q In fact we've had some witness up here as I recall one of

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- (1) the plaintiffs' experts who indicated he testified 15 or 20  
 (2) times as an expert witness Have you been an expert witness in  
 (3) many cases?  
 (4) A This is my first experience with the court system as an  
 (5) expert witness  
 (6) Q Now Dr Pearson Mr Jamin asked you some questions  
 about  
 (7) a study that Miss Norcross did Do you recall those?  
 (8) A Yes  
 (9) Q I believe if I remember correctly she trawled up larvae  
 (10) at various places and examined the larvae?  
 (11) A Yes  
 (12) Q Question number one that was dealing with which year  
 (13) class?  
 (14) A That was dealing with the '89 year class  
 (15) Q Question number two what would that year class - what at  
 (16) most would that year class have contributed to the 1993  
 (17) herring biomass composition?  
 (18) A Somewhere between three and four percent depending on  
 (19) whether you talk by number or weight  
 (20) Q So as we have discussed and I don't want to dwell on even  
 (21) if that entire year class had been wiped out which I  
 (22) understand you don't think it was could that account for the  
 (23) '93 herring failure?  
 (24) A No sir  
 (25) Q Now one other point on Miss Norcross paper Is my

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- (1) recollection correct that she dredged up or towed up larvae?
- (2) Dredged is probably the wrong word
- (3) A Dredge is not correct It s towed
- (4) Q She towed up larvae from oiled and unoiled places in the
- (5) Sound?
- (6) A Yes
- (7) Q And she found no difference between the oiled and unoiled
- (8) areas?
- (9) A No What sense in terms of the density or other things?
- (10) Q Well were there aspects of it where she found no
- (11) difference?
- (12) A Yes sir
- (13) Q Do you recall what those were?
- (14) A No sir
- (15) Q Now you were asked questions about the juveniles the
- (16) herring that are beyond the larvae stage but not yet adult
- (17) spawners and you were asked questions about whether you
- (18) studied those Do you recall that?
- (19) A Yes
- (20) Q Now you didn t do any field studies regarding those
- (21) herring?
- (22) A That s correct
- (23) Q But did you - you in your testimony you were telling us
- (24) about these juveniles among other things For instance where
- (25) they were along the Kenai?

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- (1) Q You mentioned a 1989 artificial spawn study Dr Jamin -
- (2) I m going to have him be a doctor here pretty soon
- (3) MR JAMIN I will accept it
- (4) MR COOPER Doctor of law right?
- (5) BY MR COOPER
- (6) Q Mr Jamin asked you questions about that study and why it
- (7) was terminated Can you describe the circumstances there?
- (8) A On the prespawning adults?
- (9) Q Yes I assume that s the one he was talking about
- (10) A In order to do a study on prespawning adults you have to
- (11) have prespawning adults and we didn t get up there until the
- (12) middle part of April so the bulk of the fish that we would
- (13) have liked to have caught were - they had done their thing and
- (14) moved on And so we only ended up with fish from two bays
- (15) and
- (16) the fish from one bay were spawned out and I ended up having
- (17) only one - kind of half of a study and I didn t think that
- (18) was worthy of making much of one way or the other
- (19) Q That would have been sloppy science to use only a few
- (20) results?
- (21) A To have only one sample
- (22) Q You didn t terminate that study because Exxon came along
- (23) and said hey we don t like this and stop it?
- (24) A No it was the events in the field And you know the
- (25) histopathological work those were perfectly good samples to

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- (1) A Right
- (2) Q You have looked at literature and other sources in order to
- (3) find out information about those juveniles?
- (4) A Yes sir
- (5) Q You didn t come to your conclusions about those fish just
- (6) based upon nothing?
- (7) A That s correct
- (8) Q Let s see Mr Jamin pointed out that the Kenai area the
- (9) districts along the Kenai were closed because of oil Do you
- (10) remember that subject matter?
- (11) A Yes sir
- (12) Q Now the water quality measurements that you testified to
- (13) in your direct examination along the Kenai - I ll just put
- (14) this on the Elmo This was Exhibit 6146 These water quality
- (15) measurements here - well those are far below the State of
- (16) Alaska ten part per billion threshold?
- (17) A Yes sir
- (18) Q And those samples were taken generally along those areas
- (19) of
- (20) the Kenai where these juveniles were found?
- (21) A Yes sir
- (22) Q So even if there were closures because of the oil spill
- (23) nevertheless the water in those closed areas according to Dr
- (24) Neff s measurements and the NOAA measurements were way
- (25) below

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- (1) spawning just didn t work out
- (2) Q Now Dr Pearson Mr Jamin asked you some questions
- (3) about
- (4) looking to see what might or to what extent fish may have been
- (5) bioaccumulating oil?
- (6) A Yes
- (7) Q Incidentally if I recall correctly you did look at some
- (8) tissue samples from herring adults?
- (9) A Yes we did
- (10) Q Did that have any indication whether there was any kind of
- (11) bioaccumulation?
- (12) A Yes
- (13) Q What did that show?
- (14) A Slight accumulation That was some PAHs in there
- (15) Q But nothing particularly high?
- (16) A No
- (17) Q And in fact if there had been a real problem with
- (18) bioaccumulation would you have expected to see - this is
- (19) Exhibit 4946 A Would you have expected to see this very
- (20) large - these very large herring biomasses come in in 91 and
- (21) 92?
- (22) A No sir
- (23) Q Now Mr Jamin also asked you about whether you did a lab
- (24) exposure study pointing out that Dr Kocan did You
- (25) mentioned

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- (1) A The work was performed in 1982 and 1983 and reported in
- (2) 1985
- (3) Q That was a study that took basically - required a couple
- (4) years to complete?
- (5) A We did the work in two years
- (6) Q Was it a very thorough study?
- (7) A It was a good study
- (8) Q And that was a study of the effects of oil on herring?
- (9) A Effects of oil on herring eggs
- (10) Q You didn't see any reason or need then to have to go and
- (11) do the same study all over again after the spill?
- (12) A That was part of it yes
- (13) Q Now he asked you a number of questions concerning the
- (14) microlayer situation. Incidentally do you know whether there
- (15) was a study done of sheens?
- (16) A There was a sheen study done but the study that Dr
- (17) Neff - or I think that they were referring to that Dr Neff
- (18) had proposed was not done
- (19) Q Mr Jamin didn't refer to any other sheen studies he just
- (20) asked you about Dr Neff's?
- (21) A Yes
- (22) Q Did that sheen study indicate whether or not the sheens
- (23) were a - well did that sheen study shed any light onto the
- (24) extent which the herring may have been exposed in the
- (25) microlayer where the sheen was?

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- (1) A It indicates that the sheens would come - when you had
- (2) winter storms that you would see sheens right after the winter
- (3) storms that by 1990 most of the sheens that they were seeing
- (4) were due to vessel traffic or to natural sources
- (5) Q Now Mr Jamin asked you questions about whether Exxon
- (6) had done a microlayer study. Did Dr Kocan do a microlayer study?
- (7) A Not that I know of. He's done microlayer studies but not
- (8) in connection with the spill
- (9) Q Not in connection with the Exxon Valdez oil spill that
- (10) you're aware of?
- (11) A That's correct
- (12) Q Did the Trustees do any microlayer study in connection with
- (13) the Exxon Valdez oil spill?
- (14) A Not that I'm aware of
- (15) Q Dr Pearson Mr Jamin also inquired of you about the -
- (16) Dr Kocan's lab experiment. Do you remember that general
- (17) subject?
- (18) A Yes
- (19) Q And he asked you questions about whether some of these
- (20) chromatograms were in fact diesel. Do you recall that?
- (21) A Yes
- (22) Q If Dr Kocan was using diesel fuel to expose these herring
- (23) would that have been at all reflective of what was going on out
- (24) in the field in the real world?
- (25) A No he wasn't using diesel. He was using a protocol for

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- (1) the analytical work where he's looking at what he calls the
- (2) gasoline fraction and the diesel fraction. So the word really
- (3) doesn't apply at all in this situation in the sense of what
- (4) you're talking about. He used crude oil to prepare his
- (5) abstracts - or his extracts
- (6) Q Are you saying in some of the fractions the components of
- (7) crude oil are the diesel range?
- (8) A Yes so they make diesel fuel from crude oil
- (9) Q So part of crude oil is diesel?
- (10) A Right
- (11) MR COOPER Now could we have PX499?
- (12) Well maybe we can maybe we can't
- (13) MS STEWART It's coming. Just takes a minute
- (14) BY MR COOPER
- (15) Q Now Mr Jamin was asking you questions about this. Let me
- (16) just ask you. With respect to these concentration numbers 24
- (17) PPM 01 PPM I'm reluctant to say it because when I start
- (18) dealing with numbers and especially ones with decimals in it
- (19) I'll probably get it wrong but these numbers - are these
- (20) numbers these quantities what was really in his lab experiment?
- (21) A They represent only the higher molecular weight
- (22) hydrocarbons. They don't represent the light molecular weight
- (23) hydrocarbons
- (24) Q So the bottom line is that the numbers that are on that
- (25) chart really do not include all of the components of the crude

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- (1) oil that he was exposing those eggs to?
- (2) A That's correct sir
- (3) Q Now in that connection Mr Jamin had a number of
- (4) questions on the subject of whether or not - we could have
- (5) 8983 I can probably call it up here
- (6) Number of questions on the subject of this chart. Let me
- (7) just try to understand one thing. What Dr Kocan was doing was
- (8) putting fresh oil in - exposing these herring to fresh oil
- (9) every second day?
- (10) A That's correct
- (11) Q At these high concentrations?
- (12) A This is his lowest concentration
- (13) Q And at his lowest concentrations he still had every other
- (14) day spikes up to 70 parts per billion?
- (15) A That's correct
- (16) Q By the time we looked at the Gault model and saw the
- (17) relationship between the spawn and the oil spill the
- (18) trajectory of the spill would be - in order to - how much
- (19) time was there that elapses between the bulk of the spawn and
- (20) the spill itself?
- (21) A The spill itself was on the 24th the peak of spawning was
- (22) around the middle of April or the 24th of March to the middle
- (23) of April
- (24) Q So that oil would have weathered for a few weeks?
- (25) A Yes sir

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- (1) Q And he s not using the weathered oil at all?  
 (2) A That s correct  
 (3) Q And when oil weathers a lot of those most harmful components of it evaporate off?  
 (4) A That s correct sir  
 (5) Q Incidentally do the water quality measurements that Dr Neff took indicate that there were shots of fresh oil every two days into the water column?  
 (6) A No sir What he s seeing is that the water quality measurements go up a little bit and then fall so there is one broad rise  
 (7) Q Just one point in time and then they all trail off after that?  
 (8) A Right because he s looking at a wider area  
 (9) Q Now let s see --  
 (10) A And none of them by the way are anywhere near those -- what we re seeing here  
 (11) Q Mr Jamin asked you about larvae and parasites in larvae?  
 (12) A Yes  
 (13) Q Now the larvae we re talking about are 89 larvae?  
 (14) A If we re talking about the year of the spill yes  
 (15) Q And again the larvae that were there in 1989 were part of this class that was never going to be three or four percent of the herring biomass?  
 (16) A That s correct

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- (1) Q Let s see Mr Jamin asked you a very carefully worded question and that was whether there was any other herring crash in 1993 other than the Prince William Sound one Do you remember that?  
 (2) A Yes  
 (3) Q Now not restricting it to 1993 was there a precipitous drop in the herring biomass in Sitka in earlier years?  
 (4) A In the 88/ 89 region it went from 68 000 tons in one year to 40 and then down to 28  
 (5) Q Fairly precipitous drop?  
 (6) A Yes sir  
 (7) Q And that was before -- well no oil in Sitka?  
 (8) A That s correct  
 (9) Q And that was even before the --  
 (10) A Slightly before and during the time of the spill  
 (11) Q Now incidentally did you find swollen pericardials in Sitka herring?  
 (12) A Yes  
 (13) Q I think Mr Jamin asked you about that but not in Sitka herring What does that indicate to you?  
 (14) A One of the reasons I specifically wanted to go to Sitka which was an expensive proposition for the client was to test whether there was a background level or not of this particular hydrocarbon because it was an important thing to my interpretation They funded the work and we went to Sitka

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- (1) Q Now Mr Jamin also quarreled a lot with your temperature data Let me ask you this Why didn t you focus on the area around Montague Island for your temperature data?  
 (2) A Because I believe that s where the bulk of the overwintering fish are based on the hydroacoustic surveys done  
 (3) by ADF&G and one other organization out of Cordova whose name escapes me at the moment  
 (4) Q You were convinced that Montague Island was the place to look?  
 (5) A It was the appropriate place to look  
 (6) MR COOPER Thank you Dr Pearson I don t have any further study -- or questions  
 (7) THE COURT You re excused  
 (8) MR SANDERS May it please the Court a housekeeping matter if the Court please For the next two witnesses we have these exhibits to offer These are all defendants exhibits 1893 1946 1971 1972 2048 2049 2804 2886 3059 4859 Bravo 4873 4900 Bravo 4904-Bravo 4913 5419-Alpha and 6102  
 (9) (Exhibits 1893 1946 1971 1972 2048 2049 2804 2886 3059 4859 Bravo 4873 4900 Bravo 4904 Bravo 4913 5419-Alpha and 6102 offered)  
 (10) MR O NEILL We have no objection  
 (11) THE COURT They are admitted  
 (12) (Exhibits 1893 1946 1971 1972 2048 2049 2804 2886

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- (1) 3059 4859 Bravo 4873 4900 Bravo 4904-Bravo 4913 5419-Alpha and 6102 received)  
 (2) MR SANDERS May it please the Court I can call up Dr Olley and assure the Court and the jury that he doesn t know anything about herring but it might be a good time for a break  
 (3) THE COURT Let s take our break for 15 minutes  
 (4) (Jury out at 10 00)  
 (5) (Recess from 10 00 to 10 15)  
 (6) (Jury in at 10 15)  
 (7) THE COURT Mr Sanders?  
 (8) MR SANDERS The defendants call Dr Robert Olley  
 (9) THE CLERK Would you raise your right hand?  
 (10) (The Witness Is Sworn)  
 (11) THE CLERK Please be seated For the record sir state your full name your address and spell your last name please  
 (12) THE WITNESS Robert Edward Olley O L-L-E-Y 374 Queen Street Niagra On-The Lake Ontario Canada  
 (13) DIRECT EXAMINATION OF DR ROBERT OLLEY  
 (14) BY MR SANDERS  
 (15) Q Let me ask you to tilt that silver microphone up  
 (16) What is your current employment?  
 (17) A I m currently a professor of eminentus at the University of Saskatchewan and president of my own firm

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- (1) Q And your own firm is called what?  
 (2) A General Economics Ltd  
 (3) Q And I want to go straight to your educational background  
 (4) if you will Will you describe generally what your education  
 (5) has been?  
 (6) A Well for all of the stuff that s grade school I did that  
 (7) at home pretty much because I was raised in the bush in  
 (8) northern Quebec Then I went to undergraduate school at  
 (9) Carlton University in Ottawa and obtained a BA in economics  
 and  
 (10) political science in 1960 Then I went to Queens University at  
 (11) Kingston Ontario just north of Syracuse and obtained an MA  
 (12) in 1961 and a Ph D in 1969  
 (13) Q And before obtaining your Ph D Doctor did you begin work  
 (14) after obtaining your master s degree?  
 (15) A Even before obtaining my master's degree I began work as a  
 (16) lecturer in economics at Queens and in 1963 I became an  
 (17) assistant professor of economics at the University of  
 (18) Saskatchewan That s just north of North Dakota  
 (19) Q And in 1974 did you become a full professor at the  
 (20) University of Saskatchewan?  
 (21) A I did  
 (22) Q Would you tell the ladies and gentlemen of the jury and the  
 (23) Court what subjects you taught at the university?  
 (24) A Well I taught macroeconomics which is the study of how  
 (25) economies behave and microeconomics which is the study of

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- (1) markets and individual actions Then I taught industrial  
 (2) organization which is more specifically the study of markets  
 (3) and public utilities which is also the study of special  
 (4) markets But my professional long specialty has been the  
 (5) teaching of economic development  
 (6) Q And in teaching economic development in the University of  
 (7) Saskatchewan did these courses relate to fishing?  
 (8) A Well in Canada you can t teach economic development  
 (9) without knowing fishing For the first 150 years of Canada s  
 (10) existence as part of the known world fishing was the only  
 (11) industry and then in the eastern part of Canada fishing has  
 (12) remained the main resource industry down to the present day  
 (13) actually down to the cod stocks that disappeared a year or two  
 (14) ago and now we don t know  
 (15) Then in the western part of Canada fishing and fur were  
 (16) the two main industries in the region called British Columbia  
 (17) from 1800 Then the fur pretty well died out about 1900 but  
 (18) salmon fishing began commercially in the 1870s and has grown  
 to  
 (19) and remains one of the three or four most important industries  
 (20) in the B C at this time So the economics development of the  
 (21) far western part of Canada necessarily involves the study of  
 (22) fishing  
 (23) Q How long have you taught courses at the collegiate  
 (24) postgraduate level on Canadian and I guess U S economic  
 (25) development which would include the fishing aspect of those

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- (1) courses?  
 (2) A Well I taught for three years while I was a student at  
 (3) Queens from 1960 to 63 and then one year later as an invited  
 (4) professor and then the rest of the time at Saskatchewan So  
 (5) that s 60 to now 35 years  
 (6) Q In addition to teaching during this 30 35 years have you  
 (7) done other things besides teaching in connection with the field  
 (8) of economics or in connection with the university?  
 (9) A Well at the university I ve often done the kinds of things  
 (10) economists would do for a university but perhaps the most  
 (11) interesting thing has been to analyze the significance of the  
 (12) university to the local economy The usual argument that gets  
 (13) made we need some more money Mr Government and we re  
 real  
 (14) important and I explain why we re real important But outside  
 (15) the university I do a lot of work as a volunteer with the  
 (16) Consumers Association of Canada which is a consumers  
 pressure  
 (17) group and publishes a magazine and with the Canadian  
 (18) Standards Association which is like Underwriters Laboratories  
 (19) in the U S and I ve done a fair amount of business consulting  
 (20) and advice  
 (21) Q Before I ask you about the consulting let me ask you about  
 (22) the length of time you were involved with the Consumers  
 (23) Association of Canada  
 (24) A From 1965 and I still am  
 (25) Q So that s almost 30 years?

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- (1) A Yes I ve held at the national level most of the offices  
 (2) available including its chairmanship  
 (3) Q By the way in the course of working with the Consumers  
 (4) Association of Canada have you dealt with issues involving  
 (5) tainted product or problems with product?  
 (6) A Many times  
 (7) Q Have you dealt with fish or fish related issues in the  
 (8) course of those 30 years?  
 (9) A Yes there have been fish related issues I do want to  
 (10) make clear I m not a chemist or a biologist but I was to  
 (11) develop the economics position that the association would take  
 (12) as it lobbied business to change its behavior or lobby  
 (13) government to regulate business in some fashion or to change  
 (14) the regulations in some fashion  
 (15) Q In your consulting what businesses have you consulted with  
 (16) or for?  
 (17) A Well I ve consulted - the list is fairly long but just  
 (18) some of the well known names Bell Canada and AT&T and  
 Waste  
 (19) Management Incorporated Arthur Anderson Peat Marwick  
 (20) Deloitte Touche and then a bunch of smaller ones if you  
 (21) wanted me to recite some more  
 (22) Q I think not  
 (23) Dr Olley in the course of your teaching consulting and  
 (24) the other work you ve described has it been a common practice  
 (25) for you to make market studies for various industries or

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- (1) businesses?
- (2) A Yes In the teaching part one of the questions of
- (3) economic development for a country like Canada which is
- (4) resource driven in its development one of the questions you
- (5) have to be able to understand and explain is how did each
- (6) resource wax and wane if you like why does it become more
- (7) important why does it become less important
- (8) All resource industries have the feature of boom and bust
- (9) and back at the processor level - like the timber cutter or
- (10) the fur trader or the fishermen and so you have to be able to
- (11) analyze those factors and explain them and figure out how the
- (12) industry contributed to sustained economic development
- (13) which
- (14) means other industries further processing and so forth So
- (15) I ve studied most of the resource industries in that regard
- (16) In the consulting work I ve had to study natural gas and
- (17) oil and a number of other timber as part of the consulting
- (18) assignments
- (19) Q Would it be fair to say that these market studies of
- (20) resource driven industries as well as others has kind of been
- (21) your tool of the trade part of your trade since the 1960s?
- (22) A Probably most of any professional effort has been spent in
- (23) resource industries yes
- (24) Q And of course fishing as you mentioned is known -
- (25) comes within the category of a resource industry?
- (26) A Has that characteristics of primary processors who are

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- (1) kind of at the tail end of the whiplash whatever happens in
- (2) the market snaps back more viciously to the primary
- (3) producers
- (4) Q Now in the course of your career have you written books
- (5) articles those kind of things?
- (6) A Yes
- (7) Q Have you ever written anything on the fishing industry?
- (8) A No
- (9) Q But you have published a number of articles and I think
- (10) you ve written some books correct?
- (11) A The two together and technical reports a hundred or so
- (12) yes
- (13) Q Have you given any presentations at professional meetings?
- (14) A Yes
- (15) Q Can you give us an idea what that range is?
- (16) A I m sorry I m not sure I understand it
- (17) Q Range of places where you ve given -
- (18) A Oh places Well just working from east to west I guess
- (19) Turkey Austria Germany Holland Sweden France England
- (20) the
- (21) U S and Canada of course in many places Japan Australia
- (22) New Zealand and Tahiti
- (23) Q Doctor in the course of your career have you received any
- (24) honors?
- (25) A Yes
- (26) Q Could you tell us the more significant of those?
- (27) A In 1977 I was awarded Her Majesty The Queen s silver
- (28) medal

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- (1) and that was for recognition of my work as a consumer activist
- (2) and I was awarded by the Consumers Association of Canada
- (3) the
- (4) Award of Merit primarily for my work in the field of standards
- (5) and then the university made me a member of Walter Murray
- (6) Society And when I retired from the university I retired as
- (7) an emeritus which is supposed to recognize that we did
- (8) something useful over our lives And then more important to me
- (9) was that the students created an award for teaching excellence
- (10) and named it after me so that every year somebody gets that
- (11) award at our university now
- (12) Q Does that - is that because you were an easy grader?
- (13) A I m afraid my reputation was the other way around
- (14) Q Now obviously you came to be hired as an expert by Exxon
- (15) When did that occur?
- (16) A In early 92 I think
- (17) Q And in order to prepare to do what you and I are going to
- (18) go through here this morning what - could you tell us the
- (19) kind of things you did in order to make the study an analysis
- (20) that you have done?
- (21) A Well it s been a two and-a half year project and I
- (22) started from a pretty substantial body of knowledge about
- (23) resource industry and a general knowledge also about fishing
- (24) industries Then I applied well-developed techniques for
- (25) analyzing resource industries and for looking at information
- (26) and then specifically I did maybe eight or ten things Do you

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- (1) want me to recite those things?
- (2) Q Well I would like to start you through the list because I
- (3) want to ask a couple questions about them but we may not
- (4) make
- (5) it through the entire list of ten
- (6) A Well what I did was the first thing I did was assemble
- (7) the numbers because after all the numbers are what we use
- (8) when we re teaching trying to understand how development
- (9) occurs and then I read all of the existing Canadian studies on
- (10) the salmon industry and on B C both fishing and aquaculture
- (11) generally
- (12) Q Can I stop you? Just a question B C I m sure everybody
- (13) knows what it is but let s make it clear
- (14) A British Columbia I m sorry
- (15) And then I went out and visited a number of fish - salmon
- (16) processing plants here in Alaska primarily to make sure that
- (17) when I got to the ones in Canada I did enough to ask detailed
- (18) questions of the processors there And then I visited two of
- (19) the four biggest processors in Canada and spent time in there
- (20) and then I interviewed government officials in Ottawa the
- (21) Department of Fisheries and Oceans and in Vancouver at the
- (22) same department and in Victoria the British Columbia
- (23) Department of Fisheries And I interviewed industry officials
- (24) from the B C Salmon Marketing Association and from the B C
- (25) Salmon Farmers Association And then I read the various
- (26) reports and documents that emanated from the - what you re



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- (1) calling the fish price side of this case  
 (2) So those are the main things that were hitting my memory  
 (3) Q Did you review anything in terms of the trade literature?  
 (4) A Yes I reviewed not all of the trade literature because  
 (5) there is a lot of it but I reviewed what seemed to be the main  
 (6) trade literature publications yes  
 (7) Q Is it important to do that?  
 (8) A In any market study I've ever done I review the trade  
 (9) literature and most economists do because the trade  
 (10) literature - first off it's informative it's technically  
 (11) informative to members of the trade It reports an awful lot  
 (12) of data about the trade and reports opinions and perceptions of  
 (13) what's going on And in a way it's kind of the legal  
 (14) mechanism by which members of the industry can talk to one  
 (15) another and report facts to one another and report intentions  
 (16) to one another without violating anti-trust laws in Canada or  
 (17) the U S  
 (18) Q In other words competitors can't get across the fence in  
 (19) the backyard and talk about what prices are and what they are  
 (20) going to do with them legally correct?  
 (21) A That's right as a general matter yes  
 (22) Q And the trade literature is a way to legally have that  
 (23) information across the market correct?  
 (24) A Well I don't like the emphasis you're creating It sounds  
 (25) as if it's just intended to avoid the law That's not really

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- (1) it Its real function is to collect and make widely available  
 (2) technical marketing price quantity and other information This  
 (3) is true in all industries but it does serve the purpose of  
 (4) permitting a lot of communication that couldn't be done  
 (5) face to face between competitors yes  
 (6) MR SANDERS May it please the Court I respectfully  
 (7) offer Dr Olley as an expert economist on the subject of the  
 (8) British Columbia salmon industry its market and consumer  
 (9) issues related thereto  
 (10) MR O NEILL For that specific purpose that is the  
 (11) British Columbia salmon industry we have no objection to his  
 (12) offer or tender  
 (13) MR SANDERS Well I include the markets within that  
 (14) loop the markets for the British Columbia salmon industry  
 (15) MR O NEILL And I understood that to be his offer or  
 (16) tender  
 (17) THE COURT The witness's qualifications as so stated  
 (18) are accepted  
 (19) MR SANDERS Thank you Your Honor  
 (20) BY MR SANDERS  
 (21) Q Let's get to work Dr Olley The first thing I would like  
 (22) for you to do is let's describe for the ladies and gentlemen  
 (23) of the jury the British Columbia salmon business and if you  
 (24) would would you tell us what species are involved when those  
 (25) species are harvested and tell us where the harvesting occurs

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- (1) what the seasons are and then take us up to market  
 (2) A So this is the physical side of the industry you want to  
 (3) hear about?  
 (4) Q Yes first  
 (5) A Well essentially the British Columbia wild salmon industry  
 (6) is a miniature replica of the Alaska salmon industry The  
 (7) total British Columbia harvest is a little under a third of the  
 (8) Alaska harvest The species are exactly the same species as  
 (9) are harvested in Alaska and are harvested in roughly - well  
 (10) not roughly almost exactly the same rankings as well Each  
 (11) year either pink or sockeye is the number one in terms of  
 (12) volume, and if it isn't number one it's number two And each  
 (13) year chum is the third in terms of volume and then each year  
 (14) chinook or coho is number three - four I should say in  
 (15) volume And whichever one isn't four is five  
 (16) In addition to that, British Columbia harvests a thing  
 (17) called steelhead which is trout that have gone wild and gone  
 (18) into the ocean become saltwater fish And then different from  
 (19) Alaska there is a substantial farmed salmon industry in which  
 (20) produces chinook coho and increasingly Atlantic salmon  
 (21) which  
 (22) are different from the five Pacific species Just like in  
 (23) Alaska the harvest varies considerably from year to year in  
 (24) total and by species and just like in Alaska the price  
 (25) varies too  
 (25) Q How are these species harvested in British Columbia?

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- (1) A The harvest is roughly the same as in Alaska The harvest  
 (2) techniques are roughly the same There is a lot of purse net  
 (3) harvesting and a lot of seine net harvesting In fact the  
 (4) bulk of the harvests for many species are taken the same way,  
 (5) but there is relatively less setnet harvesting on the beaches  
 (6) and relatively more troll net harvesting for particularly  
 (7) things like chinook  
 (8) And the processing the physical handling of the ship is -  
 (9) I'm sorry the physical handling of the salmon is essentially  
 (10) similar except there is much more chilling at sea and freezing  
 (11) at sea And then otherwise it goes into processors that look  
 (12) a lot like processors here use the same type of machinery the  
 (13) same techniques and produce physically the same products  
 (14) Q When are the seasons in comparison to Alaska for the  
 (15) harvesting?  
 (16) A For the wild salmon they are a bit later two to four  
 (17) weeks later depending on the run and the year For the farmed  
 (18) salmon of course you can take species out of farms not  
 (19) exactly year-round but over a much wider time frame Unlike  
 (20) Alaska the wild harvest in British Columbia drags on as it  
 (21) were It's not all over in a couple months or three months  
 (22) It sometimes goes five or six months before it's completed  
 (23) Q But as a general rule a season say for example, sockeye  
 (24) salmon in British Columbia will come somewhat after the start  
 (25) of the season for sockeye in Alaskan waters is that correct?

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- (1) A Yeah depends which Alaskan run you're comparing it to but  
 (2) if you think of the big Bristol Bay runs it comes about three  
 (3) weeks later  
 (4) Q Now where do the Canadian fishermen sell these salmon?  
 (5) A I should say first that the Canadian fishermen like the  
 (6) Alaska fishermen sell their salmon either in cans or frozen  
 (7) for the most part but there is a relatively larger trade in  
 (8) fresh salmon in Canada in B C than there is in Alaska and  
 (9) the reason is that the big U S markets are very close to  
 (10) the British Columbians and so there is a large export of fresh  
 (11) salmon to the U S markets  
 (12) And that's especially true of British Columbia farmed  
 (13) salmon the bulk of which goes into the U S markets as fresh  
 (14) Q Other than fresh where are the ultimate markets for  
 (15) British Columbia salmon?  
 (16) A Okay I'm getting to your question I'm sorry to take so  
 (17) long  
 (18) Q That's all right  
 (19) A The canned goes to Canada and to the UK and that's the  
 (20) United Kingdom England and to the rest of the European  
 (21) community and Australia And those are exactly the same  
 (22) markets where Alaska canned goes Canada canned has to  
 (23) compete  
 (24) with Alaskan in Alaska  
 (25) Q You mean in Alaska or Canada?  
 (26) A I'm sorry Canadian canned in Canada as well Alaska

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- (1) salmon competes with Canada salmon in the can in Canada  
 And  
 (2) then the frozen goes a little bit to Canada a little bit to  
 (3) the United States and a little bit to the European community  
 (4) for the smoke but the bulk of it goes to Japan just as in the  
 (5) case of Alaska  
 (6) Q Let me talk to you about the Japanese market that is  
 (7) predominantly the Japanese market takes the frozen salmon?  
 (8) A Yes it takes the bulk of Canadian frozen  
 (9) Q How do the fishermen get the product to Japan and how is it  
 (10) sold? In other words would you explain for us the Japanese  
 (11) market for this bulk of the frozen salmon that goes from  
 (12) British Columbia to Japan how does it work?  
 (13) A Yeah I don't like your question a little bit The  
 (14) fisherman doesn't get his fish -  
 (15) Q You can't object to my questions only he can  
 (16) MR O NEILL If you want some help Doctor I'll  
 (17) object  
 (18) THE WITNESS The fishermen just sells it to the  
 (19) processor and there the salmon branches and the processors  
 (20) sell it to the Japanese trading companies and they import it  
 (21) into Japan and then the Japanese trading companies - the  
 (22) Japanese distribution for salmon like any other product in  
 (23) that country is horribly complex compared to here and North  
 (24) America  
 (25) So what happens is the fish gets into - to the importers

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- (1) and the importers may sell it to wholesalers primary  
 (2) wholesalers who then resell it to retailers - well to  
 (3) regional wholesalers to retailers to big processors who may  
 (4) be processing for instance smoked salmon or portions or  
 (5) whatever And then the - some salmon is sold from wholesalers  
 (6) to processors - from importers I should say directly to -  
 (7) some is sold directly from big retailers like the big  
 (8) retailers here are getting so big that they could bypass the  
 (9) importers eventually once they met all the rules and  
 (10) regulation so the importers accommodate that  
 (11) So the salmon is sort of distributed down the market by a  
 (12) system of auctions and private bargaining and deals of various  
 (13) kinds between the internal purchasers And then - now this  
 (14) is all frozen stuff that's going in and then the frozen stuff  
 (15) may be thawed and salted for final sale I don't know the  
 (16) details of that last retailer or even the regional wholesaler  
 (17) market  
 (18) Q Well I'd like to focus on the other end of the chain if I  
 (19) could with you and I would like you to simplify as much as  
 (20) I could and if I oversimplify you stop me  
 (21) The chain goes from the fishermen to the processor and  
 (22) that occurs in Canada right?  
 (23) A Yes  
 (24) Q Canadian waters or Canadian shores?  
 (25) A Yes

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- (1) Q And then the processors sell to a trader or an importer?  
 (2) Let's call them traders  
 (3) A They are often called trading companies  
 (4) Q Those are Japanese trading companies?  
 (5) A Who buy in Canada  
 (6) Q Right Do they take title to the fish when they buy it  
 (7) from the processor?  
 (8) A Generally they do yes  
 (9) Q So when they buy generally they own the fish?  
 (10) A It's their fish and they pay the money Sometimes it  
 (11) doesn't work exactly that rigidly Sometimes the Japanese  
 (12) trading company agrees to buy the fish and the fish remains in  
 (13) freezers in Canada under the title of the Canadian processor  
 (14) until the Japanese trader notifies the Japanese processor you  
 (15) have to deliver me another 40 tons or 120 tons or whatever on  
 (16) the contract we agreed to awhile ago  
 (17) But the Japanese trader either owns it and has paid for it  
 (18) or else has committed himself to take ownership and pay for  
 (19) certain quantities  
 (20) Q At a certain price?  
 (21) A The price is generally specified exactly yes  
 (22) Q At the front end?  
 (23) A At the front end And all of this occurs of course  
 (24) during the harvest period It's in quite a short period  
 (25) Q You've anticipated my next area In other words the

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- (1) purchasing that leads to the ownership by the traders occurs  
 (2) around the time of the season which is like the summer or the  
 (3) fall of a given year right?  
 (4) A Yeah The B C market is just like any other harvest  
 (5) market When the harvest comes in the harvest comes in and  
 (6) from then on somebody owns it And in this case for the  
 (7) frozen it s generally the Japanese the trading companies or  
 (8) some importer in some country and then the stuff is dribbled  
 (9) out to the market chain for the remainder of the year  
 (10) Q And if you re a trader what is the trick to being a trader  
 (11) who makes money?  
 (12) A Well buy cheap and sell dear I guess  
 (13) Q Can you be a little more specific than that Doctor?  
 (14) A In the salmon industry there the tricks are a lot and they  
 (15) are complicated because there is five species five main  
 (16) species of wild salmon and then there is several different  
 (17) grades of each of those species and several different gear  
 (18) types and all of those things affect the grade and therefore  
 (19) the prices so it's a mosaic The market is a mosaic with an  
 (20) awful lot of pieces to it  
 (21) But for each species from each harvest the trick is once  
 (22) you know the run size then for the traders to apply the  
 (23) knowledge they have as to what they can sell those quantities  
 (24) for in the markets they normally serve to apply that knowledge  
 (25) back into the purchase price from the processors and then the

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- (1) processors back into the purchase price from the fishermen  
 (2) The fishermen are like wheat farmers or anyone else they  
 (3) are at the tail end of a pretty violently switching whip like  
 (4) the game we played as kids  
 (5) Q Crack the whip?  
 (6) A Crack the whip that s it  
 (7) Q Let s take a time here Let s say in 1988 - I realize  
 (8) you ve told us there is a mosaic of pieces and it can be very  
 (9) complicated but from 1988 backwards were the variables at  
 (10) least the things that could vary pretty well known within the  
 (11) Japanese market for British Columbia salmon?  
 (12) A Well yeah I would think they would be pretty well known  
 (13) as long as backwards doesn t get too far back  
 (14) Q I was going to ask you what s the date that would be the  
 (15) ending date for this time slice?  
 (16) A Well the beginning date is really 1976 because then the  
 (17) 200 mile limit and changes in the agreement with Japan meant  
 (18) that Japan became an importer  
 (19) Q Of salmon?  
 (20) A Of salmon  
 (21) Q And then about -  
 (22) A And then about that time the freezing technology became  
 (23) available so instead of importing in cans the Japanese began  
 (24) to increasingly import it frozen But you could say by 1980  
 (25) probably the traders had learned the bulk of the main

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- (1) dimensions of this new frozen salmon market that they were  
 (2) dealing with And from then until 1988 certainly the trick  
 (3) was really not to pay too much for the run once the run size  
 (4) was known in B C and I guess in other places as well because  
 (5) the traders buy from all over the world  
 (6) Q Is it also a factor that you have to judge how to dribble  
 (7) this inventory out over the time period so that you end up with  
 (8) little or no inventory by the time the new crop comes in in the  
 (9) next year?  
 (10) A That s right The salmon market is kind of like a futures  
 (11) market in any commodity The harvest is in and the trick to  
 (12) making money is to not pay too much for the harvest at the  
 (13) stage at which you enter given the size of the harvest and  
 (14) then dribble it out And the optimum is just to have the  
 (15) freezers empty by the time the next crop is coming in  
 (16) Q Dr Olley I want to move now to a different area Have  
 (17) you studied in this analysis that you have done have you  
 (18) studied the behavior of the price of British Columbia salmon in  
 (19) the Japanese market from say 1988 through 1992 93 that  
 (20) time frame for salmon?  
 (21) A Yes  
 (22) Q And that s the price behavior of the salmon product coming  
 (23) from British Columbia to Japan?  
 (24) A Yes Essentially my focus was on the ex vessel price  
 (25) Q Now I would like to ask you a general question first and

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- (1) then we can get more specific  
 (2) Do the salmon species the five main species in terms of  
 (3) price will they generally track each other on upward and  
 (4) downward trends?  
 (5) A Generally they all march together but some lags of a month  
 (6) or two between them and there is occasionally some little  
 (7) maverick behaviors in price most commonly with chinook  
 (8) which  
 (9) is the great big steaking salmon and it s troll caught And  
 (10) the price in British Columbia at least is determined in part  
 (11) by the price in California  
 (12) Q While you were answering that question I sneaked an  
 (13) exhibit onto the screen Did you prepare a chart which  
 (14) basically shows in a general way year-to year the way that the  
 (15) various species behavior and therefore track?  
 (16) A Yes I did and you can see chinook misbehaving on that  
 (17) chart a little bit there in the early years It always goes  
 (18) the same way as other prices except for a little period in  
 (19) there I guess there is some technology there I could use  
 (20) Q There is a little pen that I tried to teach you how to use  
 (21) yesterday  
 (22) A We don t have all this at my university  
 (23) You can see -  
 (24) THE COURT Don t usually have it in my courtroom  
 (25) either  
 (26) THE WITNESS You can see right here is chinook

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- (1) misbehaved a little bit and the price went down while the  
 (2) sockeye price was going up But in general you can see the  
 (3) feature of that chart as the price moves together and that s  
 (4) certainly true for the bigger species sockeye there and pink  
 (5) - well pink is a very low price compared to the others -  
 (6) moving the same way  
 (7) Chum is moving the same way steelhead is moving the same  
 (8) way and coho moving roughly - there is a little bit of  
 (9) misbehavior here but generally they move together  
 (10) BY MR SANDERS  
 (11) Q I would like for you to step into your familiar role as a  
 (12) teacher of economic history and be an economic historian for us  
 (13) for a few minutes And let s start in the year 1988 and I  
 (14) would like for you to describe for the jury from a historian  
 (15) perspective the price behavior for British Columbia salmon in  
 (16) the Japanese market  
 (17) A The price behavior with which I m familiar is at the  
 (18) ex vessel price and to a lesser degree the processor price  
 (19) which then reflects the Japanese price  
 (20) What happened in 1988 was that the price was ramped up in  
 (21) the first part of the year to unprecedentedly high levels They  
 (22) have never been that high before and then prices toward the  
 (23) end of 1988 weakened very substantially for Canadian salmon  
 (24) And then in 1989 prices continued their weakening for all  
 (25) species and went down further In 1990 they went down some

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- (1) Is this general chart does it fairly represent not only  
 (2) sockeye but other British Columbia salmon at the same time?  
 (3) A Yeah You saw on the previous chart that the - on the  
 (4) previous chart this peak or this line at least was a red line  
 (5) that was the sockeye chart and other - the others were  
 (6) marching along with it from 88 on  
 (7) Q Now I believe you said that the price for British Columbia  
 (8) salmon in Japan the dominant market for at least the frozen  
 (9) started to go down in 1988 How do you know that?  
 (10) A Well I don t think I said what you just said I said that  
 (11) the British Columbia price went down I didn t say the price  
 (12) in Japan  
 (13) Q Okay  
 (14) A The British Columbia price started to go down in 1988  
 (15) that s correct  
 (16) Q And that is known as the ex-vessel price?  
 (17) A Yeah In October of 88 all species were still being  
 (18) harvested in significant quantities in Canada and the  
 (19) ex vessel prices dropped very sharply in October of 88 Then  
 (20) the wholesale - the processors export price from Canada  
 (21) dropped in late 1988 and just continued dropping into 1989  
 (22) Q Now going back to your analogy with "crack the whip the  
 (23) prices the fishermen were getting paid in the latter part of  
 (24) 1988 was dropping correct?  
 (25) A Yes

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- (1) more In 1991 they went down some more  
 (2) Q Now I want to be a little bit more detailed than that  
 (3) You say that the price - and I guess to help things out a  
 (4) little bit let me put a chart that traces this price through a  
 (5) very long period of time 13 years Is that a chart that you  
 (6) prepared? This is Defendants Exhibit 1972 and the previous  
 (7) exhibit and I apologize for not naming it early is  
 (8) Defendants Exhibit 4913 both of which are in evidence  
 (9) A Yeah I ve prepared a handwritten version of that and your  
 (10) techie has brought it up  
 (11) Q And made it pretty?  
 (12) A And made it pretty  
 (13) Q Now 88 of course is an historical high correct?  
 (14) A Where is my thing? How do I make the arrow - there it  
 (15) is  
 (16) You can see there that s the 1988 peak to which I  
 (17) referred and there is the first fall in 1989 Now the 1989  
 (18) price - this is for - this is for sockeye it s still a  
 (19) pretty high price in fact just about equal with the highest  
 (20) before 1988 But then it kept on going down in 90 and in 91  
 (21) again  
 (22) Q Now don t run ahead of me I want to stay with 88 89  
 (23) here for a second  
 (24) I believe you said that the price - well first let me  
 (25) strike all that and let me ask you

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- (1) Q In Canada for British Columbia salmon?  
 (2) A That s correct  
 (3) Q And then also the price that the processors were getting  
 (4) from the importers or the traders was dropping in the latter  
 (5) part of 1988 and that tend continued into the first quarter of  
 (6) 1989 is that right?  
 (7) A That s correct  
 (8) Q And then we ve heard testimony and let s talk about that  
 (9) the sockeye price wholesale price in Japan we ve heard  
 (10) testimony in this trial stayed at a relatively higher level  
 (11) during the first quarter of 1989 Dr Crutchfield told the  
 (12) ladies and gentlemen of the jury about that  
 (13) Now is that behavior of the sockeye price inconsistent  
 (14) with the first chart that I showed you which is Exhibit Number  
 (15) 4913 or at least the teaching of that chart? Is that price  
 (16) staying up to use a precise economic term for sockeye is  
 (17) that inconsistent with what you ve told us about in terms of  
 (18) salmon tracking generally?  
 (19) A Well it s a bit of an anomaly but it s not inconsistent  
 (20) The sockeye in the market after October of 1988 would have  
 (21) been  
 (22) all sockeye that had been bought and paid for already and in  
 (23) the early part of 1988 prices were busy setting this peak that  
 (24) you can see on all these monitors and so there were a lot of  
 (25) people who paid some awful high prices for sockeye earlier in  
 1988

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- (1) Now those people particularly the Japanese traders
- (2) trading companies but to a lesser degree nearly anyone those
- (3) people might justifiably hang on to that product for awhile and
- (4) hope they could get rid of it at high enough prices to avoid
- (5) bankruptcy or at least to avoid serious financial difficulty
- (6) And they really don't have to worry because as a little
- (7) dribble of sockeye will appear from the Japanese high seas run
- (8) there is a high seas catch of fish by Japanese in May that
- (9) contain some sockeye but it would be a substantial but not a
- (10) very large quantity And then traders could wait until May and
- (11) see what began to happen from Copper River
- (12) Q Let's go from the could to the did Is there evidence that
- (13) that is what was happening in Japan in the first quarter of
- (14) 1988 with respect to British Columbia sockeye prices?
- (15) A Well British Columbia sockeye is not segregated from
- (16) others but it's certainly true that sockeye prices on the
- (17) Tokyo wholesale market held up through May Other salmon
- (18) prices didn't
- (19) Q Is there evidence however that was kind of an artificial
- (20) hold in that the traders were holding that sockeye off the
- (21) market trying to get a higher price?
- (22) A Well the trade literature reports that the trading
- (23) companies were hanging on to the fish hoping they could get a
- (24) higher price and the literature also reports that the traders
- (25) were suffering some uncertainty from a variety of other sources

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- (1) as well
- (2) Q Was sockeye actually selling at those prices in the first
- (3) quarter in Japan at anything like levels in the past?
- (4) A No The trade literature reports a lot of resistance to
- (5) the very high prices for sockeye and if you look at the
- (6) volumes through the Tokyo market - now the Tokyo is only one
- (7) market but it's a big one and it's often used as a bellwether
- (8) market So people talk about it as if it were Japan it isn't
- (9) really but it's a bellwether
- (10) The volumes of sockeye that passed through the Tokyo market
- (11) were less than half of the volumes that passed through that
- (12) market in the same months in the previous year or in the same
- (13) months in subsequent years too much less than half whereas
- (14) for other salmon species the volumes were more or less normal
- (15) for the early months of the year
- (16) So there is buyer resistance that's reported all over the
- (17) place in November December of '88 and then through the
- (18) early part of 1989
- (19) Q Now to summarize where we are the ex-vessel price the
- (20) price that the fishermen get for British Columbia salmon
- (21) starts down in 1988 toward the end of the year correct the
- (22) fall?
- (23) A For as long as the season lasted yeah For sockeye the
- (24) season is over in October so the October ex vessel price is
- (25) down by 15 percent for Canadian sockeye And some of the other

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- (1) species are coming in in significant quantities still in
- (2) November their prices are also down October November
- (3) Then
- (4) the season pretty well stops There is not much harvest in
- (5) December and practically none in January
- (6) Q Is there a chum run in Japan in the fall?
- (7) A Yeah there is a chum run off Hokkaido Island that comes
- (8) in in September October November a little bit and it's a big
- (9) chum run It meets - the quantity of chum there meets between
- (10) 20 and 30 percent of the Japanese total salmon requirements
- (11) Q What happened to the prices - how did those prices for
- (12) that chum run in the fall in Japan compare with the earlier '88
- (13) prices lower or higher?
- (14) A Well the prices for that chum run fell sharply
- (15) Q And then you've testified that the import the Canadian
- (16) export price to Japan was falling for salmon generally in the
- (17) latter part of '88 and the first quarter of 1989?
- (18) A Yes
- (19) Q And however the sockeye stated price at least - listed
- (20) price at least on the Tokyo wholesale market was staying up
- (21) kind of contrary to that trend that you're describing for us
- (22) correct?
- (23) A Yes Not contrary to the economic incentives that the
- (24) trading companies might have had but contrary to the trend as
- (25) you see it in Canada and as you see it for other salmon prices
- (26) in Canada or in the Tokyo market for that matter

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- (1) Q Maybe I'm oversimplifying but are you saying the traders
- (2) in sockeye in Japan were gambling a little bit in the first
- (3) quarter of 1989?
- (4) A Gambling may be too strong a word The traders were
- (5) confronted with the situation where they had a lot of sockeye
- (6) that they paid very high prices for If they let it go into
- (7) the market and followed the market price down they would
- (8) suffer serious financial hardship and so they did what you or
- (9) I or anyone would do in that case if there is any hope at all
- (10) we would hang on just in case it worked out and we would avoid
- (11) the financial hardship
- (12) Q I'd call that gambling with a pair of ducats and a high
- (13) ante
- (14) A Depends what's wild
- (15) Q What happened to them?
- (16) A Well, prices came down In June the sockeye prices came
- (17) down
- (18) Q What caused that? I mean if you could give us in the
- (19) historical perspective what events between the first quarter of
- (20) 1989 and June occurred that in your view influences that price
- (21) to go from its artificial high down to lower depths?
- (22) A Standing in Vancouver and looking at it in an attempt to
- (23) understand what was about to happen to British Columbia
- (24) prices
- (25) what happened was the Japanese high seas harvest for
- (26) sockeye
- (27) was about double the previous year which added to sockeye

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- (1) supplies
- (2) Q When did this run come in?
- (3) A May
- (4) Q Now for point of reference the oil spill in Prince
- (5) William Sound occurs on March 24th 19 - starts to occur on
- (6) March 24th 1989 That s the year we re talking about?
- (7) A Yes
- (8) Q Then in May the Japanese high seas fleet comes in with the
- (9) sockeye run correct?
- (10) A And chum
- (11) Q And chum run?
- (12) A Yes
- (13) Q And describe for us - I ve interrupted your narrative Go
- (14) ahead with that point
- (15) A Well those prices began to fall quite sharply As soon as
- (16) the high seas harvest came in the Japanese fishermen
- (17) experienced dramatic declines in their prices and then the
- (18) price the sockeye price just - from the point of view of the
- (19) Canadian exporters it just continued a downward trend You
- (20) couldn t describe it as a crash in Canada it was just quite a
- (21) deep downward trend in sockeye prices that continued
- (22) Q Did the price get another couple of belts after May?
- (23) A Yeah From the point of view of the fishermen the news
- (24) was really bad in terms of price
- (25) Q What was that bad news? -

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- (1) A Well prices fell a lot for sockeye and all species when
- (2) the harvests began to come in and it turned out they were big
- (3) harvests
- (4) Q And big harvests influenced the prices down further than
- (5) its already declining position?
- (6) A Yes
- (7) Q And continued that decline as your chart shows all the
- (8) way into 91 correct?
- (9) A Well this is sockeye
- (10) Q Do you want the other chart back up?
- (11) A No I mean the other just behave like sockeye so maybe
- (12) it s easier to follow one line if you can see here the price
- (13) decline in 1989 Now then in 1990 the price declined a
- (14) little bit again into in 91 it declined some more and then
- (15) in 92 the sockeye price recovered a little bit
- (16) Now other species didn t recover or didn t recover much
- (17) in 92 then the sockeye price went down in 93
- (18) Q Let me back up a little bit in time because I want to ask
- (19) you about 1989 and price and I want to draw a little bit on
- (20) your experience in the consumer field
- (21) Now in the spring and summer of 1989 - well strike
- (22) that
- (23) In the summer of 1989 when the British Columbia harvest is
- (24) coming in in sockeye that s around what July?
- (25) A Yeah late July

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- (1) Q I want to ask you if the - if you have an opinion as to
- (2) whether the oil spill in Alaska here had an affect on the price
- (3) of British Columbia salmon coming on the market in the summer
- (4) of 1989?
- (5) A The oil spill - maybe I don t understand the question
- (6) The oil spill was in Alaska and I m a B C man
- (7) Q Well was there any evidence that there was any affect on
- (8) British Columbia prices from the oil spill?
- (9) A No
- (10) Q You look incredulous but it s a question we have here
- (11) Why not why wouldn t it why don t you see that and why didn t
- (12) you see that?
- (13) A Maybe I m not understanding the question The spill was up
- (14) here in Prince William Sound and Shelikof Straits and so on
- (15) Didn t spill any oil in British Columbia
- (16) Q Does the market know the difference between a British
- (17) Columbia sockeye and an Alaskan sockeye?
- (18) A Yes British Columbia sockeye along with Copper River
- (19) sockeye from Alaska enjoy the number one ranking in Japan
- (20) And British Columbia sockeye typically command a premium
- (21) over
- (22) other Alaska in particular sockeye in price
- (23) Q In your study of price behavior from 88 and let s cut it
- (24) off at the fall of 89 for a British Columbia sockeye in the
- (25) Japanese market or let s just say the ex vessel price are you
- (26) able to perceive any effect whatsoever from the oil spill?

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- (1) A The British Columbia price behaved like you d expect the
- (2) price of a raw material to behave in the face of a massive
- (3) increase in the harvest The raw material price goes down and
- (4) it goes down sharply
- (5) Q Let me put up another chart Does the timing of the
- (6) behavior of the British Columbia sockeye price tell us anything
- (7) about whether there was an effect from the spill on that
- (8) price? I put up Defendants Exhibit 1971?
- (9) A Again now this is sockeye price and this is the export
- (10) price so this is the price that was being paid for frozen -
- (11) bulk of it would be frozen sockeye out of the warehouses and
- (12) you can see here that apart from a little blip earlier in the
- (13) year a big blip earlier in the year price peaked about
- (14) November 1988 and then was declining steadily Canadian
- (15) export
- (16) prices had lost about 15 percent of their value by the time of
- (17) the oil spill and what happened later was they just kept on
- (18) trending down
- (19) Now this sockeye is sold into the world market for
- (20) sockeye so the explanation for that rests on the world markets
- (21) for salmon not just British Columbia
- (22) Q But I think what you re saying is that the price decline
- (23) for salmon British Columbia salmon started well in advance of
- (24) the oil spill?
- (25) A Oh yes Yes
- (26) Q Now let me ask you the other side of the question that I

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- (1) started out with Did the oil spill have any conceivable  
 (2) impact on British Columbia prices?  
 (3) Assume for a minute hypothetically this is where I draw on  
 (4) your consumer experience assume hypothetically that there is a  
 (5) taint out there in the market that the market attributes it to  
 (6) Alaskan salmon okay sockeye salmon Will you assume that  
 (7) hypothetically for me for a minute?  
 (8) If you assume that as a fact what would you expect to  
 (9) happen to British Columbia salmon prices?  
 (10) A Well if your assumption were operative and there were  
 (11) taint for Alaska fish you would expect two things to happen  
 (12) One is that the demanders would go looking for untainted fish  
 (13) which would be British Columbia so the demand for British  
 (14) Columbia fish would go up and the traditional premium relative  
 (15) to Alaska fish would rise Alaska sockeye So you would  
 (16) expect whether prices were moving down or up the gap  
 between  
 (17) B C prices and Alaska prices would get wider That's what  
 (18) you'd expect to see in the market  
 (19) Q If you assumed that there was some taint on the Alaskan  
 (20) salmon in the relevant time frame right?  
 (21) A Yeah dealing with your assumption But you'd also expect  
 (22) to see the Canadian processors who are big tough marketers  
 (23) and are used to I suppose you'd have to say from a fishermen's  
 (24) standpoint pretty rough tactics, these guys would have treated  
 (25) their Alaska sockeye competitors as a wounded competitor and

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- (1) they would have attacked the wounded competitor like sharks  
 (2) They would have differentiated their product further they  
 (3) would have made - taken every step possible going around and  
 (4) saying to buyers all over the world hey fellas over the  
 (5) world fish with no taint come and get it at a premium price  
 (6) Of course the British Columbia processors didn't do that  
 (7) Q Let me ask you to come back into the real world now Did  
 (8) anything like that happen to the British Columbia salmon  
 market  
 (9) after March of 1989?  
 (10) A No From the point of view of the British Columbia sockeye  
 (11) salmon prices and the other ones too the sockeye salmon  
 (12) prices your hypothetical wasn't working  
 (13) Q Now let me ask you to look at the second page of DX1972  
 (14) Is that a chart that you have caused to be prepared which show  
 (15) the relative prices over time for Alaskan and British Columbian  
 (16) sockeye prices ex vessel?  
 (17) A Yes it is  
 (18) Q And is that chart that historical graph consistent with  
 (19) what you just told us about the fact that this didn't happen?  
 (20) A Yeah You see here in 1988 or even back in 1987 there is  
 (21) a big premium on B C salmon over Alaska - B C sockeye over  
 (22) Alaska sockeye and then that - in 1988 the British Columbia  
 (23) price for sockeye falls the same rate as the Alaska price  
 (24) falls 1990 same thing So they continue their march together  
 (25) through this period

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- (1) Q Let me ask you a question that I think you've - get to a  
 (2) point I think you've made very clear but I want to make sure  
 (3) In the Japanese market do Alaskan sockeye and British  
 Columbia  
 (4) sockeye compete head to head?  
 (5) A Depends which market you're looking at The answer is yes  
 (6) but the way in which the competition occurs is a little bit  
 (7) different At the buyer level that is the first level of  
 (8) purchase the trading companies and the wholesalers they  
 know  
 (9) the difference between British Columbia and Alaska sockeye  
 and  
 (10) they know that the principal difference is the British Columbia  
 (11) sockeye have more oil in them and so they pay a premium But  
 (12) the final consumer market sockeye is for all practical  
 (13) purposes, sockeye except for the physical things like flesh  
 (14) texture and scaling on the salmon and so there it competes  
 (15) head-to-head Price is practically the only matter apart from  
 (16) the oil content  
 (17) Q With some exceptions in perhaps '86 and the early '80s  
 (18) does this graph show the relative position of the two  
 (19) head to head as being fairly consistent over time?  
 (20) A Well it shows that the forces which determine the  
 (21) ex vessel price have not changed in their net impact and so  
 (22) the prices march together right through this whole period from  
 (23) before 1988 until 1993 really  
 (24) Q Now I'm going to finally let you get to '90 and '91 Would  
 (25) you describe for the jury from this historical perspective what

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- (1) happened to the sockeye prices for British Columbia salmon in  
 (2) the years following the oil spill '90 and '91?  
 (3) A Well yeah you can see it on the chart the British  
 (4) Columbia sockeye prices They fell most sharply in 1989 but  
 (5) they fell again in '90 and '91 Remaining at historically  
 (6) pretty high levels just way down from that 1989 peak  
 (7) Q We've completed our history now on this I want to go back  
 (8) and ask you a question that I did ask you before and you looked  
 (9) at me real funny but I do want you to answer this  
 (10) From your study and analysis the markets the prices  
 (11) conversation with processors fishermen and government  
 (12) officials is there any evidence that you have seen that would  
 (13) suggest that the oil spill in Alaska had any affect whatsoever  
 (14) on the decline of the British Columbia salmon prices?  
 (15) A I haven't seen or heard or been able to uncover one  
 (16) scintilla of evidence that the spill in Alaska affected  
 (17) B C prices  
 (18) Q Do you have an opinion as to whether it did?  
 (19) A I don't think it did  
 (20) Q In terms of this historical perspective as an economist  
 (21) being familiar with these markets could it have? Is it  
 (22) reasonable to think it could have a spill in Alaska affect  
 (23) the price of B C salmon?  
 (24) A Well theoretically if your hypothetical of a while ago had  
 (25) been true then the Alaska spill had it done what your

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- (1) hypothetical said it would have widened that gap The B C  
 (2) price would not have fallen as much as the Alaska price did  
 (3) and if there were any carryover in the years the B C price  
 (4) would have ridden above the Alaska price at a higher gap but  
 (5) that's not what happened  
 (6) Q But my question was could the oil spill in your opinion  
 (7) have had a negative impact on the price of British Columbia  
 (8) salmon?  
 (9) A No The only impact it could have had would have been  
 (10) positive  
 (11) Q And it didn't have that either?  
 (12) A Didn't have a positive effect either  
 (13) Q So it takes me to my last area of questioning for you  
 (14) Doctor Can you explain to the ladies and gentlemen of the  
 (15) jury why the price of British Columbia salmon went down in the  
 (16) late 80s?  
 (17) A In a word supply The world supply of salmon increased to  
 (18) unprecedentedly high levels and the supply of sockeye in  
 (19) particular increased to unprecedentedly high levels and in a  
 (20) resource market the only way that you can get rid of very  
 (21) large increases in the supply of a product is through price  
 (22) declines And we're talking about ex-vessel prices here The  
 (23) fishermen is the guy at the end of the whiplash game So the  
 (24) effect on the final markets will come through amplified to the  
 (25) primary processor It's just one of the tragedies of these

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- (1) kind of industries It's true for farmers and timber cutters  
 (2) and all sorts of people  
 (3) If I may there is a little bit of a timing question Why  
 (4) did it break in 1988 rather than wait until 1989 until the big  
 (5) harvest was in why did it start -  
 (6) Q I'm going to get to that in a second First I want to ask  
 (7) you if there is a historical basis for this opinion of yours  
 (8) Can you explain to the jury what there is out there other than  
 (9) what you've already told us about the decline in ex-vessel  
 (10) prices in '88 and '89 Does the trade literature reflect that  
 (11) this is what's happening to the salmon market?  
 (12) A Well I don't mean to be prideful or anything but I  
 (13) reached that opinion on the basis of analysis not on the basis  
 (14) of some other artifact That exhibit that I asked you to have  
 (15) ready merely reflects what the analysis tells you is going to  
 (16) happen The analysis tells you that when supply goes - well  
 (17) the analysis tells you two things When price goes up even if  
 (18) nothing happened to supply consumers buyers will resist and  
 (19) the quantity demanded will go down And then if supply goes  
 (20) up dramatically on top of them then prices are going to go  
 (21) south And that's what happened That's what the analysis  
 (22) predicts  
 (23) Then if you look at the trade literature it turns out  
 (24) that like that exhibit says the high salmon prices of 1988  
 (25) provoked a certain amount of resistance People don't expect

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- (1) to see them that high again We can look forward to prices  
 (2) going down  
 (3) Q I've got up in front of the jury and in front of you  
 (4) Defendants Exhibit 2049 which is in evidence It is a page  
 (5) from Seafood Leader dated March 1989 and you mentioned  
 (6) the  
 (7) first part that we had highlighted here and I'd ask you to  
 (8) read if you can see that there the next paragraph that is  
 (9) highlighted?  
 (10) A I have a little handicap with my bifocals  
 (11) Q Can I read it for you?  
 (12) A Well if there were a copy that I could have I could read  
 (13) it but it's at a bad range for my glasses  
 (14) Q Tell me when I get within your range  
 (15) A I can read it now thank you  
 (16) Q Maybe they will read it for you  
 (17) A Well the second paragraph that I've had you highlight says  
 (18) that as 1989 began frozen salmon market was a blood bath  
 (19) with  
 (20) buyers and consumers balking at the high prices  
 (21) Q And that's as 1989 began?  
 (22) A Well first further the next sentence says in December  
 (23) U S frozen salmon holdings were 50 percent over the 1987  
 (24) levels and moving slowly if at all and prices were falling  
 (25) Q Now is there other trade literature that you've had me  
 (26) blow up that further supports or documents the process that  
 (27) you've described for the jury?

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- (1) A Well there is yeah  
 (2) Q If you luck out I'll give you the right ones  
 (3) A Yeah  
 (4) Q Is that one?  
 (5) A That's one that I asked you to do  
 (6) Q Let me introduce it for the record Defendants Exhibit  
 (7) 2058 in evidence which is a page from Seafood Trend This is  
 (8) one of the trade magazines correct?  
 (9) A Yes  
 (10) Q And it's dated September 19 1988?  
 (11) A Yeah If I could I really should speak a little bit  
 (12) before I just turn that one if I may  
 (13) Q Okay Go ahead  
 (14) A What happened in 1988 was as the prices got so very high  
 (15) buyers resisted all over everywhere and in 1988 and the first  
 (16) couple months of 1989 there are dozens of references in the  
 (17) trade literature to buyers resisting salmon at the high prices  
 (18) and per capita consumption of salmon actually fell in 1988  
 (19) contrary to its long term normal trend as people turned away  
 (20) from salmon to other seafoods or other sources of protein in  
 (21) Japan and the U S so that - what that last blow up that Mr  
 (22) Sanders had for me was a reflection of really buyer resistance  
 (23) to the high prices  
 (24) But then beyond simple buyer resistance to the high prices  
 (25) what began to happen in 1988 was two things One was that  
 (26) this



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- (1) farmed salmon business began to play a role and I don't want  
 (2) to overstate the role of farmed salmon because really the  
 (3) phenomena – and I've asked you for a couple other exhibits  
 (4) maybe we'll get to them later  
 (5) The really dominant factor what happens is supply  
 (6) increased so enormously that price could not hold and the guy  
 (7) at the end of the whiplash took a beating the fisherman  
 (8) himself or woman  
 (9) Q And this Exhibit 2048 is simply another example in the  
 (10) trade literature in '88 of what was happening to the market and  
 (11) why?  
 (12) A Yeah Well what was happening on the farmed salmon front  
 (13) is that – for some time people had been saying off in the  
 (14) 1990s somewhere there is going to be a lot of farmed salmon  
 (15) and when that lot of farmed salmon appears farmed salmon is  
 (16) going to set the price not the wild harvest And then there  
 (17) was other discussions about it what were perhaps too detailed  
 (18) for our purposes  
 (19) Before then what happened in September here earlier in  
 (20) September in Vancouver there was an aquaculture conference  
 (21) and aquaculture is sort of all farmed fish but at that  
 (22) conference the attendees were told by speakers there that the  
 (23) big output of farmed salmon that was forecast for some time in  
 (24) the future was beginning to come on stage right now in 1988  
 (25) and as it comes on stage in 1988 you see what the conclusion

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- (1) was You can look for a flood of salmon to hit the market at  
 (2) lower prices and major dislocations unless the seafood market  
 (3) specifically salmon can be grown that is can be made to  
 (4) grow to absorb increasing supply  
 (5) Well there is no way a market can grow in one year to  
 (6) absorb 30 percent increase in supplies That's what happened  
 (7) in 1989 So what this does is kind of crystallize that A new  
 (8) major actor is appearing in the market and it has two  
 (9) effects One is that it says there might be a lot of farmed  
 (10) salmon out there right now that we don't know about but the  
 (11) other is to say whatever else happens in the future there is  
 (12) going to be a growing reliable supply of farmed salmon coming  
 (13) on the market  
 (14) Q Was there another conference in the fall of 1988 that  
 (15) brought forth the same kind of news to the market?  
 (16) A Yeah  
 (17) Q Let me introduce the exhibit I put in front of you  
 (18) another part of Defendants Exhibit 2048 which is a page from  
 (19) Seafood Trend of the date 10/31/88 and was that the S-I-A-L  
 (20) conference?  
 (21) A Yeah that's a prestigious food show in France and it  
 (22) deals with lots of different foods although this wasn't a  
 (23) salmon show particularly but what happened was that the  
 (24) attendees who were interested in salmon learned that Norway  
 had  
 (25) produced in 1988 30 000 more tons of salmon than had been

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- (1) previously known And this is kind of a dramatized wording  
 (2) that the reporter is making of it but the increased Norwegian  
 (3) supply was substantial  
 (4) But following hard on the heels of the Vancouver  
 (5) conference what it also alerted people to was that it might be  
 (6) unknown quantities of farmed salmon in other markets because  
 (7) Scotland produces a lot of farmed salmon and the Faroe  
 (8) Islands which are a group of islands north of Scotland  
 (9) produce a lot, and Canada is a big producer of farmed salmon  
 (10) And Iceland was producing farmed salmon and so was Ireland  
 New  
 (11) Zealand Australia but as you see below not highlighted there  
 (12) is reference to Chile and coho Chile is a big producer of  
 (13) farmed salmon So what this conference did was sort of tell  
 (14) people that the professional conference speakers if you like  
 (15) back in Vancouver warned us what might happen has actually  
 (16) happened and you see some pretty dramatic language blood  
 bath  
 (17) and the Europeans are peaved at North America they got  
 mislead  
 (18) because salmon wasn't really scarce, and so forth  
 (19) Q I'm going to put this back beyond your reading range  
 (20) Maybe not  
 (21) A Actually that works for me still  
 (22) Q Now I want to put up a chart quickly DX1946 Is this a  
 (23) chart which you had prepared to show the farmed salmon  
 prices?  
 (24) A Yes And you can see that British Columbia farmed salmon  
 (25) prices actually came down in 1988 on the average and then  
 came

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- (1) down further in '89 and continued on down The 1988 fall in  
 (2) B C salmon prices which just was shown as a single point  
 (3) here actually made up of two falls in farmed salmon prices  
 (4) There was a fall in the early part of the year which in there  
 (5) were a monthly chart would show up back in here Then the  
 (6) price flattened out for a bit and then there was a fall right  
 (7) at the end of the era as that blood bath we saw up there began  
 (8) to take place  
 (9) Q Let me take this story about the supply situation a step or  
 (10) two further because that is, I gather the center piece of  
 (11) what you're telling us caused the price decline and in order  
 (12) to illustrate that let me put up a chart of one of Dr  
 (13) Crutchfield's charts in another case, which is now Defendants  
 (14) Exhibit 2804  
 (15) Now this is a sockeye harvest chart, and I want to direct  
 (16) you or ask you to direct the jury's attention over to what  
 (17) happened in 1989 in terms of the supply of wild sockeye as  
 (18) compared with the previous year  
 (19) A Well I guess it doesn't take much directing does it? You  
 (20) can see that the supply of North American wild sockeye  
 measured  
 (21) in numbers of fish I believe he counted this in – it says  
 (22) number of fish The North American supply of sockeye just  
 (23) about doubled from 1988 to 1989 twice as many sockeye fish  
 (24) Q Now let me show you another chart that further illustrates  
 (25) that This is DX5419

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- (1) A Yeah this is mine  
 (2) Q Alpha Excuse me has an A on it  
 (3) A Now this one - this is world catch of sockeye and the  
 (4) difference between world catch of sockeye and the previous  
 (5) chart is that there is a Japanese high seas sockeye catch and  
 (6) there is some Russian sockeye and there is a wee bit of others  
 (7) sometimes from Korea so essentially the world and North  
 (8) America and you can think of them as more or less the same  
 (9) thing and you see what happened Sockeye prices here - why  
 (10) won't this arrow behave  
 (11) The sockeye harvest is the lowest in the past decade where  
 (12) I have labeled it  
 (13) Q And that's consistent with the spike in the price going the  
 (14) other direction in 1988?  
 (15) A That's correct Actually the price went up in '87  
 (16) continued up in '88 until the end and then down she went in  
 (17) '89 when we had the record harvest to date and then as an  
 (18) encore we get a bigger record harvest in 1990  
 (19) Q And that is consistent is it not with the way the price  
 (20) behaved for sockeye in '89 and '90?  
 (21) A Yeah You can see here from 1988 the harvest looks to be  
 (22) roughly if that arrow would move - the harvest looks to be  
 (23) roughly 240 million pounds and up here it's about 370 million  
 (24) pounds so it's about a 40 percent increase in sockeye harvests  
 (25) in just one year Now that's incredible increase in any raw

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- (1) material And then same thing happens again in 1990 another  
 (2) increase and there is the explanation for the falling price  
 (3) Q Is it a further explanation of why the price continued to  
 (4) go down after '89?  
 (5) A Oh yeah Well the '90 harvest where my little arrow  
 (6) seems to have gotten stuck is the highest sockeye harvest in  
 (7) this section of recorded history  
 (8) Q Let me show you another exhibit which is 4859 Bravo  
 (9) A Yeah What this does is show the world harvest of salmon  
 (10) and it's measured in millions of pounds and if you look at the  
 (11) red part of the column down in here that's the wild harvest  
 (12) and the yellow stuff on top is the farmed harvest and you can  
 (13) see that the farmed harvest had been coming along in the  
 (14) earlier years but in 1988 farmed crop of salmon nearly  
 (15) doubled and it increased further in 1989 further in '90 It  
 (16) doesn't increase much in '91 or '92 but it held at very high  
 (17) levels so that the farmed harvest actually is bigger than the  
 (18) Alaskan harvest right now You see here what happened to the  
 (19) world supply of salmon  
 (20) In 1987 to 1988 if you look at the wild alone it looked  
 (21) like there wasn't much of an increase or actually the  
 (22) statistics show a slight decrease in wild supply from '87 to  
 (23) '88 The Alaska harvest of wild was up a bit from '87 to '88  
 (24) but if you look at wild alone it looks like not an actual lot  
 (25) of difference from '87 to '88 But if you add farmed on top of

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- (1) it then it turns out that '88 represents an increase in the  
 (2) total salmon availability from '87 and indeed represents the  
 (3) second highest salmon availability in recent recorded history  
 (4) The only other one that's higher is here in 1985  
 (5) Q When was it realized that this '88 harvest was as large as  
 (6) it turned out to be?  
 (7) A Well probably after the fall chum run in Japan Fall chum  
 (8) run in Japan brought in 15 000 extra tons of coho - I'm sorry  
 (9) of chum and the British Columbia run would have been in by -  
 (10) or perfectly predictable by September it wasn't until  
 (11) December in some cases So by the end of September early  
 (12) October you know the wild harvest and you certainly know the  
 (13) Alaska harvest which was up a wee bit Japanese was up quite  
 (14) a bit And then this Vancouver conference alerts people to  
 (15) this thing the yellow piece on top  
 (16) Q And that's what the prices started to go down worldwide for  
 (17) salmon?  
 (18) A Buyers all over the world took a second look at what they  
 (19) were doing and realized that as this other dramatic language  
 (20) says that salmon wasn't all that scarce in 1988 and that's  
 (21) what takes the steam out of that euphoric rise in prices in  
 (22) 1988 Those '88 prices you never saw before and as one of  
 (23) those exhibits says not likely to see them again but the  
 (24) steam comes out of it with Vancouver and here (indicating)  
 (25) Q From '89 to '93 at least the first couple of years you

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- (1) have a continuing increase in the wild stock?  
 (2) A Yes  
 (3) Q Above historic levels If you just disregard completely  
 (4) the yellow and you have this increase in the wild stock  
 (5) supplies in '89 and '90 what effect would that have had on  
 (6) price?  
 (7) A It would have pushed them down If you look at the red  
 (8) parts of the bars alone this harvest in 1989 is as big as the  
 (9) previous peak harvest over here in '85 Then 1990 is not so  
 (10) remarkable but 1991 is the biggest wild harvest in recent  
 (11) recorded history So those increases in wild harvest alone  
 (12) would have pushed prices down  
 (13) Q And what happened though was that you had those  
 (14) increases  
 (15) on top of significant increases in the farmed supply?  
 (16) A Yeah you could say that Suppose the wild harvest stayed  
 (17) the same as it was in 1987 or 1988 all through these years  
 (18) and the only new phenomena was the growth in farmed The  
 (19) growth in farmed would have meant that crops were at or above  
 (20) historic - total historic salmon crops were at or above peaks  
 (21) ever realized so that would have driven prices down had there  
 (22) been no increase in the wild harvests  
 (23) Q In addition for that reason why the prices dropped from  
 (24) '88 throughout the period we're talking about and started well  
 (25) before the oil spill is there another reason and I think you  
 mentioned it why in your opinion prices were affected the way

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- (1) they were from 88 89 to 90 91 92?
- (2) A Well I m not quite sure what you re referring to
- (3) Q Well you mentioned the effect on the market from the growth of the farmed salmon and how it affected the way the traders would trade?
- (4) A Oh yes Well you know I don t want to take away from the proposition that what happened was that the world got drowned in salmon in these three years and the only way to move
- (5) it was at much lower prices But the presence of this yellow stuff up here the farmed stuff means that traditional marketing processes won t work nearly as well as they have done
- (6) in the past In the past however complicated the industry is the way salmon was marketed was to take it in the harvest and work it off during the rest of the year to get ready for the next harvest Well now with this big farmed salmon supply the salmon marketers are marketing salmon opportunistically so
- (7) if the holders of frozen wild let the price get much above what it costs the farmers to produce the farmers will just stop in there and take the market
- (8) And the Chilean farmed is optimal to market in the spring months which are traditionally the months when frozen wild inventory is being run down There is Colombia farmed - well it can be marketed throughout the year but it s heavily marketed at the end of the year when the Christmas market is available which would rundown frozen inventories So the

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- (1) various supplies and the quantities means that getting rid of inventory during the course of the year is going to be much much tougher and raise the risk of merchandising salmon and when the risks go up to the merchandise divers the price to the fishermen and the farmer go down
- (2) Q In the world of economists what you just described to the jury is that a big deal?
- (3) A It all depends on which one of the subworld s of economists that they are in No this is commonplace All resource markets have this characteristic, and it s always the case that the harvester at the end of the line takes the punishment whether he s a forester or a fur harvester or a wheat farmer or a soybean farmer whatever he is When supply goes up the guy
- (4) at the end of that as I call it whiplash takes this kind of price variation
- (5) Now when the supply goes up there is an even bigger impact on price in other resources but salmon consumption canned or frozen increase dramatically in 1989 as prices went down Very large fraction of that bumper crop got eaten because lower prices increased consumption
- (6) Q Now did you come up with this? Is this something that only you know?
- (7) A No Actually I felt like I might have gotten late to the movie when I went to review it because when I reviewed the Canadian sources - actually any sources I reviewed they all

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- (1) said the same thing that you can focus on the wrinkles and the timing issues but what happened was that massive bumper crops
- (2) of salmon in 1989 90 and 91 drove the price of salmon for British Columbians down And everybody says - it s actually pretty obvious what will happen the supply increase will take prices way down and any economist will look at that and notice it There is lot of interesting wrinkles about exchange rates and timing and so forth but I m not exactly novel in coming up with this conclusion
- (3) Q You re not on the cutting edge?
- (4) A No I missed it this time
- (5) Q I have in front of you an excerpt from the report I believe you just referred to It is DX3059 in evidence
- (6) A Well what I referred to was many reports I've looked at They all have the same conclusion
- (7) Q Well was there one specific one you had me make a copy of?
- (8) A The Canadian salmon outlook 1991 and that was - that report was written expressly to analyze why on earth did British Columbia salmon prices go down so rapidly and you can see the last sentence is the key sentence in that big highlighted paragraph It says the most significant factor explaining the price decrease were two successive record high harvests of Alaskan salmon It wasn t just Alaskan salmon but it was the major face to face competitor of B C
- (9) And you see the other interesting wrinkle several factors

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- (1) contributed to lower salmon prices for Canada salmon increase in farmed production high frozen inventories in Japan and they were very high in the first quart of 1989 and the unfavorable exchange rate those are all interesting wrinkles that one can analyze but the last sentence is really the story
- (2) MR SANDERS Thank you Dr Olley No further questions at this time Your Honor
- (3) THE COURT You may cross-examine
- (4) MR O NEILL Thank you Judge
- (5) CROSS EXAMINATION OF DR ROBERT OLLEY
- (6) BY MR O NEILL
- (7) Q How are you sir?
- (8) A Fine thank you
- (9) Q We ve never met My name is Brian O Neill I want to ask a couple questions about farmed salmon and the Japanese and
- (10) I ve put on the overhead Plaintiffs 6176 for identification which reflects salmon supply in Japan and farmed salmon supply in Japan so that you can compare farmed salmon supply against
- (11) general salmon supply other than farmed salmon supply
- (12) And are these levels reflective of your knowledge to the level that the role farm salmon supply in the years in Japan - is this inconsistent with your view?
- (13) A The graph is sufficiently blunt but it could be consistent with quite a wide range of views but it doesn t strike me as

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- (1) having a gross error in it  
 (2) Q And indeed farmed salmon was a small part of the overall salmon supply in Japan throughout the 80s and into 1990 isn't that correct?  
 (3) A I don't think so no  
 (4) Q You talked for a while about farmed salmon Would you agree or disagree with the following proposition Farmed salmon is not perceived as a product which is as preferred as sockeye on the Japanese market?  
 (5) A I think that within the limit - a sentence like that would have to come out of a much broader set of specifications for the study given whatever those much broader specifications are  
 (6) you could get at and that might account for a few cents difference between the price of sockeye and farmed -  
 (7) Q It's consistent with your view because you testified here today that in fact British Columbia salmon got a premium like Copper River salmon?  
 (8) A Yeah that's right there is lots of few cent differentials between salmon types  
 (9) Q And indeed the Japanese like wild salmon fatter salmon those are correct statements aren't they? They are preferred in the Japanese market?  
 (10) A Yeah subject to price differences that's correct The fatter - I mean there is several kinds of fat The fat you're referring to is the good fat

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- (1) Q The good fat we find in sockeye?  
 (2) A In Fraser River sockeye  
 (3) Q And in Copper River sockeye?  
 (4) A Yes  
 (5) Q Now with regard to fisheries and I don't mean to be critical but I do want to delineate your background you've done a lot of general economic work on a variety of topics from power plants to trees isn't that right?  
 (6) A Yes  
 (7) Q And you have never published any material where you have specifically reviewed Canadian fisheries or salmon markets before have you?  
 (8) A That's correct  
 (9) Q Now I want to talk a little bit about your general knowledge about consumers and the taint effect And in your experience you have seen products take a public relation slam and the price drop isn't that right?  
 (10) A I guess that happens once in awhile yes  
 (11) Q Baby nightwear?  
 (12) A Baby nightwear I'm afraid although I remember pronouncing myself on that I don't remember that I pronounced myself as having said that  
 (13) Q That consumer demand dropped on the news of tainting and you referred to it as baby nightwear?  
 (14) A I think that's true

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- (1) Q And we've seen it with Perrier and benzene in a couple bottles of Perrier?  
 (2) A I've heard that within this trial I don't know that for a fact and as a veteran Perrier drinker it's not my experience  
 (3) Q Prices dropped?  
 (4) A Well that's because long before the benzene there were all these wells in Quebec and Vermont began to pump this stuff out and selling it Perrier was taking the monopoly's profits  
 (5) Q Did you read about it the Perrier and benzene scare?  
 (6) A Oh yeah  
 (7) Q I want to talk about these traders in British Columbia Your description of these traders made them sound like predators  
 (8) A The traders?  
 (9) Q Yeah The traders will do what they can do to get the best price buy low and sell dear?  
 (10) A I didn't think I was describing anything other than ordinary economic motivation buy low and sell dear  
 (11) Q That's right And indeed have you ever participated or viewed the discussions that go on at any of these levels of distribution fish distribution out of British Columbia?  
 (12) A No I haven't I've interviewed the processors as to what happens but I haven't sat in nor would I have been welcome had I sought to I think  
 (13) Q Might have helped the price a little bit

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- (1) My understanding of the British Columbia ex vessel price market was that for a number of years the law allowed the British Columbia fishermen to bargain for price collectively?  
 (2) A They still do at times but that's - I mean it all depends what you mean collectively Occasionally they will go on strike just like the Alaska fishermen will occasionally go to strike and if that's what you mean by bargaining collectively that's correct  
 (3) Q My understanding and I think Dr Crutchfield's testimony in this courtroom was that it's one step beyond that that indeed they do historically bargaining collectively in a way that we can't in the United States because of our anti-trust laws?  
 (4) A That was true through the middle 80s produced the pink salmon deal between the processors and the fishermen and inoperatively low sockeye those are faded and gone  
 (5) Q But through the mid-80s that pattern of doing business in British Columbia existed and the law allowed it to exist?  
 (6) A Yeah it was a mechanism to avoid strikes  
 (7) Q And that's different than what can be done in the United States with regard to bargaining for prices you're aware of that?  
 (8) A Right Here you go straight to the strike  
 (9) Q I don't know whether it's wise but it's different?  
 (10) A Yeah  
 (11) Q In the early 80s there was a botulism incident with

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- (1) regard to canned tuna and what was the British Columbia price
- (2) after the canned tuna botulism incident do you recall?
- (3) A Are you misspeaking yourself? Do you mean canned salmon?
- (4) Q I mean canned salmon yeah Thank you
- (5) A Well in that incident some cans of salmon got into the
- (6) Belgian market with an invisible market and killed some people
- (7) Q What happened to the British Columbia market?
- (8) A Let me finish The European economic community forebade
- (9) the import of North America canned salmon so that door just
- (10) slammed bingo and the price of salmon went down
- (11) Q By a third?
- (12) A I don't know that it went down by a third
- (13) Q Did you testify that it went down by a third after the
- (14) botulism incident in British Columbia?
- (15) A I think but I'm not sure
- (16) Q Do you want to give it to me?
- (17) A You can have it The best I can do is bargain a couple
- (18) points off of you
- (19) Q I want to talk specifically about - you made the comment
- (20) that the ex vessel price in British Columbia dropped in late
- (21) 1988?
- (22) A Yes
- (23) Q And I sat at the table and I went through your report and
- (24) the data tables in your report and I couldn't find that in
- (25) your report or in the data tables And then I flipped through

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- (1) your deposition transcript and I couldn't find that in your
- (2) deposition transcript Was it in your report?
- (3) A I thought I had said in the report that prices had begun to
- (4) decline in late 88
- (5) Q You said it began to threaten in 88 but I couldn't find
- (6) any data in your report which shows that Where would it be?
- (7) A I'd have to leaf through the pages to see There is no
- (8) monthly statistics here Is it numbers you want?
- (9) Q Yeah I want to know whether we have any monthly statistics
- (10) in the report
- (11) A No there is no monthly statistics in there I just used
- (12) that as one of the backgrounds for the statement that prices
- (13) started to go down at the end of the 88
- (14) Q And in your report and I'm going to pull some pages in the
- (15) report -
- (16) THE COURT Mr O'Neill we've got some people that
- (17) are getting anxious for lunch including me We will take our
- (18) second recess at this time We will be in recess for 15
- (19) minutes
- (20) (Jury out at 12:02)
- (21) (Recess from 12:02 to 12:17)
- (22) (Jury in at 12:17)
- (23) THE CLERK All rise
- (24) BY MR O'NEILL
- (25) Q Where we left off before I was so rudely interrupted

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- (1) Doctor is it fair to say that at least in the data sets and
- (2) the report that you gave us the only indications we can get
- (3) out of the data sets in the report are that salmon prices for
- (4) British Columbia were high in 88 and low in 89?
- (5) A And falling towards the end of 88 yeah
- (6) Q Is there a data set in the report that shows us that they
- (7) were falling at the end of 88?
- (8) A No I just say it
- (9) Q I want to talk specifically about the Japanese and the
- (10) market for sockeye in Japan and would it be fair to say that
- (11) in 1988 - first let me talk about farmed salmon You said
- (12) you don't want to overstate your contentions about farmed
- (13) salmon Do you recall saying that?
- (14) A Yes
- (15) Q And the reason for that is I would guess is that in 1988
- (16) farmed salmon was about 18 to 19 percent of the world salmon
- (17) supply, and 1989 it was an increase of maybe one percent to 20
- (18) percent Is that consistent with your recollection?
- (19) A I think it increased a bit more than that in 89 didn't
- (20) it?
- (21) Q Let's go see if we can dig it out of your deposition
- (22) transcript And I'm not going to impeach you with your
- (23) deposition transcript but 98 lines 11 to 20 confirm your
- (24) recollection and tell me what the answer is
- (25) A Page which?

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- (1) Q 98 lines 11 through 20
- (2) A It's percentages we're talking about and you're right I'm
- (3) sorry I just misheard The quantities were up the percentage
- (4) didn't rise
- (5) Q The percentage from 1988 to 1989 in farmed salmon was a
- (6) percent or two from 18 or 19 percent to 20 percent?
- (7) A On a vastly larger base yes
- (8) Q Now I want to go to Japan for a minute The salmon prices
- (9) in Japan went down after the spill didn't they?
- (10) A I think that's a little too broad The sockeye prices went
- (11) down after the spill Other prices - and when you say in
- (12) Japan I think you mean the Tokyo wholesale
- (13) Q The bellwether?
- (14) A For other species the prices were going down before that
- (15) Q And indeed for sockeye salmon out of British Columbia in
- (16) the bellwether market the price drop occurred in May or June
- (17) of 1989?
- (18) A The Japanese price for sockeye went down - you know you
- (19) probably have to say it weakened a little bit in the end of
- (20) May but if you just look at the numbers June is when it went
- (21) down
- (22) Q And that's about the time of the arrival of the 1989 - the
- (23) first arrival of the 1989 packs into Japan?
- (24) A That would be when Copper River could begin to be
- (25) reaching Japan yes

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- (1) Q Now the first quarter inventory for sockeye for 1989 in  
 (2) Japan the first quarter inventory was lower than it was in  
 (3) 1988 wasn't it?  
 (4) A I haven't seen numbers on the sockeye alone. What I've  
 (5) seen is the Japanese inventory numbers for all of the premium  
 (6) reds and those inventories were much higher in the first  
 (7) quarter of '89 than they were in the first quarter of '88.  
 (8) Q Could you go to page 246 of your deposition transcript?  
 (9) A 246?  
 (10) Q Yes sir.  
 (11) A I've got it, yeah.  
 (12) Q Wasn't the question asked, is it your assumption in  
 (13) giving your opinions today that there was a significant  
 (14) increase in inventory levels from early '89 compared to early  
 (15) '88?  
 (16) And the answer was, I think the increase was relative to  
 (17) what the traders wished to be holding. I believe that the  
 (18) inventory was in absolute terms, absolutely lower than the  
 (19) previous high. So the question goes, so inventory levels in  
 (20) early '89 were lower than inventories levels in early '88.  
 (21) Answer: The question is?  
 (22) Question: That's what my question is.  
 (23) Answer: I'm sorry, I didn't hear it. And you go around and  
 (24) around, but you did say, I believe that the inventory was in  
 (25) absolute terms, absolutely lower than the previous high. Do

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- (1) you see that?  
 (2) A Yeah, I think we get to refer to sockeye and certainly  
 (3) sockeye was my mental image, yeah.  
 (4) Q So the inventory levels of sockeye in Japan, at least  
 (5) according to your deposition transcript, in 1989 were lower  
 (6) than they were in 1988?  
 (7) A There is some reference in the trade literature to sockeye  
 (8) being a bit lower in early '89 than in '88, but the public's  
 (9) literature on total reds is much higher, yes.  
 (10) Q And indeed for early 1989, sockeye prices in Japan were  
 (11) firm and not falling?  
 (12) A In the Tokyo wholesale market, the price was holding, that  
 (13) is right.  
 (14) Q I want to talk a little bit - you talked a lot about the  
 (15) supply side of the scale, but there also is a demand side of  
 (16) the scale, isn't there?  
 (17) A Always.  
 (18) Q Would it be fair to say that from 1980 to 1990 worldwide  
 (19) demand for salmon increased significantly?  
 (20) A It appears to have, as a broad matter, yes. There are  
 (21) variations in that.  
 (22) Q And indeed would it be fair to say that the demand for  
 (23) salmon, even in 1989, including sockeye salmon, expanded?  
 (24) We had an expanded demand in 1989?  
 (25) A Well, yeah. In 1988, the demand - at the final consumer

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- (1) level, the demand went down, and what happened in 1989 with  
 the  
 (2) fall of incomes was an enormous decrease in demand, yes.  
 (3) MR O'NEILL, I think I'm finished. Just let me have  
 (4) a second, I mean, thank you, Doctor.  
 (5) THE COURT: Mr. Sanders?  
 (6) MR SANDERS: Don't leave yet.  
 (7) REDIRECT EXAMINATION OF DR. ROBERT OLLEY  
 (8) BY MR SANDERS  
 (9) Q Dr. Olley, I want to refer you back to page 246 of your  
 (10) deposition. I think you mentioned in response to Mr. O'Neill's  
 (11) questions that your mind set that you were talking about was  
 (12) the sockeye inventory, first quarter of 1989, and he described  
 (13) what followed after he read you as going back and forth. Let  
 (14) me point out what is actually said right after this going back  
 (15) and forth here.  
 (16) Starting at line 16, the questioner, the guy that's asking  
 (17) your questions says, "Let's back up. I understood your answer a  
 (18) moment ago that inventory levels of sockeye salmon in Japan  
 (19) were lower in 1989 as compared to 1988, is that what you told  
 (20) me?" Answer: I said slightly lower. Yeah.  
 (21) In other words, the questioner makes it clear you're  
 (22) talking about the sockeye level at that point?  
 (23) A Yes. That's my recall, is that's what we were talking  
 (24) about, yes.  
 (25) Q Now you were asked questions, a couple questions about

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- (1) the amount of farmed salmon that was actually on or in the  
 (2) Japanese market in 1989, and you were asked a couple  
 questions  
 (3) about percent increases from '88 to '89 for farmed salmon.  
 (4) My question to you is, does a market in a rising supply  
 (5) situation have to have the product on shore in order to react  
 (6) to an increase in world supply?  
 (7) A The answer is in two dimensions, excuse me. One is -  
 (8) excuse me. One is that if supply becomes available at a lower  
 (9) price, then people who are not involved with that new supply  
 (10) will lower their price as well, and it's kind of like buying  
 (11) milk at the local supermarket. If somebody sells - is willing  
 (12) to sell it cheaper, the local supermarket will bring the price  
 (13) down, otherwise the customers will go away, so that somebody  
 (14) else doesn't actually have to sell any milk or deliver it to  
 (15) the customers at the local supermarket to bring the price down.  
 (16) The other dimension is that it's expected, it's expected  
 (17) supply, so that in a particular market, like salmon, where all  
 (18) the traders are accustomed to having to do business with at  
 (19) least a one-year time horizon in front of them, they have to  
 (20) make their decisions as to what they will pay on the basis of  
 (21) what they will expect will happen or could be made to happen  
 in  
 (22) the future. And if there is a big supply of farmed salmon  
 (23) available, what could be made to happen in the future is that  
 (24) people will ship it to them, and in fact, people have been  
 (25) shipping the percentage of farmed salmon in Japanese imports.

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- (1) If I m remembering the data correctly it has risen to about 20
- (2) percent or more for a total fresh and frozen by 1991
- (3) Q Doctor is it your opinion that it s the amount of farmed
- (4) salmon that was on hand as inventory in Japan in 1989 is what
- (5) had this influence that you ve described to the jury?
- (6) A No it s that which is available because farmed salmon
- (7) isn t like wild you take once a year and you re stuck with
- (8) whatever happened once a year It can be brought on stream in
- (9) a regular basis pretty well Not exactly but pretty well as
- (10) the wholesalers or importers need it
- (11) Q All right You were asked a couple questions about the
- (12) sockeye prices in the first quarter of 1989 in Japan My
- (13) question to you is is it significant what a price is if
- (14) product isn t moving at that price?
- (15) A Means the price is going to come down yeah
- (16) Q But the fact that the price is a stated price and very few
- (17) people are buying it that price doesn t tell us very much
- (18) except that it s going down right?
- (19) A Well that published price is a published list price and
- (20) the published lists in salmon are just like published lists in
- (21) any other commodity If you want to know what s real in the
- (22) market you don t want the published price You really want
- (23) the actual price at which transactions take place and the
- (24) trade publications tell us the few transactions that were
- (25) taking place were prices below published price

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- (1) Q For the first quarter in 1989 in Japan right?
- (2) A Right or even before that
- (3) Q Mr O Neill and you were discussing the timing of the
- (4) sockeye listed price decline in Japan as occurring around June
- (5) of 1989 and you mentioned that that is the time that the
- (6) Copper River harvest starts coming in correct to Japan?
- (7) A Yes
- (8) Q Are you aware of where Copper River - the Copper River run
- (9) was situated with respect to where the spill occurred?
- (10) A I m not an Alaskan geographer but I know it was outside of
- (11) the spill area
- (12) MR SANDERS That s my last question Thank you sir
- (13) THE COURT You may step down
- (14) MR SANDERS We call Trond Bjorndal I m trying to
- (15) learn the name
- (16) MR NEAL Got to go back to counter-intuitive and
- (17) cross elasticity
- (18) (The Witness Is Sworn)
- (19) THE CLERK Please be seated For the record sir
- (20) state your full name and address and spell your last name
- (21) please
- (22) THE WITNESS My name is Trond Bjorndal
- (23) B J O R N D - A L of Liarnden 44 Perhaps I ll spell that
- (24) L I A - R - I N D E N 44 Bergen Norway
- (25) DIRECT EXAMINATION OF TROND BJORNDAL

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- (1) BY MR SANDERS
- (2) Q Good afternoon Dr Bjorndal
- (3) A Good afternoon
- (4) Q Have you ever testified before?
- (5) A I have not
- (6) Q Just relax we ll get you through it You re from Bergen
- (7) Norway?
- (8) A That is correct
- (9) Q And what is your current employment Doctor?
- (10) A I m a professor of fisheries economics at the Norwegian
- (11) School of Economics
- (12) Q And that s in Bergen?
- (13) A That s in Bergen
- (14) Q Would you give the jury a general description of what your
- (15) educational background is?
- (16) A I have an undergraduate degree a bachelor s degree in
- (17) business administration and economics from the Norwegian
- (18) school also a master s degree from the same institution and
- (19) then a Ph D in economics from the University of British
- (20) Columbia in Vancouver
- (21) Q When did you get your bachelor s degree?
- (22) A That was in 75
- (23) Q And your master s degree?
- (24) A 79
- (25) Q And your Ph D ?

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- (1) A In 84
- (2) Q Did you do a Ph D thesis?
- (3) A I did on the optimal management of the North Sea herring
- (4) fishery
- (5) Q I was going to ask you for the title but you ll give it to
- (6) me in Norwegian won t you?
- (7) A No It was written in English
- (8) Q After you became a Ph D in economics what did you do?
- (9) A Well I returned to Norway I became an assistant
- (10) professor of fisheries economics in January of 85 I was
- (11) later promoted to associate professor and then full professor
- (12) Q If I could get you to get a little closer to this silver
- (13) microphone and speak up a little bit my partner over here is
- (14) having a lot of trouble hearing I think it s because of his
- (15) age, I think
- (16) MR NEAL At least I can understand what I hear
- (17) Judge
- (18) BY MR SANDERS
- (19) Q In your work following - receiving your Ph D have you
- (20) specialized in any particular area of economics?
- (21) A Well my work has always been related to economics of
- (22) fisheries and I ve done a fair amount of work with regard to
- (23) the management of wild fisheries but also from my return to
- (24) Norway in 1985 I ve done a substantial amount of work relating
- (25) to salmon aquaculture

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- (1) Q What is aquaculture?
- (2) A Salmon aquaculture is the production of salmon under
- (3) controlled conditions. It consists of two parts. The first
- (4) one is the hatchery production of smolts which is taking place
- (5) in tanks and in freshwater. Now after awhile the fry go
- (6) through a process called smoltification which means they
- (7) adapt
- (8) to life in saltwater and the hatcheries response as fish farms
- (9) is where the fish are kept in pens and they are fed and then
- (10) after awhile are sold to the market
- (11) Q And this is what we've been calling in this trial farmed
- (12) salmon?
- (13) A Correct
- (14) Q As distinct from wild salmon?
- (15) A Yes
- (16) Q Now in addition to what you've already described for us
- (17) have you done any research as a part of your work as a
- (18) professor or in any other capacity?
- (19) A Any research?
- (20) Q Research yes
- (21) A Of course. That's what I do all the time
- (22) Q Well I know it was a dumb question but I have to ask
- (23) these things. Could you describe for us what the research has
- (24) been?
- (25) A Well in a general sense I've done work as I already
- (26) mentioned relating to North Sea herring and more recently also

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- (1) to marine mammals such as whales and seals. Now starting in
- (2) 1985 I started doing work relating to salmon and salmon
- (3) aquaculture and that basically encompassed all aspects of
- (4) production and markets from coastal production analysis to
- (5) production planning models and to markets for salmon
- (6) Q Have you published any articles concerning your research
- (7) on
- (8) these areas of salmon aquaculture?
- (9) A I've published a book in Norwegian in 1987 on the economics
- (10) of salmon aquaculture and I published a book in English in
- (11) 1990 on the same topic
- (12) Q Give us the title of the English version
- (13) A That is called the Economics of Salmon Aquaculture
- (14) Q And in addition to those two works have you published
- (15) articles in this field?
- (16) A I've published numerous articles in academic journals and
- (17) also in more popular journals on this topic
- (18) Q Have you also taught fisheries economics marketing
- (19) strategies for fish aquacultural economics and natural
- (20) resource economics?
- (21) A That is correct yes
- (22) Q Have you done any consulting work?
- (23) A I've done consulting work for the United Nations and for
- (24) the Norwegian government and also other institutions
- (25) Q Have you made presentations at any professional meetings
- (26) in
- (27) this subject area?

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- (1) A Oh yes
- (2) Q Could you give us an idea of some of those - don't give us
- (3) all of them but give us an idea of some of those
- (4) A Well two years ago I was an invited speaker at the
- (5) meetings of the international association of aquaculture
- (6) economists in Tokyo. This summer I've been asked to be a
- (7) co-chairman at the meetings of the International Institute of
- (8) Fisheries Economics and Trade in Taiwan. I have also given
- (9) lectures at universities in Japan, Canada, United States and
- (10) several European countries on this topic
- (11) Q Now this may seem like another obvious question but in the
- (12) course of doing the work that you've just described for the
- (13) ladies and gentlemen of the jury and the court do you keep
- (14) apprised of the salmon market that Norwegian aquaculture sells
- (15) into and the prices in that market?
- (16) A As best I can yes
- (17) Q And why is that important for you to do?
- (18) A Well of course I have an academic interest in this area
- (19) and I also have shall we say a general interest in what is
- (20) going on in these markets
- (21) MR SANDERS May it please the court defendants
- (22) offer Dr Bjorndal as an economic expert on salmon prices and
- (23) salmon aquaculture for Norway
- (24) MR O NEILL Subject to the scope of the offer we
- (25) accept his qualifications

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- (1) THE COURT Qualifications are accepted you may
- (2) inquire
- (3) MR SANDERS Thank you Your Honor
- (4) BY MR SANDERS
- (5) Q Dr Bjorndal I would like for you to kind of use as a
- (6) point of departure the description you gave us of aquaculture
- (7) and salmon farming and tell us basically what given the fact
- (8) that the smolt are raised to a certain age and then they are
- (9) put in these pens or ranches and then allowed to grow for a
- (10) certain amount of time until they become mature enough to be
- (11) sold or marketed as food product what are the advantages to
- (12) this sort of a way of raising salmon as opposed to wild stock?
- (13) A Well the major advantages are that first of all you can
- (14) supply the market year round with a fresh high quality product
- (15) and also to some extent you're able to supply the product
- (16) according to the wishes of the customer. You can adjust - you
- (17) can deliver the size the customer wants you can affect the
- (18) color of the skin and so on
- (19) Q Now if you would would you explain to the ladies and
- (20) gentlemen of the jury the evolution of the Norwegian farmed
- (21) salmon industry?
- (22) A Well we have to keep in mind that the production process
- (23) in salmon aquaculture is fairly long from when eggs are
- (24) hatched until you have smolts available to be put into sea
- (25) farms takes perhaps 16-17 months in some cases more than
- (26) two



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- (1) years After that the fish are kept in the fish farms for  
 (7) perhaps another two years which means that the whole  
 (3) production period may be from three to five years Now this  
 (4) technology was developed in Norway basically in the 1970s  
 and  
 (5) of course it took awhile to learn how to do this and then  
 (6) eventually to be able to produce salmon for market  
 (7) Q Had there been salmon in Norway prior to this?  
 (8) A We did have a wild fishery and to some extent we still  
 (9) have a wild fishery but nowadays that s on a very small scale  
 (10) mainly for - mainly a sports fishery  
 (11) Q Had the fishery in past years been larger and had a  
 (12) commercial catch? Did there used to be a salmon industry in  
 (13) Norway prior to the advent of the farmed salmon industry?  
 (14) A There was but only on a limited scale in the 70s We  
 (15) have to go further back to the 1930s to find a wild fishery of  
 (16) any significance  
 (17) Q I m sorry for interrupting you  
 (18) When did the technology get to the point where there was a  
 (19) product that could be marketed  
 (20) A Well you can t really pick one year and say that this is  
 (21) when it happened it was a gradual process over time but I  
 (22) think it may be fair to choose about 1980 as a year when the  
 (23) industry started being consolidated started controlling the  
 (24) technology and then throughout the 80s production really  
 (25) started to expand

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- (1) Q Now did there come a time or a time frame I realize you  
 (2) don t want - I don t want to say a particular month or year  
 (3) but is there a time frame in which this new industry for  
 (4) Norway I guess for the world came on line so that it was  
 (5) starting to become a factor and starting to become profitable  
 (6) for Norway?  
 (7) A Well the industry was very profitable throughout its first  
 (8) years of operation  
 (9) Q That would be the early 80s?  
 (10) A I would say the early 80s up to at least 85 and  
 (11) somewhat beyond that And this laid the basis for new entry to  
 (12) the industry and expanded production taking place with a delay  
 (13) of a few years  
 (14) Now throughout the 1980s the growth rate in salmon  
 (15) aquaculture in Norway was about 40 to 45 percent which is  
 very  
 (16) high growth rate indeed  
 (17) Q Now I want to get back to that in a minute But I just  
 (18) want you to explain to the ladies and gentlemen of the jury  
 (19) where was the initial market for this initially very profitable  
 (20) product?  
 (21) A Well as I mentioned one of the advantages of salmon  
 (22) aquaculture is that you re able to supply a product fresh  
 (23) year round Now it was an expensive restaurant and the first  
 (24) market outlet was found in very expensive fancy restaurants in  
 (25) France and that was the first major market for Norwegian

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- (1) salmon and has remained an important market ever since  
 (2) Q And I suppose when you re selling to fancy French  
 (3) restaurants with white tablecloths you can get a lot of money  
 (4) for your salmon?  
 (5) A We got a very high price for a high quality product which  
 (6) had previously not been available  
 (7) Q And as a result of those high prices and that market I  
 (8) take it you re saying that that business started off on a very  
 (9) profitable footing?  
 (10) A It did And expanded and in line with the expansion in  
 (11) production knew markets were found  
 (12) Q Well now let me stop you just a second  
 (13) When it was started as a profitable venture was that a  
 (14) secret in Norway?  
 (15) A It was not a secret everybody wanted to get into the  
 (16) industry in Norway We had licensing regulations which meant  
 (17) there were limits on entry but as many - but basically  
 (18) everybody who could wanted to get into the industry On one  
 (19) occasion they gave out 150 new licenses and there were more  
 (20) than 2 500 applicants for those  
 (21) Q Now let s understand what that means In the early '80s  
 (22) you have some new industry coming on line with a good profit  
 (23) margin It attracts a lot of people that want to do this  
 (24) also So when these businesses start you ve got a three to  
 (25) five year lag time before the smolts that they start whipping

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- (1) up become something to put on the market is that correct?  
 (2) A That s correct  
 (3) Q And as a result of this increase in number of people coming  
 (4) in to the business the Norwegian farmed salmon business you  
 (5) have increased participates producing salmon that are going to  
 (6) come on line three five six seven years hence and do you  
 (7) also have a corresponding increase in production for the  
 people  
 (8) that are already doing it?  
 (9) A Yes We had large entry to the industry The number of  
 (10) farms in the industry doubled from 80 to 85 and then again  
 (11) almost doubled up to 89 At the same time the production per  
 (12) unit increased tremendously So both these sources laid the  
 (13) foundation for the substantial increase in production  
 (14) Q So in other words there is a two fold increase in  
 (15) production in Norway?  
 (16) A Yes one from increasing the number of farms and  
 (17) secondly from increasing production per farm  
 (18) Q Now you were about to describe before I interrupted you,  
 (19) that as the production increased then you kind of outran the  
 (20) market that you had established in France and Europe for high  
 (21) quality high priced white tablecloth salmon?  
 (22) A Yes so as I mentioned France was the first market for  
 (23) salmon Now what happened at the same time as production  
 (24) increased is that new ways of transporting the fish became  
 (25) available and in particular air freighting salmon to overseas

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- (1) market And the United States become another very important  
 (2) market in 84 and 85 which was actually the most important  
 (3) market for Norwegian salmon  
 (4) Again in these new markets salmon was initially primarily  
 (5) sold through the expensive restaurants and by doing so by  
 (6) going to new ones to very well-paying market segments it was  
 (7) possible to maintain the price at a fairly high level in the  
 (8) early part of the 1980s  
 (9) Q Now as supply continued to build production continued to  
 (10) build in Norway - well first Is there another added factor  
 (11) to this added production this exploding production in the 80s  
 (12) other than Norway?  
 (13) A Yes Profitability was very high in Norway and as a  
 (14) result of this we had an expansion in the industry in Norway  
 (15) but also other countries that had conditions suitable for  
 (16) farms Scotland Ireland Faroe British Columbia Chile  
 (17) Tasmania Australia even people in Alaska wanted to start  
 (18) salmon farming So wherever the right or good conditions were  
 (19) found for salmon farming there were people who wanted to start  
 (20) this business And I should also add that this was done on the  
 (21) basis of the transfer of Norwegian technology and also to a  
 (22) significant extent in many countries based on Norwegian  
 (23) capital  
 (24) Q So then you have a third way that production builds in the  
 (25) early 80s?

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- (1) A Yes  
 (2) Q And again you have this phenomena of a new player in a  
 (3) given market in a given country you have a lag time of three  
 (4) or four or five years until the start of that business until  
 (5) the time the salmon start to hit the market?  
 (6) A Yes indeed In a way the other countries followed  
 (7) Norway's lead but with a lag of a few years  
 (8) Q Now as production continues to increase for farmed salmon  
 (9) does - is the market able to absorb this increased production?  
 (10) A Well Norwegian exporters went from France to the United  
 (11) States to Japan and in all these countries the highest paying  
 (12) market segments were served initially and that was the high  
 (13) paying restaurants but the point came when the production  
 (14) increase was so large that the product had to enter into new  
 (15) market segments and in particular lower paying market  
 (16) segments  
 (17) Q Did the high paying market become saturated?  
 (18) A It became saturated yes  
 (19) Q And that then compelled with increased production you ve  
 (20) got to go down a notch?  
 (21) A You had to go down and salmon started farmed salmon  
 (22) started being sold through supermarkets in competition with  
 (23) wild salmon It was also sold to what we in Europe called the  
 (24) food services industry to hospitals Army institutions et  
 (25) cetera which are fairly large buyers of food in Europe And

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- (1) basically what happened is that the sort of high price image of  
 (2) farmed salmon gradually got lost  
 (3) Q And did the high price for Norwegian farmed salmon likewise  
 (4) get lost?  
 (5) A Yes inevitably it did  
 (6) Q And did eventually and we ll put some times on this in a  
 (7) minute eventually did the production get to the point where  
 (8) Norwegian farmed salmon entered the mass consumer market?  
 (9) A Very much so This happened throughout the world in  
 Europe  
 (10) and the United States and also in Japan Where you could find  
 (11) farmed salmon in general being sold in competition with wild  
 (12) salmon in the same market outlets  
 (13) Q And when I say mass consumer market I would include  
 (14) within that question supermarkets stores that level?  
 (15) A Indeed And today McDonald's hamburgers have a  
 McSalmon  
 (16) sandwich  
 (17) Q That's only in Norway?  
 (18) A Only in Norway so far but they would definitely like to  
 (19) introduce it also world wise  
 (20) Q Tell them to avoid Johnson City Tennessee for awhile it's  
 (21) not ready yet for it  
 (22) A And in a way that sort of indicates - well it's  
 (23) indicative of what happened to farmed salmon from only being  
 (24) sold in the very expensive restaurants to being sold through  
 (25) let's say mass consumer outlets And nowadays there are

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- (1) expensive restaurants who do not want to have farmed salmon  
 (2) anymore because they say it's not sufficiently exclusive  
 (3) Q What comes around goes around  
 (4) Doctor it would help us in our analysis here if you could  
 (5) put some times on this for us The time frame it took for this  
 (6) market to go from white tablecloth fancy French restaurants  
 (7) down to supermarket what is the relative time frame here?  
 (8) Sounds short?  
 (9) A It was indeed short All of this happened during the  
 (10) 1980s but of course it was a gradual process You can't say  
 (11) it happened in one particular year but if we look at the  
 (12) Norwegian production that was only a little more than 4 000  
 (13) tons in 1985 - sorry 4 000 tons in 1980 That increased to  
 (14) 30 000 tons in 1985 to 80 000 in 1988 and more than 100 in  
 (15) 1989  
 (16) Q Let me help you a little bit here with an exhibit  
 (17) This information has other countries included within it  
 (18) but the blue the dark blue or royal blue perhaps represents  
 (19) Norway and that shows the increase in the harvest of farmed  
 (20) salmon for Norway over these years that you were just  
 (21) mentioning?  
 (22) A Yes What you notice in the early years 80 through 83  
 (23) Norway the blue bars more or less dominated the industry  
 (24) Now production as I mentioned reached about 30 000 tons in  
 (25) 1985 and continued increasing every year after except for 91

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- (1) and 92
- (2) Q You re a little bit beyond where I want to be and for the record this is DX4900-Bravo I was searching for a time that
- (3) you could give us that would help us in terms of when this
- (4) penetration of the mass consumer markets was happening
- (5) Can
- (6) you put a date on that?
- (7) A Well again as I said it s a gradual process but if we look at some time around 1985 we re probably not far off
- (8) Q That s where we start Now when it goes - by 1989 for example is the process this descending production into from
- (9) the top layer fancy French restaurants down to the
- (10) supermarkets has that occurred?
- (11) A Oh definitely but that had already started by 1985
- (12) Q Well the reason I wanted that date is you gave me a chart
- (13) to put up This is DX6102 Is this kind of an elementary
- (14) graph showing how this phenomena of farmed salmon from the
- (15) top
- (16) exclusive restaurants down to the mass consumer markets
- (17) occurred from 1980 to 1989?
- (18) A That s correct And as you notice as time goes by and
- (19) farmed salmon is sold in the supermarkets mass consumer
- (20) markets it comes into more and more direct competition with
- (21) wild salmon
- (22) Q And that is represented by the darker green level of this
- (23) block here right
- (24) Now as a consequence of this significant increase in
- (25)

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- (1) production of farmed salmon and its need to penetrate these
- (2) other markets what happened to the price?
- (3) A Well the price stayed fairly stable up until 1985 It
- (4) fell in 1986 It came up a little bit again in 1987 but then
- (5) from the third or fourth quarter of 1987 it started to fall
- (6) again and has more or less been falling ever since up until
- (7) today
- (8) Q I ve got a chart here and this chart is specifically -
- (9) it s a language barrier problem because it s not useful to us
- (10) in terms of the numbers themselves because it s in kroners per
- (11) kilogram but do the chart lines there one showing production
- (12) and the other showing price does that give the jury an idea of
- (13) how as production goes up price goes down
- (14) A Well you see on this diagram which shows Norwegian
- (15) farmed
- (16) salmon production and the price paid to salmon farmers that
- (17) is what would be comparable to the ex vessel price in wild
- (18) fishery how this developed over 1980 to 1992 period
- (19) Now the production was increasing throughout this period
- (20) as I have already talked about, and what you notice is that the
- (21) price stayed fairly stable up to 1985 Then there was a
- (22) substantial price fall in 86 The price came up again in 1987
- (23) and then has been on a downward trend ever since
- (24) Q Now in terms of production have you made a comparison
- (25) between the - as to the frozen salmon market which is where
- (26) the Alaskan sockeye goes into the frozen salmon market have

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- (1) you prepared a chart which shows the relative relationship
- (2) volume wise of those two products Alaskan to farmed for the
- (3) period from 1980 and then a comparison in 1990?
- (4) A That s correct yes
- (5) Q I ll call up DX1893
- (6) A Now this exhibit shows the shares of Alaska salmon and
- (7) farmed salmon fresh and frozen exports in 1980 and 1990
- (8) Now
- (9) what you notice is that in 1980 Alaska salmon represented
- (10) almost 60 percent of the world fresh and frozen salmon exports
- (11) while farmed salmon represented less than five percent
- (12) Now in 1990 however the share of Alaska had been reduced
- (13) to about 32 33 percent while that of farmed salmon had
- (14) increased to roughly 45 percent, and this happened even if the
- (15) production in Alaska in 1990 was substantially higher than in
- (16) 1980
- (17) Q So both are increasing?
- (18) A Both are increasing, but of course farmed salmon production
- (19) even more than wild salmon production
- (20) Q Now this farmed salmon increase occurs over a ten-year
- (21) period, right?
- (22) A Yes
- (23) Q Now as a result of this explosion in farmed salmon
- (24) production did there come a time in the late 80s when you in
- (25) your capacity as an expert and as a Norwegian and consulting
- (26) with the government did you send out any warnings?

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- (1) A Well as we saw except for the price fall in 86 the
- (2) price was high up to 85 and then again in early 87 Now the
- (3) a tendency of fish farmers and hatchery operators is to make
- (4) their decisions based on current prices So hatchery owners
- (5) fish farmers saw the prices were high and anticipated they
- (6) would remain high and for that reason increased their output or
- (7) production of smolts and later farmed fish but with this lag
- (8) in the production process this showed up a few years down the
- (9) road
- (10) Now it was evident to a number of observers that the vast
- (11) increases in production that were ahead of us would have to be
- (12) accompanied by reductions in the price I was not the only one
- (13) to point this out This was done by several other observers of
- (14) the industry as well
- (15) Q And what was your warning?
- (16) A Well the warning was that the price would go down
- (17) Q Either because of this lag time or because they didn t pay
- (18) any attention to you did production ease up?
- (19) A No it did not As you will see in this exhibit Norwegian
- (20) exports increased dramatically especially from 85 to 90
- (21) There was a three fold increase in Norwegian exports in a
- (22) three-year period And except for a small dip in 1992 exports
- (23) have also continued to increase subsequently
- (24) Q What effect has that had on the price this vast increase
- (25) in production what effect has that had on the price of

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- (1) Norwegian farmed salmon?  
 (2) A Well the price started falling at the end of 87 and has  
 (3) been falling more or less continuously ever since and the  
 (4) consequence of this is that many farms got into financial  
 (5) problems  
 (6) Q And when you say financial problems are you being kind of  
 (7) kind?  
 (8) A Well bankruptcies started appearing in 1989 I don't  
 (9) think we had any bankruptcy in the industry prior to 89 but  
 (10) from 89 through 1992 more than 30 percent of all fish farms  
 (11) and hatcheries in Norway went bankrupt  
 (12) Q So you got 30 percent of the people in the business are  
 (13) going bankrupt less than ten years after the thing gets going  
 (14) good and still you have an increase in production as your  
 (15) chart up there shows that's DXS270 B is that correct?  
 (16) A That's correct  
 (17) Q Now at first you made it clear that the prices that  
 (18) Norwegian farmed salmon commanded on the market were  
 high  
 (19) prices?  
 (20) A Yes  
 (21) Q And obviously that's higher than wild stock prices?  
 (22) A Yes  
 (23) Q Did there come a time when Norwegian salmon's price got so  
 (24) low that it was comparable to and therefore competing with wild  
 (25) salmon?

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- (1) A Well as the price came down the price of Atlantic or  
 (2) farmed salmon got closer to the price of wild salmon and in  
 (3) particular from 1988 that was the case  
 (4) Q So the time frame on that when they come together is  
 (5) 1988?  
 (6) A Well -  
 (7) Q Roughly?  
 (8) A Roughly but they are still somewhat different and a  
 (9) farmed salmon price is higher than the wild salmon price  
 (10) however farmed salmon is generally sold as a fresh product  
 (11) As you can see from this exhibit most of it is sold as a fresh  
 (12) product and that is of course because it's supplied  
 (13) year round while wild salmon in general is sold as a frozen  
 (14) product and a fresh product will generally fetch a higher price  
 (15) than a frozen product  
 (16) Q Now I'm not asking you about whether it does better or  
 (17) worse but by 89 or so - well excuse me you said starting  
 (18) in 1985 in the mass market was Norwegian farmed salmon  
 (19) farmed salmon from other countries by then competing  
 (20) price wise with - no market-wise with wild salmon?  
 (21) A Well we have always had substantial - there has always  
 (22) been substantial imports of U S salmon to Europe and there  
 (23) was competition between farmed salmon and wild salmon  
 (24) throughout this period  
 (25) Q What about in Japan?

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- (1) A And of course the same thing happened in the United States  
 (2) and in Japan  
 (3) Q Now you've explained to us that the great increase in  
 (4) production and then the accompanying decline in price led to a  
 (5) bankruptcy of 30 percent of the people that were in the  
 (6) business beginning in 1989 and I suppose - well did Norway  
 (7) try to do something about this problem as it started?  
 (8) A Yes Well we had an organization called the Fish Farmers  
 (9) Association and in January of 1990 it decided to introduce a  
 (10) freezing program for Norwegian farmed salmon Now this was  
 of  
 (11) course based on what had happened in 1989 the falling prices  
 (12) of salmon and also one other reason they gave for this was the  
 (13) high increases in the production of wild salmon and the fact  
 (14) that Norwegian salmon was met with empty dumping  
 complaints  
 (15) both in the United States and in the European union  
 (16) Now as a consequence of this they decided to freeze  
 (17) 40 000 tons of salmon in 1990 in the anticipation that  
 (18) production would slow down in 91 and that the frozen salmon  
 (19) could be resold profitably in 1991  
 (20) Q Did that work?  
 (21) A Unfortunately it did not work  
 (22) Q The chart shows it didn't work?  
 (23) A Production increased substantially also in 90 and again in  
 (24) 1991 and as a consequence of this this Fish Farmers  
 (25) organization also went bankrupt in November of 1991 You

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- (1) notice the increase in frozen sales in 1991 and that is due to  
 (2) this freezing program  
 (3) Q The answer is self-evident but let me ask you Do you  
 (4) have an opinion as to what caused the downward trend in  
 prices  
 (5) for Norwegian salmon from approximately 1986 through the  
 (6) present?  
 (7) A Well this was caused by the huge increase in supply  
 (8) Q And the huge increase in supply is partly the fault of the  
 (9) farmed salmon industry is it not?  
 (10) A That is correct  
 (11) Q And in addition to that, starting in 1989 you had a  
 (12) tremendous increase in the wild stock?  
 (13) A Yes so of course both increase in farmed production put  
 (14) downward pressure on prices but also the increase in wild  
 (15) production put a downward pressure on prices so these effects  
 (16) worked of course together and created a huge oversupply of  
 (17) salmon  
 (18) Q Is it fair to say that the wild salmon and farmed salmon  
 (19) industries are now their own worst enemies?  
 (20) A You might say so yes  
 (21) Q Because both of them have come together for this huge  
 (22) increase in supply which has to affect the price?  
 (23) A Yes  
 (24) Q And that phenomena started occurring in the late 1980s?  
 (25) A Yes

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- (1) Q Now this may seem like a silly question to you after what  
 (2) you've just said but were you asked to determine whether there  
 (3) was any effect whatsoever from the Alaskan oil spill in March  
 (4) of 1989 on the price of Norwegian farmed salmon?  
 (5) A I was asked to do that yes  
 (6) Q And do you have an opinion on whether there was an effect  
 (7) on the downward price of Norwegian farmed salmon coming  
 from  
 (8) the March '89 Alaskan oil spill?  
 (9) A I do yes  
 (10) Q And what is that?  
 (11) A Well when we look at the statistics they clearly show  
 (12) that most of the price reduction took place prior to the Exxon  
 (13) Valdez oil spill  
 (14) Q Did you prepare a chart to show this? And I show you  
 (15) Defendants Exhibit 4904-Bravo  
 (16) A I prepared that and what you notice is that from the fall  
 (17) of 1987 from October through March of 1988 the price  
 (18) reduction for Norwegian salmon was about 30 percent It did  
 (19) continue falling also after March of '89 up until June when it  
 (20) leveled off - when it leveled off for the time being So my  
 (21) conclusion is that this was based by the increase in the supply  
 (22) of Norwegian farmed salmon  
 (23) MR SANDERS Thank you very much Dr Bjorndal  
 (24) MR O NEILL Can you leave that up?  
 (25) MR SANDERS Sure

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- (1) MR O NEILL You don't know how to work that? Did  
 (2) you see that? An attempt at technology  
 (3) CROSS EXAMINATION OF TROND BJORNDAL  
 (4) BY MR O NEILL  
 (5) Q My name is Brian O Neill Doctor The pattern that we see  
 (6) with regard to the price of farmed salmon is very different  
 (7) than the pattern that we see with regard to the prices of a  
 (8) variety of other salmon coming from other places in the world  
 (9) isn't it?  
 (10) A I wouldn't say very different but certainly there are  
 (11) differences  
 (12) Q Would it be fair to say for example with regard to  
 (13) Alaskan sockeye that in 1987 and 1988 when farmed salmon  
 was  
 (14) going down the price of Alaskan sockeye was going up?  
 (15) A Generally speaking that was correct but what happened  
 (16) then is that -  
 (17) Q That was my question  
 (18) MR SANDERS Wait just a minute I object to him  
 (19) interrupting the witness He clearly was still talking  
 (20) THE COURT Let's take the rest of his answer  
 (21) THE WITNESS Basically it's correct but what I  
 (22) mentioned also earlier is that the price differential became  
 (23) less  
 (24) BY MR O NEILL  
 (25) Q But in any event in 1987 and 1988 there is a drastic price

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- (1) with regard to Alaska reds?  
 (2) A Yes  
 (3) Q In a totally different direction than you get with regard  
 (4) to farmed salmon?  
 (5) A That is correct  
 (6) Q And in point of fact after the oil spill we get a very  
 (7) different phenomena with regard to price for Alaskan reds than  
 (8) we do for farmed salmon We get a precipitous decline in June  
 (9) or July after the oil spill don't we?  
 (10) A There was a fall but you also have to keep in mind that  
 (11) sockeye is harvested in a fairly short season while farmed  
 (12) salmon is processed continuously over the year so you would  
 (13) expect to see some differences due to that  
 (14) Q But the sockeye price crashed in Japan in June of 1989  
 (15) didn't it?  
 (16) A Well it fell definitely yes  
 (17) Q Now just so we're clear people don't farm sockeye with  
 (18) any great success do they?  
 (19) A Not yet no  
 (20) Q We would like to?  
 (21) A Yes  
 (22) Q But despite our best efforts there is not a farming  
 (23) industry with regard to sockeye salmon of any significance?  
 (24) A That is correct  
 (25) Q Now I want to talk if I could for a minute about

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- (1) Norwegian exports You said you exported some Norwegian  
 salmon  
 (2) to Japan?  
 (3) A Yes  
 (4) Q What percentage of the Norwegian farm pack was exported  
 to  
 (5) Japan in 1989?  
 (6) A At that time it was only - it was probably five or six  
 (7) percent It has increased now to about nine percent but also  
 (8) exports from Norway to Japan increased considerably from '88  
 to  
 (9) '89  
 (10) Q Farmed imports - the Japanese - I want to compare the  
 (11) total Japanese consumption of farmed salmon to all salmon  
 (12) A Yes  
 (13) Q And in 1989 farmed salmon consumption was about four  
 (14) percent of the total Japanese market and in 1990 it was about  
 (15) five percent and in 1991 it was about five percent Are the  
 (16) percentages right?  
 (17) A I could certainly verify those figures but Norway exported  
 (18) 3 000 tons of farmed salmon which was doubled in 1989 -  
 (19) Q What percentage that is of Japanese salmon consumption?  
 (20) A Well we also have to take into account that Chile expanded  
 (21) their exports  
 (22) Q What percentage of the - what percentage did Norwegian  
 (23) farmed salmon play in 1989 with regard to the Japanese  
 (24) consumption of salmon what percentage?  
 (25) A Well I don't agree with the foundation of your question

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- (1) We cannot only consider the Norwegian  
 (2) Q I want a percentage  
 (3) A Well probably two percent  
 (4) Q Two percent?  
 (5) A Yes but you know in economics it is generally known that  
 (6) although quantities may appear to be fairly small they may  
 (7) still have an impact on price  
 (8) Q But we agree that the percentage that Norwegian farmed  
 (9) salmon played in Japanese consumption in 1989 was two  
 percent?  
 (10) A That is only part of the equation  
 (11) Q What did Chile play?  
 (12) A Chile increased from a bit more from a thousand tons in  
 (13) 88 to 4 000 tons in 89  
 (14) Q And what percentage did Chilean farmed salmon play in  
 1989  
 (15) with regard to the total consumption of salmon in Japan less  
 (16) than one percent?  
 (17) A If you talk about total consumption it s less than one  
 (18) percent but certainly quantities were increasing from 88 to  
 (19) 89  
 (20) Q Now I want to talk about the demand side of the equation  
 (21) From 1987 to 1990 there were large increases in salmon  
 (22) consumption salmon demand in the United States Japan and  
 (23) France?  
 (24) A Yes  
 (25) Q And on the demand side of the equation would it be fair to

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- (1) say that in the United States for 1987 to 1990 people almost  
 (2) doubled their consumption of salmon?  
 (3) A Yes  
 (4) Q And would it be fair to say that in Japan from 1987 to  
 (5) 1990 there was an increase in per capita consumption by  
 (6) kilogram from 2 6 to 3 31?  
 (7) A That is probably correct There was certainly a very  
 (8) substantial increase  
 (9) Q And there was also a substantial increase in consumption in  
 (10) France?  
 (11) A Yes  
 (12) Q And there were increases in the United Kingdom the Federal  
 (13) Republic of Germany and Spain although not as spectacular?  
 (14) A Yes  
 (15) Q So with regard to the demand side from 87 to 90 there is  
 (16) greater demand?  
 (17) A There is greater demand yes but largely due to the  
 (18) increase in price - sorry, largely due to the decrease in  
 (19) price  
 (20) Q With regard to farmed salmon?  
 (21) A Farmed salmon and also wild salmon  
 (22) Q We don t see any decrease in price between 1987 until right  
 (23) after the spill in Alaska salmon though do we?  
 (24) MR SANDERS Object - I ll withdraw it Go ahead  
 (25) BY MR O NEILL

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- (1) Q Do you understand the question? Should I re ask it?  
 (2) A From 87 to 89 that is correct yes  
 (3) Q I just want to check a couple more markets and then I ll  
 (4) finish with you We re just about done This is easier than  
 (5) they told you it was going to be and I m only asking you  
 (6) questions about things you know about  
 (7) A Very good  
 (8) Q Canadian salmon sales focus primarily on the United States?  
 (9) A And Japan They did export to Europe but their exports to  
 (10) Europe have been reduced considerably  
 (11) Q But it s the United States with then some to Japan?  
 (12) A Yes  
 (13) Q With regard to farmed salmon farmed salmon and this is  
 (14) primarily of academic interest but you talked about farmed  
 (15) salmon availability year round?  
 (16) A Uh huh  
 (17) Q Farmed salmon has some disadvantages as opposed to wild  
 (18) stock salmon because you can get disease outbreaks can t  
 you?  
 (19) A Of course you can have disease outbreaks but that s also  
 (20) true for wild salmon  
 (21) Q But in the last five or six years that has been a concern  
 (22) with regard to the Norwegian - I m not trying to slam  
 (23) Norwegian salmon but that s been a real concern with regard  
 to  
 (24) Norwegian salmon?  
 (25) A For the past two years we ve had an excellent record with

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- (1) regard to disease problems If you go prior to that it was a  
 (2) concern  
 (3) Q So up through 90 there was a problem with regard to  
 (4) Norwegian farmed salmon and disease?  
 (5) A Well there was a problem certainly on the production  
 (6) side I wouldn t say so much on the market side  
 (7) Q I want to talk briefly about the farmed salmon industry  
 (8) again in your part of the country The Shetland Islands which  
 (9) I understand was until 1550 or thereabout a part of Norway?  
 (10) A Yes  
 (11) Q And then given away as part of a dowry?  
 (12) A Yes most unfortunately  
 (13) Q In fact it s an interesting place because they have  
 (14) Norwegian laws and a Scottish - the imposition of a Scottish  
 (15) culture on Norwegian laws that s neither here nor there but  
 (16) moving onto what s important in this case  
 (17) MR SANDERS Stipulate  
 (18) BY MR O NEILL  
 (19) Q There was the Braer oil spill within the last year or two  
 (20) with regard to the Shetland Islands?  
 (21) A Yes  
 (22) Q And there were some pens of salmon that were oiled and  
 (23) there was a lot of pens of salmon that were not oiled?  
 (24) A I think out of 60 farms in the Shetland only 11 farms were  
 (25) in the affected areas That s on the south coast of the

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- (1) Shetland Islands  
 (2) Q And then when you got over to the west side where the farms were they were not oiled?  
 (4) A They were not oiled  
 (5) Q And the Shetland industry had been working hard to develop a premium with regard to Shetland salmon to sell it against the Scots and indeed they had done things like mark on the side of the box Shetland Island salmon and as a result of the Shetland Island - the Braer spill they ran into trouble with price and their major buyers in the United Kingdom You re aware of that aren t you?  
 (12) A I m somewhat aware of what happened yes  
 (13) Q And they lost their premium didn t they?  
 (14) A Well what happened is that when the government immediately introduced a no fishing zone around the area where this oil spill happened which was incidentally twice the size of the Exxon Valdez oil spill that included a harvesting ban for fish farms for that area  
 (19) Now this meant that of course these farms could not harvest their salmon and got into financial problems Now I know there are claims by farms in the unaffected areas that the oil spill had an impact on their price and that Dr Crutchfield of Natural Resource Consultants had been asked to assess these damages I have not seen his report yet I have not seen any other let s say verification of the claims so

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- (1) far so it s not possible for me to let s say assess the validity of the claims  
 (3) Q You re aware of the fact that the government paid those claims the IOPC paid those claims aren t you?  
 (5) A Well they paid - they paid the farmers that were affected for their losses I know that  
 (7) Q They paid the price claims too didn t they?  
 (8) A I didn t know that  
 (9) Q And you re aware that the price of the salmon did go down after the Braer oil spill?  
 (11) A I m not aware of there being any specific price effects for the Shetland Islands I have not seen any verification of that There are times when Scottish salmon have been priced higher than Norwegian salmon and other periods where it s been the other way around I d be more than pleased to comment on this as soon as Dr Crutchfield s report is available  
 (17) Q Are you aware of the fact that there were some fish processors in Norwich -  
 (19) A Yes  
 (20) Q - who ended up stuck with case after case after case of salmon that was labeled Shetland Island salmon and they were unable to move it and sell it in gland?  
 (23) A Well from what I know there were two supermarket chains that stopped buying salmon from the Shetland Islands you know  
 (25) right after the oil spill But that only lasted for a couple

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- (1) weeks while other supermarket chains did not stop purchasing from the Shetland Islands  
 (3) Q What were the two that stopped purchasing?  
 (4) A Well Marx and Spencer was one I m not sure about the other one  
 (6) Q And Marx and Spencer is the predominant purchaser of Shetland Island farmed salmon?  
 (8) A It s a large purchaser but they later came out and apologized for what they did because it was unfounded because  
 (10) there was no impact on the salmon in the unaffected areas  
 (11) Q Just an impact on its price?  
 (12) A We don t know that yet  
 (13) Q Yeah we do know that  
 (14) MR O NEILL I have nothing further  
 (15) MR SANDERS I object that that - if Mr O Neill wants to testify we can put him on  
 (17) THE COURT The jury will disregard Mr O Neill s comment  
 (19) REDIRECT EXAMINATION OF TROND BJORN DAL  
 (20) BY MR SANDERS  
 (21) Q Are you saying that within the Shetland Islands there were farmers who were affected by the banned directory in the oil areas?  
 (24) A There were 11 farms affected by the oiled area and that salmon was used for the production of mink feed It was taken

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- (1) off the market  
 (2) Q And that was what the ban was on the ones that were actually affected by the oil when the government said you can t fish in here anymore there is only in the water?  
 (5) A And it only affected 11 out of 60 farms  
 (6) Q And they are the ones that got paid?  
 (7) A They got compensation for their losses  
 (8) Q Right the 11 got paid?  
 (9) A That is correct yes  
 (10) Q Now I want to ask you a couple questions - and of course the unaffected farmers still in the Shetlands claimed they were affected right?  
 (13) A They did but there were also disputes about the magnitude of those claims I do not know whether - how far that process has come I do not think that process has come to completion yet and certainly I have not seen Dr Crutchfield s report about this  
 (18) Q So as far as you know - and to clarify what Mr O Neill was asking you about the validity of those claims of the people who were not affected but in the Shetlands we don't even know about that yet do we?  
 (22) A It remains to be shown  
 (23) Q Now I want to ask you a couple questions with respect to a couple other areas that he went into First he asked you about the comparison of DX4904-B and the behavior of price for

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- (1) Alaskan sockeye right?
- (2) A Yes
- (3) Q Now it s hard to make that comparison from your chart to the other chart because that s in dollars per pound and this is
- (4) kroners per kilogram correct?
- (5) A Yes
- (6) Q And more importantly did there come a time when the price
- (7) of farmed salmon Norwegian farmed salmon came into
- (8) equilibrium in a relative way but equilibrium with Alaska
- (9) sockeye?
- (10) A Well this is what we talked about earlier
- (11) Q Correct when was that time?
- (12) A That was in 19 - from 1988 onwards the price differential
- (13) has been substantially less than in previous years
- (14) Q And that s what I call a relative equilibrium correct?
- (15) A Yes
- (16) Q And are you familiar with the prices of other Alaskan
- (17) salmon?
- (18) A Well I m familiar with the prices of Alaskan salmon being
- (19) exported to Europe
- (20) Q And did those prices start to fall before June of 1988 or
- (21) did they fall before March of 1988 - 1989 I m sorry if you
- (22) know?
- (23) A Well I don t have monthly price observations I only have
- (24) yearly price observations for that
- (25)

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- (1) Q Okay Would you agree though with Dr Olley that if the
- (2) prices for three of the five species of salmon start heading
- (3) south that eventually all of those species prices will start
- (4) to head south?
- (5) A Very much so yes
- (6) THE COURT I assume head south means down?
- (7) MR SANDERS Go down that s an old Tennessee
- (8) expression I apologize It was the fastest way out of town
- (9) THE COURT Not so here
- (10) MR SANDERS That s right I m sorry my analogy
- (11) didn t make any sense at all did it
- (12) BY MR SANDERS
- (13) Q Now if you had - let s take a - I ll ask an economic
- (14) question this will be good If you have a hypothetical
- (15) situation where you have decrease in prices would you
- (16) normally
- (17) expect that the demand would go up?
- (18) A Yes
- (19) Q And so the Japanese increase in consumption in 89 90 and
- (20) 91 is consistent with the drop in the prices?
- (21) A It certainly is Like in all other major markets
- (22) Q Now I want to ask you the question that Mr O Neill didn t
- (23) want you to answer He asked you the question about a
- (24) percentage of the Japanese market that was comprised by
- (25) Norwegian and then after you insisted Chilean farmed salmon
- (26) Did the percentage of farmed salmon from anywhere and

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- (1) everywhere increase in Japan in the late 1980s?
- (2) A Well as I mentioned Norwegian and Chilean combined
- (3) exports to Japan increased from roughly 4 500 tons in 88 to
- (4) 10 000 tons in 1989
- (5) Q Let s take that on then where did it go in 1990?
- (6) A And then in particular Chilean exports continued to
- (7) increase Norwegian exports leveled off for a few years and
- (8) then started increasing then in 92 but in addition to that
- (9) there was also farmed salmon from other countries although in
- (10) smaller quantities from Scotland Australia New Zealand and
- (11) on top of that you have exports of sea trout which is a product
- (12) very similar to salmon and which is also favored by Japanese
- (13) consumers
- (14) Q Is it - would it be your testimony that there has been a
- (15) gradual significant increase in the amount of farmed salmon or
- (16) trout going into Japan starting in 1989 and increasing
- (17) thereafter to the present?
- (18) A Well I would say it started in 87 88 It increased
- (19) thereafter and of course also the production of farmed salmon
- (20) in Japan itself has increased
- (21) Q Now one other question If you have price and supply in
- (22) equilibrium - supply and demand in equilibrium and you have
- (23) a
- (24) decrease in price - strike that I ll forget all that I don t
- (25) have any other questions?
- (26) MR O NEILL Definitely over his head

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- (1) THE COURT Thank you Doctor
- (2) MS STEWART Your Honor defendants have Merry Tuten
- (3) by video deposition She s 48 minutes long
- (4) DIRECT EXAMINATION OF MERRY TUTEN (Video)
- (5) BY VIDEO EXAMINER
- (6) Q Miss Tuten I ll be asking you questions first so just for
- (7) the record could you give us your full name and your current
- (8) address and where you re currently employed?
- (9) A Okay my name is Merry Tuten Merry Alan Tuten I m
- (10) currently the president and CEO of the World Trade Center
- (11) Association in greater Los Angeles and my office address is
- (12) One
- (13) World Trade Center Suite 295 Long Beach California 98031
- (14) Q Let s start then with your background Could you give us
- (15) an general outline of your educational background?
- (16) A A master of science degree in natural resources from the
- (17) University of Michigan Bachelor of arts degree from the
- (18) University of California in environmental studies I ve had
- (19) continuing education in Japan
- (20) Q What education did you have in Japan?
- (21) A I was selected as one of the 30 Americans to attend the
- (22) Japan business study program in 1989
- (23) Q Did you attend the Japan business program while you were
- (24) executive director of ASMI?
- (25) A Yes I did
- (26) Q And generally what was the - what went on at the executive



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- (1) business program in Japan? What was the type of training or education?
- (2) A It was basically a three week program sponsored by MIT ministry of industry and trade for the government of Japan and JETRO the Japan external trade organization to familiarize about 60 people from around the world half of whom are Americans on business practices in Japan It was a fairly intensive program on history culture government structure legal structure and business practices
- (9) Q When did you graduate from college?
- (10) A My undergraduate degree was in 1976
- (11) Q And then the master s degree?
- (12) A 1978
- (13) Q And then could you describe your work experience after college?
- (14) A I spent several years working for the federal government immediately after college I then spent about six years managing an investment and real estate portfolio for the University of Alaska which was a large land owner in Alaska which is a 300 million dollar portfolio After that I spent several years working for the governor of Alaska as the director of Pacific Rim relations After that I spent a little more than three years as the executive director of ASMI and I ve now been the president and CEO of the World Trade Center here in Los Angeles for the past two years

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- (1) Q And then you said you spent about three years as the executive director of the Alaska Seafood Marketing Institute?
- (2) A Uh huh
- (3) Q And I think both of us today will refer to that as ASMI?
- (4) A Uh huh
- (5) Q And what was your best recollection of the date that you started as executive director of the Alaska Seafood Marketing Institute?
- (6) A It s certainly a matter of public record but it would have been in the fall of 1986
- (7) Q And then when did you leave approximately?
- (8) A I left in mid January of 1990
- (9) Q Then when did you become - you re the president of the World Trade Center?
- (10) A Uh huh
- (11) Q When did you start doing that?
- (12) A In February of 1990
- (13) Q Well let s now turn back a little in time and discuss what the Alaska Seafood Marketing Institute is and could you generally describe that?
- (14) A ASMI is a unique organization It is a public/private partnership between the seafood industry the State of Alaska and during my tenure we added the federal government Its purpose is to promote all species of Alaska seafood meaning any seafood product that comes from the waters surrounding

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- (1) Alaska
- (2) Q And do you promote that - those products worldwide?
- (3) A Yes
- (4) Q How is the Alaska Seafood Marketing Institute run if you could just describe it generally?
- (5) A It had when I was there I think a 21 member board of directors that was carefully crafted as a result of legislation passed establishing and enabling ASMI - that has a mix of fishermen large processors and small processors and the general public The board established the direction for ASMI It also established a very extensive committee system that represented the private interests For example there was a halibut committee a salmon committee a canned salmon committee a white fish shellfish quality committee It was a very extensive committee system Each committee probably had between eight and 15 private sector members and occasionally some members of other trade organizations or government officials So the board set direct policy The committees dealt with the promotion and marketing and unique problems associated with the particular species run by the committee
- (20) There was a full-time staff in Juneau During my tenure we also established a presence in Seattle The staff was responsible for handling the day-to-day management of the multi-million dollar promotional budget
- (24) Q I think you said the primary purpose of ASMI was to promote

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- (1) Alaska seafood products worldwide?
- (2) A Yes
- (3) Q Now is ASMI is it affiliated with a state or part of the state or how would you describe it?
- (4) A It is because it was established by state legislation and because it is administratively housed in the Department of Commerce it is technically an entity of the State of Alaska
- (7) Q So you had your offices in one of the state buildings in the Department of Commerce?
- (8) A Yes in Juneau yes not in Seattle
- (9) Q How is ASMI funded?
- (10) A At the time that I was there the funding ratios changed significantly Originally ASMI was largely funded by the State of Alaska During my tenure the fishermen increased their contributions by 50 percent to ASMI and the federal government became our primary distributor
- (16) Q And did the processors contribute also?
- (17) A Yes they had - I m sorry and I misspoke The fishermen the processors one is - it s inextricably linked in terms of where the money comes from in the seafood industry but in this case the processors paid a tax It was a voluntary tax to determine the amount and a mandatory tax once the processors voted on the amount and approved it
- (23) Q During the time that you were executive director were you the primary spokesman for ASMI?

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- (1) A Yes
- (2) Q Now did ASMI have employees or contractors in places other than Juneau Alaska?
- (3) A Yes
- (4) Q Could you tell us where they were and generally who they were and what they were doing?
- (5) A In Seattle we had a contractual employee that was a staff support person to the marketing committee as well as a staff person who managed the export programs and was staff support to the export committee During the Exxon Valdez oil spill we had contractual employees based in Cordova and between 1987 I would say and 1990 at least until I left there were contractual employees in the United Kingdom Japan France and Brussels
- (6) Q What was the function of those contractual employees in the foreign countries?
- (7) A There were a wide variety of them Some were contracted to conduct research not traditional market research as much as research and evaluation on the programs that we were conducting on those markets We also had in some countries trade liaisons Those were individuals who made calls on the trade to determine the effectiveness of our programs and the needs of the trade community the need for them to have support from ASMI to sell Alaska seafood in their respective country We also had advertising and public relations agencies and

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- (1) probably a few more that may come to mind later We also had some merchandising reps that went into grocery stores and conducted in store demonstrations and promotions It changed over time At any given point in time we might have one group that changed depending on the program that we were running and the respective country
- (2) Q Miss Tuten I've handed you deposition exhibit 26127 And it's an article from the Anchorage Daily News dated April 4th 1989 and it attributes some comments to you You previously said you did a lot of speaking and if you'll look in the middle of the page it states Merry Tuten executive director of the Alaska Seafood Marketing Institute says she believes the public worldwide has drawn no conclusion about the state's seafood quality And my first question is did you make a statement like that?
- (3) A Yes
- (4) Q And what was the basis for that statement?
- (5) A The date of this article is the 4th of April?
- (6) Q Yes
- (7) A So this would have been prior to our formal research We had done some soft polling meaning that we had contacted our industry network in our major markets France Japan the UK and the U S This was not too long after the oil spill and we did not believe at that point in time that the consumer had made the connection between the oil spill and seafood products

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- (1) from Alaska At that point in time we believed based on our preliminary research that the consumer was concerned about the tanker the wildlife and other issues
- (2) Q Now I think you said you contacted your industry contacts Could you tell us who they were just in a general way and who they were?
- (3) A Well there are a number of ways we did that One way was through one of our advertising agencies that has its own affiliates around the world Another way was through our committee members that of course has distributors agents reps and buyers in those respective markets We had done some review of the media coverage At that point in time none of it had shown any concern on seafood quality or safety and that was our primary concern
- (4) Q So the source of this was the feedback that you were getting from the various board members people in the industry and other parts of the world and then those contractors that you had in the other parts of the world?
- (5) A Uh huh and our ad agency
- (6) Q And your ad agency?
- (7) A And I believe I'd have to check but I believe which also polled their affiliate offices in the respective country
- (8) Q Then if you will look over on the right side it states seafood brokers throughout the main markets in the United States United Kingdom Japan and France are concerned about

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- (1) the oil spill's impact on the price of salmon The brokers recognize that Alaska will not market tainted seafood but they were concerned that prices would climb if the Prince William Sound salmon season is a bust Tuten said and did you make those statements?
- (2) A Tuten said
- (3) Q Tuten said I'm sorry
- (4) A Yes I did and that was the feedback that we had received
- (5) Q And the again the feedback from the board members the industry brokers in the U S and other countries and your ad agency?
- (6) A Uh huh I mean at this point in time the concern beyond the contaminated issue was supply Would the season be open?
- (7) Would there be product? And as a result of that concern given that we were just getting ready to go into the season the industry around the world was stressing concern about supply
- (8) Q And then here it also mentions in your statement that they were concerned that prices would climb?
- (9) A Price and supply are synonymous when any industry person expresses any immediate concern will there be product and how much will there be
- (10) Q So the feedback that you were getting was that there was a concern that there may be closures in areas of Alaska that would reduce supply and that would increase the prices that the processors would need to pay?

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- (1) A I don't know as I would make that - I don't know as the  
 (2) people that we spoke with made that conclusion As much as  
 (3) they are always concerned about price going into the season  
 (4) they are always concerned about supply When we spoke  
 about  
 (5) them they didn't express any concern about contamination  
 (6) They expressed their regular concerns and then more so  
 (7) Q You say here they were concerned that prices would climb  
 (8) if the Prince William Sound salmon season is a bust?  
 (9) A Uh huh  
 (10) Q And that's the feedback that you were getting?  
 (11) A Generally yes  
 (12) Q Do you recall the names of any of the people on the ASMI  
 (13) board that gave you this information?  
 (14) A You have to realize that we were dealing with news room  
 (15) chaos for three or four months We spoke with hundreds of  
 (16) people every day We spoke with hundreds of members of the  
 (17) industry every week and so therefore I couldn't attribute  
 (18) with whom I spoke three years ago on this particular quote  
 (19) MS STEWART Your Honor would that be a convenient  
 (20) time?  
 (21) THE COURT We'll suspend for the day now ladies and  
 (22) gentlemen Please remember my cautionary instructions and  
 we  
 (23) will recommence at 8:00 tomorrow morning Would counsel  
 stay  
 (24) for just a moment? Jury is excused  
 (25) (Jury out at 2:00 p m )

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- (1) THE COURT Am I correct in assuming that we're pretty  
 (2) much on track to finish the defendant's case some time  
 (3) tomorrow?  
 (4) MR LYNCH Yes Your Honor I -  
 (5) THE COURT Magical appearance from the Barco  
 (6) MR LYNCH Well when you raised that subject you  
 (7) got my interest Yes Your Honor I had a discussion with one  
 (8) of my colleagues about that during the break and told them I'll  
 (9) stop asking questions if we get close I have both of the  
 (10) witnesses tomorrow  
 (11) MR O NEILL I'll make the same comment so I'll  
 (12) respond in kind  
 (13) THE COURT We'll finish up with the evidence tomorrow  
 (14) some time then and my assumption - tell me if I'm wrong but  
 (15) my assumption is that your preference would be to suspend  
 (16) whenever we complete the testimony and that we would instruct  
 (17) and argue the matter Monday morning  
 (18) MR O NEILL Yes  
 (19) MR LYNCH Yes Your Honor  
 (20) THE COURT What about time for oral arguments?  
 (21) MR LYNCH Mr Cooper is going to do that so I'm  
 (22) stepping aside  
 (23) MR O NEILL I'm happy to go one and a half and a  
 (24) half like I did last time That's a little tight  
 (25) THE COURT Two hours per side?

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- (1) MR COOPER That sounds fair Possibly about as much  
 (2) as their attention span  
 (3) MR O NEILL That really is a problem on this kind of  
 (4) material  
 (5) THE COURT It is Anybody who wishes can be seated  
 (6) though you're probably tired of being seated at this point so  
 (7) stand if you wish  
 (8) One other thing that I wanted to comment on this  
 (9) deposition that we're listening to right now I wanted to know  
 (10) who took it for you so that I can communicate with them It's  
 (11) probably the best quality video that I have ever seen used in  
 (12) this courtroom Most of them that I have seen have been  
 (13) somewhere between (noise) to awful and I'm not just talking  
 (14) about the ones I've seen in this case This is one of the few  
 (15) really good ones I've seen I want to communicate with these  
 (16) people find out how they are doing it so that I can do some  
 (17) work about spreading the word about how it can be done  
 Some  
 (18) of these depositions drive the jury crazy I watch them and  
 (19) they quit listening to them after awhile because the background  
 (20) noise drives you crazy on some of them I've refused to listen  
 (21) to some they have been so bad I want to know who did this  
 (22) MS STEWART I'll let you know Your Honor  
 (23) THE COURT I'm going to meet with people on jury  
 (24) instructions right now  
 (25) MR LYNCH Do you want to take that matter up?

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- (1) MR O NEILL We have one evidentiary matter that if  
 (2) we could get clarified today it would save us some time  
 (3) tomorrow  
 (4) THE COURT Okay  
 (5) MR O NEILL There are five or six bar graphs which  
 (6) were provided to me two or three days ago that were not - the  
 (7) analysis that summarized data the bar graphs were not in  
 (8) Dr Anderson's report the data is not in his report I asked  
 (9) for the backup data two days ago was given some backup data  
 (10) that doesn't match what's on the charts and then I was shown  
 (11) some backup data in the lobby at 10:00 today which is different  
 (12) from what I was given two days ago It requires some analysis  
 (13) it requires some data verification It isn't in his report  
 (14) As I stand here now I still do not have that package and  
 (15) on Dr Anderson's stuff I do the analysis myself So we  
 (16) object to these exhibits - could I have the numbers? Exhibits  
 (17) 6136 8632 A 8633 A 8631 A 8629 A 8634 A and 8682-A and  
 (18) 6136 if I didn't say that one  
 (19) MR LYNCH Those are all DXs  
 (20) MR O NEILL DXs and as I stand here today I don't  
 (21) have the backup so I object on the grounds that it wasn't  
 (22) disclosed as part of an expert report under the plan and Rule  
 (23) 1006  
 (24) THE COURT You all have been doing very good I do  
 (25) hate to see this thing start happening

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- (1) MR LYNCH Your Honor you know there are so many  
 (2) people doing so many things that I hesitate to dispute  
 (3) Mr O Neill's statement as not being valid This chart which  
 (4) if I may just hand up to you the real point of controversy in  
 (5) this chart are the two bars to the left which were shown to  
 (6) the jury in the opening statement They are based on CFEC  
 (7) data They are simple compilations of CFEC reports listing the  
 (8) gross earnings of holders of permits in the areas and fisheries  
 (9) for which damage claims are made  
 (10) We sent with the material which was sent several days ago  
 (11) the original CFEC Table 1(a) materials The spread sheet to  
 (12) which Mr O Neill made reference to that he said he saw in the  
 (13) lobby this morning is our internal computer spread sheet that  
 (14) has that data he's welcome to have that but it is not the  
 (15) original data and was not supplied because under Rule 1006  
 (16) the thing these plaintiffs are entitled to have are the CFEC data  
 (17) These numbers are rather simple compilations I could show  
 (18) Your Honor the form in which they come but there is one page  
 (19) for each type of fishing permit and that page summarizes all  
 (20) the years and all the gross earnings  
 (21) I don't know the source of the confusion over Mr O Neill's  
 (22) difficulty in verifying the numbers because when I attempted  
 (23) to discuss it with him he simply took the position that it  
 (24) wasn't in Dr Anderson's report  
 (25) As to the Dr Anderson's report issue this is not - these

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- (1) charts are not really any different than the charts that  
 (2) plaintiffs' experts offered and they couldn't have been  
 (3) included in the report because what they do is summarize the  
 (4) evidence that has gone in as to what the plaintiffs' damage  
 (5) claim is versus what our claim of the proper numbers are The  
 (6) plaintiffs' damage claim has changed significantly through the  
 (7) course of the trial and I don't know whether it was changed  
 (8) again yesterday but it has changed a number of times and I  
 (9) really believe it is the two columns to the left from my short  
 (10) discussion with Mr O Neill that is controversial and those are  
 (11) straightforward nothing but historical numbers from the CFEC  
 (12) files  
 (13) MR O NEILL With regard to the CFEC issue I  
 (14) received two days ago faxes as part of the backup for this  
 (15) thing of communications that occurred as late as June 6th with  
 (16) the CFEC which these exhibits are based on that were claimed  
 (17) to be part of the backup So it isn't just historical CFEC  
 (18) data that goes under the exhibit I mean they have been  
 (19) communicating with CFEC to get front line CFEC data through  
 (20) this year and they didn't provide it until two days ago  
 (21) THE COURT I'm losing you This exhibit appears to  
 (22) report 1980 to 84 and 85 to 88 data and I guess on a  
 (23) couple of the bars up to 93 which would not be -  
 (24) MR O NEILL It is  
 (25) THE COURT That's current stuff?

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- (1) MR O NEILL 93 CFEC data They haven't finalized  
 (2) their 1993 data yet and may not for some month so they got  
 (3) interim numbers  
 (4) In addition the backup documents didn't include one two  
 (5) three four five six seven types of gear types and I did  
 (6) the analysis myself And so what we - as I stand here right  
 (7) now I tried last night to reconstruct those bar graphs from  
 (8) the backup that they gave me I couldn't do it and that's my  
 (9) problem and my frustration and it's an important topic and as  
 (10) I stand here right now I still don't have enough backup and I  
 (11) haven't examined Dr Anderson on why he picked the years  
 (12) which  
 (13) I'd like to do but it's a little late for that right now and  
 (14) that's the source of my frustration Your Honor  
 (15) THE COURT Give me just a second please Mr Lynch  
 (16) am I correct in assuming that so far as you know there isn't  
 (17) anything else available that supports this exhibit?  
 (18) MR LYNCH If I could break my reply into three  
 (19) parts the 93 data I agree with Mr O Neill it's informally  
 (20) supplied to us by CFEC  
 (21) THE COURT Has he got everything you've got?  
 (22) MR LYNCH I'm told that he's got everything I've  
 (23) got He does not have our internal spread sheet but he could  
 (24) have that I'll be glad to give him that I'll be glad to  
 (25) give him the computer printout that we did  
 (26) THE COURT I don't know whether that would help or

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- (1) not  
 (2) MR O NEILL My problem is I can't take those bars  
 (3) back to the data sources I'm a good statistician, I'm trained  
 (4) in statistics  
 (5) MR LYNCH I'm not so I certainly can't take him on  
 (6) in that point Your Honor but I would be glad to say on the  
 (7) spirit of Your Honor's concern it's not our intent to hold  
 (8) back anything and I don't think it's a very difficult data -  
 (9) compilation data test  
 (10) The form of the question will be did you at my request  
 (11) compile the numbers that show the average fisheries increase  
 (12) reported by the CFEC This is not a case of Dr Anderson  
 (13) having chosen those for comparison  
 (14) THE COURT I'm going to let you proceed with this up  
 (15) to a point well maybe a comfortable distance I think this  
 (16) is the kind of exhibit Mr O Neill that you can probably deal  
 (17) with fairly readily My sense of it is that it isn't that  
 (18) complicated but my sense is that you've got a problem  
 (19) generating or validating what you're seeing here If we get  
 (20) into the examination and it starts to appear that you haven't  
 (21) been given that which goes into this I'm going to knock the  
 (22) whole thing out If it appears as we get into it that you  
 (23) have been given the information that backs this up so that you  
 (24) can deal with it in cross examination with him with it why we  
 (25) will go ahead but quite frankly if it becomes apparent to me

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- (1) that Mr O Neill hasn t been given that which went into the
- (2) preparation of this the whole thing is going to go out and
- (3) we ll deal with it some other way
- (4) MR O NEILL Thank you Judge
- (5) THE COURT I ll see counsel on jury instructions
- (6) right now
- (7) (Recess at 2 20 p m )

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- (1) REDIRECT EXAMINATION OF TROND BJORNDAL  
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- (2) BY MR SANDERS 6605
- (4) DIRECT EXAMINATION OF MERRY TUTEN (Video)  
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- (5) BY VIDEO EXAMINER 6610

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- (1) INDEX
- (2) DEFENDANT S WITNESSES
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- (4) BY MR COOPER 6438
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- (1) STATE OF ALASKA )
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA )
- (6) I Leonard J DiPaolo 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) LEONARD J DiPAOLO RPR  
Notary Public for Alaska
- (22) My Commission Expires 2 3 96

Look-See Concordance Report

UNIQUE WORDS 3,139
TOTAL OCCURRENCES 14,503
NOISE WORDS 385
TOTAL WORDS IN FILE 42,941

SINGLE FILE CONCORDANCE

CASE SENSITIVE

NOISE WORD LIST(S)
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INCLUDES ALL TEXT OCCURRENCES

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## Vol 37 6633

(1) IN THE UNITED STATES DISTRICT COURT  
 (2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No A89 0095 CIV (HRH)  
 (5) ) Anchorage Alaska  
 The EXXON VALDEZ ) Friday July 8 1994  
 (6) ) 8 00 a m  
 TRANSCRIPT OF PROCEEDINGS  
 (9) TRIAL BY JURY 41ST DAY  
 (10) BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE  
 VOLUME 37 Pages 6633 6839  
 Realtime Transcription

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## Vol 37 6635

(1) P R O C E E D I N G S  
 (2) (Jury in at 8 00)  
 (3) THE CLERK. All rise  
 (4) (Call to Order of the Court)  
 (5) THE COURT Good morning Mr Sanders  
 (6) MR SANDERS Good morning  
 (7) THE COURT Ladies and gentlemen  
 (8) MR O NEILL. Good morning  
 (9) THE COURT This is continuation in trial of A89-0095  
 (10) in re the Exxon Valdez Why do I think you re going to  
 (11) introduce something to me?  
 (12) MR O NEILL. We promise today not to complicate  
 (13) anybody s life and our goal is to get out of here before the  
 (14) clouds come in  
 (15) MR SANDERS May it please the Court I have two  
 (16) housekeeping matters When I listed the exhibits yesterday  
 (17) afternoon I listed an exhibit as 4873 and it was admitted as  
 (18) such The exhibit we actually used in the courtroom was  
 (19) 4873-Alpha. I propose a solution that I withdraw 4873 as an  
 (20) exhibit and now move the admission of 4873 Alpha  
 (21) MR O NEILL. We have no objection  
 (22) (Exhibit 4873 withdrawn)  
 (23) (Exhibit 4873-A offered)  
 (24) THE COURT Consider it done  
 (25) (Exhibit 4873-A received)

## Vol 37 6634

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 (15) Deputy Clerk TOM MURTIASHAW  
 U S District Court  
 (16) 222 W 7th Avenue #4  
 Anchorage AK 99513  
 (17) Ph 907/271 4529  
 (18) Reported by LEONARD J DIPADLO  
 Registered Professional Reporter  
 (19) Midnight Sun Court Reporters  
 2550 Denali Street Suite 1505  
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## Vol 37 6636

(1) MR SANDERS And finally, I slipped one by Mr  
 (2) O Neill yesterday  
 (3) MR O NEILL. That s the kind of guy I am  
 (4) MR SANDERS We didn t list but did use exhibit -  
 (5) Defense Exhibit 5270-B I never moved its admission I now do  
 (6) so  
 (7) (Exhibit DX5270-B offered)  
 (8) MR O NEILL. We have no objection  
 (9) THE COURT Defendants Exhibit 5270 B is admitted  
 (10) And the others we were talking about were also defendants  
 (11) exhibits?  
 (12) MR SANDERS That's correct, DXs  
 (13) THE COURT Thank you  
 (14) (Exhibit DX5270-B received)  
 (15) MS STEWART Your Honor before we begin, we would  
 (16) like to read a list of defendants exhibits that we would offer  
 (17) into evidence  
 (18) Your Honor never mind  
 (19) MR O NEILL We have enough exhibits  
 (20) THE COURT Okay We're going to continue the  
 (21) deposition of Merry Tuten I even figured out how to pronounce  
 (22) it  
 (23) CONTINUING DIRECT EXAMINATION OF MERRY TUTEN  
 (video)  
 (24) THE WITNESS With hundreds of members of the industry  
 (25) every week and therefore I couldn t attribute with whom I

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- (1) spoke three years ago on this particular quote Sorry  
 (2) BY VIDEO EXAMINER  
 (3) Q But at the time was the feedback that you were getting  
 (4) consistent with what you said here?  
 (5) A Generally there was concern about price and supply, and  
 (6) there was not concern at this point about quality  
 (7) contamination  
 (8) Q And that feedback was coming from many many sources?  
 (9) A Well this wasn't a sophisticated survey This was a what  
 (10) we call a soft poll where we touched base with people we  
 (11) respected as sort of multipliers of opinion rather than a  
 (12) formal research process This was fairly early on  
 (13) Q Do you recall approximately how many people you talked to  
 (14) to develop this deposition?  
 (15) A No because the way ASMI works I might call 10 people and  
 (16) they might each call ten and those ten might call ten more so  
 (17) when you looked at the multiplier effect of our network it  
 (18) could have been hundreds of people, it could have been ten  
 (19) people I trusted very much in the judgment of the industry  
 (20) leaders that provided this feedback as well as our agency at  
 (21) the time  
 (22) Q And were you confident at that point in time what you were  
 (23) saying here was correct?  
 (24) A Yes I would like to say for the record that we took the  
 (25) issue of telling the truth to be very sacred in this and that

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- (1) we were in a very difficult position at ASMI because we were  
 (2) concerned about the industry we were concerned about the  
 (3) market and our primary concern was to protect the market but  
 (4) to do so by being honest and forthright about what was really  
 (5) going on rather than to fabricate promotional information that  
 (6) would perhaps bode well for the industry in the short term but  
 (7) discredit it in the long term So we were very careful about  
 (8) what we said to whom we said it and how it was backed up  
 (9) Q And when you talked to the press or had press releases  
 (10) that same position was involved there very careful and very  
 (11) honest?  
 (12) A Yes and we did not - with the exception of a few  
 (13) occasions we did not approach the press We were in a  
 (14) reactive rather than a proactive position for the most part,  
 (15) because we did not wish to create an issue if none existed  
 (16) Q Now handing you a document that is from the Anchorage  
 (17) Times it's an article from what the Times did Tuesday April  
 (18) 4th 1989 and it's previously been marked in the Parker  
 (19) deposition as 3378 You've had a chance to look at that Let  
 (20) me know and I'll ask you some questions because there is  
 (21) some  
 (22) more statements that apparently you talked to reporters about.  
 (23) A If I might add one time I did not mention when you talked  
 (24) about the role of ASMI and coming forth here while ASMI was  
 (25) not responsible for seafood quality, we were responsible for  
 the quality assurance programs for the seafood industry

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- (1) There is a very big distinction between quality assurance  
 (2) programs and quality control Quality control is an industry  
 (3) issue the regulatory side was in the Department of  
 (4) Environmental Conservation and Fish & Game Our  
 responsibility  
 (5) was to educate the fishermen and the processing communities  
 (6) about how to properly handle fish and to also advise and  
 (7) counsel the both retail and consumer trade the trade and the  
 (8) consumer about how to deal with the actual product So what  
 (9) you'll see in a lot of the interview that we conducted was a  
 (10) continual focus on the quality assurance issues because it was  
 (11) within our jurisdiction to education about that item and  
 (12) it's - actually one of the two ASMI mandates is promote and  
 (13) quality assurance which I failed to mention early on  
 (14) Q What specific type things would ASMI do for quality  
 (15) assurance?  
 (16) A We produced a wide variety of educational material how  
 (17) to - both at the point of origin where the fish were caught  
 (18) how to handle it how to transport it, how the trade can  
 (19) determine one species from another how the consumer can  
 store  
 (20) it all the way throughout the entire chain how to handle that  
 (21) product We provided educational training and programs fairly  
 (22) extensive  
 (23) Q Did you and ASMI get involved in the zero tolerance  
 (24) decisions after the oil spill?  
 (25) A We were not involved in making the decision but we were

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- (1) certainly involved in discussions concerning everything from  
 (2) zero tolerance to the opening and closing of seasons harvest  
 (3) areas to what precautions would be taken if a contaminated  
 (4) fish was brought aboard a vessel but in terms of being in a  
 (5) decision making capacity no  
 (6) Q Were you consulted about the zero tolerance program?  
 (7) A Could you define when you say zero tolerance programs  
 and  
 (8) consult it could you define that a little bit more?  
 (9) Q Let me - well first have you heard the term zero  
 (10) tolerance?  
 (11) A Uh huh  
 (12) Q What's your understanding of that?  
 (13) A A perfectly clean fish would be brought in brought  
 (14) aboard In other words there would be zero tolerance for any  
 (15) kind of contaminated fish to reach the marketplace  
 (16) Q We were just talking about zero tolerance and did - was  
 (17) it your understanding of the zero tolerance program it also  
 (18) meant that fishing areas would be closed if there was going to  
 (19) be any danger whatsoever of contaminated fish coming from  
 that  
 (20) area?  
 (21) A I don't know as I would make the connection between zero  
 (22) tolerance and that decision but there was a tremendous  
 amount  
 (23) of discussion about areas not being fished for a variety of  
 (24) different reasons zero tolerance among them  
 (25) Q Were you involved in those discussions about which areas

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- (1) should be closed?  
 (2) A No  
 (3) Q Focusing back again on this document that was previously  
 (4) marked as Exhibit 3378 and this is the report from the  
 (5) Anchorage Times it again attributes some comments to you  
 and  
 (6) one of them is that seafood brokers throughout the main  
 markets  
 (7) in the United States United Kingdom Japan and France are  
 (8) concerned about the oil spill s impact on the price of salmon  
 (9) The brokers recognize that Alaska will not market tainted  
 (10) seafood but they were concerned that their price would go up  
 (11) if the Prince William Sound season goes bust  
 (12) Did you make those comments?  
 (13) A Yes  
 (14) Q And then it goes on and attributes these comments to you  
 (15) and I quote The survey has also shown that though the public  
 (16) is very concerned about the wilderness environment and the  
 fate  
 (17) of -  
 (18) A Mammals and -  
 (19) Q - mammals and sea birds they have not made any  
 (20) connection between the pollution and the quality of Alaska  
 (21) seafood  
 (22) Did you make that statement?  
 (23) A Yes  
 (24) Q Now it refers to a survey and that the soft survey that  
 (25) you were - the soft poll you previously told us about?

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- (1) A My staff and I developed it in conjunction with ADF&G and  
 (2) ADEC Fish & Game and the Department of Environmental  
 (3) Conservation respectively and I believe it was reviewed by  
 (4) either our advising agency in Seattle and/or our agencies  
 (5) around the world and possibly even Burson Marsteller if they  
 (6) were on board by that time I m not sure they were I don t  
 (7) think so  
 (8) Q And was this reviewed by anybody on the ASMI board?  
 (9) A Yes absolutely  
 (10) Q And then the coversheet indicates that this ten facts sheet  
 (11) was sent to 18 000 retailers restaurant operators  
 (12) distributors brokers and food traders and press?  
 (13) A Roughly The amount varied between 16 and 18 000 You  
 (14) made a comment about the board and I would like to clarify  
 (15) Q Sure  
 (16) A At this point in time the chairman of the board who was  
 (17) my supervisor in Seattle and I was in Juneau was Victor  
 (18) Horgan who was the chairman of the board of ASMI and with  
 (19) Ocean Beauty Seafood He and I had a very close working  
 (20) relationship and we reviewed everything we did before we did  
 (21) anything As I mentioned before ASMI was in a bit of an  
 (22) awkward position because of the composition of its group being  
 (23) processors fishermen fisherpeople and there were - we were  
 (24) careful that what we put out was clear to our constituency but  
 (25) also was accurate with regard to the state s role

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- (1) A Uh huh  
 (2) Q I m now going to hand you a document dated April 3 1989  
 (3) It s from you to a Dale Miller I ve handed you what s been  
 (4) marked as Exhibit 26 128 and it s from you to Dale Miller  
 (5) Tell us who Dale Miller is  
 (6) A Dale Miller is in the dairy livestock and poultry division  
 (7) of the Foreign Agricultural Service in the U S Department of  
 (8) Agriculture and as I mentioned earlier since seafood is not a  
 (9) traditional AG commodity we were in the poultry dairy and  
 (10) livestock division He was our point of contact He was the  
 (11) administrator for the federal funds that we received  
 (12) Q What was the purpose of writing this to him?  
 (13) A At this point in time as you might expect the federal  
 (14) government was interested in knowing how its investment in  
 (15) ASMI s promotional program was being impacted by the oil spill  
 (16) and they wished to know the status of the situation and what  
 (17) our plans were and what we were doing So we sent them a  
 copy  
 (18) of a notice that we put out I believe we put three of these  
 (19) notices out over a three-month period that we had sent to  
 (20) retailers and restaurant operators and distributors and  
 (21) brokers Our objective was to let him know what our position  
 (22) was and what was going on  
 (23) Q Who developed this document that s attached which is  
 (24) entitled Ten facts you should know about the recent oil spill  
 (25) in Alaska?

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- (1) So therefore my board chairman reviewed it occasionally we  
 (2) had industry experts review it we had Fish & Game and DEC  
 (3) review it  
 (4) Q If you look over at the right hand column there is another  
 (5) quote attributed to you and it is We are very weary of  
 (6) getting out in front There isn t a perception among the  
 (7) public yet that there is a problem with our fish and we don t  
 (8) want to do anything that might equate the oil spill with fish  
 (9) quality in their mind  
 (10) Did you make that statement?  
 (11) A Yes  
 (12) Q Could you explain what you meant by that?  
 (13) A Given the diversity and constituency in ASMI we were under  
 (14) a tremendous amount of pressure including from our own  
 (15) agencies to get out there and make a statement get out there  
 (16) and tell the world that everything was fine to spend a  
 (17) tremendous amount of money communicating to both the trade  
 and  
 (18) the consumer that there wasn t a problem I personally felt  
 (19) very strongly that this was not the appropriate approach and my  
 (20) board chairman agreed and we took a different tact And our  
 (21) tact was don t create a probable until one exists don t  
 (22) exacerbate something ASMI didn t need this kind of attention  
 (23) the industry didn t need it And if we were required to do  
 (24) that we would respond and we had a plan in place But there  
 (25) were a lot of motives going on at the time a lot of people who

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- (1) would have made a lot of money by generating a lot of
- (2) awareness and we felt for the sake of the industry we would
- (3) respond if there was a crisis and a problem and that we would
- (4) not generate it ourselves
- (5) Q You referred to some motives going on What were those?
- (6) A Well I mean as you might imagine we had been approached
- (7) by dozens and dozens of firms that wanted to help us create
- (8) ads television spots news programs put us on CNN give us
- (9) the kind of visibility that they thought was warranted and we
- (10) declined those opportunities
- (11) Q And those opportunities involved a fee I assume?
- (12) A Many times yes Very lucrative industry
- (13) Q You said that you felt strongly that you shouldn't get out
- (14) ahead and generate problems and Vic Horgan did Was that also
- (15) the opinion of the ASMI board?
- (16) A Not everyone no but eventually there was consensus
- (17) Q And when was there eventual consensus with that?
- (18) A It was an ongoing evolutionary process I don't think
- (19) there was any particular - well there might have been a point
- (20) in time at a few board meetings where the issue came up and was
- (21) rationally discussed There was a tremendous amount of emotion
- (22) going on at this point in time and we tried to keep a very cool
- (23) head about it and tried to look at the reality of the market
- (24) and what was going on around the world and where the media was
- (25) focusing its attention

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- (1) Q Well at a point in time then did a consensus arrive that
- (2) that was the right thing to do not get out ahead and generate
- (3) a lot of publicity and concern?
- (4) A I don't think it was you know X date we decided we
- (5) weren't going down that path I think with each passing day
- (6) the information was rolling in to outside from around the world
- (7) and within our own industry and so we headed down a path
- (8) carefully and slowly and each day that path was shaped
- (9) Q So let me see if I understand You had the contingency
- (10) plan where you could go do massive publicity if that was
- (11) necessary but you decided that it wasn't necessary and you
- (12) continually watched what was happening?
- (13) A And gathered more information
- (14) Q And gathered more information And the more information
- (15) you gathered the more you all became convinced that what you
- (16) were doing was the right thing to do?
- (17) A Yes
- (18) Q By the time that you left ASMI was there any question that
- (19) ASMI and you with your approach didn't do the right thing on
- (20) this particular subject?
- (21) A I don't think so The media the trade press, was very
- (22) supportive in a sense came out with statements that they felt
- (23) as though we were responding calmly and coolly in a very heated
- (24) environment I think the board felt as though they did a very
- (25) good job and this was one of ASMI's great strengths was its

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- (1) response to the oil spill
- (2) Q You should have in front of you what's been marked as
- (3) Exhibit 26 131 and it's an Anchorage Times article May 18th
- (4) 1989 and again it attributes a number of comments to you And
- (5) one of the things it indicates that you said is that quote
- (6) "Recent publicity has been favorable and no special effort may
- (7) be needed
- (8) Did you say that?
- (9) A Yes
- (10) Q And that is what you were telling us before you were
- (11) tracking it and as time went on it became more apparent that
- (12) nothing extra needed to be done than what you were doing?
- (13) A Nothing extra than what we were doing but what we were
- (14) doing was extra
- (15) Q Yes
- (16) A Yes
- (17) Q But you didn't need to have any massive publicity use? In
- (18) other words your contingency plan didn't have to be put into
- (19) effect?
- (20) A No
- (21) Q Then you go on and it states I quote from you "We don't
- (22) want to go out and tell people not to worry about something if
- (23) there is no indication that they are worried And at this
- (24) point in time on May 18 1989 was there an indication that
- (25) the consumers were not reducing their purchases"?

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- (1) A That's correct generally speaking Doesn't mean that
- (2) there weren't some isolated incidents that we had heard about
- (3) but as a general rule it was not reaching the volume we were
- (4) hearing which would cause us serious concern
- (5) Q And then you go on to state that there has been some
- (6) television and media statements that had been favorable?
- (7) A Yes largely because - we spent a tremendous amount of
- (8) time with reporters in a reactive position but in an effort to
- (9) communicate accuracy, and many times the accuracy came through
- (10) and the media would report steps that were being taken and the
- (11) fact that there was no contaminated fish that reached the
- (12) market
- (13) Q Talking generally about the media reports from this
- (14) Exhibit 26 131, it sounds like the media reports were pretty
- (15) much getting out the factual information that you were
- (16) providing them?
- (17) A In the trade media yes In the consumer general press
- (18) not so much because that wasn't their issue
- (19) Q What was their main issue with the general press?
- (20) A Captain Hazelwood and the tanker and the birds
- (21) Q You say you approved all outgoing communications You mean
- (22) anything that went outside of the office to the public or
- (23) anything that went out of the office?
- (24) A Period yes ASMI had been through a lot - not a lot but
- (25) crisis we were all trained in crisis communication we all



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- (1) knew you had to have one spokesperson you had to have one  
 (2) point of origin for primary information and we were adamant  
 (3) about it I was adamant about it because I didn't want to  
 (4) have people with vested interests whether they were fishermen  
 (5) processors the public sector private sector I didn't want  
 (6) anyone to try to take ASMI down a path that wasn't ASMI's path  
 (7) Q And you were the spokesperson?  
 (8) A Yes  
 (9) Q I'm now handing you a document that has three pages and  
 (10) each page is an Alaska Seafood Update and they are for June  
 (11) 89 July 89 and August 89 and they were previously marked  
 (12) as 3393 in the Parker deposition  
 (13) My question is who prepared these reports? What would you  
 (14) call them bulletins?  
 (15) A Uh huh These are fact sheets to communicate accurate  
 (16) information about the status of the fishery and the steps that  
 (17) were taken to assure quality We had a small staff at ASMI  
 (18) I'm a very hands-on manager and we often did this as a group  
 (19) where one or two of my staff and I would decide what we  
 (20) thought  
 (21) needed to be in it. We might run it through a few industry  
 (22) experts we would run it through Fish & Game and DEC to make  
 (23) sure that we were reflecting accurately what they were doing  
 (24) In some cases later in the process I believe we also ran  
 (25) it by Burson Marsteller to make sure that we were clear in our  
 communication So a lot of people touched these documents

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- (1) Q So each one of these documents was widely reviewed and  
 had  
 (2) an input from a lot of people?  
 (3) A And quickly yes  
 (4) Q And what was the primary purpose of these documents?  
 (5) A To communicate ASMI's official message  
 (6) Q Who received copies of each of these bulletins?  
 (7) A I believe we had a list of between 16 000 and 18 000 we  
 (8) called them trade and consumer decision makers or  
 multipliers  
 (9) people that went forth and communicated either through  
 industry  
 (10) publications or the general media I believe this went to all  
 (11) members of the Alaska legislature key members of congress  
 We  
 (12) had it on hand should anyone call up and want to know what  
 was  
 (13) the latest information We couldn't handle this many calls  
 (14) We had to add several more people on staff so we created  
 (15) things that we could just fax to people and we blew out the  
 (16) fax machine and had to get a bigger more sophisticated fax  
 (17) Q Of those 16 to 18 000 people that received these bulletins,  
 (18) what categories of people were in that group?  
 (19) A It was a fairly carefully constructed list of journalists  
 (20) writers opinion makers Opinion makers meaning, for  
 example  
 (21) in the United States food editors and writers that publish  
 (22) articles about seafood  
 (23) Q Then what about in foreign countries?  
 (24) A Yes I would have to look at the distribution list but I  
 (25) believe this went to the individuals recommended by our trade

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- (1) liaisons in the respective country as well as individuals that  
 (2) the industry themselves had recommended  
 (3) Q Handing you now a document that is called a news release  
 (4) dated July 14th 1989 it was previously marked I believe as  
 (5) Exhibit 3385 in the Parker deposition My first question is  
 (6) are you the author of that document?  
 (7) A I believe this was probably prepared by Peggy Parker and  
 (8) approved by me  
 (9) Q At the top it says contact or Peggy?  
 (10) A Uh huh  
 (11) Q What was the purpose of this document?  
 (12) A It was not unusual for ASMI to have ongoing press releases  
 (13) prior to and after the oil spill so this particular press  
 (14) release gave the results of the research which both the public  
 (15) and the industry were asking ASMI to comment on So rather  
 (16) than comment individually we issued a press release  
 (17) Q Was this sent out to people other than the press?  
 (18) A Probably but I couldn't enumerate who they would be  
 (19) Q I want to focus one more time on that document The very  
 (20) first paragraph states "Ongoing results from market surveys  
 (21) commissioned by the Alaska Seafood Marketing Institute  
 indicate  
 (22) that awareness of the Exxon Valdez oil spill among consumers  
 (23) has not affected purchases of seafood from Alaska  
 (24) And as of July 14th 1989 was that your understanding of  
 (25) the surveys that you had seen?"

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- (1) A For the most part yes  
 (2) Q And we talked about the Burson Marsteller surveys Were  
 (3) there any other surveys that you were aware of that ASMI was  
 (4) using?  
 (5) A Not any formal  
 (6) Q What about informal or soft surveys?  
 (7) A Well as I mentioned we had ongoing feedback from our  
 (8) offices and from the industry and from the committees and from  
 (9) our contractual employees We only conducted two sets of  
 what  
 (10) we would call surveys, soft poll at the beginning, within the  
 (11) first ten days and a formal research  
 (12) Q And all of those things were consistent with this  
 (13) conclusion here?  
 (14) A For the most part  
 (15) Q If you would turn to the second page of Exhibit 26 133 and  
 (16) focus on the section of where it says accomplishments And  
 (17) what is this section of accomplishments?  
 (18) A This was in response to the question what were ASMI's  
 (19) accomplishments relative to the Exxon Valdez oil spill and how  
 (20) we perceived our success or what contributions ASMI made  
 (21) Q The first one is, no contaminated seafood reached the  
 (22) marketplace and that is a fact as I understand it?  
 (23) A Yes  
 (24) Q And the second one is that there was no major negative  
 (25) press about Alaska seafood in the U S or overseas as a result

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- (1) of the proactive media networking and serving as a reliable  
 (2) source of information positive TV and print media resulted?  
 (3) A With emphasis on the word "major" There was negative  
 (4) press there were cartoons numerous cartoons there were  
 (5) negative reports but in terms of having what we considered to  
 (6) be a major negative press response that would have attacked  
 the  
 (7) Alaska seafood industry for providing an unhealthy unsafe  
 (8) product in the marketplace that did not occur  
 (9) I should also clarify that "no contaminated seafood reached  
 (10) the marketplace" didn't mean that no contaminated seafood  
 was  
 (11) caught It means that it just never made it to the  
 (12) marketplace  
 (13) MS STEWART Your Honor, that concludes defendants  
 (14) examination  
 (15) MS WAGNER Plaintiffs will provide a cross by  
 (16) video  
 (17) CROSS EXAMINATION OF MERRY TUTEN (video)  
 (18) BY VIDEO EXAMINER  
 (19) Q Good afternoon Could you tell us about some observations  
 (20) you made about the oil spill and the cleanup?  
 (21) A I only toured the site once I was on the ground in  
 (22) various communities but in terms of being in a helicopter  
 (23) close enough to touch the spill I only found it necessary to  
 (24) go out there once after - I think it was within a week -  
 (25) within a month I would have to check the date but I flew

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- (1) with either the Department of Fish & Game or the Department of  
 (2) Environmental Conservation  
 (3) Q What areas did you observe?  
 (4) A We toured the entire Sound  
 (5) Q What did you observe regarding the presence of oil?  
 (6) A A tremendous amount of oil  
 (7) Q Everywhere?  
 (8) A No Clearly there were areas that were more affected than  
 (9) others  
 (10) Q The role of ASMI in connection with the post spill Is it  
 (11) fair to characterize it in part as damage control?  
 (12) A Yes  
 (13) Q And one of the things you were actively attempting to do  
 (14) was to convince the trade press not to publicize or link the  
 (15) oil spill to Alaska salmon?  
 (16) A We did not wish to exacerbate it it already existed  
 (17) Q Were you encouraging the trade press not to link the two if  
 (18) they possibly could?  
 (19) A We were encouraging them not to do so  
 (20) Q So to the extent if we were to survey the trade press and  
 (21) not find much reference at all regarding linking the spill to  
 (22) the marketing of Alaskan salmon then you did your job pretty  
 (23) well?  
 (24) A Well if you're suggesting that we went to the trade press  
 (25) and asked them not to report we never did that That was

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- (1) never our objective  
 (2) Q No I'm not suggesting that I'm saying you were I take  
 (3) it encouraging them to act responsibly in terms of what they  
 (4) were reporting in terms of linking the spill to the marketing  
 (5) of Alaskan salmon?  
 (6) A We encouraged them to get the most accurate information  
 and  
 (7) to rely on us for that information  
 (8) Q In Alaska Were you present at any meetings prior to the  
 (9) opening of the salmon season in 1989 where buyers and  
 (10) processors were present?  
 (11) A Yes We conducted the meetings  
 (12) Q And at that meeting were processors and buyers present?  
 (13) A Yes  
 (14) Q And were they concerned about the oil spill?  
 (15) A Very much so  
 (16) Q And what were some of the things discussed at that meeting?  
 (17) A This was like a town hall meeting, standing room only  
 (18) capacity, live on the radio a lot of emotion a lot of people  
 (19) that were very confused about how the season was going to  
 work  
 (20) a lot of fishermen that wanted to know how the season was  
 going  
 (21) to progress what Fish & Game was doing what ASMI was  
 doing  
 (22) what DEC was doing to ensure that the season would open if it  
 (23) could and if it couldn't what was going to happen then  
 (24) Q Were there concerns about contaminated fish getting into  
 (25) the marketplace?

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- (1) A Yes  
 (2) Q And what were the discussions in that regard?  
 (3) A Concern about - on every side of the issue People were  
 (4) concerned that the season wouldn't open and they would  
 (5) therefore lose their income People were concerned that the  
 (6) season would open and contaminated fish would get into the  
 (7) marketplace and therefore destroy their market opportunity for  
 (8) the long term There was no clean message in these meetings  
 (9) other than concern and confusion about what government was  
 (10) going to do and what ASMI was going to do to help them in the  
 (11) long run  
 (12) Q And it was during the course of this Cordova meeting there  
 (13) were specific discussions regarding the fear that contaminated  
 (14) fish would get into the marketplace and potentially destroy the  
 (15) Alaskan salmon market?  
 (16) A That was certainly one of the issues that was raised, along  
 (17) with many others  
 (18) Q Do you recall were there any other subsequent meetings  
 (19) that you attended where processors and fishermen were  
 present  
 (20) discussing the oil spill?  
 (21) A I'm sure there were many ongoing I can reference some of  
 (22) them or at least jog my own memory Anytime we addressed  
 the  
 (23) legislature which we did frequently all parties would be  
 (24) present Even having to do with ASMI's budget during that  
 (25) legislative session all parties would be present

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- (1) During the week of April 7th meetings that we had with the  
 (2) various agencies at some time industry representatives would  
 (3) be present Our committee meetings all had fishermen and  
 (4) processors I can't recall whether fishermen and processors  
 (5) attended the ASMI board meeting but it wouldn't surprise me if  
 (6) their records revealed that they were in attendance there  
 (7) There was a tremendous involvement by an awful lot of people  
 (8) week after week after the oil spill  
 (9) Q At these various meetings were there continuing concerns  
 (10) about potential problems that could develop if contaminated  
 (11) fish got into the marketplace?  
 (12) A Yes I would say that was one of the top issues  
 (13) Q Was there concern about the risk this posed to both the  
 (14) processors and the fishermen trying to make a living?  
 (15) A Yes absolutely  
 (16) Q And in trying to determine how much they were going to -  
 (17) strike that  
 (18) How much they were going to pay for fish from fishermen?  
 (19) A No that wasn't the issue as to how to keep the product  
 (20) safe pure wholesome so no one would be adversely affected  
 (21) including the ultimate consumer  
 (22) Q So the goal was to try to develop some strategy for  
 (23) marketing some salmon so that contaminated product would  
 (24) not  
 (25) get into the marketplace?  
 (26) A Not so much that as a strategy to ensure that only pure

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- (1) product came off the boat and entered the distribution chain  
 (2) and a tremendous amount of work on all sides was put into that  
 (3) effort  
 (4) Q That was a continuing source of discussion leading up up to  
 (5) July of 1989?  
 (6) A Yes ongoing With every mile the spill moved that issue  
 (7) moved with it  
 (8) MS WAGNER That's it Your Honor  
 (9) MR LYNCH Dr Yuko Kusakabe Your Honor  
 (10) THE CLERK Raise your right hand please  
 (11) (The Witness is Sworn)  
 (12) THE CLERK For the record please state your full  
 (13) name your address and spell your last name  
 (14) THE WITNESS My name is Yuko Kusakabe  
 (15) K U S A K A B E I live in 3223 41st Avenue Southwest  
 (16) Seattle Washington  
 (17) MR LYNCH Your Honor in order to make the  
 (18) commitment - meet the commitment that we discussed last  
 (19) night  
 (20) to complete the Phase II A evidence by today I've made an  
 (21) agreement with Mr O'Neill to sort of shorten up the  
 (22) qualifications process by sort of narrating what I would expect  
 (23) to elicit in offering Dr Kusakabe  
 (24) MR O NEILL She can testify and he can narrate I  
 (25) just want to know what the scope of the offer is with regard to  
 (26) her expertise

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- (1) MR LYNCH Short narrative of that Dr Kusakabe is  
 (2) a Japanese national who lived in Japan for the first 20 years  
 (3) of her life and moved to the United States where they studied  
 (4) at the University of California Santa Barbara and took a Ph D  
 (5) in natural resource and fisheries economics at the University  
 (6) of Rhode Island Her Ph D thesis was based on a study of the  
 (7) Japanese salmon market and specifically references for  
 (8) different species of salmon and other factors going to  
 (9) preference for salmon in the Japanese market It was based on  
 (10) a survey procedure involving an interview of Japanese  
 (11) importers  
 (12) of salmon in Japan which she conducted first in 1988 and then  
 (13) repeated in 1989  
 (14) In 1989 at the suggestion of her advisor Dr Anderson,  
 (15) who will also be testifying, there was added to the survey a  
 (16) series of questions about factors affecting price in 1989  
 (17) Dr Kusakabe's family was involved in commercial fishing in  
 (18) Japan her grandfather was a commercial fisherman, and she's  
 (19) been acquainted with the Japanese fishing market both as a  
 (20) consumer and as - from her family background from her early  
 (21) life She has - in addition to her Ph D she has co-authored  
 (22) nine articles on the subject of the Japanese salmon market.  
 (23) She has authored reports to the Canadian Department of  
 (24) Fisheries and Oceans and the Norwegian Center for the Applied  
 (25) Research based on her Ph D work That work was funded in  
 (26) part  
 (27) by the United States Department of Agriculture the Canadian

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- (1) Department of Fisheries and Oceans the Norwegian Center for  
 (2) Applied Research  
 (3) She has worked along with Dr Anderson on salmon research  
 (4) on behalf of the State of Alaska She has published or  
 (5) co-authored nine articles on Japanese salmon and herring  
 (6) markets She's made presentations on the Japanese salmon  
 (7) market to professional economists at the 6th International  
 (8) Conference of the International Conference of Fisheries and  
 (9) Economics and Trade which she made in Paris in 1982 and the  
 (10) Agricultural International Congress in 1990  
 (11) She is an associate of J L Anderson & Associates which is  
 (12) Dr Anderson's firm for conducting research and participated  
 (13) with him in work for Exxon relating to herring and salmon  
 (14) prices in this case Specifically in that connection she  
 (15) performed a review of Japanese language trade literature  
 (16) relating to herring and salmon markets and the causes and  
 (17) effects of various factors on the price of herring and salmon  
 (18) and specifically including the oil spill  
 (19) We would tender Dr Kusakabe as an expert in Japanese  
 (20) fisheries market specifically salmon and herring and that's  
 (21) the tender  
 (22) MR O NEILL We have no objection  
 (23) THE COURT Dr Kusakabe's qualifications as a  
 (24) fisheries marketing expert are accepted  
 (25) DIRECT EXAMINATION OF YUKO KUSAKABE

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- (1) BY MR LYNCH  
 (2) Q Dr Kusakabe I d like to talk first with you about a  
 (3) subject that I know Mr O Neill has been dying to spend more  
 (4) time on which is the delectable item of herring sac-roe  
 (5) Let me call your attention to DX8597 on the screen This  
 (6) is an extract from a Japanese encyclopedia on fisheries?  
 (7) A Yes it is  
 (8) Q And what does it depict If I can find the pen?  
 (9) A This is a picture of herring and herring eggs sac  
 (10) Q How is that product used in Japan?  
 (11) A Well when the herring comes to the shore in spring to  
 (12) spawn we catch the herring and then extract the egg sac and  
 (13) then we bnne it and then we eat it as a delicacy in Japan  
 (14) especially for the new year celebration  
 (15) Q Now I m showing you DX3204 Is that a photo of herring -  
 (16) salted herring sac-roe advertising it for gift purposes?  
 (17) A Yes Since herring roe salted herring roe is considered  
 (18) indispensable item for the new year's celebration for that  
 (19) purpose people give gift at the year end, and salted herring  
 (20) roe is considered a good gift.  
 (21) Q This is a gift box?  
 (22) A Yes  
 (23) Q And then if you open it up one or more of the boxes, like  
 (24) seasoned candies you can get a one pound box or a three  
 (25) pound box depending on how generous you want to be?

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- (1) A Yes  
 (2) Q And this (indicating) is from a Japanese cookbook?  
 (3) A Yes If you were given salted herring roe or if you  
 (4) purchase salted herring roe you have to prepare and the  
 (5) preparation is rather elaborate You put the salted herring  
 (6) roe in the water to take the salt out and then take off the  
 (7) seine main grain (ph) some skin and then marinate it in some  
 (8) seasoning and cut it into bite size And that is how the  
 (9) salted herring is prepared for the new year s celebration  
 (10) Q Looks like cooking sweet breads Have you ever done that?  
 (11) A No  
 (12) Q About as equally unappetizing Some people like sweet  
 (13) breads too  
 (14) Now the salted herring roe, you say is an indispensable  
 (15) item to the new year s dinner This is sort of like a  
 (16) Thanksgiving turkey would be in the United States?  
 (17) A Yes I think that's a rather similar analogy  
 (18) Q Showing you another exhibit of DX3203 is that the way it  
 (19) would come to the table?  
 (20) A Yes That is the picture of the new year s special dish  
 (21) New year s dish consists of many things many different food  
 (22) items but three items are considered most important to be  
 (23) included and those are black beans  
 (24) Q Where are those on this picture? Up here?  
 (25) A Yeah the black one there And then salted herring roe and

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- (1) then dried baby anchovies and each has a symbolism  
 (2) Q I bet people really look forward to New Year s?  
 (3) A But each has a symbolism of good health longevity  
 (4) prosperity and good harvest. So those items are even if it  
 (5) may sound unappetizing to you is considered very  
 indispensable  
 (6) items  
 (7) Q I apologize I really mean no offenses Please excuse  
 (8) those comments  
 (9) Which is the symbol that salted herring roe represents?  
 (10) A Salted herring roe is a symbol of prosperity  
 (11) Q Now has the use of herring roe in Japan changed over the  
 (12) years with the introduction of new products?  
 (13) A Yes  
 (14) Q Let me find -- here we are What change has taken place in  
 (15) the nature of the market for herring roe?  
 (16) A Salted herring roe used to be made out of Pacific herring  
 (17) roe and it was salted and that was a traditional product. And  
 (18) in early 70s the new supply was located that is the Atlantic  
 (19) herring roe It's known to have a little softer texture but  
 (20) the new product, called flavored herring roe was developed  
 (21) using Atlantic herring roe And flavored herring roe is like  
 (22) already flavored you don't have to go through any elaborate  
 (23) preparation that we have seen on the previous picture It  
 (24) comes all ready to go You open the package and you can eat  
 (25) it And that ready to-eat convenience was a good appeal to

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- (1) this new product and its consumption has increased  
 (2) tremendously in late 1980s  
 (3) Q Let me show you DX1964 if I may  
 (4) A By the way, this is a picture of the red pepper flavored  
 (5) herring roe  
 (6) Q And this is what you would see in a supermarket in Japan?  
 (7) A Those are items that are readily available at the  
 (8) supermarket shelves all year round  
 (9) Q Now DX1964 is a bar graph showing the distribution of  
 (10) sales of flavored herring roe?  
 (11) A Yes  
 (12) Q And from that it would appear that flavored herring roe is  
 (13) used year round, is that correct?  
 (14) A Yes with the concentration in December Flavored herring  
 (15) roe is introduced more like snack appetizer and side dish to be  
 (16) consumed year round but since it is convenient and  
 (17) inexpensively priced more and more started to be used as a  
 (18) substitute for traditional salted herring roe So we see more  
 (19) concentration in December presenting - it is more used for  
 (20) the substitute  
 (21) Q Let me just pick up two or three of those points First of  
 (22) all it was not originally marketed or sold as a new year s -  
 (23) something to be used in that traditional New Year s meal that  
 (24) you were talking about?  
 (25) A No

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- (1) Q More of salted peanuts or something you would serve for a  
 (2) Friday evening gathering or something?  
 (3) A Yes an appetizer  
 (4) Q And how does its price relate to the price of the  
 (5) traditional Pacific salted herring roe?  
 (6) A It is a lot more inexpensively priced I don't know let's  
 (7) see half 40 percent I have to look up the data but it  
 (8) is -  
 (9) Q Considerably less expensive?  
 (10) A Yes  
 (11) Q And other recent years you say it's nevertheless come to be  
 (12) used by some people as a substitute in that traditional market  
 (13) for Pacific salted herring roe?  
 (14) A Yes  
 (15) Q And what's the effect of that been on the market for the  
 (16) traditional Pacific salted herring roe?  
 (17) A In the sense that it's an inexpensively priced product  
 (18) people don't give as a gift but from your own meal this  
 (19) product just does the job And - would you repeat your  
 (20) question again?  
 (21) Q Well what was the effect of the gradual adoption of  
 (22) flavored herring roe for the salted herring roe?  
 (23) A The premium gift market is secured by premium salted  
 (24) herring but everything else - I mean flavored herring roe  
 (25) eroded the tail end of the salted herring roe market

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- (1) tremendously  
 (2) MR LYNCH Your Honor may I offered DX1964 the  
 (3) chart of flavored herring roe sales?  
 (4) (Exhibit DX1964 offered)  
 (5) MR O NEILL. No objection  
 (6) THE COURT Admitted  
 (7) (Exhibit DX1964 received)  
 (8) BY MR LYNCH  
 (9) Q DX1965 that's the chart of the salted herring roe?  
 (10) A Yes  
 (11) Q And this is sac-roe?  
 (12) A Yes  
 (13) Q What does that chart reflect as to the difference in the  
 (14) way which the traditional salted product is sold and the  
 (15) flavored product is sold?  
 (16) A This shows the - virtually the only time people purchase  
 (17) herring roe is December and the majority of the purchase is  
 (18) done in this single month  
 (19) Q Now you told us that the flavored herring roe had not had  
 (20) much of an impact on the high end of the Pacific salted roe  
 (21) market where the product is given in those fancy gift boxes  
 (22) that we saw earlier?  
 (23) A Yes  
 (24) Q Is that the only way that the traditional salted herring  
 (25) roe is sold in the fancy boxes?

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- (1) A No There is a lot of secondary product and for the home  
 (2) consumption something not included for your home New  
 Year's  
 (3) dish you can buy in less fancier packaging  
 (4) Q And so if somebody didn't happen to give you a gift of  
 (5) salted herring roe you didn't get enough you got the one  
 (6) pound instead of the three pound you can go to the market and  
 (7) buy some for your own consumption?  
 (8) A Yes That's what people do  
 (9) Q And that sells at a lower price?  
 (10) A Yes  
 (11) Q Now we see the sales all occurring in December When  
 does  
 (12) the herring roe get to Japan from Alaska and other places?  
 (13) A Majority of the importation come into Japan in July -  
 (14) Q And then -  
 (15) A - August somewhere  
 (16) Q And in the case of Alaska product in what form does it  
 (17) come to the Japan?  
 (18) A Majority of the Alaskan herring roe comes as frozen whole  
 (19) fish and in Japan the removal of the roe and the further  
 (20) processing into the finer product that process is done in  
 (21) Japan or third country  
 (22) MR LYNCH Offer DX1965  
 (23) (Exhibit DX1965 offered)  
 (24) MR O NEILL. No objection  
 (25) THE COURT Admitted

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- (1) (Exhibit DX1965 received)  
 (2) BY MR LYNCH  
 (3) Q Let me show you DX5697 Alpha This shows us the sources  
 (4) from which herring roe of all kinds is received in Japan?  
 (5) A Yes  
 (6) Q And the way in which those sources of supply are ranked by  
 (7) Japanese traders and consumers?  
 (8) A Yes And the British Columbian product is considered a  
 (9) premium product and basically they are the one who set the  
 (10) price for all the Alaskan and European all the other herring  
 (11) roe would be priced in accordance with the price ceiling set by  
 (12) British Columbian product  
 (13) Q Referring to the Alaska product is that used in the - in  
 (14) these fancy gift box where does it fall in terms of gift boxes  
 (15) or less fancy packages?  
 (16) A It has a lot of grading Top end of the Alaskan product  
 (17) can go into gift pack and then tail end of the Alaskan product  
 (18) is competing directly with the flavored Atlantic herring so  
 (19) there is a certain range to it but since the gift market is  
 (20) rather small and secured by British Columbia they have a hard  
 (21) time and they have to compete with the flavored herring roe  
 (22) Q So is it the fact that the majority of these sac-roe sold  
 (23) to Japan or herring containing sac roe which are later  
 (24) produced into sac roe that go to Japan from Alaska is outside  
 (25) the gift segment of the market?

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- (1) A Depending on the supply of the British Columbia yes  
 (2) MR LYNCH Offer DX5697 Your Honor  
 (3) (Exhibit DX5697 A offered)  
 (4) THE COURT Admitted  
 (5) (Exhibit DX5697 A received)  
 (6) BY MR LYNCH  
 (7) Q Did you review the trade literature and public data on  
 (8) the - what was going on in the herring roe market in 1988 and  
 (9) early 1989?  
 (10) A Yes  
 (11) Q And what did you find as to the state of the market at that  
 (12) time?  
 (13) A As we saw earlier in the monthly sales of the salted  
 (14) herring roe one time you can sell salted herring roe is in  
 (15) December and 88 year-end is the only time you can sell the  
 (16) salted herring roe and the limited gift market did well but  
 (17) everything which kicked out of the gift market have to compete  
 (18) with the flavored herring roe which has been eroding the  
 (19) traditional salted herring roe market for quite some time and  
 (20) the price just crashed And '88 herring roe season was a  
 (21) disaster and because of that tremendous amount of inventory  
 (22) was carried over into 1989  
 (23) Q Let me refer to DX3181 Dr Kusakabe It's probably hard  
 (24) for you to read on the screen so I'll put it up in English  
 (25) This is an article from the Seafood s Trading and Marketing

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- (1) News of February 27th 1989 is that correct?  
 (2) A Yes  
 (3) Q And is that one of the Japanese language trade publications  
 (4) that you reviewed as a part of your study of what happened to  
 (5) herring in - herring prices in 1988 '89?  
 (6) A Yes  
 (7) Q And if I may the year s herring roe supply was projected  
 (8) to swell to 30 000 tons the largest in recent years This was  
 (9) partly due to large leftover inventory carried forward to this  
 (10) year which was a result of the detrimental defeat of last  
 (11) year s year-end marketing strategies  
 (12) Now the detrimental defeat of last year s year-end as a  
 (13) result of herring roe strategies what strategies are we  
 (14) talking about?  
 (15) A Many things happened at the end of 88 and the cost of the  
 (16) roe was significantly high in '88 so there was very expensive  
 (17) roe product in the market at the year-end and other things  
 (18) was the emperor was dying there was a lot of severe  
 (19) restraining going on at that time that definitely affected  
 (20) product which is linked to the celebration and festive things  
 (21) And let s see the auction of the salted herring roe in  
 (22) Osaka was usually start at the beginning of November but it  
 (23) was delayed and so the time you can sell herring was even  
 (24) shortened  
 (25) So this one-time opportunity you can sell salted herring

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- (1) roe was shortened and high cost of product and the emperor is  
 (2) dying and all these different things contributed to the  
 (3) disastrous year-end market this article is referring to  
 (4) Q So the effect of that was that processors went into 1989  
 (5) holding more leftover herring roe than what they typically had?  
 (6) A Yes It is estimated that is a record high inventory  
 (7) Q And that had been acquired at unusually high prices  
 because  
 (8) of the prior year s pricing situation?  
 (9) A Yes exactly  
 (10) Q Now what happened to supply as you moved into 1989 from  
 (11) sources other than Alaska?  
 (12) Well there was a restricted herring harvest in Alaska  
 (13) Did that create a supply shortage in 1989?  
 (14) A Well I think overall supply was okay  
 (15) Q In 1989?  
 (16) A 89 but if you re talking about at the time ex vessel  
 (17) price is negotiating at the beginning of the season  
 (18) everything indicated that we are going to have good - I mean  
 (19) good Pacific harvest as well as good Atlantic herring roe  
 (20) harvest was projected in '89 and all the forecasts said we are  
 (21) going to have good season for Pacific as well as Atlantic  
 (22) herring roe, and we had this huge record high inventory of  
 (23) herring roe which they purchased with high cost in the  
 (24) previous year And that was the situation  
 (25) Q In your professional opinion as a trained economist what

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- (1) consequence did those market factors have on the price that  
 (2) fishermen could expect to obtain on herring roe in 1989?  
 (3) A Market factors or forces indicate that it s logical thing  
 (4) to expect low prices  
 (5) Q Now in your review of the trade press in Japan did you  
 (6) attempt to determine if there was any indication that the Exxon  
 (7) Valdez oil spill had an influence on the price of salted  
 (8) herring roe as it reached Japan and what traders were willing  
 (9) to pay for salted herring roe?  
 (10) A Your question is do I have opinion?  
 (11) Q No My question is, did you review the trade literature to  
 (12) see if there were references or indications in the trade  
 (13) literature that the Exxon Valdez spill had some effect on  
 (14) prices?  
 (15) A Yes I reviewed  
 (16) Q What did you find?  
 (17) A My finding was Exxon Valdez oil spill didn t have any  
 (18) impact on the price of herring roe  
 (19) Q Let me refer you to DX3181, which is an article from the -  
 (20) I guess I can t pronounce this so I have to ask for your  
 (21) help Can you read that on the monitor?  
 (22) A Yes Nikkan Hokkai Keizai  
 (23) Q What does that translate to?  
 (24) A Daily Northern Sea Economic News  
 (25) Q Is that a trade publication in Japan?

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- (1) A Yes
- (2) Q The decision to close the herring fishery seems to be triggering bullish attitude on the part of the local producers slash processors Japanese importers are strengthening their guard
- (3) Who are the local producers or processors?
- (4) A Well in this context since Prince William Sound is closed for fishing the Alaskan producers in other part of Alaska are going to use the closure of Prince William Sound as - to increase the price they receive
- (5) Q So at least as presented in this trade article the processors felt that the fishermen were claiming they should get a higher price because the supply would be produced?
- (6) A Yes
- (7) Q But as it says they were strengthening their guard?
- (8) A Yes
- (9) Q And what ultimately was the price for 1989?
- (10) A Price has significantly decreased
- (11) Q I m sorry?
- (12) A Price has significantly decreased
- (13) Q Now herring roe is also sold on kelp is that correct?
- (14) A Yes
- (15) Q Is that a different end use market in Japan?
- (16) A Yes Herring roe on kelp is considered distinctively different product it doesn t have any linkage with the New

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- (1) Year s celebration so it is consumed year round as a special expensive item for festive and celebration opportunities
- (2) Q Kind of thing you would do if you got a promotion or graduated from college or something?
- (3) A Yeah
- (4) Q And what did you find about the factors affecting the price of herring roe on kelp in 1988 89?
- (5) A What is your question again?
- (6) Q What did you find were the factors affecting the price of herring roe on kelp in 1988 and 1989?
- (7) A Again there is an indication that inventory of herring roe on kelp is high but it s just an indication because we don t have official statistic which keep track of herring roe on kelp as a separate icon but a review of the trade literature indicate that the market has been shrinking for quite some time and so there isn t much interest in this product
- (8) Q So according to trade literature at that time the demand had been declining?
- (9) A Yeah
- (10) Q Imagine that Must be people like me and Mr O Neill And there was an oversupply or there was a large inventory according to informal sources?
- (11) A Yes
- (12) Q What about incoming supply for 1989?
- (13) A The good harvest was projected from British Columbia

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- (1) Prince William Sound and also Finland
- (2) Q What did you find if anything in the trade literature about the effect that the Exxon Valdez oil spill might have had on the price for herring roe on kelp?
- (3) A I didn t find any indication the oil spill had a negative price impact on the price of herring roe on kelp
- (4) Q Now I d like to turn Dr Kusakabe to your doctoral thesis Could you describe to the jury what your plan was for your thesis and how you went about developing that?
- (5) A Yes The emphasis of my thesis was salmon isn t just salmon it has all sorts of different characteristics in it so let s take a look at how buyers of the salmon look these different characteristics of salmon and that was a main focus of my dissertations So I went over and I developed a survey and then I went over to Japan and interviewed salmon buyers
- (6) Q Let me show you DX3022 Alpha I ll bring a copy with the Court s permission to the witness stand
- (7) is this a listing of the importers and traders in Japan who you interviewed in connection with your thesis?
- (8) A Yes and no This is a list of the Japanese importers and retail buyers surveyed in 1989 and I did a similar thing for
- (9) 88
- (10) Q Let s go into that First of all the requirement for the award of a doctorate is that you demonstrate that you have done
- (11) some original research that advances the stated scholarship in

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- (1) your field is that correct?
- (2) A Yes
- (3) Q And that work is supervised as you go forward by a committee?
- (4) A Yes
- (5) Q And how many people were on that committee?
- (6) A Four people
- (7) Q And were these members of the economics faculty at the University of Rhode Island?
- (8) A And one from the marketing department
- (9) Q And those persons review what you plan to do?
- (10) A Yes
- (11) Q And you have to have their approval of your design and approach before you can have confidence that what you do will in fact qualify you for a doctorate is that correct?
- (12) A Yes
- (13) Q So in 1988 you had this idea of trying to evaluate how Japanese buyers evaluated the different characteristics of salmon is that correct?
- (14) A Uh huh
- (15) Q At that time you weren t thinking into the future there was going to be an oil spill in the future true?
- (16) A No
- (17) Q And you developed a survey identifying the different characteristics of salmon and talking to Japanese traders?

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- (1) A Yes  
 (2) Q Now how did you choose who to talk to?  
 (3) A I used the membership list of the Japanese Marine Product Importers Association  
 (4) Q Did you contact everybody on that list?  
 (5) A That lists the member s name and address with the primary seafood product they import so I chose the one whose primary item they import is salmon and then from there I chose those whose headquarter s in Tokyo and I tried to contact every one of them  
 (6) Q So you tried to contact one hundred percent of those Tokyo-based importers who specialize in salmon?  
 (7) A Yes within financial and time constraint  
 (8) Q The financing of your project was at least partially paid to you by the three sources that I mentioned the Department of Agriculture Canadian Department of Oceans and Fisheries and the Norwegian Center for Applied Research?  
 (9) A Yes  
 (10) Q And a part of the understanding for that funding was that you would write reports based on your work for the Canadian and Norwegian sponsors is that correct?  
 (11) A Yes  
 (12) Q They were interested - they were interested for their own purposes in knowing what you learned?  
 (13) A Yes

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- (1) Q And at that time you only anticipated doing the survey once in 1988?  
 (2) A Yes  
 (3) Q Then is it correct that subsequently Dr Anderson indicated to you that Exxon would be willing to finance a second trip to Japan where you could do the survey a second time, and he suggested that you add to your survey some questions about factors affecting price?  
 (4) A Yes  
 (5) Q And he also gave you a supplement to your survey form that had those questions?  
 (6) A Yes  
 (7) Q And you reviewed those and agreed to include those in your survey form?  
 (8) A Yes  
 (9) Q And those were of relevance to your doctoral work depending on what the other answers would be?  
 (10) A Yes It is a related subject matter  
 (11) Q Then did you follow the same procedure to try to find people whom you could interview?  
 (12) A Yes  
 (13) Q Wrote them letters asked them if they would talk to you?  
 (14) A Yes  
 (15) Q And then went to Japan and talked to them?  
 (16) A Yes

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- (1) Q And when you went to Japan went to Tokyo you conducted face-to-face interviews?  
 (2) A Yes  
 (3) Q Now let me show you -  
 (4) MR LYNCH Offer DX3022 Alpha  
 (5) (Exhibit DX3022 Alpha offered)  
 (6) MR O NEILL No objection  
 (7) THE COURT Admitted  
 (8) (Exhibit DX3022 Alpha received)  
 (9) BY MR LYNCH  
 (10) Q Let me show you DX6107 While I m walking back could you state for the record what this is Dr Kusakabe?  
 (11) A This is a survey note that I took for the supplemental question added for the 1989 survey  
 (12) Q So this is only a part of the survey notes in total is that correct?  
 (13) A Yes  
 (14) Q Now, these are notes that you made after you had conducted the interviews?  
 (15) A There is two sets of survey notes here I took notes during the survey and then for qualification I just cleaned up my answers on the other So there is two sets of the interview notes for each respondents  
 (16) Q So this exhibit has your original rough notes that you took when you were sitting there in the person s office?

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- (1) A Yes  
 (2) Q And then when you went back someplace your hotel or your room if you had only made a partial notation you would write it out so you could understand it a day later?  
 (3) A Yes  
 (4) Q Or a month later or a week whatever  
 (5) Now were these surveys conducted in English or in Japanese?  
 (6) A In Japanese  
 (7) Q So the questions here on the form are in English which probably made it easier for your committee to review the survey form Did you translate the questions into Japanese when speaking to the Japanese traders?  
 (8) A Yes that s what I did  
 (9) Q And your discussion with them was in Japanese?  
 (10) A Yes  
 (11) Q And when you were giving the form did you give it the same way did you read the questions the same way in each case?  
 (12) A Yes  
 (13) Q I ve got up on the screen question about factors contributing to the price decline for sockeye salmon in 1989 Did you then ask the trader do you think this was high it was important high, moderate medium or none?  
 (14) A Yes I asked then to rate various factors that could have contributed to the price decline and I asked them to rate



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- (1) every one of them in terms of its importance  
 (2) Q How many total interviews did you conduct of Japanese  
 (3) salmon traders with reference to the 1989 survey that included  
 (4) this part six?  
 (5) A For part six 35  
 (6) Q 35 total Were those the same people you had interviewed  
 (7) in 1988 or different?  
 (8) A Many of them are the same 27 interviews were completed  
 (9) for 88 so for 89 I did have ten more people  
 (10) Q Is that because more people were willing to talk to you in  
 (11) 89 just lucked out?  
 (12) A Well I think it s lucked out And at the same time 88  
 (13) I did some restaurant surveys so I have to partially devote my  
 (14) time for restaurant interviews so that s part of the reason  
 (15) Q Now with reference to the funding you got from Exxon were  
 (16) you paid for your time did Exxon pay you a salary or hourly  
 (17) fee -  
 (18) A No  
 (19) Q - for the work that you were doing in conducting this  
 (20) survey?  
 (21) A No Exxon simply reimbursed for my travel expenses  
 (22) Q So that s your airplane fare and your hotel?  
 (23) A Well meals  
 (24) Q And meals okay Showing you DX4910-Alpha is this a  
 (25) summary of the results of your survey as to the factors that

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- (1) you asked about?  
 (2) A Yes  
 (3) Q This was a prompted survey isn t that correct that is  
 (4) you -  
 (5) A What do you mean by prompted?  
 (6) Q You prompted the trader by asking him about these specific  
 (7) factors? You gave them a list and asked them what importance  
 (8) they assigned to it?  
 (9) A Yes but we did have that other category so they could add  
 (10) anything that they thought is important into this  
 (11) Q Now when you asked these questions when you asked the  
 (12) trader what do you think the importance of the reduced price of  
 (13) other seafood was did you always get a response or did they  
 (14) sometimes not have an opinion on particular items?  
 (15) A If they didn t have an opinion for that particular factor  
 (16) they didn t give me and I didn t record it  
 (17) Q Now what is the - what are the bars representing? The  
 (18) first one indicates reduced price of other seafood as falling  
 (19) somewhere between two or three in importance How is that  
 (20) calculated Dr Kusakabe?  
 (21) A Three is highly important two is more directly important  
 (22) and one is minimum and zero is none Each respondent give  
 (23) ratings in that scale and this is just an average of those  
 (24) which represent the buyers that I interviewed as a group  
 (25) These are their opinions

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- (1) Q So if - you took and translated their answers into  
 (2) numbers three being for highly important zero for being no  
 (3) importance at all -  
 (4) A Yes  
 (5) Q - and you added up the scores for all those people who did  
 (6) respond to you -  
 (7) A Yes  
 (8) Q - and divided by the number of people who responded on  
 (9) that particular item -  
 (10) A Yes  
 (11) Q - and then that s the assigned value is that correct?  
 (12) A Yes  
 (13) Q So in this chart it ranks the responses in the order of  
 (14) importance that on average the respondents assigned is that  
 (15) correct?  
 (16) A Uh huh  
 (17) Q Now did you inquire or look into statistics to determine  
 (18) what percent of the salmon importation business in Japan was  
 (19) represented by the persons from whom you got responses in  
 (20) this part of your survey?  
 (21) A Yes We calculated the buyers that I interviewed in 1989  
 (22) represented roughly 65 to 70 percent of the total Japanese  
 (23) import of salmon  
 (24) MR LYNCH Offer DX6107 and DX4910-Alpha  
 (25) (Exhibits DX6107 and DX4910 Alpha offered)

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- (1) MR O NEILL No objection  
 (2) THE COURT Both admitted  
 (3) (Exhibit DX6107 and DX4910-Alpha received)  
 (4) BY MR LYNCH  
 (5) Q Let me show you Dr Kusakabe DX1892 Alpha Is this  
 (6) another summarization on the responses about the specific  
 (7) question about the Exxon Valdez oil spill?  
 (8) A Yes  
 (9) Q And would you just explain the results you got as  
 (10) summarized in this chart?  
 (11) A The previous chart shows that among all the things what are  
 (12) the factors that they considered important factors contributed  
 (13) to the price decline and since oil spill was rated hardly  
 (14) anything we look - this just shows that actual calculation of  
 (15) the number of people for its answer rather than just a summary  
 (16) and after 35 buyers who answered the question 28 said spill  
 (17) did not contribute to price decline and out of 28 five were  
 (18) of the opinion that spill was a factor which held the price  
 (19) and five traders considered that spill as a minimum factor and  
 (20) one person considered the spill was a minimum factor  
 (21) moderate  
 (22) factor but he rated eight other market factors as equal  
 (23) contributing factor to the price decline and one buyer said  
 (24) spill was a highly important factor for the price decline but  
 (25) at the same time he listed 13 other marketing factors - market  
 (25) factors as equally contributing to the price decline

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- (1) Q Now let me just go back to DX4910-A According to  
 (2) DX1892 A one and only one assigned a high value to the oil  
 (3) spill as a cause for the price decline?  
 (4) A Yes  
 (5) Q You didn't ask about change in price you asked about price  
 (6) decline that is correct?  
 (7) A Yes  
 (8) Q And one person assigned that a high value?  
 (9) A Yes  
 (10) Q But that person listed 13 other factors from this list as  
 (11) also having a high value?  
 (12) A Yes  
 (13) Q And one person listed it as having a moderate value in  
 (14) here?  
 (15) A Well the one person who rated spill as moderate this is  
 (16) an average so his answer is incorporated into calculation of  
 (17) the importance of the oil spill  
 (18) Q I understand but if you just look to his alone, the bar  
 (19) would have come out to somewhere in the middle if it weren't an  
 (20) average if you just looked at the one person's you had a  
 (21) chart for that one respondent his answer would say it was a  
 (22) moderate factor?  
 (23) A Yes  
 (24) Q And his answer would have been eight other factors out here  
 (25) in the moderate and you indicated five others would have it s

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- (1) Q There is nothing in the Japanese trade literature relating  
 (2) to salmon that indicated to you that it was a cause of a  
 (3) decline is that correct?  
 (4) A Yes  
 (5) MR LYNCH No further questions Your Honor  
 (6) THE COURT You may cross-examine  
 (7) MR O NEILL Thank you Judge  
 (8) CROSS EXAMINATION OF YUKO KUSAKABE  
 (9) BY MR O NEILL.  
 (10) Q Have some year-end presents for you  
 (11) You work for James Anderson & Associates - I want you to  
 (12) know that you created most of that paper so this is not my  
 (13) fault.  
 (14) You work for James L. Anderson & Associates That's a  
 (15) correct statement?  
 (16) A Yes  
 (17) Q And Doctor Anderson is here right back there and he's  
 (18) going to testify today?  
 (19) A Yes  
 (20) Q And you've worked for James L. Anderson & Associates on  
 (21) and  
 (22) off since when?  
 (23) A Since '87 because he was my advisor for my dissertation  
 (24) and so I worked for him - I mean worked with him on different  
 (25) functions  
 (25) Q So from 1987 to the present day you've worked with Dr

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- (1) a minimal factor?  
 (2) A Yes sir  
 (3) Q And five of the 28 who said it was not a factor in the  
 (4) decline volunteered that they said the oil spill had in fact  
 (5) caused the price to stay up?  
 (6) A Yes  
 (7) Q And you didn't ask that question they volunteered?  
 (8) A Yes  
 (9) MR LYNCH Offer 1892 A  
 (10) (Exhibit 1892 A offered)  
 (11) MR O NEILL No objection  
 (12) THE COURT Admitted  
 (13) (Exhibit 1892 A received)  
 (14) BY MR LYNCH  
 (15) Q Now did you review the Japanese trade literature the  
 (16) Japanese language trade literature for references in that  
 (17) literature to indications that the Japanese traders view threat  
 (18) of contaminated fish or the possibility of contaminated fish as  
 (19) a factor affecting the price of Alaska salmon in 1989?  
 (20) A I reviewed that  
 (21) Q What did you find from your review of the Japanese trade  
 (22) literature?  
 (23) A Based on my review of the Japanese literature oil spill  
 (24) wasn't a factor which caused the price decline of sockeye  
 (25) salmon

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- (1) Anderson Now Dr Anderson and you this isn't the first time  
 (2) that you have done work on behalf of the oil industry, is it?  
 (3) A Yes, we did consulting work for Glacier Bay case  
 (4) Q And you worked for British Petroleum?  
 (5) A Yes  
 (6) Q And British Petroleum's maritime insurer West of England?  
 (7) A I guess it is Those insurance names and whose oil was it  
 (8) I'm not really familiar with that  
 (9) Q But you worked in any event on a prior case on behalf of  
 (10) the oil industry and you're here today on behalf of Exxon  
 (11) Corporation?  
 (12) A Yes  
 (13) Q And Exxon indeed is paying you, like all experts get paid  
 (14) to be here to testify?  
 (15) A Yes  
 (16) Q And James L. Anderson & Associates has made in the last  
 (17) four or five years 60 70 80 percent of its money from either  
 (18) Exxon or British Petroleum a lot of it?  
 (19) A I don't know the percentage  
 (20) Q It's a high percentage isn't it?  
 (21) A I assume it is  
 (22) Q And the survey that was done that you have testified here  
 (23) today about you designed the first four pages of the survey?  
 (24) A Yes  
 (25) Q And with regard to the fifth page that was added on for the

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- (1) second generation of the survey Dr Anderson designed that  
 (2) page didn't he?  
 (3) A He drafted I looked at it and I thought it was  
 (4) appropriate  
 (5) Q Now survey work is a specialty in and of itself isn't it?  
 (6) A Survey work yes  
 (7) Q And there are people like the Burson Marsteller people that  
 (8) are experts in survey work?  
 (9) A I don't know whether they are expert in survey  
 (10) Q You have never been trained with regard to how to draft a  
 (11) survey form have you?  
 (12) A I've never taken a course  
 (13) Q And with regard to survey procedures and survey samplings  
 (14) you've never been trained with regard to that have you?  
 (15) A In terms of the course work no  
 (16) Q And you've never taken any courses regarding how to  
 (17) interview people?  
 (18) A In terms of the course work no  
 (19) Q And you've never worked for a survey firm?  
 (20) A No  
 (21) Q And with regard to the last page the section that deals  
 (22) with the oil spill that was not part of your 1988 survey form  
 (23) was it?  
 (24) A No  
 (25) Q And you don't know how Dr Anderson decided to list the

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- (1) A The question was worded factors contributed to price  
 (2) decline for sockeye salmon in 1989 but this question was  
 (3) referring to the ex vessel price  
 (4) Q The form does not say ex vessel price does it?  
 (5) A No  
 (6) Q And you didn't ask any of the respondents here what might  
 (7) be the \$64 question and that is whether the subject of the oil  
 (8) spill came up in discussions over their negotiation on fish  
 (9) price you didn't ask them that did you?  
 (10) A Whether I asked what?  
 (11) Q Whether the subject of the oil spill came up in the  
 (12) particular negotiations over fish price  
 (13) A Well oil spill is included in one of the factors which can  
 (14) cause price decline and they have chance to rate oil spill on  
 (15) the basis of its importance for the price decline  
 (16) contribution How they actually negotiate price with processor  
 (17) wasn't in the subject of this question  
 (18) Q How they did the negotiation with the processor and whether  
 (19) they used the oil spill as a weapon in those negotiations you  
 (20) did not ask about that directly did you?  
 (21) A In this question in here no, I didn't  
 (22) Q Now with regard to the survey generally you were in the  
 (23) survey room or in the room where you met with them in many  
 (24) instances it was by phone isn't that right?  
 (25) A There was a phone in the conference room meeting room

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- (1) various categories that he listed on the survey form do you?  
 (2) A Would you repeat your question again please?  
 (3) Q The factors on the last page of the survey form both the  
 (4) listing and the order you don't know why he listed them in the  
 (5) order that he listed them or why he chose them do you?  
 (6) A In terms of the market factor which can cause a price  
 (7) decline I looked at it and all the factors included there I  
 (8) thought it was appropriate I don't see any problems of the  
 (9) factor he included to be included in the list  
 (10) Q Could you go to page 12 of your deposition transcript? If  
 (11) I can approach I'll dig it out of the mountain of paper  
 (12) A Is this the one?  
 (13) Q Yes  
 (14) A Page?  
 (15) Q 12 please lines 9 through 14 In your deposition I did  
 (16) ask you whether you knew how Dr Anderson decided which  
 (17) categories to list on the last page and you said you didn't  
 (18) know isn't that correct?  
 (19) A I don't know how he decided and I still don't know how he  
 (20) decided  
 (21) Q That's fine That's fine Now in the survey form there  
 (22) is no reference in the survey form to the fishermen price the  
 (23) grounds price or the ex vessel price?  
 (24) A I have to review the survey form  
 (25) Q You've got a stack No this is not it

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- (1) Q Sometimes -  
 (2) A I don't recall but yeah  
 (3) Q Sometimes they were interviewed by phone?  
 (4) A Yeah  
 (5) Q And in a courtroom when people come into a courtroom to  
 (6) testify like you're here today they are subject to the  
 (7) locomotive of truth cross-examination but with regard to what  
 (8) these processors or buyers Japanese buyers told you this may  
 (9) seem an obvious point but we can't cross-examine them can  
 (10) we  
 (11) because they are not here isn't that right?  
 (12) A Well, I don't have any reason to believe that they  
 (13) deliberately tell me a lie I don't have any reason to  
 (14) believe - and in fact all their answers indicated they  
 (15) demonstrated the substantial knowledge of the subject material  
 (16) and they cooperated I don't really -  
 (17) Q We can't cross-examine them here can we? We have to take  
 (18) your word about what they said?  
 (19) A We produced a list of the buyers that I talked to and you  
 (20) do have a chance to contact and do the same survey if you  
 (21) wished and in terms of they are not physically here yes  
 (22) that's true  
 (23) Q And with regard to producing the list, the list was  
 (24) produced after the discovery in this case was closed wasn't  
 (25) it so we didn't have an opportunity to go depose them did we?  
 (26) A Well you have a list of all the Japanese traders and

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- (1) whether you could get the exact same person or not is - I  
 (2) don't think it was such a special thing -  
 (3) Q I want to go -  
 (4) A - to go over to talk to them if you wished to  
 (5) Q Now when you did your recording of the notes you sat and  
 (6) you wrote down the answers The respondents didn't write  
 down  
 (7) the answers did they?  
 (8) A Yes I did it  
 (9) Q And you didn't show them the answers to show them what  
 you  
 (10) wrote down was correct is that correct?  
 (11) A I didn't show them the particular answers  
 (12) Q And in prior surveys you did go and show them the  
 (13) particular answers in Glacier Bay you sent them the answers  
 (14) didn't you?  
 (15) A No  
 (16) Q You didn't? Then why did they write you letters saying  
 (17) their answers weren't correct?  
 (18) A Well I don't exactly know We never ever showed their  
 (19) list of the buyers that we interviewed We promised the  
 (20) confidentiality we promised their answer will be reported only  
 (21) in aggregate and that's a promise we kept And that's true  
 (22) for the Glacier Bay that's true for this case  
 (23) Q You got complaints from some of the Glacier Bay survey  
 (24) respondents that what they recorded wasn't accurate didn't  
 (25) you?

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- (1) A Yes We received two letters saying that - in terms of  
 (2) the Glacier Bay case saying that they answered only in general  
 (3) term so it doesn't reflect any specific price that processors  
 (4) are quoting but that was after the litigation and after the  
 (5) list of the buyers that we interviewed was turned over to  
 (6) plaintiffs side and -  
 (7) Q Are you finished?  
 (8) A Not really  
 (9) Q Go ahead  
 (10) A So we assumed that they had pressure to write the letter of  
 (11) that sort to us but during the interview I didn't have any -  
 (12) I don't have any basis to believe that their answers was  
 (13) faulty and they demonstrated the significant understanding of  
 (14) the situation  
 (15) Q Now I want to go through some of these survey forms if we  
 (16) could and on a lot of the survey forms the people that you  
 (17) interviewed didn't in fact do business in the oiled fisheries  
 (18) or take fish from the oiled fisheries, isn't that correct? And  
 (19) I'm on this survey form which has a number I think it's 302  
 (20) And this survey form - it appears on the survey form that  
 (21) the respondent got his fish from Bristol Bay, and there is  
 (22) nothing on the survey form to indicate that this respondent got  
 (23) any fish at all from an oiled fishery is there?  
 (24) A No but just because this particular year he didn't  
 (25) purchase fish from say, Prince William Sound doesn't

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- (1) necessarily mean he doesn't have any knowledge of the salmon  
 (2) fishery in Alaska After all this is their profession  
 (3) Q This person and this survey form didn't buy fish from the  
 (4) oiled fisheries did he?  
 (5) A This particular person in this particular year he  
 (6) indicated that he purchased a hundred percent of sockeye from  
 (7) Bristol Bay  
 (8) Q And on survey form 306 which is another one you counted  
 (9) this person didn't get fish from the oiled fishery did he?  
 (10) A In the year this survey was done but again doesn't mean he  
 (11) doesn't know  
 (12) Q And on survey form 309 you surveyed somebody who  
 bought  
 (13) fish in Canada and not Alaska isn't that right?  
 (14) A Yes Well, the sockeye from Canada a hundred percent He  
 (15) did purchase other species of salmon and he didn't list the  
 (16) origin for these fish so we don't really know whether he  
 (17) purchased certain other species of fish from other -  
 (18) Q We have no idea about what market activities he was  
 (19) involved in in 1989 with regard to the oiled fisheries All we  
 (20) know is that he bought from Bristol Bay?  
 (21) A Canada  
 (22) Q This one is from Canada I'm sorry even farther away  
 (23) In this is form 311 and local salmon does include the  
 (24) oiled area doesn't it?  
 (25) A Yes

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- (1) Q And he talks about two things This person says that the  
 (2) Exxon Valdez oil spill didn't have any price affect but he  
 (3) also says on the bottom in the Cook Inlet area workers went  
 (4) for cleanup oil spill shortage of workers and processing  
 (5) plants means lower quality of product Isn't that what that  
 (6) says?  
 (7) A Yes  
 (8) Q So here we have a survey respondent that testifies - this  
 (9) is a person with knowledge of Cook Inlet because he buys from  
 (10) Cook Inlet, and on the survey form we find out that the product  
 (11) coming out of Cook Inlet is lower because of the oil spill?  
 (12) A He says that shortage of worker in the processing plant has  
 (13) contributed to the price - quality decline of sockeye  
 (14) Q And the shortage of workers he has is a result of  
 (15) abandoning for the oil spill?  
 (16) A Yes  
 (17) Q And on survey form 321 we can see on the original form  
 (18) there is drift gillnet price increase supplier Kenai Do you  
 (19) see that?  
 (20) A Yes  
 (21) Q But when you go back to your room you changed the form  
 (22) into a narrative and you include such things as the beach nets  
 (23) more than made up for it which wasn't on the original survey  
 (24) form isn't that right?  
 (25) A In the original form within the personal interview given

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- (1) the limited time I basically jot down the key word that remind  
 (2) me what exactly he said And so I - since like it is brought  
 (3) out several years ago that Kenai drift gillnet price increase  
 (4) doesn't really make any sense so in order to avoid that  
 (5) situation right after I interview I wrote down in full  
 (6) sentence what this person said as a comment and that is a  
 (7) comment he made  
 (8) Q Now on survey form 303 we have no idea where the person  
 (9) buys the fish from at all do we?  
 (10) A What survey?  
 (11) Q I think it's 303  
 (12) A The one I have in front of me is 87  
 (13) Q 89 is up there too  
 (14) A 327  
 (15) Q 303  
 (16) A This person import 98 percent fresh  
 (17) Q But we don't know whether he imported from the oil  
 impacted  
 (18) areas from your form, do we?  
 (19) A No  
 (20) Q And on survey form 312 -  
 (21) A Domestic production may be buy from other importers so I  
 (22) think the percentage of this person's direct import is  
 (23) relatively small but it doesn't mean that he doesn't know the  
 (24) industry  
 (25) Q And on survey form 312 we have somebody who takes it  
 from

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- (1) southeast Alaska Canada and Bristol Bay but again not from  
 (2) the impacted areas isn't that correct?  
 (3) A In terms of the direct import yes and it doesn't mean he  
 (4) doesn't know the market situation at that time and he may have  
 (5) just listed a main part It doesn't necessarily mean he  
 (6) doesn't import sockeye from Prince William Sound  
 (7) Q And on survey form 313 we have somebody who is involved  
 in  
 (8) Canada and Puget Sound but not Alaska?  
 (9) A Yeah it says so  
 (10) Q And on survey form 314 we have somebody from Bristol  
 Bay  
 (11) but again not from any of the oil impacted areas?  
 (12) A Yes it says so It's hard to say This person said we  
 (13) mainly import sockeye from Bristol Bay Well we can't say a  
 (14) hundred percent comes from Bristol Bay It doesn't mean he  
 (15) doesn't import from Prince William Sound at all  
 (16) Q Your survey form says it's a hundred percent from Bristol  
 Bay doesn't it?  
 (17) A That's what it says  
 (18) Q And on survey form 316 again the survey form isn't filled  
 (19) out so we can't tell where he or she imports from is that  
 (20) correct?  
 (21) A It says 80 percent of his import is rainbow trout  
 (22) Q So he doesn't import from the oiled areas This is a  
 (23) rainbow trout not salmon?  
 (24) A Well it is 80 percent out of the 20 percent He didn't

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- (1) give me the detailed information what the rest of the fish he  
 (2) imports from  
 (3) Q Now here we got a survey form number 318 Again we had a  
 (4) rainbow trout exporter who appears to export rainbow trout from  
 (5) Iceland?  
 (6) A And Norway  
 (7) Q And we surveyed him and this guy is halfway around the  
 (8) world isn't he?  
 (9) A It indicates that main fish that he import is rainbow trout  
 (10) from Norway and Iceland Doesn't mean he doesn't know the  
 (11) salmon market  
 (12) Q And on survey form 325 we again have no indication as to  
 (13) where this person is buying fish?  
 (14) A Country of origin was not described in this It just  
 (15) simply says his frozen import consists of 60 percent of  
 (16) sockeye 10 percent of chinook five percent of coho and 20  
 (17) percent of chum and five percent of rainbow and in terms of  
 (18) the country of origin each fish comes from he didn't  
 (19) elaborate  
 (20) Q And on survey 327 we have somebody that imports from  
 (21) Bristol Bay and Chile?  
 (22) A Yes  
 (23) Q On this survey however we were able to get opinions from  
 (24) the respondent that - on the second page there may be some  
 (25) possibility that oil tainted salmon is in the inventories

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- (1) abroad and some of them may appear next year And the  
 image of  
 (2) Alaskan and oil can give a very negative impact on Japanese  
 (3) salmon market It's on the second page of the rewrite of the  
 (4) survey?  
 (5) A Survey what number?  
 (6) Q I think it's 327  
 (7) A Yes he made a comment and I recall that his comment was  
 (8) such and his answer was incorporated into the total analysis  
 (9) of this analysis for the factors contributed to the price  
 (10) decline  
 (11) Q Now on survey 328 we have somebody who identifies the  
 (12) fact that they in fact are buying from Cook Inlet isn't that  
 (13) right?  
 (14) A Yes And the person - going back to the person you  
 (15) mentioned at 327 he indicated he import from Bristol Bay a  
 (16) hundred percent sockeye  
 (17) Q Yeah he did There was another indication we get from  
 (18) people who aren't in the market?  
 (19) A Yes  
 (20) Q On 328 we have somebody that's in the Cook Inlet market  
 (21) don't we?  
 (22) A He indicated 50 percent of the sockeye he imports comes  
 (23) from Cook Inlet another 50 is from Canada  
 (24) Q So we have somebody in an oiled market and with regard to  
 (25) somebody who was actually in an oiled market doing business  
 in

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- (1) an oiled market we get a high rank with regard to the Exxon  
 (2) Valdez oil spill don't we?  
 (3) A Yes As I mentioned he listed many other factors as  
 (4) equally important factors contributing to the price decline  
 (5) and Exxon oil spill was one of them  
 (6) Q Now on some of these survey forms we just didn't get any  
 (7) answers including where they buy from isn't that right?  
 (8) A Yes Respondent always had opportunity not to answer not  
 (9) to volunteer that information or simply said don't know  
 (10) Q On form 402 we don't know where the person is buying  
 from?  
 (11) A This person just answers he import 41 percent of the frozen  
 (12) salmon Import now he do does is 41 percent sockeye 14  
 (13) percent king, 14 percent chinook and 20 percent chum and  
 nine  
 (14) percent rainbow and in terms of the country of origin each  
 (15) species came from he didn't elaborate  
 (16) Q So we don't know where he buys from at all?  
 (17) A Yes It doesn't necessarily mean that he doesn't know the  
 (18) industry  
 (19) Q And on survey form 404 again we don't know where the  
 (20) person buys from? And we're over 10 00  
 (21) A He just answered percentage breakdown of the species and  
 (22) not country of origin  
 (23) Q So we don't know where he buys from?  
 (24) A No  
 (25) MR O NEILL Good time for a break?

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- (1) THE COURT We'll take our recess at this time We'll  
 (2) be in recess for 15 minutes  
 (3) (Jury out at 10 05)  
 (4) (Recess from 10 05 to 10 20)  
 (5) (Jury in at 10 20)  
 (6) THE CLERK All rise  
 (7) BY MR O NEILL  
 (8) Q Ma'am -  
 (9) MR O NEILL Your Honor?  
 (10) THE COURT Mr O'Neill, you can continue  
 (11) BY MR O NEILL  
 (12) Q Survey form 405 again we surveyed somebody who bought  
 out  
 (13) of Bristol Bay and Canada?  
 (14) A Yes  
 (15) Q Survey form 408 this appears to be somebody who buys at a  
 (16) department store in Japan and buys primarily Japanese  
 domestic?  
 (17) A Yes  
 (18) Q And the same with survey form 408 we can't tell where they  
 (19) buy from but it appears it's a buyer in a department store in  
 (20) Japan is that a correct statement? I'm guessing that it's a  
 (21) buyer in a department store in Japan from the margin notes on  
 (22) the bottom right hand corner on the first page  
 (23) A Well 400 number series are the buyers for the department  
 (24) stores and supermarket and large retailers and so I think  
 (25) that's accurate category

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- (1) Q Probably a good guess don't you think?  
 (2) Now I want to talk a little bit about your review of the  
 (3) trade literature if we could for a minute Now when I  
 (4) deposed you you talked about basically three trade literature  
 (5) publications?  
 (6) A Yes  
 (7) Q And the first and I'm not going to try them in Japanese  
 (8) but the first one the rough translation of that is the  
 (9) Fisheries Economic News?  
 (10) A Yes  
 (11) Q And when you did your study leading to your conclusion  
 you  
 (12) did not have a complete collection of the 1989 copies of the  
 (13) Fishery & Economic News isn't that right?  
 (14) A Well in the deposition time I confused with the Hokkai  
 (15) Keizai and Suisan Keizai and Suisan Keizai is an economic  
 (16) news For that particular journal I reviewed the entire 89  
 (17) for Hokkai Keizai We had only March to August and that's the  
 (18) period of journal that I reviewed for that particular journal  
 (19) but later on I reviewed the entire year and we presented all  
 (20) the related article to you as well  
 (21) Q I want to follow this through date by date I asked you at  
 (22) your deposition with regard to the Fisheries Economic News  
 (23) whether you reviewed March April or May of 1989 I asked you  
 (24) that question and we indeed had the articles there that you  
 (25) reviewed with us at the deposition And you answered at your

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- (1) deposition that you did not review March April or May of 1989  
 (2) isn't that correct? Was that your answer at your deposition?  
 (3) A If I answered that way I must have confused because March  
 (4) to July for all three trade journals that I reviewed that  
 (5) particular period you are talking about is covered For one of  
 (6) the trade journals at the time of the deposition only March to  
 (7) July or March to August was reviewed and not the rest of the  
 (8) year  
 (9) So in that sense it was incomplete but later on I  
 (10) completed and all the articles from the rest of the period was  
 (11) presented to you  
 (12) Q Let's go to your deposition transcript on page 21 line 14  
 (13) through 24 And did you tell me at your deposition -  
 (14) A Page 21 line what?  
 (15) Q 14 through 24 Did you tell me at your deposition, under  
 (16) oath that you didn't have a complete collection of the 1989  
 (17) version of the Fishery & Economic News and particularly that  
 (18) you did not review March April or May of 1989?  
 (19) A The question was regarding to March April and May of '89  
 (20) You don't know whether you had a complete collection of  
 (21) Fisheries Economics News?  
 (22) Q And your answer was?  
 (23) A This is a period that I could review and it was within the  
 (24) period that I reviewed these are the articles for those My  
 (25) answer was - we didn't have the period that period at hand

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- (1) so I couldn't review and this is a period I could review and  
 (2) it was within the period that I reviewed. These are the  
 (3) articles for the best of my knowledge  
 (4) So I guess I said a completely different saying within one  
 (5) sentence. I think in terms of - well we had - when we were  
 (6) talking about Fisheries Economics News the period that we  
 (7) didn't have the complete set was Hokkai Keizai and I confused  
 (8) Hokkai Keizai with Suisan Keizai and for Hokkai Keizai we had  
 (9) only from March to August and that's the only period that I  
 (10) reviewed for that particular journal. We had two other  
 (11) journals and for that I reviewed a complete 1989 period since  
 (12) the review was done relatively long time ago  
 (13) I guess at the time of the deposition I confused the period  
 (14) and I confused the name of the journal  
 (15) Q In the defendants exhibits we didn't have in the room that  
 (16) day when I talked to you about that and I was direct in asking  
 (17) you and clear in asking you what you reviewed and what you  
 (18) didn't review and your story today is different than your  
 (19) story then isn't it?  
 (20) A At that time as I said I confused the Hokkai Keizai with  
 (21) Suisan Keizai and I knew that we have only March to some  
 (22) period I didn't recall clearly whether that was after July or  
 (23) up to August. At one time when I reviewed my deposition I  
 (24) said I reviewed from June to August I think but in fact it  
 (25) was March to the end of August at that time and so -

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- (1) Q With regard to the articles that you brought to the  
 (2) courtroom and that you gave to us it appears that they were  
 (3) faxed around the country after your deposition in October  
 (4) through January isn't that right?  
 (5) A Well we were trying to get the official translation of the  
 (6) journals that I reviewed so that we can present and it was  
 (7) taking a long time for the official translator to complete the  
 (8) translation. At the time of the deposition not all of the  
 (9) official translation was given to us or given to you and we  
 (10) tried really hard to speed up the process so that we are going  
 (11) to have the whole translated journals  
 (12) Q We'll go through those in a minute. Now when you picked  
 (13) the articles to come out of these journals you did not pick  
 (14) every article that had to do with the Exxon Valdez oil spill  
 (15) did you?  
 (16) A I believe that I picked everything which said anything  
 (17) about oil spills  
 (18) Q Would you go to page 23 of your deposition transcript?  
 (19) A Yes I have page 23  
 (20) Q On page 23 of your deposition transcript we're referring to  
 (21) Plaintiffs Exhibit 1773, which is an abstract your abstract  
 (22) of the articles that you looked at and I asked you whether it  
 (23) contained all references to the Exxon Valdez oil spill and the  
 (24) Seafood Trade and Marketing News and you said it didn't isn't  
 (25) that right?

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- (1) Q What date was your deposition taken on?  
 (2) A Would you say it again please?  
 (3) Q What was - can you go to the front page of your deposition  
 (4) transcript and tell me what date the deposition was taken on?  
 (5) A The deposition was taken August 19 1993  
 (6) Q And we did discuss at the deposition the fact that you had  
 (7) formed an opinion based upon your then version of a very  
 (8) incomplete data set. Whether or not that's true that's what  
 (9) you told me then isn't that right?  
 (10) A I reviewed the entire year of Seafood News entire year of  
 (11) Economic News partial period for Hokkai News and my  
 (12) opinion  
 (13) Q Now I'm interested in the fact that in the exhibit that has  
 (14) those articles that was given to us by Exxon Corporation it  
 (15) appears that there was a lot of fax traffic immediately after  
 (16) your deposition and this was the fax top that's out there  
 (17) scrambling to get a complete set of articles and this is on  
 (18) August 16th 1993 and indeed the effort continues until  
 (19) January 11 of 1994. Are you aware of that?  
 (20) MR LYNCH Your Honor I have no objection to the  
 (21) question except for the fact about scrambling to get copies of  
 (22) articles and so forth of which there is no evidence and I ask  
 (23) that Mr. O'Neill limit himself to questions  
 (24) THE COURT Rephrase the question please  
 (25) BY MR. O'NEILL

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- (1) A The exhibit you're referring to was only for the salmon  
 (2) articles. We produced two sets which comprise the Exxon  
 (3) Valdez  
 (4) in terms of herring roe and we had a pile of Exxon oil spill  
 (5) related articles related to salmon. What you are referring to  
 (6) at that time was only the part the salmon article and so if  
 (7) the Exxon oil spill was discussed in relation to herring roe  
 (8) it wasn't included in the pile you are referring to but it  
 (9) doesn't mean that I omitted the articles for the whole  
 (10) reviewing process  
 (11) Q Now indeed the trade press reported a lot about the Exxon  
 (12) Valdez oil spill didn't it?  
 (13) A Yes I believe  
 (14) Q And indeed the trade press carries on April 5 in the Suisan  
 (15) Keizai -  
 (16) A Keizai  
 (17) Q - Prince William Sound herring fishery closure is decided  
 (18) and on April 11 of 1989 in an article on herring roe there is  
 (19) a link between the Prince William Sound closures and sales  
 (20) battles over salted herring roe products. Do you see that?  
 (21) That's a correct statement that's from one of your exhibits  
 (22) isn't it?  
 (23) A If I recall the content correctly it's that the closure of  
 (24) the Prince William Sound and the possible supply reduction for  
 (25) the small and medium size roe is considered a good thing for  
 (26) the overall salted herring roe market sales battle. And that

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- (1) Is my recollection of that
- (2) Q And on April 19 of 1989 the title of the article is
- (3) Affects of Crude Oil Accident Update and they talk about the
- (4) oil moving into Kodiak That s a correct statement, isn t it?
- (5) A Yes
- (6) Q And in the trade press on May 2nd in an article on the
- (7) Alaska herring market there is a reference to Cook Inlet and
- (8) prices are uncertain and there is no way of looking into the
- (9) future Do you see that?
- (10) A Yes
- (11) Q And Cook Inlet is on that date a subject of the discussion
- (12) as to whether or not it s going to be oiled or not?
- (13) A Yes
- (14) Q And on May 17th we get the first report from the Copper
- (15) River Now the Copper River wasn t oiled but it is in Prince
- (16) William Sound and is part of the Prince William Sound fishery
- (17) Isn t that right?
- (18) A Yes
- (19) Q And right out of the box with regard to the Copper River
- (20) it looks like the Copper River prices are sound doesn t it?
- (21) The fish prices started at 2 40 for sockeye and ended at 2 60
- (22) to 2 65, that s a good price?
- (23) A Copper River always get a good price
- (24) Q And then what happens to Copper River sockeye in June
- (25) what
- (25) does the press report in June do you recall?

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- (1) A I think the price decreased significantly
- (2) Q And that s about when the Copper River pack hits Japan
- (3) Isn t that right or do you know?
- (4) A Well earlier Copper River sockeye is air freighted to
- (5) Japan and the first auction in Tokyo area to my
- (6) understanding got the good price and then the second one
- (7) because of the supply the price went down
- (8) Q And on March 29th again we get in the trade press
- (9) reference again to the oil spill area and indeed to shortcut
- (10) this would it be fair to say that in March April and May
- (11) late March April May and June of 1989 the trade press was
- (12) replete with descriptions of the Exxon Valdez oil spill Isn t
- (13) that right?
- (14) A Substantial coverage of the oil spill in the trade
- (15) journals
- (16) Q And with regard to the Japanese popular press I can t read
- (17) these but I m told that in the popular press there were
- (18) regular headlines in Japan about the Prince William Sound oil
- (19) spill Are you aware of that?
- (20) A I don t know what you re referring to by popular press
- (21) Q I have a stack up there for you
- (22) A Okay
- (23) Q The newspaper that the common ordinary folks read over a
- (24) period of time carried regular reports of the Prince William
- (25) Sound oil spill and indeed on one page carried a picture of

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- (1) Mr Rawls
- (2) A What page are you referring to?
- (3) Yeah I saw his picture I ve never reviewed these -
- (4) Q Articles?
- (5) A Articles This is the first time that I see
- (6) Q With regard to the trade press which you did review the
- (7) trade press is referring to it as an oil spill a heavy oil
- (8) spill, it describes where the oil is going all of that in the
- (9) trade press isn t that correct?
- (10) A I said there is a significant coverage of the oil spill in
- (11) the trade journals
- (12) Q Now there was in fact a survey done of attitudes towards
- (13) seafood and the oil spill by Burson Marsteller You re aware
- (14) of that, aren't you?
- (15) A I didn't read the report
- (16) Q You never read the report?
- (17) A No It came across my table I may have glanced at it
- (18) but I didn t read it.
- (19) Q Have you talked to anyone about it?
- (20) A Not necessarily
- (21) Q The Burson Marsteller results which are in evidence in
- (22) this case let's see whether they are consistent with your
- (23) results or inconsistent I ll give what you Burson-Marsteller
- (24) says and you tell me whether that s consistent or inconsistent
- (25) with your results

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- (1) A Okay
- (2) Q Let s talk about the United States 95 percent of
- (3) consumers were aware of the Exxon Valdez oil spill?
- (4) MR LYNCH Your Honor Doctor -
- (5) MR O NEILL. You re right, I'll go to Japan Good
- (6) point Moving right along
- (7) BY MR O NEILL.
- (8) Q The Japanese survey by Burson 83 percent of Japanese
- (9) interviewed were aware of the spill Is that consistent or
- (10) inconsistent with your report?
- (11) A My trade journal review was not to determine whether
- (12) consumer has a significant understanding of the knowledge
- (13) about
- (14) the oil spill so - but my understanding is, yeah I think
- (15) they basically knew of the oil spill
- (16) Q And 50 percent were not eating as much seafood as before?
- (17) A Well I glanced at it and I didn't read the whole thing so
- (18) I cannot quote but my understanding was all the reasons
- (19) quoted
- (20) as the reason to decrease the consumption none of them not a
- (21) single person said oil spill And I looked at the - some of
- (22) the executive summary page, and so I didn t read the whole
- (23) thing so I cannot really say but that was my understanding
- (24) and that was -
- (25) Q But you did look at the executive summary page?
- (26) A Or some of the page which listed answers I guess but I
- (27) really don t know how this survey was conducted and I don t



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- (1) have any chance to verify
- (2) Q When you reviewed the executive summary did you review the portion that said that 58 percent of Japanese consumers surveyed would avoid eating Alaskan seafood?
- (3) A The page that you re referring to says awareness of the Exxon Valdez oil spill has not affected consumers purchases of seafood from Alaska isn t it the summary of the findings on the page that you re referring to?
- (4) Q I want you to read exactly what I showed you out loud right there Just read it out loud
- (5) A This article portion of the summary of findings said nearly six consumers in ten would avoid eating Alaskan seafood
- (6) women are more likely to voice their fear than men 40 percent says outright that they do not believe that Alaskan seafood is safe to eat and three percent are not at all confident that the products are safe
- (7) Q Is that consistent or inconsistent with your survey results?
- (8) A It is very inconsistent and this is just a portion and even on one page of the summary there seems to be conflicting information One hand is awareness of the oil spill has not affected consumers' purchase of seafood and then the phrase that you asked me to read seems to be indicating otherwise and
- (9) I really don t know how they conducted it and how they can come up with the conflicting conclusion even on one page

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- (1) And so as for the particular phrase that you asked me to read yes it is contradictory to my understanding
- (2) Q And 40 percent said outright that they do not believe Alaska seafood is safe to eat?
- (3) A Yes the information you asked me to read and that is very contradictory to my finding
- (4) Q And on the next page the assurance by the Alaska Seafood -
- (5) A I'm reading it Yes
- (6) Q Now Burson Marsteller interviewed more people in the Japanese trade than you did didn t they?
- (7) A I don t know how they selected and how many people surveyed and what form and I cannot verify their method And this is the first time I was reading sentences and in what context this particular phrase was put on I have no idea and -
- (8) Q I m interested in you distancing yourself from the Burson Marsteller survey because they surveyed the trade like you did isn t that right?
- (9) A I don t even know how they conducted the survey
- (10) Q But they did survey the trade didn t they and you know that they surveyed the trade You have the Burson Marsteller report back in your office someplace don t you?
- (11) A Well this was designated as possible cross examination material and is not a kind of a thing that I read beforehand I took a look at it but since there was - so many documents

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- (1) was designated at the possible cross-examination I couldn t read every single one of them So this is the first time I was asked to read this particular paragraph you re quoting and I don t know how it is conducted and what kind of question they asked what kind of -
- (2) Q Do you know who they are Burson Marsteller?
- (3) A Some kind of the survey firm in Los Angeles
- (4) Q A professional survey firm? You re aware that they are a professional survey firm?
- (5) A Okay
- (6) Q And it - you have insulated yourself from this knowledge even though they did exactly the same thing you did prior to coming in here today isn t that right?
- (7) A I don t think they did exact same thing and I m not given a chance to review to see whether your statement is true or not
- (8) Q You were given a chance You were given these documents ahead of time and you knew about Burson Marsteller doing the survey a year or two ago, didn t you? You new they went out and did a survey some time ago on the subject that was related to the subject that you came in here to testify about isn t that right?
- (9) A I didn't read this particular thing I can say again and again I didn t read it
- (10) Q And Burson Marsteller wasn t paid by Exxon were they? Do

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- (1) you know?
- (2) A I don t know who funded their work I don t know where they got the money I don t know
- (3) Q The Burson Marsteller survey in front of you I ll represent to you wasn t funded by Exxon
- (4) A It was prepared for Alaska Seafood Marketing Institute it says
- (5) Q And the Alaska Seafood Marketing Institute isn t in this lawsuit right now do you know?
- (6) A No I don t
- (7) Q But Exxon is isn t that right?
- (8) A Yes
- (9) Q And Exxon is paying you to be here today, isn t that right?
- (10) A Yes
- (11) MR O NEILL Thank you
- (12) THE COURT Redirect?
- (13) REDIRECT EXAMINATION OF YUKO KUSAKABE
- (14) BY MR LYNCH
- (15) Q I have a few questions first Dr Kusakabe about survey and survey practice and how that s used in your field and then some questions about the substance of the salmon market as you studied it in Japan and have studied it and lastly we can ask a few questions about this survey which seems to have a little sunshine for everybody
- (16) The survey of practitioners in the trade is a recognized

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- (1) method that is used in economic study to understand markets is
- (2) that correct?
- (3) **A Yes**
- (4) **Q** And the survey that you developed for your thesis that was reviewed by your thesis committee and its methodology approved
- (5) as appropriate is that correct?
- (6) **A Yes**
- (7) **Q** Now that kind of survey work is not the same as Roper does That s not public opinion survey where you re trying to predict voters or something like that is it?
- (8) **A No**
- (9) **Q** So you don t use the same techniques that they use for random situations and you re doing a market survey is that accurate?
- (10) **A Yes**
- (11) **Q** In the case of the survey that you conducted in 1989 the follow up survey you indicated that you contacted the people and selected them on the basis of what they were shown in the published journal to specialize in is that correct?
- (12) **A Yes**
- (13) **Q** And you didn t try to make any - you didn't try to bias your choice of selections one way or the other except that they were involved in salmon?
- (14) **A Yes**
- (15) **Q** Now from your knowledge of the Japanese salmon market is

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- (1) a wholesaler bound year in and year out to purchase from a given area?
- (2) **A** Would you say it again?
- (3) **Q** Any given trader when he purchases from Bristol Bay year in and year out Is he bound to stay with Bnristol Bay?
- (4) **A No**
- (5) **Q** Would you expect that a person who bought from Bristol Bay or bought from Canada would know market conditions in Alaska as
- (6) a part of choosing where they are going to buy the salmon?
- (7) **A Absolutely**
- (8) **Q** Now if it were the case that one particular producing area had a low price for some reason would traders be interested in knowing about that low price?
- (9) **A Sure**
- (10) **Q** And if the oil spill were affecting one area so-called oiled markets I think we heard about differently than other pricing areas would you expect traders to know about that?
- (11) **A Yes**
- (12) **Q** Because that would produce a competitive advantage for their competitors or for them?
- (13) **A** It s their profession that s what they did
- (14) **Q** Now let me stop for a second You were asked about rainbow trout Some of the people you talked about imported rainbow trout is that correct?
- (15) **A** Uh huh

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- (1) **Q** From Norway?
- (2) **A** And Sweden and some other European countries
- (3) **Q** Farmed fish?
- (4) **A Yes**
- (5) **Q** Why would a salmon trader be interested in rainbow trout?
- (6) **A** Well rainbow trout is because of the similarity in the color of flesh is considered a good substitute for sockeye salmon in Japan
- (7) **Q** So if you were competing with other vendors of sockeye salmon one thing you might offer for sale in the market because of its color is rainbow trout?
- (8) **A** Rainbow trout is considered a close substitute for sockeye
- (9) **Q** Now is sockeye something that s unique in other words is it a species that has no substitutes?
- (10) **A** That's not true, but if everything else is the same sockeye is considered a preferred species of salmon
- (11) **Q** Sockeye would be the first choice?
- (12) **A** If everything else is the same, including price
- (13) **Q** Including price And what are the other kinds of fish which considering price might be substituted for sockeye salmon if the price got too high?
- (14) **A** Everything but particularly sea trout rainbow trout chum salmon king salmon It s all -
- (15) **Q** How is most sockeye consumed in Japan? Steak the way we do it?

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- (1) **A** No Primary product form in which we consume or Japanese
- (2) consume salmon is salted and salted slice of salmon of different species are the most prevalent product form in which Japanese consume salmon
- (3) **Q** When you look at coho or chum or rainbow trout as a substitute is that generally salted too?
- (4) **A Yes**
- (5) **Q** Now is this a product like fillet mignon or lobster? Can only rich Japanese, affluent Japanese people afford sockeye?
- (6) **A** The way salmon is perceived in Japan is completely different from the way it is here I guess salmon is more considered as luxury item something that you eat once in a while at the restaurant. That is not the case in Japan In it s present form which we assume salmon is salted and it is considered a stable food almost and we eat that product breakfast lunch and dinner and we just eat it all the time
- (7) **Q** Now is it something - could the middle class or working class Japanese family afford to eat sockeye salmon?
- (8) **A Yes** It is within the reach of everybody
- (9) **Q** Now in the United States a lot of us we eat beef You go to the store and you see porterhouse steak or New York steak or chuck steak and they have price differentials And if you can get a New York steak at a good price you might get it
- (10) Is that how the price relationship is between salmon?
- (11) **A** Different species of salmon yes

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- (1) Q So will Japanese consumers shift from sockeye if that price differential changes?
- (2) A Absolutely
- (3) Q So if we had a market in which all the other prices for species are falling is it your experience for sockeye prices to stay up if other prices go down?
- (4) A No in the face of all the other species of salmon going down predicting that sockeye salmon price is going to stay up indefinitely because they are special is completely unreasonable The historical price relationship among the different species of salmon indicate that they do move generally in the same direction
- (5) Q Now I just want to ask one -
- (6) A Even if there is a price differential among them
- (7) Q Now I just want to ask one more question about survey technique Mr O Neill showed you an answer on the Elmo from one of your survey respondents - by the way, in addition to the fact that these people were listed in the trade directory as specialists in salmon you interviewed them correct?
- (8) A Yes
- (9) Q Were you able to make a judgment about their knowledge about the salmon market?
- (10) A Yes
- (11) Q Overall what was their qualification to discuss conditions in the salmon market?

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- (1) A They have a profound understanding of the market profound understanding of the fishing situation in Alaska, Canada all the area
- (2) Q By the way which - as to origin in your survey what was the - he showed us herring roe, that British Columbia is the highest - regarded as the best source of sac roe herring How does Alaska versus British Columbia versus Japan - what is the source of origin preferred?
- (3) A Canada is British Columbia salmon is considered premium product
- (4) Q Now as I said Mr O Neill showed you this answer which indicated that this particular respondent said that he had some concern about the image of Alaska and oil might give a very negative impact on the Japanese salmon market correct?
- (5) A Yes
- (6) Q Now that's not what you wrote down when you were sitting in the room with that gentleman?
- (7) A That's exactly what he said and that's how I took note and his answer was incorporated in that overall analysis of the survey
- (8) Q This is one of those answers where you went back to your room and expanded on what you had written down in the first place isn't that right? In other words when you wrote it down sitting in the office you wrote this?
- (9) A Yes It says image linkage Alaska oil big and that's the

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- (1) shorthand note I took during the interview
- (2) Q And then you went back and wrote down using your memory
- (3) exactly what it says even though it was negative to Exxon?
- (4) A Yes
- (5) Q And likewise when someone said something that reflected positively you honestly wrote down what they had said and expanded your notes to be accurate is that correct?
- (6) A Yes
- (7) Q And the survey work that you did you considered to be part of your doctoral dissertation?
- (8) A Yes
- (9) Q You did not consider that work to be work that you did as an employee or as a consultant to or expert for Exxon is that correct?
- (10) A We are never told that that information is the property of Exxon we cannot use it we cannot publish My understanding was all the data I collected I can incorporate it into my dissertation and I can publish any articles based on those data that I acquired through the survey
- (11) Q Now this is the Burson Marsteller survey that Mr O Neill asked you so much about PX1756 and do you have a copy of that
- (12) there?
- (13) A Yes
- (14) Q On the bottom the pages are numbered PMI And could you turn to PMI1952?

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- (1) A The one I have has A C-E number
- (2) Q Let me ask you to turn to page Roman 8 That refers to the trade
- (3) Mr O Neill asked you a lot about consumer responses as to the trade Burson Marsteller's conclusion at least reported here most of the trade is aware of the oil spill but for now it has not affected their purchases of Alaska seafood Is that consistent with the results that you got later in 1989?
- (4) A Yes
- (5) Q And it says 87 percent of the trade is aware of the spill with more wholesalers aware than retailers however as in many - as in - as many in the trade report the change in their purchase patterns - you think I was reading Japanese
- (6) However as many in the trade report a change in their purchase patterns as do not and of those reporting a change 15 percent have decreased their purchase even though none cite
- (7) the spill for their reduced purchase, but wholesalers were essentially worried about prices more retailers are worried about an abundant and consistent supply of fresh Alaskan seafood
- (8) Was that consistent what you were told by the traders when you interviewed them in later 1989?
- (9) A Yes it is absolutely
- (10) Q And Mr O Neill asked you if there was a lot of coverage about the oil spill in the trade press Do you remember that?

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- (1) A Yes  
 (2) Q But he never asked you whether any of that coverage at any  
 (3) time indicated concern in the press that contaminated seafood  
 (4) would reach the Japanese market or hurt the market in Japan  
 (5) Did you find any such concern in the press as you reviewed?  
 (6) A No  
 (7) MR LYNCH Thank you No further questions Your  
 (8) Honor  
 (9) THE COURT Thank you You may step down  
 (10) MR LYNCH Dr Anderson  
 (11) THE CLERK Would you raise your right hand please  
 (12) sir?  
 (13) (The Witness is Sworn)  
 (14) THE CLERK Please be seated For the record sir  
 (15) please state your full name your address and spell your last  
 (16) name  
 (17) THE WITNESS My name is James Lovett Anderson  
 (18) A N D E R S O N 20 5th Avenue Narragansett, Rhode Island  
 (19) MR LYNCH Your Honor, in the narrowing time window  
 (20) with Mr O'Neill's agreement I will propose to use the same  
 (21) abbreviated qualification procedure  
 (22) MR O NEILL Yes  
 (23) MR LYNCH Dr Anderson is a professor of resource  
 (24) economics at the University of Rhode Island He is also the  
 (25) principal of J L Anderson & Associates which is the employer

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- (1) of Dr Kusakabe and was discussed in Dr Kusakabe's  
 (2) examination  
 (3) He has a BS in biology and economics from the College of  
 (4) William and Mary in Virginia and a master's in agriculture and  
 (5) natural resource economics from the University of Arizona He  
 (6) received his Ph D in agriculture and resource economics from  
 (7) the University of California at Davis His thesis on which he  
 (8) received that Ph D was the American Agricultural Award as the  
 (9) outstanding thesis in 1983-84 It was on the subject of  
 (10) aquaculture and the relation to the salmon markets  
 (11) Since that time he's been a member of the faculty of the  
 (12) University of Rhode Island and was this year awarded a prize by  
 (13) the college as the outstanding researcher of the year His  
 (14) research has specialized in fish markets and particularly the  
 (15) salmon market and their relationship between the salmon  
 (16) market  
 (17) and aquaculture farmed salmon He has published 50 articles  
 (18) in the field He has worked on projects for the State of  
 (19) Alaska the government of Canada in addition to his private  
 (20) consulting business as J L Anderson  
 (21) He's a member of the American Agricultural Economics  
 (22) Association the American Fishery Society the American  
 (23) Marketing Association the Aquaculture Association of Canada  
 (24) International Institute of Fisheries Economics and Trade the  
 (25) International Associates of Commercial Agriculture  
 (26) He's made presentations to professional meetings in his

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- (1) field at the rate of about one such presentation a month and  
 (2) has previously been qualified as an expert in this court on the  
 (3) subject of salmon pricing that being in the Glacier Bay case  
 (4) and we would tender Dr Anderson as an expert on fisheries and  
 (5) mechanics and specifically the pricing of salmon and Alaska  
 (6) herring roe products  
 (7) MR O NEILL No objection  
 (8) THE COURT Dr Anderson's qualifications are accepted  
 (9) from the Court.  
 (10) DIRECT EXAMINATION OF JAMES L ANDERSON  
 (11) BY MR LYNCH  
 (12) Q I'd like to pick up Dr Anderson with the question of  
 (13) your engagement to work for Exxon on this matter What did  
 (14) Exxon when they contacted you and you agreed to work for  
 (15) them  
 (16) what did they ask you to do?  
 (17) A They asked me to evaluate the factors which influenced the  
 (18) salmon market and herring roe markets and to evaluate the  
 (19) impact of the oil spill on salmon and herring roe prices  
 (20) Q Did you undertake a study at that time an economic study  
 (21) to carry out that evaluation?  
 (22) A Yes We undertook an extensive study on both salmon and  
 (23) herring roe That study involved review of the academic  
 (24) literature review of the trade press over 2500 articles It  
 (25) involved collection of data from all over the world to look at  
 (26) prices and evaluate changes involved some statistical work

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- (1) review of expert witness testimony from the plaintiffs and the  
 (2) survey that you conducted  
 (3) Q Showing you Defendants' Exhibit 4895-B Is that a listing  
 (4) of the publications from which you reviewed articles that might  
 (5) have a bearing on the pricing of Alaska salmon Alaska herring  
 (6) roe products, in the period prior to and after the Exxon Valdez  
 (7) oil spill?  
 (8) A Yes it is  
 (9) Q And the portion that is indicated by Japanese characters I  
 (10) gather that you didn't do that personally?  
 (11) A No I didn't. Yuko reviewed those  
 (12) Q That's Dr Kusakabe, who just left?  
 (13) A Yes  
 (14) Q Is that a recognized - part of a recognized market  
 (15) analysis in an effort to ascertain price?  
 (16) A It should be  
 (17) Q Have you personally traveled to Japan? Are you personally  
 (18) acquainted with market conditions for salmon and seafood  
 (19) products in Japan?  
 (20) A Yes I have  
 (21) Q And would you just give us a brief description of your  
 (22) personal background experience in Japan?  
 (23) A I spent about three three-and-a-half weeks in Japan in  
 (24) 1988 primarily to study the herring roe and salmon markets  
 (25) and I visited at least 25 processors or reprocessors of herring

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- (1) roe products in Japan as well as touring three different  
 (2) wholesale markets in Japan  
 (3) Q Dr Anderson I m going to put up on the screen the  
 (4) portion - version of this chart that our careful planning  
 (5) contemplates would have emerged from the process of  
 applying  
 (6) these applique items  
 (7) We heard a lot yesterday from Dr Olley and from Dr  
 (8) Bjorndal about the change that had occurred in the salmon  
 (9) market I m going to put this down for the time being since  
 (10) it s a blank make it hard for me to see you  
 (11) And that s summarized is it not on the column in the  
 (12) chart reading inseason 1988?  
 (13) A That s correct.  
 (14) Q In 1988 there hadn t been an oil spill so that isn t  
 (15) relevant Inventory in Japan through the season was low?  
 (16) A Uh huh  
 (17) Q What does the green arrow tell us?  
 (18) A The arrows indicate the direction of influence with regard  
 (19) to influencing salmon prices and as we know when inventories  
 (20) are low it tends to drive up prices So that green arrow  
 (21) reflects upward pressure on prices  
 (22) Q And the supply situation in 1988 was a low harvest for that  
 (23) year?  
 (24) A Inseason there was a low harvest and that also contributed  
 (25) to pressure upward pressure on prices

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- (1) Q Then exchange rate?  
 (2) A Exchange rates were strong Japan was in one of its  
 (3) strongest economic situations in 88 and with strong exchange  
 (4) rates it contributed to upward pressure on prices  
 (5) Q So for all it was good to be a salmon fisherman and  
 (6) producer?  
 (7) A It was They received the highest prices they had ever  
 (8) received in the history of the fishery in 1988  
 (9) Q The 1988 salmon price overall was up and set a new record?  
 (10) A In Alaska yes  
 (11) Q Now let s move on to the second half of 1988 What  
 (12) happened with inventory as the year moved on?  
 (13) A Well as the year moved on of course inventory started to  
 (14) increase rapidly and the main cause of that was the fact that  
 (15) there was a record chum harvest in Japan That chum harvest  
 (16) occurs in fall after the regular season in Alaska and that  
 (17) record contributed to rapidly increasing inventories  
 (18) contributing to driving down prices  
 (19) Q And farmed salmon?  
 (20) A Well in addition with the high prices of 1988 we found  
 (21) that Japanese traders became much more aware of farmed  
 salmon  
 (22) and its availability and the rapid growth of that industry  
 (23) created an opportunity for them to purchase farmed salmon as  
 (24) well  
 (25) Q And the end?

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- (1) A Well the end continued strong which meant they could buy  
 (2) more from the United States with less yen and so that actually  
 (3) helped keep prices up a little bit  
 (4) Q And overall how did the prices do?  
 (5) A Well overall there was pressure on prices and prices  
 (6) began to decline in late 88 in most all markets  
 (7) Q We ve heard about the Bill Atkinson News Report in this  
 (8) case Do you agree with Dr Crutchfield this is a reliable  
 (9) English language insight into the state of thinking into the  
 (10) Japanese market?  
 (11) A Yes it is  
 (12) Q Let me ask you first of all a few questions about the  
 (13) market generally Dr Anderson Dr Crutchfield told us that  
 (14) for sockeye salmon and the other high priced species of  
 salmon  
 (15) coho and chum that Japan was really the driving force for the  
 (16) Alaska market. Do you agree with that conclusion?  
 (17) A There is no doubt about that  
 (18) Q So if you wanted to determine what prices were going to do  
 (19) or would have been is Japan the right place to look?  
 (20) A If you don t understand the Japanese market you will not  
 (21) understand how prices work for sockeye  
 (22) Q And with reference to the Japanese market is it immune  
 (23) from world forces or how does the Japanese market relate to  
 (24) salmon activity in other parts of the world?  
 (25) A Well Japanese make their living trading, as we know We

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- (1) hear about their deficit all the time The Japanese know  
 (2) what s happening in the world and they attempt to score  
 product  
 (3) from all over the world especially salmon  
 (4) Q Now referring to the Atkinson report this is a report  
 (5) from November of 1988 it says the market for frozen salmon is  
 (6) softening due to general abundance is softening due to the  
 (7) good catches of fall chum salmon and the general abundance  
 of  
 (8) salmon this year Inventories of Cook Inlet sockeye are larger  
 (9) than product from other fisheries resulting in a recent drop  
 (10) in consumer wholesale prices The current list price for  
 (11) sockeye is around and I take it that s the general symbol  
 (12) 1500 yen per kilo or 5 59 a pound and it could drop further  
 (13) if the sales volume doesn t pick up Most users are reportedly  
 (14) waiting for the price to bottom out before stocking up on  
 (15) product  
 (16) That last sentence, does that refer to what traders who  
 (17) held inventory were doing or does that refer to people who  
 (18) were needing inventory or do you know?  
 (19) A I believe that refers to people in Japan users in Japan  
 (20) who would need the product  
 (21) Q They are not holding inventory but they are waiting for  
 (22) price to fall before they buy inventory?  
 (23) A Correct  
 (24) Q And it goes on to say other species have already felt the  
 (25) effect of market forces Sales of pink salmon were the first

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- (1) to fall off this year because of reduced supply and high  
 (2) prices This was followed by a drop in import chum which ran  
 (3) into a stiff competition from the record landings of domestic  
 (4) fall chum Sale of coho were the next to be affected by the  
 (5) abundance of salmon and competition from northern European  
 (6) trout Coho imports also began arriving just about the time  
 (7) that the revised increased supply estimates were reported in  
 (8) Japan  
 (9) Now do those two paragraphs accurately summarize the  
 (10) change that had taken place in the posture of supply and  
 demand  
 (11) for salmon in the Japanese market in late 1988?  
 (12) A Yes There was a lot of things happening in late 88 which  
 (13) turned the market around  
 (14) Q Now Dr Crutchfield said that he chose to focus on one  
 (15) particular facility in Japan the Japanese Central Wholesale  
 (16) Market Are you acquainted with that market?  
 (17) A Yes I visited that market.  
 (18) Q Have you been to that market?  
 (19) A Yes I have  
 (20) Q And how does the Japanese Central Wholesale Market fit  
 into  
 (21) the market for salmon overall for Japan? Is that the whole  
 (22) market?  
 (23) A No that's not the whole market That's one of many many  
 (24) markets within Japan and it's just one market level Of  
 (25) course there is an import level and wholesale levels and

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- (1) various retail levels but in Tokyo and in Japan it's the  
 (2) single most important wholesale market  
 (3) Q And do you agree with Doctor Crutchfield that it's a good  
 (4) place to look for information about what's going to happen to  
 (5) prices?  
 (6) A It's a good place to get an idea what's happening with  
 (7) prices at the wholesale level in Japan yes  
 (8) Q Now this Atkinson article seems to indicate that the price  
 (9) effect is a little bit like a domino game Pink salmon were  
 (10) struck first and then chum and then coho, is that correct?  
 (11) A Yes  
 (12) Q Is that characteristic of the way product supplies come on  
 (13) the market? In other words, is this the sequence in which new  
 (14) supplies of salmon other than farmed salmon would typically  
 (15) come into the Japanese market?  
 (16) A Yeah, I think it reasonably reflects that  
 (17) Q Now from your study did you reach any conclusion about  
 (18) what was going on with sockeye inventories at the end of 1988?  
 (19) A Well the only official statistics available had to do with  
 (20) total inventories and there are some reports of sockeye  
 (21) inventories and although -  
 (22) Q I didn't mean to limit my question to sockeye inventories  
 (23) A Oh okay yes the question was about inventories  
 (24) Q What was the status regarding inventories were they  
 (25) moving were they being held, rising or falling in price?

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- (1) A Inventories were basically piling up by the end of the  
 (2) year  
 (3) Q Was there indication in the trade press as to what traders  
 (4) were doing or what their strategy was going to be regarding  
 (5) inventory?  
 (6) A Well with regard to in particular sockeye inventories  
 (7) their strategy would be to since this paid a lot for those  
 (8) inventories would be to try to hold them back and try to  
 (9) recover their high costs and hope that there would be a good  
 (10) supply in the upcoming season in June  
 (11) Q Was that strategy something that was known to the  
 (12) marketplace, was it being reported publicly?  
 (13) A There were indications of that in the trade press yes  
 (14) Q Now referring to what will eventually be offered as Exhibit  
 (15) DX8141 ask you if you with the Court's permission could  
 come  
 (16) down and help us put together an analysis of the market in  
 (17) 1989 and start with the time, either call it the first quarter  
 (18) or the time leading up to the Exxon Valdez oil spill I think  
 (19) these little gadgets are laid out here  
 (20) Go right ahead  
 (21) A Okay Well as you saw prices were high in 88 in the  
 (22) middle of 88, and prices did decline as '88 moved on with the  
 (23) increase in the record chum harvest But now we turn to early  
 (24) 89 before the spill and prior to the spill there is no  
 (25) spill so it's not applicable and so that's not affecting the

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- (1) market but what is affecting the market is that inventories  
 (2) are up  
 (3) By the end of the first quarter, inventories are up 50  
 (4) percent over their - over the same time last year So  
 (5) obviously when inventories are up, when your refrigerator is  
 (6) going to get filled you're going to have some downward  
 (7) pressure on price  
 (8) And where those inventories are up part of the reason is  
 (9) that some product wasn't selling that well in Japan because  
 (10) they were trying to extract a high price given they paid a lot  
 (11) for those record prices in 1988, but there were other reasons  
 (12) as well With that high priced product around and declining  
 (13) Japanese traders moved into the world markets to try to find  
 (14) new products and imports were up nearly 300 percent in the  
 (15) first quarter over 1989 before the spill  
 (16) Q Is that total imports total salmon imports?  
 (17) A That's total salmon imports And of course those imports  
 (18) are coming in from inventories that might be in the United  
 (19) States or Canada and they are also coming in from farmed  
 (20) product.  
 (21) Q Let me stop you for a second to talk about these growth of  
 (22) imports I would like to put up on the monitor and I think  
 (23) you would be able to see it there Plaintiffs Exhibit 428  
 (24) which Dr Crutchfield talked about. And this chart shows  
 (25) increases in imports of - U S exports really of salmon

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- (1) during the first three months of 1989 broken down by species  
 (2) At my request did you look into the prices at which those  
 (3) exports - prices realized on those exports in 1989?  
 (4) A Yes I did  
 (5) Q What did you find?  
 (6) A We found that as Dr Crutchfield pointed out in the center  
 (7) one sockeye increased but they increased at significantly  
 (8) lower prices Prices declined If you compare the last  
 (9) quarter in 1988 with the first quarter in '89 the prices of  
 (10) those sockeye were 26 percent lower in the first quarter of  
 (11) 1989  
 (12) Q So if you were in the United States and you were trying to  
 (13) predict if you were a trader or a fisherman or a processor  
 (14) you were trying to predict what was going to happen to sockeye  
 (15) prices in 1989 would you look at the price that fish are  
 (16) actually moving from the United States to Japan as an indicator  
 (17) of what's going to happen to price or would you look at what's  
 (18) happening to fish in inventory at the Tokyo Wholesale Market?  
 (19) A Well the most important thing to look at is what price the  
 (20) fish are selling at from the United States and this is well  
 (21) known from among all research  
 (22) Q Prices from the transactions from United States to Japan  
 (23) had gone down in 1989 prior to the unfortunate accident the  
 (24) oil spill?  
 (25) A Yeah about 26 percent

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- (1) Q And that was consistent with what happened to all these  
 (2) other species as they come to the market in late 1988?  
 (3) A Well the producers level prices had declined  
 (4) significantly by the beginning of 1989 and the imports had to  
 (5) come in relatively cheaply because they have to compete with  
 (6) those products that were coming in and already cheap by 1989  
 (7) As I mentioned imports were up from inventories and things  
 (8) like that and farmed salmon production of course was up and  
 (9) they started sourcing that This adds the downward pressure  
 (10) on prices globally and prices in Japan  
 (11) In addition ADF&G and the various other forecasting  
 (12) institutions come up with strong forecasts for Alaska and in  
 (13) particular Bristol Bay This obviously has to drive down  
 (14) prices  
 (15) In addition to these conventional and important supply  
 (16) factors the yen was weakening which means it would cost  
 (17) more yen for a Japanese trader to buy the same dollars' worth of  
 (18) salmon than it did in 1988 This clearly drives down price  
 (19) And the price of other seafoods such as tuna and shrimp was  
 (20) declining in Japan very rapidly declining and as you know  
 (21) the traders in Japan have to compete with the other seafood for  
 (22) the consumers stomach or consumers' dollar and therefore if  
 (23) the price of shrimp drops 40 percent which is what it dropped  
 (24) and tuna dropped as well you're going to lower the price of  
 (25) your salmon if you're going to move it

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- (1) So when it's all said and done in early 1989 we see some  
 (2) significant change from what had occurred in mid to early 1988  
 (3) and that was that prices for all producing area markets had  
 (4) declined significantly prior to the spill  
 (5) Q Now at this point we're approximately - you've summarized  
 (6) what's gone on in the market but approximately through March  
 (7) 31 of 1989?  
 (8) A That's correct  
 (9) Q This dotted line is supposed to represent March 24th?  
 (10) A Approximately yes  
 (11) Q And all the factors that an economist or trader or  
 (12) processor would look at indicated a decline in price?  
 (13) A Yes Not only in late '88 but early '89 A lot of  
 (14) negative factors were coming known  
 (15) Q Now Dr Crutchfield reasoned that because there was an oil  
 (16) spill the appropriate thing to do was to just look at the  
 (17) price at the end of the first quarter in 1989 As an economic  
 (18) matter and from your knowledge of Japanese salmon markets  
 (19) do you agree with that conclusion?  
 (20) A No I don't  
 (21) Q What kind of market is the Japanese Central Wholesale  
 (22) Market? It's a fairly stable steady unchanging place?  
 (23) A The Japanese wholesale markets -  
 (24) Q You have to keep your voice up because the court  
 (25) reporter -

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- (1) A Sorry  
 (2) It's a very dynamic place The fact is that the Japanese  
 (3) wholesale markets are like many many stock markets in a way  
 (4) Price changes every day there is negotiations every day there  
 (5) is auctions every day, and that information is communicated  
 (6) rapidly throughout the world by fax and all different kind of  
 (7) mechanisms So if you were sitting here in 1989 and this is  
 (8) what you saw and you see prices going down all over the  
 (9) world  
 (10) you don't want to fix a price in 1989 and fix that price that's  
 (11) going to have to finally be paid in mid to late 1989 because a  
 (12) lot of stuff happens and your market is going to react to it  
 (13) Q Just by way of human interest if anything else, let me ask  
 (14) you if you can identify a little shot that you took - identify  
 (15) this shot from the Tokyo Central Wholesale Market  
 (16) (Videotape played)  
 (17) A Well this is Tokyo Central Wholesale Market and there are  
 (18) buyers there looking over fish throughout the day, and this is  
 (19) an example of the type of fish that's being sold It's a giant  
 (20) market many many football sizes large, with thousands of  
 (21) participants Those guys with the hat on are buyers They are  
 (22) inspecting tuna right there but they inspect all the fish that  
 (23) they are going to purchase and they are very technically  
 (24) sophisticated with regard to that  
 (25) This is actually an auction that they have the tuna  
 (26) auction It gives you an idea of the flavor of the place

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- (1) It s noisy there is auctions going around there is prices  
 (2) being determined a lot of action And every day that action  
 (3) is communicated throughout the world  
 (4) Q Now on March 24th to our - to everybody s misfortune  
 (5) there is an oil spill and when you did your study did you  
 (6) look into the question of whether or not the oil spill in the  
 (7) time after March 1989 had an effect on the price that Japanese  
 (8) traders would pay for Alaska salmon and specifically salmon  
 (9) from Cook Inlet or Prince William Sound?  
 (10) A Yes  
 (11) Q What did you conclude?  
 (12) A Well the conclusion is that - well first of all, the oil  
 (13) spill occurs and you re not sure what s going to happen and  
 (14) what happens there could be some negative influence because  
 (15) of  
 (16) fear of taint or positive influence because people are worried  
 (17) they are not going to get the supplies This kind of  
 (18) neutralizes each other  
 (19) And the conclusion I m going to explain is based on all the  
 (20) things we ve looked at which are trade press to formal  
 (21) statistical analysis We concluded that there was no effect  
 (22) from the oil spill on price  
 (23) Q Now let s start off with what was publicly reported and  
 (24) what was going on in the marketplace We ve seen this before  
 (25) Let me direct your attention to the Atkinson newsletter of June  
 21 1989 specifically to the entry - this is a report

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- (1) summarizing Japanese activity as reported in the Japanese  
 trade  
 (2) press is that correct?  
 (3) A That s correct  
 (4) Q And other sources apparently that Mr Atkinson has and  
 (5) according to that report the effect of the spill in Prince  
 (6) William Sound is being stressed by fishermen as they press for  
 (7) strong ex vessel prices and the real event won t be fully  
 (8) known  
 (9) Now did you find indications in the trade press that  
 (10) fishermen argued that because of the spill they should get a  
 (11) higher price?  
 (12) A Yes I mean there were examples not only in the trade  
 (13) press but obviously things like that came up in Yuko s survey  
 (14) as well and also Merry Tuten suggested that was the concern  
 (15) from buyers  
 (16) Q Now did you find any corresponding evidence in the trade  
 (17) press or from reports or interviews that processors or buyers  
 (18) were beating up fishermen and telling them they couldn t get a  
 (19) good price because of fear of contamination?  
 (20) A We looked at 2500 articles and we talked to a lot of  
 (21) people and the fact is we couldn t find anything that linked  
 (22) the price to contamination  
 (23) Q Did you look at the Burson Marsteller record?  
 (24) A Yes did I review those  
 (25) Q What conclusion did that lead you to?

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- (1) A Well the conclusion that you have to come to when you look  
 (2) at the reports is the same one that Merry Tuten came up with  
 (3) and that is consumers and buyers were not changing their  
 (4) practices buying practices in response to the spill  
 (5) Q So overall from direct evidence did you find directly that  
 (6) taint or fear of contamination from fish had an effect on  
 (7) prices after the oil spill in mid 1989?  
 (8) A No  
 (9) Q Now are there sort of circumstantial tests that an  
 (10) economist can do that you can find a sign that the market was  
 (11) reacting to a fear of contamination?  
 (12) A Yes, there are several ways  
 (13) Q What would those be?  
 (14) A One would be you would want to look at consumption If  
 (15) people were afraid to eat a product if you were afraid to  
 (16) serve stuff to your kids you wouldn t buy it. Well you would  
 (17) look to see what happened to consumption did it go up or  
 down  
 (18) Q What did happen?  
 (19) A Well, in the markets we looked at which is the Japanese  
 (20) market and the United States market the dominant ones, we  
 (21) found in all cases consumption went up  
 (22) Q Let me show you Exhibit 4889 Could you tell the jury what  
 (23) that exhibit represents?  
 (24) A This depicts the monthly consumption per household from  
 (25) official Japanese statistics of salmon As you can see it

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- (1) tends to increase throughout the year and actually peaks in  
 (2) December, where there is greater consumption And that is just  
 (3) 1988  
 (4) Can I say something now?  
 (5) Q Sure  
 (6) A The expectation of course if the spill was going to have  
 (7) an effect with regard to taint or fear you would expect 1989  
 (8) to be below that line because people would buy less because  
 (9) they are afraid And you can see after the oil spill in every  
 (10) single month after the oil spill the Japanese consumers are  
 (11) buying more salmon so they are obviously not afraid to buy  
 (12) salmon  
 (13) Q And just as a sort of economic sideline or footnote is it  
 (14) also true you expect consumption to go up or demand to go up  
 if  
 (15) price goes down?  
 (16) A Yeah  
 (17) Q That s one of the good things about lowering price that s  
 (18) why Cal Worthington does that?  
 (19) A Exactly Lower price sell more cars They could use him  
 (20) in the salmon business  
 (21) MR LYNCH Offer DX4889-B which is the chart that s  
 (22) currently on the monitor  
 (23) (Exhibit DX4889-B offered)  
 (24) MR O NEILL. No objection  
 (25) THE COURT Admitted



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- (1) (Exhibit DX4889-B received)  
 (2) BY MR LYNCH  
 (3) Q Did you look at how consumption of other types of seafood related to the consumption of salmon in Japan?  
 (4) A Yes  
 (5) MR LYNCH The 4893 Alpha - which I'll offer  
 (6) (Exhibit 4893-Alpha offered)  
 (7) MR O NEILL. No objection  
 (8) THE COURT Admitted  
 (9) (Exhibit 4893-Alpha received)  
 (10) THE WITNESS What this chart shows is that we know  
 (11) the Japanese market is much different than our market but the  
 (12) interesting thing is that as the Japanese become more present  
 (13) in the world they have become a little bit more westernized in  
 (14) their diet and they consume less seafood So from the period  
 (15) of 1988 to 1991 we see a slight decline in their seafood  
 (16) consumption  
 (17) In contrast salmon consumption has increased every year  
 (18) since 1989 '90 and '91 the years following the spill If you  
 (19) thought there was a big taint problem or there was a fear  
 (20) their salmon consumption would decline as much as they  
 (21) declined  
 (22) their general seafood consumption  
 (23) BY MR LYNCH  
 (24) Q Now let's look whether they were eating salmon from  
 (25) someplace else like Bristol Bay or British Columbia What

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- (1) influenced?  
 (2) A Right uniformly  
 (3) Q His assumption was that traders didn't differentiate  
 (4) between Cook Inlet and Bristol Bay and Southeast?  
 (5) A The bad news is Bristol Bay was the same as the bad news in  
 (6) Prince William Sound according to Mendelsohn  
 (7) Q That's Mendelsohn's contention?  
 (8) A Right  
 (9) Q And it's true isn't it that by and large consumers in  
 (10) the market can't tell where the sockeye comes from and where  
 (11) the salmon comes from?  
 (12) A Generally within Alaska they can't tell  
 (13) Q Cannot tell?  
 (14) A Cannot tell  
 (15) Q What conclusion do you draw from the information that you  
 (16) collected about 1989 consumption as compared to 1988  
 (17) consumption in Japan?  
 (18) A Well the primary - that consumers weren't avoiding  
 (19) salmon salmon from Alaska and that the taint effect did not  
 (20) influence consumption  
 (21) MR LYNCH Offer 4868-Alpha  
 (22) (Exhibit 4868-Alpha offered)  
 (23) MR O NEILL. No objection  
 (24) THE COURT Admitted  
 (25) (Exhibit 4868-Alpha received)

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- (1) does this chart DX4868-Alpha indicate?  
 (2) A Well, Japan has many sources of salmon and this is -  
 (3) shows that with regard to Alaskan sockeye in particular, the  
 (4) exports of Alaskan sockeye increased from 1988 to 1989 and  
 had  
 (5) there been a strong taint or fear of taint you would expect  
 (6) that to probably decline  
 (7) Q Now I'd like to ask you you mentioned Bristol Bay in  
 (8) talking about this chart You were here when Ms Kusakabe  
 was  
 (9) on the stand?  
 (10) A Yes  
 (11) Q And you heard a whole bunch of questions from Mr O'Neill  
 (12) where he was talking about oiled markets as opposed to some  
 (13) other markets?  
 (14) A Yes  
 (15) Q You've studied reports of the plaintiffs' experts in this  
 (16) case is that correct?  
 (17) A Yes  
 (18) Q Do the plaintiffs' experts postulate that there was an  
 (19) affect on price only in one market like Cook Inlet as opposed  
 (20) to Bristol Bay or what do they claim may have happened?  
 (21) A Well from my reading is that they believed that was an  
 (22) influence in price in - well, in Dr Crutchfield's case Upper  
 (23) Cook Inlet In the case of Mendelsohn he argues that all of  
 (24) Alaska was influenced  
 (25) Q Dr Mendelsohn assumes that prices throughout Alaska were

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- (1) BY MR LYNCH  
 (2) Q Let me ask you to take a look at 4891 Alpha and I'm going  
 (3) to ask you to do it all at once here Now we're talking -  
 (4) for purposes of sockeye salmon we're talking primarily about  
 (5) the Japanese market but did you also look at the U.S. market?  
 (6) A Yes After the Japanese market the next most important  
 (7) market is the United States market especially for canned and  
 (8) what we illustrated there was the change in consumption from  
 (9) fresh frozen salmon on the left and the change from canned on  
 (10) the right And we can see fresh frozen increased about 20  
 (11) percent between 1988 and 1989, and with regard to canned  
 the  
 (12) consumption nearly doubled  
 (13) Now the consumption actually more than doubled  
 (14) Q I haven't had enough practice There we go  
 (15) Now pink salmon the pink salmon market which is the  
 (16) primary fish caught in Prince William Sound is primarily  
 (17) canned?  
 (18) A Over two-thirds  
 (19) Q And the canned as opposed to sockeye salmon the canned  
 (20) salmon is sold primarily in the United States and western  
 (21) Europe?  
 (22) A That's correct  
 (23) Q So if you want to look at the canned market you look at a  
 (24) different price indicator is that correct?  
 (25) A Right

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- (1) Q Now is the U S market particularly for pink salmon  
 (2) immune from world prices or Japanese price?  
 (3) A Is the U S market immune?  
 (4) Q Yes Does it follow world prices?  
 (5) A Well all salmon prices tend to move together  
 (6) Q Now with reference to the conclusions that you outlined  
 (7) about prices in Japan were those factors also at work in the  
 (8) United States as to pink salmon?  
 (9) A Yes similar factors not the exact same imports into  
 (10) Japan but similar factors  
 (11) Q So the price of salmon was falling in U S markets as well  
 (12) during the first quarter of 1989?  
 (13) A Yes The price of salmon all salmon in U S markets were  
 (14) declining starting in 88 basically  
 (15) Q Now you indicated that in trying to determine whether or  
 (16) not there was objective circumstantial evidence that consumers  
 (17) were avoiding Alaska salmon you looked at consumption Did  
 (18) you look at anything else?  
 (19) A Yes  
 (20) Q What?  
 (21) A Well we looked at the relationship between prices between  
 (22) areas One of the things that Dr Crutchfield and several  
 (23) others suggest is that if you take an area where there is  
 (24) obviously no impact and compare it to an area where you re  
 (25) suspicious of some kind of impact you should be able to

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- (1) determine what that impact is and so we compared prices  
 (2) between different areas  
 (3) Q Let me - if I could put that up on the screen Exhibit  
 (4) 4863 is a further version of the chart that Dr Olley talked  
 (5) about  
 (6) MR LYNCH I d offer 4863  
 (7) MS STEWART C  
 (8) MR LYNCH 4863 Charlie  
 (9) (Exhibit 4863 Charlie offered)  
 (10) MR O NEILL No objection  
 (11) THE COURT Admitted  
 (12) (Exhibit 4863-Charlie received)  
 (13) BY MR LYNCH  
 (14) Q Dr Olley showed us that British Columbia and Alaska prices  
 (15) tracked What does this chart add to the mix?  
 (16) A What this adds is Washington price for sockeye And you  
 (17) can see that if buyers were really worried about Alaska salmon  
 (18) they might shift away from Alaska salmon and then that would  
 (19) increase the demand for British Columbia and Washington  
 (20) salmon Yet in fact the price of Washington salmon even -  
 (21) they even suffered a greater decline than the price in Alaska  
 (22) and this holds true for many price comparisons that we ve done  
 (23) for other species as well  
 (24) Q Now you were involved in the Glacier Bay litigation?  
 (25) A Right

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- (1) Q And in that litigation which Dr Crutchfield talked about  
 (2) he compared the price in the oiled area to prices in an unoiled  
 (3) area?  
 (4) A That was one of his approaches  
 (5) Q And he thought he saw a change in that relationship is  
 (6) that correct?  
 (7) A He said the relationship where Bristol Bay had changed  
 (8) Q And in his testimony about the Shetland Islands he said he  
 (9) made the same kind of test to see if the relationship between  
 (10) the Shetland price and the Norwegian price had changed?  
 (11) A That s right  
 (12) Q Now, did you from these charts and from the data that s  
 (13) behind these charts, did you find a change in the relationship  
 (14) that indicated that buyers were discriminated against what Mr  
 (15) O'Neill was calling the oiled markets?  
 (16) A Not only - there doesn't seem to be discrimination but  
 (17) we formally evaluated extensively evaluated it and found that  
 (18) we could not - we have to come to the conclusion there was no  
 (19) change in the traditional relationship from the markets  
 (20) Q Now did you conduct any other economic tests to see if  
 (21) buyers were avoiding - you don't have to look back there for  
 (22) me I ll find my way back out  
 (23) You testified consumption - consumption didn t indicate  
 (24) buyers were avoiding You tested price differentials you  
 (25) didn t see the price differentials indicated an avoidance

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- (1) Now are there other tests you can and did do?  
 (2) A Sure if there was a sweeping taint effect you would  
 (3) expect it to affect anything in Alaska and in particular you  
 (4) would expect it to influence other species And so one of the  
 (5) easy things to do is well what the heck happened to the price  
 (6) of halibut what happened to the price of other species and so  
 (7) we looked at the price of other species in Alaska to see if  
 (8) their price went up or down  
 (9) MR LYNCH Let me show you DX4880-Alpha which I'll  
 (10) offer Your Honor  
 (11) (Exhibit DX4880-Alpha offered)  
 (12) MR O NEILL No objection  
 (13) THE COURT Thank you It is admitted  
 (14) (Exhibit DX4880-Alpha received)  
 (15) THE WITNESS What this illustrates is the price  
 (16) change between 1988 and 1989 for five different finfish  
 (17) harvested in Alaska and you can see the price of flatfish  
 (18) increased over 20 percent the price of rockfish increased  
 (19) about ten percent the price of Pacific cod nearly 60 percent  
 (20) the price of pollack almost doubled and the price of halibut  
 (21) went up over 20 percent. And I think this gives strong  
 (22) indication that if there was a taint effect that permeated all  
 (23) of the market for finfish or fish in Alaska you would expect  
 (24) to see some declines in these prices Instead we saw  
 (25) increases

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- (1) BY MR LYNCH  
 (2) Q You indicated the price of seafood was declining yet  
 (3) you're showing these prices going up. Are these fish that are  
 (4) popular in the Japanese market and that compete directly  
 (5) against salmon?  
 (6) A Well, some are and some aren't, but certainly Japanese  
 (7) participate in the cod, pollack, flatfish. They participate in  
 (8) all those markets.  
 (9) Q So these particular fish prices were rising even though  
 (10) overall competitive fish prices were declining?  
 (11) A Right.  
 (12) Q This was a percentage change, but we've got ex-vessel price  
 (13) and then we're talking about Tokyo wholesale market prices  
 (14) and export prices. Could you give the jury a quick summary of what  
 (15) price means down that chain of distribution? What's the  
 (16) difference between the ex-vessel price, the processor price,  
 (17) the export price, et cetera?  
 (18) A Well, one of the things you don't want to get confused on  
 (19) the ex-vessel price is the price paid to the boat. Then there  
 (20) are a lot of facts that contribute to cost increases as you go  
 (21) along. Different people take their percentage cuts, there are  
 (22) taxes, various things added to the cost. As a matter of fact,  
 (23) when you get rid of the head and gut, that raises the price  
 (24) because you lose about 20 to 30 percent of the fish. So when  
 (25) you have - in the United States, if a fish is paid about \$2 at

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- (1) the boat that typically leads to a retail price in excess of  
 (2) \$6. In Japan, \$2 at the boat would easily lead to a price at  
 (3) the retailer of over \$10 a pound. So there is a big markup and  
 (4) you have to keep this in perspective, at least a factor of  
 (5) three.  
 (6) Q So Dr. Olley talked about being at the end of the whip. If  
 (7) the price at the retail level is falling from ten to \$8, then  
 (8) the price will fall down corresponding all the way to the  
 (9) ex-vessel?  
 (10) A There tends to be much more volatility at the boat level  
 (11) and more stability at the higher levels.  
 (12) Q Now, if consumers like Mr. O'Neill has talked about the  
 (13) Perrier matter and the - what was that? Corona beer had a bad  
 (14) rumor going around and Alar on apples, if you had something  
 (15) like that affecting consumer reaction to a product, would you  
 (16) expect it to show up after the news of that event occurred?  
 (17) A Yes, of course.  
 (18) Q Now, does the pattern of price change that you see in  
 (19) salmon from Alaska indicate a decline that can be closely  
 (20) traced to the timing of the Exxon Valdez oil spill?  
 (21) A No, actually. We look at a lot of educational data and  
 (22) looked at '88 and '89, you have to remember that change  
 (23) between  
 (24) '88 and '89 took place over time and the bulk of that change  
 (25) occurred before the spill.  
 (26) Q So the price decline that occurred in the Tokyo Central

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- (1) Wholesale Market in June for sockeye was part of a process that  
 (2) had started previously.  
 (3) Generally, as an economist, could any economist have  
 (4) reasonably anticipated that sockeye prices would not fall  
 (5) eventually in light of what was happening to these other  
 (6) factors in the market?  
 (7) A No, Economists would suggest that they would fall, and so  
 (8) did the trade press.  
 (9) Q Moving forward, beyond - March 24th, 1989, would you  
 (10) summarize what developments occurred in the market that Dr.  
 (11) Crutchfield's model takes out of or keeps out of  
 (12) consideration? Let's start with inventory.  
 (13) A Well, first, inventories, going into the season, is - the  
 (14) beginning of the season is a very important factor that Dr.  
 (15) Crutchfield in all studies of the salmon market noticed. It  
 (16) was very high, twice as much as it was the prior year, going  
 (17) into the season. So this makes this arrow even stronger in  
 (18) 1989 in terms of the negative price.  
 (19) Then, in addition to, in the beginning of the season, we had  
 (20) a good - in Japan, they had a spring chum run, which was  
 (21) strong. Chum run, chum run, say that six times fast. Which  
 (22) was strong, which contributed to driving down prices, because  
 (23) we  
 (24) had a record chum harvest there at the end of '88.  
 (25) In addition, the Japanese have a sockeye fishery and they  
 (26) have a sockeye fishery which happens before our sockeye

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- (1) fisheries and what happened to the price of Japanese sockeye  
 (2) the price was crashed from the prior year before, and you'd  
 (3) expect that if Japanese are worried about Alaska salmon, then  
 (4) they would really pay a good price for their own domestic  
 (5) sockeye, which they know are from their own waters, and the  
 (6) price goes down for Japanese sockeye.  
 (7) And also, we have continued good harvest forecasts for  
 (8) Bristol Bay. So going into the season, we have high  
 (9) inventories. We have good catches here in Japan, but we have  
 (10) falling prices in Japan, and then we have continued high  
 (11) expectations on harvest.  
 (12) Q What about the exchange rate?  
 (13) A Well, the exchange rate -  
 (14) Q Have you finished supply? Did I jump ahead of you?  
 (15) A Well, that was supply prior to - conditions prior to the  
 (16) season. I can put an exchange on it right here. The yen  
 (17) weakened about ten percent, and if the yen goes down ten  
 (18) percent, that raises price to ten percent.  
 (19) Q So what happened in season?  
 (20) A Then what happened in season?  
 (21) Q I guess that was my question.  
 (22) A What was in season was some pretty spectacular things.  
 (23) Despite any spill, Alaska came in with a record harvest, and  
 (24) this is not just any old record, this is a record for all  
 (25) recorded time in Alaska. And as Dr. Olley noted, this is

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- (1) record for sockeye as well important fish for Japan And not  
 (2) only did Alaska have a world record but the world had a world  
 (3) record When we add in all the stuff caught in Japan every  
 (4) place else they catch fish we end up with a world record  
 (5) harvest and this world record harvest is up 30 percent from  
 (6) the year before and that s a record from the time they ever  
 (7) collected statistics  
 (8) And then to add to this misery if you re a seller of  
 (9) salmon we have a world record of farm products and this is a  
 (10) world record for the entire time of history world record in  
 (11) Alaska overall world record Everything adding up to a world  
 (12) world world record  
 (13) You re looking at a 35 percent increase at one time in  
 (14) supply This had a major big downward pressure on price  
 (15) Q Now let me if I could turn to this Atkinson report again,  
 (16) this is the report I believe June 28th, 1989  
 (17) Mr Atkinson was not working for Exxon He reports While  
 (18) the overall supply of salmon in Japan has increased annual  
 (19) consumption has remained the same at about 310 000 tons  
 (20) This  
 (21) resulted in a 60,000 ton carryover into the new season May  
 (22) 1989  
 (23) Now that s the inventory factor that you were talking  
 (24) about on your chart that is correct?  
 (25) A That s right.  
 (26) Q And how does that inventory as of June 1 compare with the

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- (1) prior area s inventory?  
 (2) A It was about double  
 (3) MR LYNCH Your Honor, I ve got that chart as  
 (4) DX1758 Alpha which I ll offer but in the interest of moving  
 (5) along I won t put it right up on the screen  
 (6) (Exhibit DX1758-Alpha offered)  
 (7) MR O NEILL No objection  
 (8) THE COURT It is admitted  
 (9) (Exhibit DX1758-Alpha received)  
 (10) BY MR LYNCH  
 (11) Q And let s take a look for a moment at the price at which  
 (12) that - at which exporters traded in the quarter after the oil  
 (13) spill 6097  
 (14) A Well what this tells us is that because of those negative  
 (15) factors that started in 88, price declined 26 percent from the  
 (16) fourth quarter 88 to 1989 and then they were roughly double  
 (17) between the first and second quarter 1989 Slightly increased  
 (18) about two percent  
 (19) Q So we saw earlier that even before the oil spill the price  
 (20) at which salmon was moving out of the United States to Japan  
 (21) had fallen about 26 percent?  
 (22) A Right 26 percent  
 (23) Q And it stayed at about that level it had fallen to even  
 (24) after the spill?  
 (25) A Right

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- (1) Q Now going back to -  
 (2) MR LYNCH Offer 6097 Your Honor  
 (3) (Exhibit 6097 offered)  
 (4) MR O NEILL No objection  
 (5) THE COURT Admitted  
 (6) (Exhibit 6097 received)  
 (7) BY MR LYNCH  
 (8) Q Going back to the Atkinson report production from domestic  
 (9) operation fall chum and high seas and others are estimated at  
 (10) 200 000 ton for the season That s an annual demand of  
 (11) 310 000  
 (12) ton Salmon imports are also expected to reach 200 000 tons  
 (13) for this season a 35 percent increase over the 1988 season  
 (14) That s talking about the forecast aspect of your chart is that  
 (15) correct?  
 (16) A Well, yeah  
 (17) Q As of June they were forecasting that increase?  
 (18) A Harvest forecast.  
 (19) Q The increase in imports will be the result of increased  
 (20) landings of wild salmon in North America coupled with efforts  
 (21) to promote greater exports of farmed salmon to Japan World  
 (22) salmon production of 89 90 season is expected to jump to  
 (23) 310 - jump to 319,000 tons a 73 percent increase over the  
 (24) 88/ 89 season therefore the total supply of the salmon  
 (25) during the '88/ 89 season could be 480 000 tons Is that  
 (26) supply situation basically what you ve summarized up to the

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- (1) time the harvest actually arrived?  
 (2) A Yes that s what everybody was expecting  
 (3) Q Now going on to the next page of this report there has  
 (4) been a lot of discussion yesterday in cross-examination about  
 (5) farmed salmon Mr Atkinson reports While there are various  
 (6) reasons for the rapid decline this year the large increase in  
 (7) farmed imports just as the new season was about to begin and  
 (8) relatively low prices cause confusion in the marketplace  
 (9) From what you know about the Japanese marketplace as it  
 (10) existed through 1988 and into early 1989, what about the  
 (11) arrival of low price farmed salmon, even in limited quantities  
 (12) affected the perception of the market about what price  
 (13) commitments were reasonable?  
 (14) A Well, it s important to understand that the Japanese are  
 (15) used to not having much supply in springtime, so they can  
 (16) whittle out their inventories over the spring, and what  
 (17) happened in this particular year is that they had high price  
 (18) inventories that attracted the farmed salmon in and other  
 (19) salmon and caused confusion because then they didn t know  
 (20) can  
 (21) I get rid of my inventories before the new season starts and  
 (22) that created a lot of nervousness because there was a change  
 (23) in  
 (24) the standard operating procedures in the Japanese trade  
 (25) Q So as reported in this same report the effect is that  
 (26) the - in order to dispose of carryover inventory Japanese  
 (27) traders have to - I ve got that color problem again It s the

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- (1) Elmo Every once in a while it gets color blind  
 (2) Unfortunately in order to dispose of 60 000 tons carryover  
 (3) inventory the sellers will have to drop their prices by as  
 (4) much as 600 yen a kilo or 1 95 a pound?  
 (5) A Right.  
 (6) Q Could you translate that back? What does it do to prices  
 (7) at the vessel?  
 (8) A Is it 1 96?  
 (9) Q I think it says 1 95  
 (10) A That would translate back to at least a minimum of a 60  
 (11) cent cut at the vessel  
 (12) THE COURT We'll take our second recess We will be  
 (13) in recess for 15 minutes  
 (14) (Jury out at 12 00)  
 (15) (Recess from 12 00 to 12 15)  
 (16) (Jury in at 12 15)  
 (17) THE COURT You may continue, Mr Lynch  
 (18) BY MR LYNCH  
 (19) Q Dr Anderson could you complete the list of market factors  
 (20) that affected price in 1989 and I'd like to talk to you very  
 (21) briefly about Dr Mendelsohn's  
 (22) A Okay Well the last two components - I mean the last  
 (23) component really is that prices of shrimp and those another  
 (24) competing products went downward and in 1989 the price was  
 (25) down so you had a lot of negative factors in there

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- (1) contributing to this downward price  
 (2) Q What about late 1989?  
 (3) A In late 1989 just a quick couple conclusions here  
 (4) inventories ended up at the end of the year from Japan's  
 (5) perspective imports were up which continued to drive down  
 (6) price Japanese supply ended up being a new record in terms  
 (7) of  
 (8) the amount of product they had to put in the market. By the  
 (9) end of the year the yen stabilized but when they had to buy  
 (10) all their product, the yen was weak Prices of other products  
 (11) had more or less stabilized at a low level contributing to  
 (12) downward pressure on price And ultimately we still have a  
 (13) very strong downward pressure on price throughout the year,  
 (14) however most of the decline occurred back here  
 (15) MR LYNCH Offer DX6141 as completed  
 (16) (Exhibit DX6141 offered)  
 (17) MR O NEILL No objection  
 (18) THE COURT Admitted  
 (19) (Exhibit DX6141 received)  
 (20) BY MR LYNCH  
 (21) Q You've studied Dr Mendelsohn's model which the plaintiffs  
 (22) used in this case?  
 (23) A Yes  
 (24) Q And that model is based on the use of three or four  
 (25) variables which Dr Mendelsohn believes the predicated price  
 would have been?

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- (1) A More than three or four variables but yes  
 (2) Q One of those was the increase in farmed salmon?  
 (3) A Yes  
 (4) Q Do you agree with the results of that model?  
 (5) A No I don't  
 (6) Q Did you use a recognized economic method to try to  
 (7) ascertain what in your judgment would have been the price  
 (8) realized by Alaska fishermen if there had been no oil spill in  
 (9) 1989?  
 (10) A Yes  
 (11) Q What method did you use?  
 (12) A Well in addition to all this other background we  
 (13) formalized a relationship between non spill areas and the spill  
 (14) areas to formally test whether the relationship between these  
 (15) areas had changed significantly in 1989  
 (16) Q And is that referred to as benchmarking?  
 (17) A Sometimes yes  
 (18) Q And what areas did you benchmark against?  
 (19) A Well, there are four spill areas Chignik, Cook, Prince  
 (20) William Sound and Kodiak and those needed to be compared  
 (21) with  
 (22) other benchmark areas The benchmark areas were Bristol  
 (23) Bay  
 (24) Crutchfield used before Southeast B C Canada and Japan,  
 (25) and  
 we did that for all the pieces  
 Q What was the total number of tests you did?  
 A We had to do 56 different tests because of all these

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- (1) different markets and species  
 (2) Q DX6148 is this a summary of the test you did?  
 (3) A Yes this summarizes the results  
 (4) Q 44 of the tests show no significant difference What does  
 (5) that indicate?  
 (6) A When we take - 44 of the tests between test area and an  
 (7) oil area, in 44 of the tests we found no significant  
 (8) difference  
 (9) Q Meaning the relationship between the Alaska oiled area  
 (10) price and the benchmark price was within the statistical  
 (11) boundaries it had always been within?  
 (12) A Yes it was within the natural variance  
 (13) Q What happened to those eight cases?  
 (14) A Well we found it was above the benchmark prediction That  
 (15) means an area non-oiled the forecast was higher in a non-oiled  
 (16) area  
 (17) Q That's for four of the areas?  
 (18) A Well using one - Japan as a benchmark for chum and for  
 (19) the four areas there was four examples where the chum price  
 (20) was significantly below what would have been forecasted using  
 (21) Japanese chum - Japanese price index  
 (22) Q How much below was it?  
 (23) A Eighteen cents  
 (24) Q Eighteen cents a pound?  
 (25) A Yes

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- (1) MR LYNCH 6418 and I'm adding eighteen cents a  
 (2) pound in handwriting next to the one test where there was a  
 (3) negative variance  
 (4) (Exhibit 6418 offered)  
 (5) MR O NEILL No objection  
 (6) THE COURT It is admitted  
 (7) (Exhibit 6418 received)  
 (8) BY MR LYNCH  
 (9) Q Now could you quickly review with us your finding as to  
 (10) 1990 What happened to salmon price in Japan in 1990?  
 (11) A Well salmon prices in Japan were either stable or somewhat  
 (12) down compared to 1989  
 (13) Q Could you just enumerate quickly the factors Inventory  
 (14) was down at the start of the season and up at the end?  
 (15) A Right It was down at the - slight pressure but  
 (16) minimal It was down at the end It was up at the year-end  
 (17) which drives down price  
 (18) I'm not going to do justice to this but I'll have to rush  
 (19) through it but the key thing that happened in 1990 was we have  
 (20) a new world record for sockeye which broke the record from  
 (21) the  
 (22) record of the year before And then in Alaska Alaska has a  
 (23) new record in 1990 they had a record - their second highest  
 (24) in 1989 and then they have a new first high, it's in 1990  
 (25) With regard to their key competitor chum chum harvested a  
 (26) new world record and then of course farmed salmon breaks  
 (27) their

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- (1) record again and by this time farmed salmon alone the  
 (2) production equals more than the total sum of all coho, chinook  
 (3) and all salmon combined Farmed salmon is greater than that  
 (4) whole quantity in this year Salmon is the second highest on  
 (5) record the total supply the year before 89 was the  
 (6) highest and Japan ends up with a new supply record the  
 (7) highest they have ever had to push through their market  
 (8) So in addition to these supply factors the yen continues  
 (9) to weaken a bit more You probably heard about the stock  
 (10) market crash in Japan, but in 1990 the Japanese economy  
 (11) starts  
 (12) to crack and we hear about it now adays This weakens their  
 (13) ability to buy prices of the competing products are mixed or  
 (14) increasing but the net result is that salmon prices are either  
 (15) roughly equal or down  
 (16) Q You haven't mentioned this one major factor which is the  
 (17) reason we're all here  
 (18) A Well in my opinion there is no influence of the oil spill  
 (19) by 1990 There is no mention in the trade press there is no  
 (20) mention anywhere except for plaintiffs' experts in 1990 on  
 (21) price  
 (22) Q Let me ask you what this chart is  
 (23) A This chart shows Dr Mendelsohn's price damage that he  
 (24) claims is caused by the spill his spill effect  
 (25) Q So according to Dr Mendelsohn's model even though it's a  
 (26) full year after the Exxon Valdez spill the impact of the

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- (1) spill according to him has not only remained but has  
 (2) actually grown?  
 (3) A It's grown significantly  
 (4) Q Now mathematically when you get inside his little  
 (5) computer game and figure out how it came to this conclusion  
 (6) what is the biggest factor in his mathematical model that he  
 (7) uses to predict that there would have been an even higher price  
 (8) in 1990 and a greater affect from the oil spill in 1990 than in  
 (9) 1989?  
 (10) A Well by far the thing that dominates his model is  
 (11) absolutely farmed salmon and his conclusion is counter to  
 (12) common sense when farmed salmon goes up the price of  
 (13) sockeye  
 (14) and pink go up significantly  
 (15) Q Now does his model take into account whether the sale of  
 (16) farmed salmon is at a higher or lower price?  
 (17) A No It's just quantity that they are producing in the  
 (18) world someplace  
 (19) Q So when you have a world record supply of farmed salmon  
 (20) his model automatically shows it would be an increase and he  
 (21) attributes this to the oil spill?  
 (22) A Yeah The bigger this record is the bigger the price will  
 (23) be based on his model  
 (24) Q Showing you DX6151 What is that chart?  
 (25) A This is a chart which illustrates a relationship between  
 (26) Alaska British Columbia and Washington that we've seen  
 (27) before

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- (1) but then also shows Dr Mendelsohn's forecast for 1990 and  
 (2) 1990  
 (3) Q So in order for Dr Mendelsohn's model to be working  
 (4) correctly Alaska prices would have had to go passed -  
 (5) A Way over Washington prices and way over B C prices while  
 (6) B C prices would stay down  
 (7) Q So according to Dr Mendelsohn's model the more farmed  
 (8) salmon that are produced the more people are going to like  
 (9) Alaska sockeye salmon?  
 (10) A Right As long as farmed salmon production is going to go  
 (11) through the roof the price of sockeye will go through the  
 (12) roof  
 (13) Q Let me show you DX3056 a document entitled Salmon 2000  
 (14) By who was that published?  
 (15) A ASMI, the Alaska Seafood Marketing Institute  
 (16) Q What did the Salmon 2000 include about the significance of  
 (17) farmed salmon? Are they really happy that the farm salmon  
 (18) production is increasing?  
 (19) A No Farm salmon production is considered to be by ASMI  
 (20) and many people in this industry the largest single threat to  
 (21) the industry  
 (22) Q Now let's -  
 (23) MR LYNCH Your Honor I'll offer DX6139 Alpha  
 (24) (Exhibit DX6139 Alpha offered)  
 (25) MR O NEILL No objection

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- (1) MR LYNCH In the eight and a half by 11 format  
 (2) THE COURT DX6139?  
 (3) MR LYNCH Alpha  
 (4) THE COURT Thank you it is admitted  
 (5) (Exhibit DX6139-Alpha received)  
 (6) BY MR LYNCH  
 (7) Q Let s put this board up here and if you would complete  
 (8) that for me Dr Anderson I guess you can see we re try to  
 (9) rush so we can finish today  
 (10) A I naturally talk fast but not normally this fast  
 (11) Well in 1991 we see that price also declined and it  
 (12) declined as you can see on that picture there over 1990  
 (13) levels and I believe the spill did not have an influence in  
 (14) 1991 There is no mention of it anywhere that I know of  
 (15) influencing the industry  
 (16) Inventories were you know up in the beginning of the  
 (17) year which would help drive down price in 1991 but at  
 (18) year-and they are down a little because of good sales But the  
 (19) important thing that happened in 1991 is a third really quite  
 (20) amazing year Sockeye production ended up with its third  
 (21) highest on record and all three of the records for sockeye are  
 (22) basically in the last couple years Pink salmon ended up with  
 (23) a new world record brand new world record and in particular  
 (24) Alaska pink salmon ended up with a new world record and this  
 (25) is obviously a result of the farming aquaculture operations in

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- (1) Alaska Not farming, but the aquaculture operations and good  
 (2) management  
 (3) In addition salmon - in addition farmed salmon broke  
 (4) another world record They keep going up keep producing  
 (5) and  
 (6) by this time farmed salmon production is more than the entire  
 (7) production in the United States including Alaska all these  
 (8) Japanese supply is at its second highest on record that  
 (9) they have to move through the thing through the market and -  
 (10) well salmon in total is at a new world record Broke that  
 (11) world record in 1989 So you have three big big big years in  
 (12) a row  
 (13) MR LYNCH Now Rob has been good enough to put up  
 (14) for me the added or the next step in DX5567 B which I'll  
 (15) offer Your Honor  
 (16) (Exhibit DX5567 B offered)  
 (17) MR O NEILL No objection  
 (18) BY MR LYNCH  
 (19) Q And this chart depicts how Dr Mendelsohn's model  
 (20) continues  
 (21) to work into 1981 correct?  
 (22) A 91  
 (23) Q 91 thank you for the correction  
 (24) What it shows is that Exxon Valdez oil spill occurred in  
 (25) the first quarter of 1989 Dr Mendelsohn would say it was  
 more of a problem in the market in 91 than it was in 89 is  
 that correct?

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- (1) A More than twice as much  
 (2) Q And more than it was in 1990?  
 (3) A Yes  
 (4) Q And mathematically if you look inside that computer  
 (5) equation what explains this growth?  
 (6) A Well there is only one explanation from the model and  
 (7) that is farmed salmon As long as farmed salmon keeps  
 breaking  
 (8) records the price of sockeye and pink will go up  
 (9) Q This would happen if farmed salmon is selling at five cents  
 (10) a pound?  
 (11) A Even if it s free  
 (12) Q So do you know of any economic premise that would support  
 (13) the conclusion that the price of a competitive product will  
 (14) increase progressively as the supply regardless of price of  
 (15) farmed salmon increases?  
 (16) A No I don t  
 (17) Q Is that consistent with any tenet of market mechanics that  
 (18) you know of?  
 (19) A No Dr Crutchfield said that when farmed salmon goes up  
 (20) price should go down I can t imagine why anybody would say  
 (21) that  
 (22) Q Now as you looked at the market in 1991 did you see any  
 (23) evidence that this was actually happening that in fact the  
 (24) price or the reaction to Alaska salmon was based on some  
 (25) concern about the oil spill which happened two-and a half  
 years

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- (1) earlier?  
 (2) A No The relationship between Alaska price and the other  
 (3) regions as we see from our various graphs has stayed the  
 (4) same and there is no indication that the spill had anything to  
 (5) do with it fear the compounding fear had anything to do with  
 (6) it What it was caused by was all this action right here in  
 (7) supply  
 (8) Q Let me go one further step into this if you follow Dr  
 (9) Crutchfield s model, Alaska salmon would have departed from  
 the  
 (10) price of Washington state salmon?  
 (11) A Right and B C  
 (12) Q Had it ever in history done that?  
 (13) A Well they always depart a little bit here and there but  
 (14) never has, in recent history has Alaska price been above  
 (15) Canada or Washington prices, and yet Dr Mendelsohn s model  
 (16) suggests it to be about \$3 50 at the same time being in  
 (17) composition with Canada and Washington Same at \$1 60 and  
 70  
 (18) MR LYNCH Offer 6151  
 (19) (Exhibit 6151 offered)  
 (20) MR O NEILL No objection  
 (21) THE COURT Exhibit 6151 is admitted and the previous  
 (22) one which I believe is 5567 B is admitted  
 (23) (Exhibits 6151 and 5567 B received)  
 (24) MR LYNCH Yes Your Honor  
 (25) BY MR LYNCH

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- (1) Q All in all - Doctor I think you can resume the stand  
 (2) All in all did you find any economic support for a claim  
 (3) that prices for Alaska salmon prices for so-called oiled  
 (4) market salmon were in any way affected after 1989?  
 (5) A Certainly in 1990 and 1991 I can't find any evidence for  
 (6) any kind of claim  
 (7) Q Now let me ask you if you also took a look on a benchmark  
 (8) basis of the impact of the oil spill on prices for herring and  
 (9) herring roe?  
 (10) A Yes I did  
 (11) Q What did you find from that study?  
 (12) A Well we used British Columbia herring roe and roe on kelp  
 (13) to try to forecast what the appropriate price would be for  
 (14) Prince William Sound herring roe and roe on kelp in the year  
 (15) that they did not have harvests because of the spill  
 (16) Q What did you find in terms of the actual price versus the  
 (17) benchmark price?  
 (18) A Well there wasn't an actual price but we found that the  
 (19) price for - in 1989 for sac-roe should have been about 32  
 (20) cents and the price for roe on kelp should have been \$10.09  
 (21) MR LYNCH Let me put up Exhibit 6845 Charlie which  
 (22) I'll offer Your Honor  
 (23) (Exhibit 6845-Charlie offered)  
 (24) MR O NEILL No objection  
 (25) THE COURT Admitted

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- (1) (Exhibit 6845-Charlie received)  
 (2) BY MR LYNCH  
 (3) Q What does 6845-Charlie tell us Dr Anderson?  
 (4) A This shows the relationship between British Columbia price  
 (5) and Prince William Sound price and we can see that they tend  
 (6) to move together reasonably well There are some differences  
 (7) and of course there is a gap in 1989 because there was no  
 (8) Prince William Sound fishery and therefore no price  
 (9) Q What's the green line here - I'm sorry I've got the  
 (10) wrong - that's the trouble with not looking at what you're  
 (11) doing  
 (12) MR LYNCH This is what I meant to offer Your Honor  
 (13) MR O NEILL No objection  
 (14) BY MR LYNCH  
 (15) Q What's this green line here?  
 (16) A First of all you also added in my price prediction which  
 (17) is about 32 cents which is that dot The green line is the  
 (18) plaintiffs price predictions for 1989 '90 and '91  
 (19) Q Now does that green line - is this green line derived from  
 (20) Dr Mendelsohn's model?  
 (21) A It's derived from Mendelsohn's and I believe Hughes but  
 (22) Mendelsohn's work primarily  
 (23) Q Mendelsohn predicated a price a competitive price of 21  
 (24) cents did he not?  
 (25) A A price - I think 25 cents was the spill effect

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- (1) Q Then he added 25 cents based on - but this is not  
 (2) Mendelsohn's model as Mendelsohn calculated it right?  
 (3) Mendelsohn's combined price was 48 cents?  
 (4) A 46 cents or 48  
 (5) Q And then plaintiffs offered another expert Hughes?  
 (6) A Hughes right  
 (7) Q And he testified to a 1989 price of about what 46 cents?  
 (8) A 46 cents  
 (9) Q So what the plaintiffs did was took Hughes 46 cents and  
 (10) added Mendelsohn's 25?  
 (11) A To get 73 cents  
 (12) Q And that was a price that would have put the 1989 price  
 (13) almost up to the price that British Columbia sac-roe was  
 (14) commanding?  
 (15) A Put the Prince William Sound price above the British  
 (16) Columbia price  
 (17) Q Had that ever happened that you know of in the history of  
 (18) the Japanese sac-roe salmon market?  
 (19) A No it hasn't  
 (20) MR LYNCH Let me put up if I can get the right  
 (21) code Exhibit DX5011 B which I'll offer Your Honor  
 (22) (Exhibit DX5011 B offered)  
 (23) MR O NEILL No objection  
 (24) THE COURT Admitted  
 (25) (Exhibit DX5011 B received)

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- (1) BY MR LYNCH  
 (2) Q Does this likewise indicate the - there it is this  
 (3) indicate the way you predicated the roe on kelp price that  
 (4) would have existed in 1989?  
 (5) A Yes using the benchmark approach British Columbia and  
 (6) Prince William Sound you can see my forecast of about 10.09  
 (7) Q Dr Anderson did you look into the question of whether  
 (8) there should have been a difference in price in - of sac-roe  
 (9) and roe on kelp in 1990 and '91 as a result of the oil spill?  
 (10) A Yes  
 (11) Q What was your conclusion?  
 (12) A That I don't think there should be a difference in price  
 (13) Q And the reason for that was?  
 (14) A The reason for that was with benchmarks review literature  
 (15) a tremendous number of background documentation that the  
 (16) spill had no effect in 1990 and 1991 on price  
 (17) Q Now did you review - have others studied the causes of  
 (18) the decline in the price of Alaska salmon over the period from  
 (19) 1988 to 1991?  
 (20) A Yes considerable interest  
 (21) Q And are the findings that you have explained to the jury  
 (22) today consistent with what others concluded after they have  
 (23) looked into the subject?  
 (24) A Yes  
 (25) Q Are you familiar with the work of find my cheat sheet



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- (1) here of Dr Boyz (ph)?  
 (2) A Yes  
 (3) Q Who is Dr Boyz?  
 (4) A Dr Boyz is a faculty member University of Alaska  
 (5) Fairbanks  
 (6) Q Did he do a study of the 1989 salmon price in Alaska?  
 (7) A Yes he did a study forecasting 1989 prices and prices  
 (8) beyond based on data from prior to 1989  
 (9) Q And where did he - where did he end up?  
 (10) A Well he forecasted the price for sockeye at about 1 34 to  
 (11) 1 37 The actual price applied was 1 42 and he forecasted  
 (12) pinks at 45 and actually the price was 44 cents Pretty close  
 (13) to on the money  
 (14) Q Did Dr Boyz use farmed salmon in deciding what the future  
 (15) price of salmon would be?  
 (16) A No  
 (17) Q Are you familiar with the work of Doctors Greenberg and  
 (18) Herman?  
 (19) A Yes I am  
 (20) Q And what did they study?  
 (21) A They are on the faculty of the University of Alaska and  
 (22) they studied the salmon as well extensively  
 (23) Q What about the salmon market in 1988 through 1991 did  
 (24) they  
 (25) study that?  
 (26) A Well in one of their many papers they studied and

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- (1) particularly focused in on what was the causes of the price  
 (2) decline between 1988 and 1990  
 (3) Q And what did they conclude?  
 (4) A They concluded that 76 percent of the price decline was  
 (5) caused in high valued landings ten to 11 percent was caused  
 (6) by  
 (7) farmed salmon and the remainder was caused by other factors  
 (8) such as exchange rates other landings and things like that  
 (9) but not the oil spill A hundred percent of the decline could  
 (10) be explained by these additional factors  
 (11) Q And those are the factors you've outline for the jury that  
 (12) broke down each of these three market years?  
 (13) A Right  
 (14) Q Are you familiar with Doctor Wessels and Wylan?  
 (15) A Yes I am  
 (16) Q And what did they conclude?  
 (17) A They have done quite a bit of study on the Japanese market  
 (18) and consumer behavior and they concluded that the price -  
 (19) well the expenditure behaviors in Japan are related to price  
 (20) and the substitutes and that explains expenditure behavior in  
 (21) Japan  
 (22) Q You started to sound like an economist The price got too  
 (23) high?  
 (24) A When price substitutes change that changes how much  
 (25) Japanese spend on salmon  
 (26) Q And the price in 1988 got too high and forced an

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- (1) adjustment?  
 (2) A Yes  
 (3) Q We've talked about Salmon 2000 Is the biggest problem of  
 (4) the Alaska salmon industry farmed salmon?  
 (5) A That's correct  
 (6) Q Did the general accounting office study the causes for  
 (7) decline in Bristol Bay in 1991?  
 (8) A Yes  
 (9) Q And that decline was parallel with Cook Inlet and Prince  
 (10) William Sound?  
 (11) A Yes it was proportionate  
 (12) Q Did they find any oil spill event as an explanation of that  
 (13) decline?  
 (14) A No They found the supply related factors explained it  
 (15) Q What about the Canadian Department of Fisheries and  
 (16) Ocean?  
 (17) A They also did a study for a market outlook 1991  
 (18) Q What did they find?  
 (19) A They said - in addition to the yen and farmed salmon they  
 (20) said that the two most important factors were the record  
 (21) harvests in Alaska  
 (22) Q Did the Japanese external trade organization do a study?  
 (23) A Yes  
 (24) Q What did they conclude?  
 (25) A They concluded that the yen and supply are the main things  
 (26) influencing the market for Japanese - price of Japanese

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- (1) salmon, and also that the farmed salmon was becoming a  
 (2) significant factor in the market  
 (3) Q Now have you at my request taken work done by other  
 (4) experts in this case catch forecasts and prices for various  
 (5) sources and compiled sets of tables that show how your price  
 (6) would apply to assumed catches and assumed quantities at  
 (7) various times?  
 (8) A Yes  
 (9) Q Have you also compiled some CFEC data on income  
 (10) average and  
 (11) actual fishing income realized in the various areas that are  
 (12) involved in this case?  
 (13) A Yes  
 (14) MR LYNCH Your Honor in the interest of speeding  
 (15) this along I've arranged with Mr O Neill that I will just  
 (16) read these into the record in order to allow us to complete  
 (17) today I propose to do that if it's okay with Your Honor  
 (18) after the jury is retired for the day I can read that into  
 (19) the record  
 (20) THE COURT Satisfactory?  
 (21) MR O NEILL Yes sir it is  
 (22) MR LYNCH If I could have one second to double  
 (23) check, I think I'm through  
 (24) I don't know if I've offered 6140 Alpha That's the 1991  
 (25) summary chart I would offer that  
 (26) (Exhibit 6140 Alpha offered)

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- (1) THE COURT Mr O Neill any objection to 6140?  
 (2) MR O NEILL I apologize No objection  
 (3) THE COURT It is admrtted  
 (4) (Exhibit 6140-Alpha received)  
 (5) MR LYNCH Dr Anderson I apologize to you for  
 (6) rushing through this material so quickly with you Your Honor  
 (7) I believe I have no further questions at this time  
 (8) THE COURT Cross-examine  
 (9) CROSS EXAMINATION OF JAMES L ANDERSON  
 (10) BY MR O NEILL.  
 (11) Q Sir sort of old home week isn t it? Him you me Dr  
 (12) Crutchfield  
 (13) A Yes  
 (14) Q I was trying to wear my same suit and tie the last time and  
 (15) I missed the tie but I see you have on the same suit and your  
 (16) salmon pin  
 (17) A I only have one suit and tie  
 (18) Q I had - for this little exercise I had to go out and buy  
 (19) some suits  
 (20) This is the second time because I talked about it with Ms  
 (21) Kusakabe that J L Anderson has testified before on behalf of  
 (22) the oil industry isn t that correct Doctor?  
 (23) A That s correct  
 (24) Q And indeed J L Anderson and Associate s biggest client is  
 (25) Exxon Shipping Company?

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- (1) A That s correct  
 (2) Q And I want to talk a little bit about some harvest stuff  
 (3) but between 85 and 90 percent of the sockeye sold to Japan  
 (4) comes from Alaska That s a correct statement isn't it?  
 (5) A That s correct  
 (6) Q And the vast majority of Alaskan fresh frozen salmon is  
 (7) exported to Japan?  
 (8) A That s right  
 (9) Q And the world sockeye harvests declined from 1985 through  
 (10) 1986 to 1987 through 1988?  
 (11) A That s right  
 (12) Q And the world catch of pink salmon declined from 1985 to  
 (13) 86 with a minor increase in 87 and then declines in 88?  
 (14) A That s right  
 (15) Q U S exports of pink salmon reached a high in 88 dropped  
 (16) in 89 90 and 91?  
 (17) A U S exports of - say that again  
 (18) Q Pinks  
 (19) A I don t recall that one right off the top of my head  
 (20) Q We can save a little time but my notes show that at page  
 (21) 32 line 24 of your deposition I asked you the question is  
 (22) that inconsistent with your recollection?  
 (23) A Well I don t recall what happened to pink exports  
 (24) Q Go back to page 32 line 24  
 (25) A These are these little pages or the big pages?

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- (1) Q You got to go to the little pages  
 (2) A Are you sure we re talking about fresh frozen pink here or  
 (3) are we talking about canned?  
 (4) Q What do you think we re talking about?  
 (5) A Well I m not sure or total  
 (6) Q I think it s a total in any case the question was asked  
 (7) does the chart indicate that the U S exports of pink salmon  
 (8) reached a high or a tie for high in 88 it is and then  
 (9) dropped in 89 90 and 91 and your answer was yes it was  
 (10) A Well I don t remember any confusion about it so it s  
 (11) probably correct.  
 (12) Q And U S exports of chum reached a high in 88 and then  
 (13) dropped in 89 90 and 91?  
 (14) A Yes Chum harvest was very hard  
 (15) Q And in 1987 and 88 we had the lowest pink harvest in the  
 (16) United States?  
 (17) A 87 and 88?  
 (18) Q Yes  
 (19) A In the last decade yeah  
 (20) Q And from 1976 to 1991 the amount of salmon consumed in  
 (21) Japan has generally increased?  
 (22) A More or less steadily yes  
 (23) Q And I want to talk if I could for a minute, about early  
 (24) 1989 sockeye As of January of 1989 the market had started to  
 (25) improve for sockeye coho and chum fillet due partly to a

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- (1) moderate carryover sockeye had been in short supply Would  
 (2) you agree with that statement?  
 (3) A That s basically correct yes  
 (4) Q So with regard to sockeye in early 1989 we had a healthy  
 (5) market?  
 (6) A With regard to wholesale sockeye in Japan prices were  
 (7) firm I wouldn t call it a healthy market  
 (8) Q And indeed Seafood Trading and Marketing News in  
 (9) February of 1989 makes the statement that the market is  
 (10) improving for all species of salmon in Japan?  
 (11) A I m not sure about that one I m not sure  
 (12) Q Would you go to page 48 of your deposition transcript?  
 (13) THE COURT Did you say 89 in that question?  
 (14) MR O NEILL Yes sir I did  
 (15) THE WITNESS Yes I'm on page 48  
 (16) BY MR O NEILL.  
 (17) Q Page 49 line 12 through 15 - I m sorry it goes into 49  
 (18) you re right bottom of 48 through 49 Then the middle of page  
 (19) 49 in the Seafood Trading and Marketing News there was the  
 (20) report that the market is improving for all species of salmon  
 (21) in Japan Do you see that?  
 (22) A Yes I do  
 (23) Q And that was what was at least reported in the Japanese  
 (24) trade press?  
 (25) A That s apparently one report yeah

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- (1) Q And then after that report we had the oil spill?
- (2) A Right.
- (3) Q And frozen sockeye prices at the Tokyo Central Wholesale Market declined beginning in June or July of 1989?
- (4) A Yes They improved slightly after the oil spill and then declined in June
- (5) Q Now with regard to the health of Alaskan ex vessel prices for salmon they increased 86 '87 '88 and then they dropped in 89?
- (6) A That s right
- (7) Q Now I want to talk a little bit about farmed salmon I guess I specifically want to talk about sockeye salmon
- (8) Sockeye has long been considered the most valuable of canned salmon Would n t you agree with that?
- (9) A It s the highest priced canned salmon
- (10) Q And with regard to the Japanese they prefer dark red flesh salmon as opposed to pink or pale colored flesh?
- (11) A They tend to prefer redder flesh to less red flesh
- (12) Q And sockeye is generally a favored species although there are certain regional preference such as chum in and around Tokyo?
- (13) A That s correct.
- (14) Q And farmed salmon is not as preferred as sockeye salmon on the Japanese market and generally does not compete against Alaska sockeye?
- (15) A Alaska sockeye?

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- (1) A That s changing a bit but certainly in the late 80s that would be more or less true
- (2) Q And Japanese traders clearly prefer sockeye with chinook and coho being viewed as neutral and chum and Atlantic are slightly less than neutral?
- (3) A I believe you know, all other things being equal that s true
- (4) Q So with regard to Japanese buyers we have the old adage old to you and me but maybe not to anybody else redder is better?
- (5) A That s a common phrase used
- (6) Q And in your studies Japanese traders generally prefer sockeye from Canada or Alaska and prefer, as the dominant product in the summer sockeye gillnet sockeye frozen from Alaska?
- (7) A That s right In the time period of the 80s that s exactly right late 80s
- (8) Q As of 1988 it was your opinion that there was little doubt from the research that the market for salmon had the significant potential to expand?
- (9) A I felt there was - I m not sure which - which one are you referring to? I believe there was certainly opportunity to have the market expand with appropriate marketing efforts yes
- (10) Q Referring to section nine of your paper for the Seafare group April of 1988

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- (1) A Yes
- (2) Q You opined at that time that the species most affected and this is the year before the oil spill by the increasing production of farmed salmon are chinook and coho salmon isn t
- (3) that right?
- (4) A That s right
- (5) Q But you didn t find the same relationship between farmed salmon and red salmon did you or sockeye salmon?
- (6) A When you say the same relationship I felt that the farmed salmon has the largest impact on coho and king
- (7) Q Would you agree with the statement that it is unlikely that the world s largest salmon market will switch in significant volume to farmed salmon?
- (8) A I wouldn t say I would agree with that statement
- (9) Q Did you make that statement in the executive summary in 1988 in the Seafare paper?
- (10) A Actually I don t believe I made that statement.
- (11) Q You don t think so?
- (12) A No
- (13) Q I have here page 2 of the executive summary and I ll ask you about the last yellow line sentence and would you read it for the jury?
- (14) A The last one?
- (15) Q Yes
- (16) A Here s what you said It is unlikely that the world s

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- (1) largest salmon market will switch in significant volume to farmed salmon and they will likely farm their own in any case
- (2) Q That s your statement?
- (3) A Well it - it wasn t - isn t my statement
- (4) Q Is it out of your paper?
- (5) A Well, I can explain it The situation is Seafare was the leading contractor in this particular thing for the State of Alaska I wrote Chapter 9 They wrote - I sent them Chapter 9 they wrote the rest of the document They submitted that document without my review As a matter of fact, I wrote a letter to the State of Alaska and to Seafare complaining that there are statements in there which did not follow from my research in Chapter 9 and so I had nothing to do with the executive summary
- (6) Q Would you agree with the statement in Chapter 9 that overall the conclusion is that farmed salmon will not be direct competition for the majority of Japanese demand for Alaska sockeye salmon?
- (7) A In late 88 yes, I agree
- (8) Q In 1988 you were of the view that canned salmon would not compete with farmed salmon?
- (9) A Yeah I agree with that one Still agree with that one
- (10) Q With regard to the Japanese seafood market would you agree with the statement that retail fish stores and supermarkets - retail fish stores and supermarkets the country of origin is

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- (1) not usually specified?  
 (2) A In general that's true but not always  
 (3) Q And in April of 1989 were you of the view that this is at  
 (4) the time of the oil spill that sockeye salmon is traditionally  
 (5) preferred by the Japanese because of the size and the color of  
 (6) its flesh and the U S and Canada are the only major suppliers  
 (7) of sockeye salmon and for these reasons the importance that  
 (8) these countries play in Japanese frozen salmon markets is not  
 (9) likely to change soon?  
 (10) A What's the source of that one?  
 (11) Q The Japanese Seafood Salmon Market Salmon Economics  
 and  
 (12) Commercial Fisheries by Yuko Kusakabe and James Anderson  
 (13) A Well I basically agree with that as well Maybe I should  
 (14) think about it a little more but I agree with it  
 (15) Q And again in April of 1989 Japanese traders clearly  
 (16) preferred sockeye salmon?  
 (17) A That's right  
 (18) Q So we still have the redder the better?  
 (19) A Right That's one of the advantages of farmed salmon  
 (20) actually  
 (21) Q Indeed if you go to such mundane sources as the salmon  
 (22) cookbook or the World Book Encyclopedia they come to the  
 same  
 (23) conclusion you came to in April of 1989?  
 (24) A That is -  
 (25) Q The redder in better?

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- (1) A In simple terms yes  
 (2) Q And with regard to farmed salmon farmed salmon imports in  
 (3) Japan in 1988 1989 were very small parts of what was  
 imported  
 (4) into the country four or five percent?  
 (5) A I don't believe that's correct They were a relatively  
 (6) small component I believe they are more like 11 or 12 percent  
 (7) in 1989  
 (8) Q How about farmed salmon imports?  
 (9) A Imports of - part of the total?  
 (10) Q Yeah  
 (11) A Sure If you look at farmed salmon imports as part of the  
 (12) total I think it's closer to five or six percent  
 (13) Q And Norway in 1987 88 and 89 exported most of its  
 (14) imports to the United States or France?  
 (15) A Yeah sure  
 (16) Q With regard to traders in 1989 88 89 in regards to  
 (17) salmon from Chile Norway and New Zealand, they were  
 relatively  
 (18) neutral about those as opposed to sockeye?  
 (19) A That's right  
 (20) Q And traders who were interviewed about it wild salmon as  
 (21) opposed to farm salmon gave reasons such as fat content isn't  
 (22) that right?  
 (23) A Yeah  
 (24) Q There was a question asked of Ms Kusakabe that was asked  
 (25) of you but the fear of contamination pre-season was in fact

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- (1) discussed in the trade press?  
 (2) A There was some - yes Right after the spill there was  
 (3) some - there were some articles that indicated there might be  
 (4) some concern there  
 (5) Q And you did study the Burson Marsteller report?  
 (6) A No - the Burson Marsteller report yes I did  
 (7) Q And the Burson Marsteller report is sort of an odd  
 (8) document I'll give you because it has general conclusions and  
 (9) specific conclusions?  
 (10) A A lot of documents have specifics -  
 (11) Q That are not consistent with each other?  
 (12) A There are some conclusions that would be interpreted as  
 (13) inconsistent on the surface but if you actually look at the  
 (14) information there there is some reasons why they say that.  
 (15) Q And one of the things you looked at in your study was the  
 (16) Burson Marsteller report and indeed you did look at it?  
 (17) A Sure  
 (18) Q In the United States, the Burson Marsteller report made the  
 (19) point that 95 percent of consumers were aware of the Exxon  
 (20) Valdez oil spill, that's a correct statement and you  
 (21) considered that?  
 (22) A I think that's reasonable  
 (23) Q And 37 percent of the consumers indicated a reluctance to  
 (24) eat seafood from Alaska because of health concerns associated  
 (25) with the spill?

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- (1) A I think that's unreasonable  
 (2) Q But that's what they reported?  
 (3) A If you look at their case at that that's what they said in  
 (4) their summary but it's not supported by their data  
 (5) Q And 29 percent almost 30 percent said outright that they  
 (6) didn't believe Alaska seafood was safe to eat?  
 (7) A I think that's what they said in their summary not  
 (8) supported  
 (9) Q Well over 50 percent of American consumers surveyed  
 (10) indicated that they weren't sure or were skeptical whether the  
 (11) Alaska seafood industry could provide safe food  
 (12) A That's what they said in the conclusion  
 (13) Q And over 90 percent of U S traders were aware of the Exxon  
 (14) Valdez oil spill?  
 (15) A Right  
 (16) Q And 43 percent of United States traders thought that the  
 (17) oil spill would eventually affect consumers purchases and  
 (18) consumption?  
 (19) A Yeah, I believe you're properly quoting  
 (20) Q And 43 percent believed that the consumers' fears about  
 (21) safety of eating these products will reduce the demand for  
 (22) them?  
 (23) A Say it again  
 (24) Q 43 percent of the traders believed that consumers fear  
 (25) about safety of eating these products will reduce demand for

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- (1) them?
- (2) A Yeah I think they said that
- (3) Q And Burson Marsteller conclude that had reassurance by the industry that is Merry Tuten among others that Alaskan seafood is safe to eat does not evoke great confidence among most consumers?
- (4) A That s what she said yeah
- (5) Q And 28 were - 72 percent of American consumers surveyed believed that the oil spill had affected seafood from Alaska?
- (6) A That s what they said
- (7) Q And of that 72 percent 22 percent believed that seafood all over Alaska had been affected by the oil spill?
- (8) A I believe that you re quoting it properly
- (9) Q Now you may take issue with that.
- (10) A I do
- (11) Q That s what they said?
- (12) A That s what they say
- (13) Q With regard to U S traders - well they surveyed more people than did and you Ms Kusakabe?
- (14) A Yeah
- (15) Q And they surveyed in four different markets Japan U S England and France?
- (16) A That s right
- (17) Q And they surveyed U S traders and 41 percent of U S traders believed that the spill had affected seafood from

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- (1) certain parts of the state?
- (2) A I think that s probably correct
- (3) Q And 16 percent of the trade concluded that the oil spill had affected seafood from all over Alaska?
- (4) A I think you re quoting correctly
- (5) Q And 41 percent said it affected only certain parts of Alaska?
- (6) A I think you re quoting correctly
- (7) Q Do you take issue with any of that?
- (8) A I think I do take issue with that yes
- (9) Q Now they surveyed 306 Japanese consumers?
- (10) A That sounds right
- (11) Q And 83 percent of the Alaska consumers were aware of the spill?
- (12) A Yes
- (13) Q And 57 percent of the Japanese consumers surveyed said they would avoid eating seafood from Alaska?
- (14) A But of all the people they surveyed none said that they changed your - or decreased their consumption none due to the oil spill and -
- (15) Q I ll give you that but is my statement a correct statement about their conclusions?
- (16) A That s a correct quotation of their conclusion
- (17) Q And 40 percent said outright that they didn t believe Alaska seafood was safe to eat?

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- (1) A That s a correct quotation
- (2) Q And the assurance from the Alaska seafood industry viewed 48 percent of Japanese consumers -
- (3) A I see it That s a good proper quotation
- (4) Q 58 percent of the Japanese consumers said they or other members of their family would not eat seafood from Alaska at the present time?
- (5) A That s what their conclusion was
- (6) Q And 13 percent of Alaskan - of Japanese consumers believed that Alaskan seafood is - only 13 percent believed that Alaskan seafood was safe to eat?
- (7) A I believe you re quoting correctly
- (8) Q Now, they went out and interviewed 185 members of the Japanese trade?
- (9) A Right
- (10) Q How many did you guys interview?
- (11) A 37 key traders
- (12) Q And 87 percent of the Japanese traders that they interviewed were aware of the oil spill?
- (13) A I think that s correct.
- (14) Q And 15 percent had decreased their purchases of seafood?
- (15) A Yeah I believe that s what they said I don t think virtually any of them gave a reason of the oil spill
- (16) Q A higher percentage of wholesalers 46 as compared to 41 percent of the retailers believed that Japanese consumers

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- (1) purchases and consumption would in fact decrease or could decrease because of the oil spill?
- (2) A You re quoting correctly
- (3) Q And they did an interview - a similar survey in France?
- (4) A Uh huh
- (5) Q And 89 percent of French consumers were aware of the spill?
- (6) A I think that s right
- (7) Q And 19 percent stated that they weren t eating as much seafood as before?
- (8) A I think that s right.
- (9) Q And 31 percent of the French consumers indicated that they would avoid eating Alaska seafood?
- (10) A I think that s correct
- (11) Q And 22 percent said they didn t believe Alaska seafood was safe to eat?
- (12) A I think that s what it says
- (13) Q And then they went and interviewed French traders?
- (14) A Right
- (15) Q And 47 percent of the French traders thought that the oil spill would affect consumers purchases and consumption of seafood?
- (16) A Yeah I think that s right
- (17) Q And they did the same thing in England?
- (18) A Uh huh
- (19) Q And they interviewed 373 consumers and 190 members of the

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- (1) trade is that correct?  
 (2) A Right  
 (3) Q And 81 percent of English consumers were aware of the  
 (4) spill?  
 (5) A Yeah I think that s what they say  
 (6) Q And 42 percent indicated they would avoid eating Alaska  
 (7) seafood?  
 (8) A I think that s what they said  
 (9) Q And 31 percent said they didn t believe Alaska seafood was  
 (10) safe to eat?  
 (11) A I think that s what it says  
 (12) Q And 42 percent indicated that they would not eat Alaskan  
 (13) seafood?  
 (14) A I think that s what their conclusion is  
 (15) Q And of the trade 190 people in the trade 56 believed that  
 (16) it would affect consumers purchases or consumption?  
 (17) A I think you re quoting correctly  
 (18) Q Would you agree with the proposition that the  
 (19) Burson Marsteller reports were one of the most significant  
 (20) amounts of effort that was put into addressing the issue that  
 (21) we re here talking about today?  
 (22) A I believe it was a good effort – not a good effort but a  
 (23) strong effort for about a month I think they were all done in  
 (24) a month  
 (25) Q I want to talk for a minute about just generally modeling

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- (1) A Okay  
 (2) Q An econometric model is instrumental in science today  
 (3) isn t that right?  
 (4) A I would say it is  
 (5) Q And modeling allows us to quantify the relationship between  
 (6) explanatory variables such as harvest and other explanatory  
 (7) variables and price?  
 (8) A That s the goal  
 (9) Q And statistical modeling can help us understand and  
 (10) quantify the direct impact of market forces including spills?  
 (11) A Yes If done properly certainly  
 (12) Q And in the past in assessing spills you ve done  
 (13) statistical modeling yourself?  
 (14) A Certainly  
 (15) Q And in this case you didn t do any statistical modeling?  
 (16) A No that s not correct. Benchmark analysis is statistical  
 (17) modeling plus I –  
 (18) Q Did you run an econometric model in this case?  
 (19) A Yes  
 (20) Q For benchmark?  
 (21) A Yeah  
 (22) Q I want to talk a little bit about the taint concept  
 (23) generally  
 (24) A All right  
 (25) Q And its recognition in the literature – and indeed it is

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- (1) recognized in the literature isn t it?  
 (2) A Yes  
 (3) Q And we ve seen it for example in Germany?  
 (4) A You re referring to in Germany?  
 (5) Q James Anderson Journal of Consumer Affairs summer of  
 (6) 91  
 (7) A Well I m not sure exactly – I haven t reviewed that  
 (8) recently Which run are you talking about?  
 (9) Q There was a story on television in Germany concerning the  
 (10) parasitic infestation of North Sea fish and consumption fell  
 (11) 50 to 80 percent?  
 (12) A I think that s a reasonable characterization  
 (13) Q And as a general proposition would you agree with the  
 (14) statement that consumers are unable to evaluate the safety of  
 (15) selected – consumers are unable to evaluate the safety of  
 (16) selected seafood and react with an indiscriminate rejection of  
 (17) all fish?  
 (18) A No I don t think I would agree with that.  
 (19) Q Come back to that in a minute I have a document called  
 (20) the Journal of Consumer Affairs and I have an article written  
 (21) by Joan Grey Anderson and James L. Anderson Is that you?  
 (22) A Yes that is  
 (23) Q Excuse me for just a second I ll be back to it  
 (24) A That s okay  
 (25) Q I ve got one with a cheat sheet on it so – how about this

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- (1) statement which is close during negative media coverage of  
 (2) seafood quality an additional problem may occur  
 (3) Unknowledgable consumers unable to differentiate safe from  
 (4) unsafe species may abandon from the market?  
 (5) A Yes  
 (6) Q That s a possible – that s a possibility that you and your  
 (7) co author describe?  
 (8) A Yes  
 (9) Q I ll give this to you because we can talk about it for a  
 (10) minute  
 (11) A I ll blame this on my wife  
 (12) Q Is she your wife?  
 (13) A Yes  
 (14) Q So you re going to blame this cross-examination on your  
 (15) wife?  
 (16) A Yes of course Isn t that what you re supposed to do?  
 (17) THE COURT When she s not here  
 (18) THE WITNESS Don t you blame everything on your  
 (19) wife?  
 (20) BY MR O NEILL.  
 (21) Q I m not going to rise or fall on that one My wife is in  
 (22) the courtroom and I m not a stupid man  
 (23) I d like to go to page 147 and here is the statement that  
 (24) I was looking for and it deals – in the summer of 1988,  
 (25) coastal pollution became front page news, and then at the end

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- (1) of the paragraph consumers are unable to evaluate the safety  
 (2) of seafood selected react with indiscriminate rejections of  
 (3) all fish Although health official had warned that such a  
 (4) withdrawn unwarned, and certain seafood s sales fell  
 (5) dramatically in the summer of 1988 Do you see that?  
 (6) A Yes  
 (7) Q That refers to this kind of taint event?  
 (8) A Well it refers to a kind of taint event yes  
 (9) Q And then in here you ve drawn an analogy to Alar?  
 (10) A Yeah  
 (11) Q Would you explain that to us?  
 (12) A Well I actually haven't looked at this paper in quite a  
 (13) long time  
 (14) Q I did  
 (15) A I know I can tell that. So what s the question?  
 (16) Q The question is, in the context that we're talking about of  
 (17) taint, could you tell us why Alar has relevance to that  
 (18) subject?  
 (19) A Well obviously there was a lot of media attention to the  
 (20) Alar issue in apples and that media tension caused some  
 (21) people  
 (22) to not buy apple juice and apples and the consumption of  
 (23) apples and apple juice declined and that continued as long  
 (24) as - well actually it continued in particular while media  
 (25) tension was high  
 (26) Q How about Perrier did you follow Perrier or Corona beer?

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- (1) A Well I don t drink either Perrier or Corona beer  
 (2) Q You say that with some pride  
 (3) A Yes of course It's bad enough being in my age group bad  
 (4) enough being some yuppie drinking Perrier I know a little bit  
 (5) about the Perrier I don t know about the Corona incident  
 (6) Q Sales in America as a result of benzene in Perrier dropped  
 (7) precipitously didn't they?  
 (8) A Yes they did as far as I know  
 (9) Q Have you or your wife ever looked at the subject of Chilean  
 (10) grapes?  
 (11) A Not formally I'm familiar with that incident to a degree  
 (12) Q You report on it in your article?  
 (13) A Yeah it's mentioned in there I believe  
 (14) Q And tell us about the relevance of Chilean grapes to taint  
 (15) as described in your article  
 (16) A Well when Chilean grapes were found to be stained with  
 (17) cyanide Combined with the media attention, grapes were  
 (18) banned  
 (19) from importation from Chile, and there was a decline in the  
 (20) grape consumption apparently  
 (21) Q You're familiar with the botullism incident in Alaska?  
 (22) A Yes I am  
 (23) Q And concerns over contamination of some cans of Alaskan  
 (24) salmon sold in Europe caused the price to drop?  
 (25) A That s right  
 (26) Q Are you aware at all of any Japanese literature concerning

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- (1) the general subject of tainted fish and petroleum?  
 (2) A No  
 (3) Q Have you ever read a journal article by a guy named T  
 (4) Motohan (ph) in 1983 entitled Tainted Fish Caused by  
 (5) Petroleum Compounds? Have you ever read that?  
 (6) A No  
 (7) Q I'll move on to a new one  
 (8) A Never heard of it  
 (9) Q It s obscure You re looking at probably the only person  
 (10) in the world who read it and Mr Motohari owes me a distinct  
 (11) favor  
 (12) Are you at all familiar with Seafood International?  
 (13) A Yes That s a trade magazine  
 (14) Q And do you read it or review it periodically?  
 (15) A Pretty regularly yeah  
 (16) Q In May of 1989 in Seafood International there was the  
 (17) report seafood processors in the area were concerned that the  
 (18) image of seafood from the pristine waters of Alaska may have  
 (19) been besplurged along with the waters of the Sound, one local  
 (20) salmon fish buyer are already calling us trying too get lower  
 (21) prices we are afraid even though we will not be dealing with  
 (22) tainted fish some buyers are going to use their perception of  
 (23) quality problems to get lower prices  
 (24) Did you read that? Do you recall reading that?  
 (25) A Well, actually I don't recall reading that, but I would

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- (1) believe that s a reasonable quote  
 (2) Q And in the same issue the May issue of Seafood  
 (3) International do you recall reading the phrase there is a  
 (4) perception down here that all of Alaska is covered with oil  
 (5) people do not realize how big Alaska is I think they are  
 (6) sympathetic to the situation but are concerned? Do you recall  
 (7) reading that in Seafood International?  
 (8) A I read so many things, I don't recall reading that specific  
 (9) example but I do recall some comments like that, yes  
 (10) Q Do you recall, there was a lot of publicity at or near the  
 (11) time of the spill?  
 (12) A Right  
 (13) Q And are you aware of the fact that there were indeed  
 (14) cartoons published that made fun of Alaskan seafood?  
 (15) A Yes, I ve seen a couple  
 (16) Q Are you aware of the fact that vendors at the Seattle  
 (17) seafood market - what's that called, Pike s Place?  
 (18) A Yeah  
 (19) Q - indeed sold some of their fish with signs out saying not  
 (20) from Alaska?  
 (21) A That's right.  
 (22) MR O NEILL. Could you excuse me for just one  
 (23) second? I ve truncated the outline and if I could have a  
 (24) second to consult with  
 (25) BY MR O NEILL.

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- (1) Q I have in front of us Japanese imports of salmon from one  
 (2) of - I think it's from Ms Kusakabe's dissertation  
 (3) A Yeah I think you're right  
 (4) Q The increase in the imports of farmed salmon from 1988 to  
 (5) 1989 are shown on these two bars isn't that correct?  
 (6) A Yes  
 (7) Q And at the same time we see that increase and indeed  
 (8) throughout from '76 to 1990 we see the increase in consumption  
 (9) in Japan with regard to salmon?  
 (10) A Yeah that's true  
 (11) Q And it's constant through 1990?  
 (12) A Constant through 1990? I mean it's not constant but  
 (13) it's - with the exception of a year or two it's been  
 (14) increasing  
 (15) Q That's good for salmon prices?  
 (16) A Well no not necessarily  
 (17) Q The more they eat the more demand there is?  
 (18) A Not necessarily You always have to consider price and  
 (19) quantity  
 (20) Q And quality?  
 (21) A And quality too  
 (22) Q With regard to quality are you aware of the fact that the  
 (23) way that the Prince William Sound pink fishery had to be  
 (24) structured in the summer of 1989 that fish were caught late in  
 (25) their life cycles and the quality with regard to Prince William

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- (1) Sound pinks was down?  
 (2) A Well whenever there is a terminal fishery like what  
 (3) happened there there is a lot of complaining that quality will  
 (4) be a little lower when they are caught a little later in their  
 (5) life cycle It's common whenever there is a terminal fishery  
 (6) Q Doctor Plaintiffs' Exhibit 6171 is the Seafare thing that  
 (7) we've been talking about  
 (8) MR O NEILL I offer 6171 Chapter 9 and the  
 (9) executive summary  
 (10) (Exhibit 6171, chapter 9 offered)  
 (11) THE COURT Is that a Plaintiff's 6171?  
 (12) MR LYNCH Yes No objection  
 (13) THE COURT Plaintiffs 6171 is admitted  
 (14) (Exhibit 6171 chapter 9 received)  
 (15) MR O NEILL That was painless Thank you Doctor  
 (16) THE WITNESS Thank you  
 (17) RE-CROSS EXAMINATION OF JAMES L. ANDERSON  
 (18) BY MR LYNCH  
 (19) Q Dr Anderson what was your first response to Exxon when  
 (20) they approached you about working on this case?  
 (21) A I told them I wasn't interested  
 (22) Q And what turned you around was it because Exxon came  
 (23) back  
 (24) with a big paycheck?  
 (25) A Well the reason what turned me around, was I talked to  
 other guys on the faculty particularly my department chairman

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- (1) and they said that you know as long as you have an  
 (2) opportunity to do research your way and you're not bound up  
 (3) by  
 (4) some kind of constraints and things like that in terms of  
 (5) results or constraints in terms of availability of data that  
 (6) it represented probably the best opportunity to study the  
 (7) salmon market there is And fish market is my - that's what I  
 (8) do  
 (9) Q And were those conditions of yours met before you took the  
 (10) job?  
 (11) A Yes they were They told me and assured me that if I  
 (12) needed data or needed time that subject to constraints  
 (13) imposed  
 (14) by the courts or something like that I would have that  
 (15) freedom And they also told me that they would in no way  
 (16) coerce me to come up with any kind of particular conclusion  
 (17) Q Do you personally and professionally subscribe to the price  
 (18) opinions that you have given to the jury in this case today and  
 (19) that are contained in these exhibits that we will be marking?  
 (20) A Yes I do  
 (21) Q Is that based on as thorough and unfettered a study as you  
 (22) can conduct?  
 (23) A Yes Probably one of the most thorough studies done  
 (24) Q Now, you have written on the subject of taint or concern or  
 (25) fear of - fear as a factor in the marketing of natural  
 products is that correct?  
 A Yes I have

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- (1) Q You're not - you didn't go into this study ruling that out  
 (2) as a possibility?  
 (3) A No not at all  
 (4) Q You looked for that correct?  
 (5) A Yes  
 (6) Q Now Mr O'Neill asked you if you were aware that when  
 (7) benzene was found to be contained in Perrier sales fell  
 (8) didn't he?  
 (9) A Yes he did  
 (10) Q And you performed that test on Alaska salmon didn't you?  
 (11) A Yes  
 (12) Q What did you find?  
 (13) A Well sales increased in all markets  
 (14) Q And when botulism occurred in canned Alaska salmon in  
 (15) 1982  
 (16) what happened?  
 (17) A Price declined and actually I tested for that as well  
 (18) Q And sales declined as well did they not?  
 (19) A Sales declined as well  
 (20) Q And indeed some countries of the world prohibited the sale  
 (21) of canned Alaska salmon?  
 (22) A There was an embargo on canned salmon from Alaska  
 (23) Q Did any of those things happen in 1989?  
 (24) A No  
 (25) Q In fact you looked for evidence that any tainted product  
 reached the market and couldn't find any?



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- (1) A That's right
- (2) Q So far as you're aware Dr Crutchfield testified he didn't know of any of that?
- (3) A As far as I know
- (4) Q And Dr Mendelsohn in his deposition testified to the same thing?
- (5) A Right
- (6) Q And when grapes from Chile were I guess, intentionally doctored with cyanide they were excluded from the market, right?
- (7) A They were excluded
- (8) Q What happened?
- (9) A Consumption went down and I believe price went down
- (10) Q And you looked for those consequences in 1989 by an objective test of the market and you couldn't find it?
- (11) A Right
- (12) Q Now subsequently, a number of scholars have tried to explain the rapid decline in the price of salmon from 1988 to 1991. Is that correct?
- (13) A Many have
- (14) Q The ones that we named before Dr Boyz, Dr Freeman and so forth?
- (15) A Right
- (16) Q All of those people looked into that issue after the fact, that is correct?

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- (1) A Yes
- (2) Q And did any of them report that they thought that the oil spill or consumer concern about the quality or safety or purity of Alaska fish was a cause for decline in price or decline in assumption?
- (3) A None of them reported anything close to that
- (4) Q Let's see if I can find it here
- (5) All of the Burson Marsteller data that - actually that Mr O'Neill read to you and you acknowledged he was quoting correctly all of that related to a study that was done in the middle of 1989 correct?
- (6) A It was done before the season in '89 in May
- (7) Q And no data was read to you about any concern about taint in 1990 correct?
- (8) A No
- (9) Q No fishermen reports in Fishermen News nothing, no cartoons?
- (10) A No
- (11) Q No signs at Pike's Market?
- (12) A No
- (13) Q Nothing at all like that happened in 1990, did it?
- (14) A No
- (15) Q What about 1991?
- (16) A Nothing
- (17) Q And how about consumption and sale of Alaska salmon, what

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- (1) quantities were sold in those years?
- (2) A Well quantities of sales continued up
- (3) Q Now based on your research into taint, is there any way that an economist could realistically conclude that the market was avoiding or refusing to pay competitive prices for a product in 1990 and 1991 because an oil spill had occurred three years prior to that which resulted in no damaged product reaching the market?
- (4) A No That's the most unusual conclusion I'd ever seen
- (5) Q Now if you had an econometric model that predicted that was happening as an economist what would you say about that model?
- (6) A You'd evaluate that to see if it makes sense I must be missing something The spill can't be affecting anything in 1991 I must have something there incorrect. And in this particular case you'd really look at why is farmed salmon positive
- (7) Q Now, Mr O'Neill asked you about model and econometric techniques, and you say you used them and you used them here?
- (8) A Right
- (9) Q And Dr Boyz of the University of Alaska, he prepared a model, didn't he?
- (10) A Yeah econometric model
- (11) Q Very similar to the kind - in type to the kind that Dr Mendelsohn used?

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- (1) A Yeah same similar style
- (2) Q How close did he come to the actual price using his model?
- (3) A Eight cents for sockeye in '89 and three cents for pinks or maybe only one cent.
- (4) Q Dr Boyz wasn't working for the plaintiffs when he did that?
- (5) A No
- (6) Q He was working for the State?
- (7) A Funded by the Prince William Sound Aquaculture Association
- (8) Q And his model using objective economic data, produced a price that's within a few cents of the price you have arrived at here?
- (9) A Right
- (10) Q Now I wanted to talk about the farmed salmon variable Do you remember this book, Salmon 2000?
- (11) A Yes
- (12) Q That was put out by the Alaska Seafood Marketing what?
- (13) A Institute
- (14) Q Of which the board of directors are Alaska-based processors and fishermen?
- (15) A That's right
- (16) Q I wonder if I could direct your attention to page 15 I'll just read this to you to save time in Academia - that's where you live?
- (17) A Most of my life

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- (1) Q - and in industry there has been a reluctance to predict  
 (2) salmon market activity during the next several years let alone  
 (3) to the year 2000 This reticence may be based in part on  
 (4) unpredictable changes in the last ten years even as late as  
 (5) the mid 80s prognosticators from fisheries and universities  
 (6) were underestimating the exclusive expansions of salmon  
 farming  
 (7) growth Is that a true statement?  
 (8) A That s what they said  
 (9) Q You had been guilty of that in 1988?  
 (10) A Semi  
 (11) Q You were always a believer that farmed salmon was  
 (12) underrated as a factor?  
 (13) A That s correct  
 (14) Q But in 1988 you were able to see how big a factor it  
 (15) became?  
 (16) A Well in 1988 I forecasted that prices would decline at  
 (17) least 20 to 30 percent however my estimates of future  
 (18) production were lower than actually occurred They were  
 (19) greater than my expectation  
 (20) Q I d like to see if we could find that quote This is Mr  
 (21) Atkinson s writing in 1989 and he makes his money by giving  
 (22) good data to people who are in the industry He s not working  
 (23) for litigation purposes is he?  
 (24) A Not that I know of  
 (25) Q And when he wrote this in 1989 he said that the - various

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- (1) factors for the rapid decline the large increase in farm  
 (2) imports just as the new season was about to begin as relatively  
 (3) low prices caused confusion in the marketplace and he said  
 (4) that one of the factors was that the consumer has little  
 (5) resistance to farmed salmon and supermarkets find it easy to  
 (6) fit into their purchase forecasts and the product is always  
 (7) available he was talking about Japan?  
 (8) A Yes  
 (9) Q And is it the fact that one of the advantages of farmed  
 (10) salmon is going to the redder is better - how is that redder  
 (11) is better?  
 (12) A The redder the better  
 (13) Q The redder the better Is farmed salmon - can you grow  
 (14) it to order as to color?  
 (15) A Yes you can You can grow it to size you can adjust the  
 (16) fat content and to a large degree you can change the color  
 (17) depending on what you feed it  
 (18) Q And have those industries which are in fact looking for  
 (19) more share of the Japanese market have they in fact adjusted  
 (20) their product to deal with this the redder the better  
 (21) syndrome?  
 (22) A Well certainly they try to adjust the fee and things like  
 (23) color to meet the market needs  
 (24) Q And this is the GAO study in 1991 Now Mr O Neill asked  
 (25) you about the significance of salmon in 1989 Did it continue

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- (1) to grow into 1991?  
 (2) A Farmed salmon that is?  
 (3) Q Yes sir  
 (4) A Yes  
 (5) Q I m talking about the Japanese market where the price of  
 (6) salmon -  
 (7) A Right  
 (8) Q And the GAO reports that the supply of farmed salmon is  
 (9) perceived by the Japanese as higher quality than Bristol Bay  
 (10) sockeye Is that a development that s occurred as the years  
 (11) that we re talking about have gone by?  
 (12) A Yes I have not formally tested that specific hypothesis  
 (13) Q That s not your conclusion but that s what the GAO has  
 (14) reported?  
 (15) A Right  
 (16) Q Now if I could spend a minute with you on the  
 (17) Burson Marsteller document that was read in part to you I  
 (18) think you said more than once you realized what Mr O Neill was  
 (19) reading to you was a correct reading what they said, but you  
 (20) didn t agree that was right?  
 (21) A That s exactly right  
 (22) Q What s the basis for your disagreement with the  
 (23) Burson Marsteller -  
 (24) A Well if I could see one of the reports it would help  
 (25) but -

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- (1) Q I think I have the Japanese report but it s marked This  
 (2) is PX1756 the Japanese report  
 (3) A Well when consumers were asked in an unassisted way  
 they  
 (4) were asked whether their seafood consumption declined and  
 as  
 (5) with anything, a few people said their consumption declined  
 (6) anywhere from six to 15 percent But then when they were  
 asked  
 (7) why did your seafood consumption decline when they looked  
 at  
 (8) the whole world with regard to salmon, 890 some responded  
 out  
 (9) of those suggested price And a variety, only these people  
 (10) out of 897 said the oil spill influenced their consumption  
 (11) patterns  
 (12) And where the conclusions come with regard to the  
 (13) association of Alaska and Alaska taut and they would avoid  
 (14) Alaska food comes from the questionnaire itself And after  
 (15) they asked those questions objectively then they asked  
 (16) questions and let me just read three questions that follow  
 (17) This one has a page missing, the key page missing  
 (18) Q Here is another copy Let s see if we can do better this  
 (19) time Deep fear that there will be consistency in there  
 (20) A If you give me the U S - do you have any other one?  
 (21) Thanks Well after they asked those questions about  
 (22) whether the people had changed their consumption patterns  
 (23) because of the spill then they asked when I mention the term  
 (24) ocean pollution that may effect people s health please tell me  
 (25) what comes to mind Then people say oil spill I think

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- (1) Then have you recently heard anything about an oil spill in
- (2) Alaska that s occurred oh if I didn t think of it there oh
- (3) yeah I think I ve heard of it
- (4) In your opinion did you think the oil spill affected fish
- (5) from Alaska well heck they are asking me about the oil
- (6) spill they just said it affects pollution of course it s
- (7) going to affect fish then some people say yeah it affected
- (8) fish from Alaska
- (9) Then the next question is based on what you heard or seen
- (10) has the oil spill affected seafood from all Alaska or other
- (11) parts Well you re asking somebody in Alaska or Japan or
- (12) France just like asking a kid they try to answer what you
- (13) think the surveyor wants and so they say some things that may
- (14) be all of Alaska
- (15) And then they asked do you feel that seafood from Alaska
- (16) now being sold in stores and restaurants is safe to eat Now
- (17) if you're being asked these questions after they just said
- (18) pollution Alaska making the direct link as a rational
- (19) respondent you're going to say gosh I d sound like an idiot
- (20) The ocean pollution that may affect people's health they link
- (21) that with the oil spill
- (22) And then they ask if Alaska seafood is safe to eat of
- (23) course I m going to say it isn t Then they ask about whether
- (24) you re confident they say I m not that confident now And
- (25) then - that s basically it And then they go on

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- (1) But the point is that when people were asked did it change
- (2) your consumption patterns they said no and when traders
- (3) were
- (4) asked they said no and after they give leading questions in
- (5) order to not sound like an idiot the respondent said well
- (6) yeah I d probably avoid Alaska seafood And when Merry
- (7) Tuten
- (8) and others analyzed this data they came to the conclusion that
- (9) people aren't making the link between the spill and seafood
- (10) they re making it between spill and birds and mammals and all
- (11) those things
- (12) But with regard to the seafood markets the link in the
- (13) association is not made and I do not believe it influenced
- (14) price
- (15) Q Dr Anderson when Burson Marsteller asked the question
- (16) are you worried about Alaska seafood before talking about the
- (17) oil spill what kind of response did they get?
- (18) A Well, they asked have you declined your consumption and
- (19) then they asked why Three out of 800 and some said oil spill
- (20) Q So it was an insignificant response?
- (21) A Three out of 890 is insignificant and none in Japan I
- (22) might add
- (23) Q Let me show you DX4869 B I just want to clear up one
- (24) point Mr O Neill asked you the question whether sockeye
- (25) prices Alaska sockeye prices had stayed up until June
- (26) following the spill That question was only addressed to one
- (27) market is that correct?

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- (1) A That was addressed to Tokyo wholesale It was Tokyo
- (2) wholesale price
- (3) Q How did U S sockeye prices - when did they start to fall
- (4) overall when did the actual decline begin?
- (5) A Well we can see from this exhibit that the prices of
- (6) sockeye exported to Japan declined in - started to decline in
- (7) really September October November but then precipitously
- (8) declined in December you know around December before the
- (9) spill obviously
- (10) MR LYNCH No further questions Your Honor I will
- (11) offer 4869-B
- (12) (Exhibit 4869-B offered)
- (13) MR O NEILL No objection
- (14) THE COURT Admitted
- (15) (Exhibit 4896-B received)
- (16) THE COURT Thank you You may step down
- (17) MR LYNCH I ll read this into the record These are
- (18) the purely statistical abstract that I was planning to ask Dr
- (19) Anderson to authenticate and Mr O Neill agreed with me that
- (20) we could do it the more correct way so I ll read this
- (21) DX6138 DX6136 DX8632 Alpha DX78633 Alpha
- (22) DX8631 Alpha
- (23) DX8629-Alpha DX8334-Alpha DX8628-Alpha DX9369 Alpha
- (24) DX6124
- (25) DX6135 DX6137 DX6125 DX6115 DX6126 DX6127 DX6128
- (26) DX6155
- (27) DX6156 DX6121 DX6117 DX6177 DX6176 DX6119 Alpha
- (28) DX6145
- (29) DX6123 DX6118 Alpha DX6143 DX6129 DX6130 DX6131
- (30) DX6132

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- (1) DX6133 DX6116 DX6134 DX6120 Alpha DX6144 and
- (2) DX6122
- (3) (Exhibit DX6138 DX6136 DX8632 Alpha DX78633 Alpha
- (4) DX8631 Alpha DX8629 Alpha DX8334 Alpha DX8628 Alpha
- (5) DX9369 Alpha DX6124 DX6135, DX6137 DX6125 DX6115
- (6) DX6126
- (7) DX6127 DX6128 DX6155 DX6156 DX6121 DX6117 DX6177
- (8) DX6176
- (9) DX6119-Alpha DX6145 DX6123 DX6118-Alpha DX6143
- (10) DX6129
- (11) DX6130 DX6131 DX6132 DX6133 DX6116 DX6134
- (12) DX6120-Alpha
- (13) DX6144 and DX6122 offered)
- (14) MR O NEILL We have no objection
- (15) THE COURT They are admitted
- (16) (Exhibit DX6138 DX6136 DX8632 Alpha DX78633 Alpha
- (17) DX8631 Alpha DX8629 Alpha DX8334 Alpha DX8628 Alpha
- (18) DX9369-Alpha DX6124 DX6135 DX6137 DX6125 DX6115
- (19) DX6126
- (20) DX6127 DX6128 DX6155 DX6156 DX6121 DX6117 DX6177
- (21) DX6176
- (22) DX6119 Alpha DX6145 DX6123 DX6118 Alpha DX6143
- (23) DX6129
- (24) DX6130 DX6131 DX6132 DX6133 DX6116 DX6134
- (25) DX6120 Alpha
- (26) DX6144 and DX6122 received)
- (27) MR COOPER Your Honor at this point - we had
- (28) another 16 scientists we wanted to call
- (29) MR O NEILL Do it
- (30) MR COOPER Defendants rest
- (31) MR O NEILL Plaintiffs have no rebuttal case Your
- (32) Honor
- (33) THE COURT This completes the presentation of
- (34) evidence as to Phase II A of our case I appreciate everyone s

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- (1) efforts to get it done this afternoon This will make it
- (2) possible for us to adjourn at this point You should expect
- (3) that we will have - as the first order of business on Monday
- (4) counsel and I will have a little bit of work to do so I want
- (5) you all to come in at 9 00 on Monday rather than 8 00 9 00
- (6) we ll have closing arguments from each side just as we did
- (7) before followed by jury instructions
- (8) I hope expect that we will get all of that accomplished
- (9) by 2 00 Monday afternoon It s possible that we could run over
- (10) just a little bit but I do want to get those three things,
- (11) plaintiffs argument defendants arguments and my instructions
- (12) all in one package, and you should expect then to start
- (13) deliberating on Phase II A on Tuesday morning
- (14) We will adjourn at this time Please don t read anything
- (15) don t listen to anything, don't do any research about the case
- (16) on your own Really don't even start making decisions now
- (17) Even though you've heard all of the evidence wait until you ve
- (18) had the opportunity to listen to the arguments hear my
- (19) instructions and review the exhibits then there will be plenty
- (20) of time for you to start making decisions
- (21) You are excused now until 9 00 Monday morning This case
- (22) is adjourned until 8 00 Monday morning
- (23) (Jury out at 2 00)
- (24) THE COURT On the record
- (25) MR COOPER It s about a seven page script Your

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- (1) Honor
- (2) Your Honor, at this time the defendants would move for a
- (3) judgment pursuant to Rule 50(a) with respect to a number of
- (4) matters
- (5) First we move for a judgment on all of the plaintiffs
- (6) price claims on the grounds that there is insufficient evidence
- (7) that there was a price effect legally caused by the spill or
- (8) that such price effect was a result of the physical effects of
- (9) the spill within the meaning of the Benefiel case In denying
- (10) our summary judgment motion Your Honor gave the plaintiffs an
- (11) opportunity to try to prove that the effects of the spill
- (12) caused a decline in prices Plaintiffs have not done that.
- (13) Their proof does not show actual fear of contamination and
- (14) much less actual contamination It shows at most that buyers
- (15) used fear of contamination as a weapon to obtain lower prices
- (16) There can be no liability for the consequences of the
- (17) purchasers using fear of contamination as an excuse or a
- (18) bargaining tool to lower prices
- (19) Second we move for judgment on all the plaintiffs price
- (20) claims on the ground that the evidence establishes beyond
- (21) dispute that fishing prices and income were adversely affected
- (22) by market developments independent of the spill notably the
- (23) impacts of the worldwide decline in all types of salmon
- (24) Plaintiffs have failed to provide the jury with any reasonable
- (25) basis for distinguishing these impacts for which defendants

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- (1) have no liability from impacts for which defendants may have
- (2) liability A jury accordingly may not find for plaintiffs on
- (3) these claims
- (4) Third we move for judgment on plaintiffs claims for
- (5) reduced prices of sockeye salmon on the ground that no
- (6) reasonable jury could find that the massive increases in the
- (7) world's farmed salmon output caused the price of salmon to go
- (8) up Plaintiffs theory of liability and damages depend on a
- (9) model that makes this assumption There is thus no substantial
- (10) evidence that the spill was a legal cause of reduced prices and
- (11) no reasonable basis for estimation of the alleged damages
- (12) plaintiffs claim
- (13) Fourth we move for judgment on all of plaintiffs price
- (14) claims on the ground that they rest on models and other
- (15) evidence that are fundamentally flawed do not meet the
- (16) requirements of the Daubert case and similar cases and cannot
- (17) provide sufficient evidence to allow a reasonable jury to
- (18) conclude that the spill was a legal cause of any decline in
- (19) prices or to provide any reasonable basis of estimation of the
- (20) amount of plaintiffs' alleged damages
- (21) Fifth we move for judgments on plaintiffs price claims on
- (22) the ground that plaintiffs' evidence establishes that any
- (23) alleged price effect as to the Upper Cook Inlet sockeye fishery
- (24) must be offset by the windfall gain that the Upper Cook Inlet
- (25) setnetters in 1989 resulting from the closure of the Shelikof

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- (1) Strait fishery and the closure of the Cook Inlet drift net
- (2) fishery This offset must be deducted from plaintiffs price
- (3) claims and judgment should be entered in defendants favor of
- (4) that effect In addition plaintiffs damage exhibits that
- (5) ignore this offset should not be permitted to go to the jury
- (6) Sixth we move for judgment on all of plaintiffs' claims
- (7) for lost harvest in Prince William Sound after 1989 on the
- (8) ground that there is no substantial evidence that would allow a
- (9) reasonable jury to distinguish between impacts for which
- (10) defendants have liability from impacts for which they are not
- (11) responsible or provide a reasonable basis for the estimation of
- (12) damages
- (13) Seventh we move for judgment on all of plaintiffs claims
- (14) for lost harvest in 1989 on the ground that there is no
- (15) substantial evidence to support plaintiffs claims that the
- (16) harvest would have been higher than calculated by the Alaska
- (17) Department of Fish & Game and that the opinion testimony on
- (18) which plaintiffs rely is speculative untested and dependent on
- (19) invalid and unproven assumptions and fails to comport with the
- (20) requirements of scientific validity set forth in Daubert and
- (21) similar cases
- (22) Eighth we move for judgment on plaintiffs claims for lost
- (23) herring harvest in 1993 and 1994 on the ground that there is no
- (24) substantial evidence of any causal relationship between the oil
- (25) spill and plaintiffs alleged damages And that the expert

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- (1) opinions offered by plaintiffs rely unproven assumptions and
- (2) speculation and do not comport with the requirements of expert
- (3) testimony on scientific issues set out in Daubert and similar
- (4) cases
- (5) Ninth we move for judgment on all plaintiffs claims for
- (6) lost salmon harvest in 1994 and 1995 on the grounds that the
- (7) claims are speculative hypothetical and premature and there
- (8) is no substantial evidence that the damages claimed will in
- (9) fact occur and that the undisputed evidence shows that the
- (10) smolt counts on which plaintiffs rely as to sockeye are not
- (11) valid predictors of actual sockeye returns
- (12) Tenth we move for judgment on plaintiffs claims for lost
- (13) sockeye harvest for 1994 and 1995 on the grounds that there is
- (14) undisputed evidence that any overescapement following the oil
- (15) spill made only a minor contribution to problems in the
- (16) relevant lake systems that there is no substantial evidence
- (17) that the levels of sockeye harvest in 1949 and 1995 would have
- (18) been different if the spill not occurred and that there is no
- (19) reasonable basis on which a jury can distinguish between
- (20) impacts for which defendants have liability and those for which
- (21) they do not.
- (22) I should add Your Honor that the first part of that 10th
- (23) one, the evidence disputed the overescapement following the
- (24) oil
- (25) spill indicated that was at most only a minor contribution

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- (1) lost sockeye harvest in 1994 and 1995 on the ground that the
- (2) undisputed evidence shows that the State of Alaska was fully
- (3) responsible for managing the sockeye fishery in 1989 and
- (4) determining the level of escapement that would be permitted
- (5) and that defendants cannot have liability for the consequences
- (6) of decisions made or not made by Alaska officials with
- (7) responsibility and authority to act
- (8) Twelfth we move for judgment on plaintiffs claims for
- (9) lost sockeye harvest in 1994 and 1995 on the ground that the
- (10) undisputed evidence is that plaintiffs' losses did not result
- (11) in any way from diminution of aquatic resources caused by the
- (12) spill or the physical effects of the spill
- (13) Thirteenth we move for judgment on plaintiffs claims for
- (14) the lost sockeye harvest in the Kodiak area on the ground that
- (15) the plaintiffs are not entitled to recover any damages with
- (16) respect to sockeye from Akalura Lake since no evidence was
- (17) introduced with respect to Akalura In addition judgment
- (18) should be entered on plaintiffs entire claim for the Kodiak
- (19) area since plaintiffs damage calculation is based on both
- (20) Akalura Lake and Red Lake but plaintiffs have provided the
- (21) jury with no reasonable basis for distinguishing the portion of
- (22) their damages that relates to Akalura Lake from the portion
- (23) that relates to Red Lake
- (24) Fourteenth we move for judgment on all of plaintiffs
- (25) claims for lost harvest in 1994 and 1995 on the ground that

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- (1) there is no evidence to support plaintiffs theory that there  
 (2) was or will be a zero fishery in those years Judgment should  
 (3) be entered as to any claim for damages in excess of a  
 (4) reasonable estimate of lost harvest due to oil effects And  
 (5) plaintiffs exhibits premised on a zero fishery should not be  
 (6) permitted to go to the jury  
 (7) Fifteenth we move for judgment on all of plaintiffs  
 (8) claims for lost harvests in 1994 and 1995 on the ground that  
 (9) the plaintiffs evidence does not provide any reasonable basis  
 (10) for the elimination of lost profits damages claimed by persons  
 (11) who sold their permits after March 23 1989 although the Court  
 (12) has held that they may not recover such damage The evidence  
 (13) provides no reasonable basis for the jury to distinguish  
 (14) between losses for which defendants have liability and losses  
 (15) for which they do not  
 (16) Sixteenth we move for judgment on all of plaintiffs'  
 (17) claims on the ground that plaintiffs evidence shows that  
 (18) persons who purchased permits after the spill paid a price that  
 (19) was lower because of the spill and it otherwise would have  
 (20) been To the exact extent that jury accepts plaintiffs claim  
 (21) such purchasers have received a gain as a result of the spill  
 (22) which must be offset against any recovery for lost profits  
 (23) subsequent to the date of such purchase and plaintiffs exhibits  
 (24) that ignore the offset should not be permitted to go to the  
 (25) jury

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- (1) Seventeenth The undisputed evidence shows that a number  
 (2) of plaintiffs purchased their permits after the spill or after  
 (3) they had notice of the possibility that the spill might effect  
 (4) fisheries We move for judgment as to such plaintiffs permit  
 (5) claims  
 (6) Eighteenth move for judgment on the claims all of  
 (7) plaintiffs permits claims on the ground that the undisputed  
 (8) evidence shows that many plaintiffs did not sell their permits  
 (9) for fair market value in any arms length transaction There is  
 (10) no substantial evidence that indicates which plaintiffs if  
 (11) any sold their permits in transactions that were at arms  
 (12) length and thus the record contains no reasonable basis for a  
 (13) jury to determine which if any, of the plaintiffs have  
 (14) suffered damages or what the amount of their damages may be  
 (15) Nineteenth we move for judgment on all plaintiffs' permit  
 (16) claims on the grounds that plaintiffs evidence of the price at  
 (17) which the permits supposedly would have sold in the absence of  
 (18) the spill depends on speculative untested and unscientific  
 (19) assumptions and opinions and that there is no substantial  
 (20) evidence which would allow the jury to distinguish between  
 (21) impacts on permit values entirely independently of the spill  
 (22) such as the declining market for salmon and impacts for which  
 (23) defendants have liability or provide the jury with a  
 (24) reasonable basis for determining the damages if any that were  
 (25) legally caused by the spill

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- (1) Finally we move for judgment on all of plaintiffs claims  
 (2) that there is no substantial evidence to support them  
 (3) MR O NEILL I'll be brief if I can be brief On  
 (4) the price claims As a matter of preference once the fact of  
 (5) damage has been determined by a preponderance of evidence  
 the  
 (6) calculation of the damage need not be made with mathematical  
 (7) precision but all we need to provide is a reasonable basis in  
 (8) fact to estimate what the damages are  
 (9) As to the price claim, the evidence is not just that there  
 (10) was contamination used in negotiation but the evidence is that  
 (11) because of the possibility of contamination there were real  
 (12) impacts on the market. And because of taint there were real  
 (13) impacts on the market.  
 (14) With regard to the evidence concerning the price claims we  
 (15) have standard econometric models that sort out price claims  
 (16) from all of the other factors which is the proper way to do  
 (17) that proof With regard to farmed salmon one to two percent  
 (18) of farmed salmon foreign farmed salmon gets into the  
 Japanese  
 (19) market and it's a minor point. With regard to the nature of  
 (20) the proof being flawed it isn't, and we stand on the record on  
 (21) that. With regard to the Upper Cook Inlet alleged windfall  
 (22) gain there is evidence with regard to which had jury can  
 (23) figure that ought itself that goes to weight With regard to  
 (24) the plaintiffs damage exhibits they are in they were put in  
 (25) right there is foundation for all of them With regard to

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- (1) lost harvest after 1989 all that have goes to weight With  
 (2) regard to lost harvest in '89 I'm outraged that Exxon would  
 (3) make the motion but all that goes to weight. With regard to  
 (4) herring in 1993 and 1994 there is indeed evidence which links  
 (5) the oil with the virus which links it with the crash we put on  
 (6) the most reputable experts in the world on and their argument  
 (7) goes to weight.  
 (8) Regard to 94 and 95 harvests on the Kenai with regard to  
 (9) the nature of proof it's like an anti trust case and no  
 (10) different and we've put in credible proof how to do that  
 (11) With regard to the causal link between the Exxon Valdez oil  
 (12) spill in 94 and 95 we put in proof through Dr Mundy and  
 (13) others about that. With regard to this contention that Exxon  
 (14) gets off the hook because the State of Alaska did what a  
 (15) fireman ought to do or try to do what a fireman ought to do  
 (16) the evidence is clear that overescapement results from oil  
 (17) spills and we butt that evidence in through a couple different  
 (18) witnesses and we put it in by analogy back to 1987  
 (19) With regard to Kodiak we put in the same proof that  
 (20) because of overescapement there was an impact on the Kodiak  
 (21) salmon as a whole With regard to permits the jury has before  
 (22) it the data with regard to every single sale it has before it  
 (23) the data with regard to the nature of the sale, it has about it  
 (24) sales prices that were sworn to before the Commercial Fishery  
 (25) Entry Commission by the person making the sale all goes to

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- (1) weight With regard to people who purchased permits after the
- (2) spill the argument is in point of fact up until the time
- (3) studies became known they wouldn't know akin to fraudulent
- (4) concealment With regard to the nature of the transactions
- (5) with regard to the permit holders that s detailed line by line
- (6) in the evidence that s going to the jury They have a book
- (7) like this
- (8) With regard to the evidence as to what the sale price who
- (9) have been that was put in through standard econometric
- (10) models With regard to all of the contentions and it s a
- (11) concession to the shortness of life we rely on the record and
- (12) oppose the motion We move for judgment as a matter of law
- (13) also specifically on the point that the Exxon Valdez oil spill
- (14) was a legal cause of all of plaintiffs damages and we also
- (15) move with regard to overescapement claims in 94 and 95 that
- (16) there is in fact no proof that the action of the State of
- (17) Alaska or any other party was a superceding cause of
- (18) plaintiffs damages There could be no question that the oil
- (19) spill was so important in bringing about the plaintiffs' harm
- (20) that a reasonable person would regard it as a cause and attach
- (21) responsibility to it
- (22) With regard to that last statement that the oil still was
- (23) so important in bringing around - bringing about the
- (24) plaintiffs harm that a person would regard it as a cause and
- (25) attach responsibility to it we cite that proposition on all

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- (1) the grounds as to all of the grounds that Exxon sites and for
- (2) the record we move for judgment as a matter of law on all of
- (3) plaintiffs' Phase II claims on the ground that there is no
- (4) legally sufficient evidentiary basis to let Exxon off the hook
- (5) MR COOPER Your Honor Mr Lynch reminds me I forgot
- (6) to merge the Robison Benfield the future biological - future
- (7) harvest claims that depend upon a biological impact event or
- (8) impact of the oil Obviously Your Honor he would oppose the
- (9) motion that plaintiffs make with respect to spill being a legal
- (10) cause I think the evidence - there is certainly evidence
- (11) that the plaintiffs are not entitled to a motion on that And
- (12) we feel the contrary in many respects
- (13) With respect to overescapement in 1994 and 1995 there is
- (14) evidence on that for instance Mr Flory testified respecting
- (15) that during the time of the trial so we would generally oppose
- (16) that motion
- (17) MR O NEILL We ve made our record
- (18) THE COURT All of the motions are denied
- (19) MR COOPER Thank you Your Honor
- (20) MR O NEILL 8 00 Monday morning
- (21) THE COURT 8 00 Monday morning I expect that by the
- (22) latter part of this afternoon 4 4 30 we will have a more or
- (23) less final set of instructions that will be available to you,
- (24) we ll give you a call when they are ready so that one can pick
- (25) them up

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- (1) MR O NEILL Thank you judge we ll have somebody
- (2) standing buy
- (3) THE COURT Recess until 8 00 Monday morning
- (4) (Proceedings recessed at 2 15 p m )

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- (1) STATE OF ALASKA )
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA )
- (6) I Leonard J DiPaolo 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) LEONARD J DIPAOLO RPR
- Notary Public for Alaska
- (22) My Commission Expires 2 3 96

**Look-See Concordance Report**

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 UNIQUE WORDS 3,088  
 TOTAL OCCURRENCES  
 15,370  
 NOISE WORDS 385  
 TOTAL WORDS IN FILE  
 42,469

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 SINGLE FILE CONCORDANCE

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 CASE SENSITIVE

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 NOISE WORD LIST(S)  
 NOISE NOI

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 INCLUDES ALL TEXT  
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 IGNORES PURE NUMBERS

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**Yeah** [29] 6662 25, 6674 5, 19, 6692 4, 6698 9, 6700 17, 6711 3, 6734 16, 6737 25, 6744 16, 6767 21, 6788 22, 6790 10, 15, 23, 6792 19, 6793 2, 20, 6795 22, 6796 22, 6797 5, 6798 21, 6801 10, 6802 13, 6804 18, 6805 3, 10, 6811 23, 6812 1  
**yeah** [10] 6692 2, 6712 13, 6759 15, 6783 19, 6784 25, 6793 7, 6803 15, 6817 3, 7, 6818 5  
**Year** [4] 6663 2, 6664 23, 6667 2, 6674 1  
**year** [59] 6661 14, 18, 19, 6662 9, 15, 20, 21, 6664 8, 13, 16, 22; 6670 7, 10, 11, 12, 6671 8, 24, 6694 24, 6695 5, 10, 6700 1, 6703 19, 6704 8, 6706 10, 6715 19, 6718 1, 4, 5, 6726 12, 13, 6729 23, 6730 12, 13, 6732 8, 6733 1, 6735 2, 6736 4, 6744 1, 6745 18, 6755 16, 6756 2, 6757 6, 6760 6, 17, 6762 4, 8, 12, 6765 21, 6766 4, 5, 25, 6769 17, 20, 6773 14, 6787 3, 6805 13, 6813 3  
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**year-round** [1] 6674 1  
**years** [18] 6637 1, 6659 2,

6663 12, 6665 11, 6670 8, 6688 17, 6697 3, 6745 19, 6769 22, 6770 10, 6771 25, 6778 11, 6811 1, 7, 6813 2, 4, 6815 10, 6827 2  
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**You'd** [1] 6811 13  
**you'd** [2] 6756 2, 6811 16  
**you'll** [1] 6639 9  
**You've** [4] 6638 19, 6690 25, 6746 15, 6762 20  
**you've** [12] 6687 20, 25, 6689 14, 16, 19, 6739 5, 6759 25, 6778 10, 6798 12, 6801 9, 6821 17  
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**yourself** [3] 6714 16, 6715 11, 6798 13  
**YUKO** [6] 6660 25, 6687 8, 6716 17, 6834 9, 12, 15  
**Yuko** [5] 6658 9, 14, 6728 11, 6742 13, 6789 12  
**yuppie** [1] 6802 4

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**Zealand** [1] 6790 17  
**zero** [14] 6639 23, 6640 2, 6, 7, 9, 14, 16, 17, 21, 24, 6682 22, 6683 2, 6827 2, 5



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(1) IN THE UNITED STATES DISTRICT COURT  
 (2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No A89 0095 CIV (HRH)  
 (5) ) Anchorage Alaska  
 The EXXON VALDEZ ) Monday July 11 1994  
 (6) ) 8 00 a m  
 TRANSCRIPT OF PROCEEDINGS  
 (9) TRIAL BY JURY 42ND DAY  
 (10) BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE  
 VOLUME 38 Pages 6840 6988  
 Realtime Transcription

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(1) PROCEEDINGS  
 (2) (Jury not present)  
 (3) THE CLERK All rise  
 (4) (Call to Order of the Court)  
 (5) THE COURT Good morning ladies and gentlemen  
 (6) MR O NEILL Good morning Judge  
 (7) THE COURT We convened without the jury in case  
 (8) A89-0095 in re the Exxon Valdez The purpose of this  
 (9) morning s non jury session is to take exceptions if any to  
 (10) the jury instructions that counsel and I have worked over on I  
 (11) guess Wednesday Thursday Friday or something like that  
 last  
 (12) week I want to take up the matter of formal exceptions to the  
 (13) instructions first  
 (14) Mr O Neill do the plaintiffs have exceptions to the  
 (15) instructions which I proposed to give as I did before? I m  
 (16) breaking this down between instructions I proposed to give and  
 (17) instructions that you have requested that I m not giving  
 (18) Let s deal with those that I propose to give first  
 (19) Mr Oesting maybe this is your chore  
 (20) MR OESTING Don't read off my papers or I ll lose my  
 (21) act  
 (22) THE COURT I didn t mean to cut you out of it  
 (23) MR OESTING Well that s all right Your Honor we  
 (24) have three to which we would impose or interpose a specific  
 (25) objection The first one is at page 24 as we have not yet had

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(1) them numbered from the set we got Friday and that objection  
 (2) has been briefed on the superceding cause instruction and we  
 (3) submitted an alternative and I have filed the written  
 (4) exception I believe Your Honor is fully and fairly has  
 (5) considered that previously and ruled against us if we need to  
 (6) make that a formal development on the record although I  
 would  
 (7) still seek to prevail upon the court On the single point that  
 (8) we do not believe that foreseeability is an element of  
 (9) superceding cause and that is the guts of our objection to  
 (10) that particular format - formulation as the court has defined  
 (11) it  
 (12) THE COURT I understand your arguments We ve worked  
 (13) over this one as you indicated and you propose to give it as  
 (14) reflected by page 24  
 (15) MR OESTING All right The other two exceptions are  
 (16) to - pages 26 27 which is the plaintiffs contention  
 (17) instructions and that is the -  
 (18) THE COURT No no no Now wait a minute 26 and 27  
 (19) are preponderance of the evidence  
 (20) MR OESTING Now these are by page numbers  
 (21) THE COURT I understand I m looking at page  
 (22) numbers Page 26 begins if unanimously find by a  
 (23) preponderance of the evidence  
 (24) MR OESTING Okay, may I approach the bench?  
 (25) THE COURT Sure

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- (1) MR OESTING I think I m having a little mystery  
 (2) problem  
 (3) THE COURT We are on the same instruction  
 (4) MR OESTING With respect to this one I again raise  
 (5) the issue we debated Friday with regard to physical extent of  
 (6) such loss which we think is not only completely inconsistent  
 (7) with the Court s rulings in 172 and 187 but seriously  
 (8) misleading and not the law under Oppen rulings previously  
 (9) entered because it essentially connotes that some sort of  
 (10) caustic or toxic impact of oil touching fish is how the loss  
 (11) must be caused and our view very simply is not the case It s  
 (12) harm to the biota and microorganisms in the food chain of the  
 (13) salmon and Oppen makes quite clear that it s harm to aquatic  
 (14) life and harm to the fisheries not just physical touching but  
 (15) the fisheries output or the fecundity aspect and I think this  
 (16) instruction misstates both the essence of the Court s prior  
 (17) rulings with that language  
 (18) THE COURT We've got several things going here and  
 (19) let s see if we can get them all out. What you said I  
 (20) understand to impact pages 26, 27 and 28 right?  
 (21) MR OESTING No 28 except for I ll mention a couple  
 (22) of potential typos  
 (23) THE COURT 26 and 27?  
 (24) MR OESTING Yes that insert on 26 and 27  
 (25) THE COURT Now I inserted and I think you know this

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- (1) I inserted the phrase the physical extent of such loss or  
 (2) damage so caused at the very tail end of things  
 (3) MR OESTING Yes  
 (4) THE COURT I made that inserton for the purpose of  
 (5) attempting to reinforce a necessary link between causation and  
 (6) the fact of some injury  
 (7) MR OESTING It s the physical is the key word in  
 (8) the insertion  
 (9) THE COURT Taking it one step further what I was  
 (10) trying to do with those words is push the jury toward  
 (11) understanding and remembering that they have to decide how  
 (12) many  
 (13) fish for example somebody didn t catch as distinguished from  
 (14) the concept of did oil hurt fish directly  
 (15) MR OESTING That s exactly -  
 (16) THE COURT Which is what you re getting at  
 (17) MR OESTING I do not disagree with the continuum  
 (18) between oil spill which is legal cause of reduced salmon  
 (19) harvest in the first line of this instruction having to have a  
 (20) force that interrupts It s the implication of physical extent  
 (21) of such loss as it required physical destruction of a fish or  
 (22) there was some physical impediment.  
 (23) THE COURT The words were not intended to do the  
 (24) later  
 (25) MR OESTING I appreciate that  
 (26) THE COURT Do you have a suggestion for how we might

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- (1) accomplish which I think is a similar thought as to what we  
 (2) need to say in words that will not implicate this concept of  
 (3) oil getting on fish?  
 (4) MR OESTING How about actual for physical does that  
 (5) do it?  
 (6) THE COURT Let me - give me a second to read it with  
 (7) that in there Tentatively I think that will solve my problem  
 (8) if it solves your problem  
 (9) MR OESTING It does  
 (10) THE COURT Mr Daum or whoever is behind the Barco  
 (11) that is going to talk for the defendants do you wish to have a  
 (12) say on this particular item?  
 (13) MR DAUM Let me see if I can extricate myself  
 (14) either physically or actually in this case Your Honor as I  
 (15) think you know it s our view that some kind of physical impact  
 (16) or actual impact on aquatic life is required We have  
 (17) preserved that position Your Honor has rejected it so  
 (18) obviously we think physical is better but in terms of what  
 (19) Your Honor is trying to do actual is just as good as physical  
 (20) for our purposes preserving our other position  
 (21) THE COURT I understand that s accepted I ll  
 (22) change the word physical to actual in both instructions 26 and  
 (23) 27  
 (24) MR OESTING Okay I had two other May I approach  
 (25) the bench John don t run off These are typo things Your

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- (1) Honor  
 (2) (Discussion off the record)  
 (3) THE COURT Is Mr Daum aware of - no he s not  
 (4) because he couldn t have heard us Mr Daum we ve made a  
 (5) technical correction if you will to number 27 which used  
 (6) both the articles 'a' and the - in connection with legal cause  
 (7) of the second line we have taken the out On the next page  
 (8) 28 after the words 'decreased is the word and should be in  
 (9) there so it reads a better way  
 (10) MR OESTING Your Honor in referring to 27 we did  
 (11) put a 'was in' and move - you said you simply took the 'the'  
 (12) out We still need the verb there  
 (13) THE COURT Yes I didn t mean to say that  
 (14) MR OESTING That s it for instruction exceptions  
 (15) from our side Your Honor  
 (16) THE COURT Now do the plaintiffs have exceptions to  
 (17) my failing to give instructions which you have requested?  
 (18) MR OESTING We do on those that we attached to our  
 (19) exceptions memo although again without the numbers which  
 (20) each of the three of which - I m sorry only the first of  
 (21) which is our principal of superceding cause exception  
 (22) THE COURT The document you referred to -  
 (23) MR OESTING Was filed this morning with our  
 (24) exceptions and our alternative proposal Your Honor I am  
 (25) just -

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- (1) THE COURT You guys filing things this morning has  
 (2) kind of given me fits  
 (3) MR OESTING I know that sir  
 (4) THE COURT Because we literally had no time to look  
 (5) at those documents  
 (6) MR OESTING Well you've already ruled on the point  
 (7) THE COURT Not only have I maybe ruled on it but I  
 (8) can't find the specific piece of paper at this point  
 (9) MR OESTING Well -  
 (10) THE COURT I'm sorry I've got it Okay I'm on page  
 (11) 2 of your plaintiffs' exceptions to court The first is  
 (12) superceding cause that we've already talked about What's the  
 (13) second one which you raise here?  
 (14) MR OESTING The second one is the one we have  
 (15) corrected by actual<sup>1</sup> and deletion of physical<sup>1</sup> so those we  
 (16) do not take exception to the cause not given  
 (17) THE COURT I'm not clear on what else you have here  
 (18) The numbering is not clear to me You have a two and then a  
 (19) sub one two three  
 (20) MR OESTING I better look at it if I may approach  
 (21) the bench Your Honor  
 (22) (Discussion off the record)  
 (23) MR OESTING That Your Honor is our - the  
 (24) exception to the superceding cause instruction is the one that  
 (25) we would take - that we have proposed and the court has  
 chosen

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- (1) not to given  
 (2) THE COURT And we've taken care of your other one  
 (3) MR OESTING Yes you have  
 (4) THE COURT Mr Daum you're up Do the defendants  
 (5) have exceptions to the instructions as I proposed to give  
 (6) them?  
 (7) MR DAUM Yes we do Your Honor We have filed this  
 (8) morning a paper setting forth our objections to the  
 (9) instructions to the form of special verdict and also including  
 (10) the additional instructions we think ought to be given I can  
 (11) cover that orally or not as Your Honor likes  
 (12) THE COURT Let's take this a piece at a time Are  
 (13) there any objections in here to the instructions as I proposed  
 (14) to give them that I have not heard before and ruled on  
 (15) informally in chambers?  
 (16) MR DAUM I think Your Honor that five and six  
 (17) particularly five - five six and seven may be points that  
 (18) Your Honor didn't focus on specifically We argued point one  
 (19) at considerable length we argued point two at considerable  
 (20) length We argued point three at considerable length and four  
 (21) as well  
 (22) THE COURT Give me a moment please to read five six  
 (23) and seven because as I say I haven't had a chance to read  
 (24) these this morning If you give me just a moment please  
 (25) I've reviewed defendant's exceptions five six and seven

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- (1) I'm not going to make any change in the proposed instructions  
 (2) based on five or seven Six it seems to me may have some  
 (3) merit to it Six deals with permits and points out that the  
 (4) instruction that I proposed to give tells the jury to subtract  
 (5) the actual sale price from the - whatever it should have been  
 (6) I don't know what to call it  
 (7) MR DAUM We call it the but for price  
 (8) THE COURT Mr Daum points out that in fact we had  
 (9) transactions that were not arms length transactions such that  
 (10) the quote actual price received doesn't -  
 (11) MR O NEILL For the record -  
 (12) THE COURT - doesn't compute well  
 (13) MR O NEILL They may or may not have been but with  
 (14) regard to the point Mr Daum makes in his instruction he's  
 (15) right  
 (16) THE COURT How do you feel Mr O Neill about the  
 (17) fix that he proposes there? What he proposes to do is have the  
 (18) jury consider as the second factor the greater of the actual  
 (19) fair market value or the sum actually received  
 (20) MR O NEILL I think Mr Daum is right Your Honor  
 (21) THE COURT I do too and I will make that fix  
 (22) Mr Daum had you numbered my instructions  
 (23) MR DAUM Yes did I Your Honor I was worried about  
 (24) the pages I had hoped we would get a numbered set so this  
 was  
 (25) correspond later to the record at some point but it doesn't

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- (1) seem to have happened  
 (2) THE COURT Nice guess but it didn't work  
 (3) MR DAUM What we call instruction 35 is on Your  
 (4) Honor's page 33  
 (5) THE COURT Yes I have it I will make that  
 (6) revision That I think takes care of your exceptions to the  
 (7) instructions that I proposed to give  
 (8) MR DAUM Yes it does Your Honor  
 (9) THE COURT What instructions which you have requested  
 (10) that I have not given?  
 (11) MR DAUM We have a number of them as well which we  
 (12) have also attached to the back of - to the back of this  
 (13) document  
 (14) THE COURT Now do I have there any proposed  
 (15) instructions that I have not seen before?  
 (16) MR DAUM Yes you do Your Honor  
 (17) THE COURT Shame on you  
 (18) MR DAUM I accept that Beginning at our refused  
 (19) instruction number 23 these are instructions which Your Honor  
 (20) has seen not in the form of instructions but in the form of  
 (21) the motions for directed verdict that Your Honor denied  
 (22) We put them here assuming that based on Your Honor's  
 (23) rulings you would not wish to give these instructions but in  
 (24) order to preserve the record I don't believe there is a legal  
 (25) issue Your Honor has not considered

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- (1) THE COURT The new ones are 23 through 26  
 (2) MR DAUM 26 yes Your Honor  
 (3) THE COURT Let me take a quick look at them just so I  
 (4) know what I m dealing with Your prediction is correct I ve  
 (5) reviewed them and I have declined to instruct on this I think  
 (6) that brings us to the verdict form Is there anything about  
 (7) instructions however before we close that out?  
 (8) MR DAUM Nothing from the defendants Your Honor  
 (9) THE COURT Let s go to the verdict form We received  
 (10) from you from each of you this morning a new version of this  
 (11) that I think resolves a number of questions that had - still  
 (12) existed at the end of the day Friday What we have now as I  
 (13) understand it is a difference of view as to how the  
 (14) superceding cause question should be put to the jury basically  
 (15) have I got that right?  
 (16) MR OESTING That s right  
 (17) MR DAUM Yes  
 (18) THE COURT Is there anything other than that that  
 (19) I ve missed here?  
 (20) MR OESTING No  
 (21) MR DAUM There is no difference in the forms Your  
 (22) Honor For completeness I should say that we have preserved  
 (23) in our objections an objection to the way the verdict form is  
 (24) phrased in terms of awarding damages Your Honor  
 (25) considered  
 (25) that objection overruled it we have preserved it It doesn t

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- (1) need to be talked about but it s here  
 (2) THE COURT That s understood What we need to focus  
 (3) on then is the two if you will competing views of how we  
 (4) should crank superceding cause into the verdict form Is there  
 (5) anything that you all wish to say about that? If there is I ll  
 (6) hear you If there isn t what I propose to do is go in the  
 (7) back room where it s quiet and think about the two proposals  
 (8) and decide which one to use  
 (9) MR DAUM For the defendants Your Honor we  
 (10) submitted a brief memorandum if that gets to Your Honor we  
 (11) have nothing we need to say orally We gave it to  
 (12) Mr Murtashaw this morning Your Honor will unfortunately not  
 (13) be surprised  
 (14) THE COURT Let me find it Mr Daum is it I think  
 (15) incorporated into your exceptions or objections  
 (16) MR DAUM No it s a separate document called  
 (17) memorandum of defendant with respect to superceding cause  
 (18) We  
 (19) split it out since the objections are to such a great extent  
 (20) for the record that we wanted to make sure -  
 (21) THE COURT I think I left that one on my desk  
 (22) MR DAUM I can get another copy for you if you like  
 (23) THE COURT No I ll find it  
 (24) MR OESTING Ours was filed Friday Your Honor on  
 (25) this point but I would simply ask the Court we re going into  
 (25) chambers which is preferable but I think B is the order

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- (1) asking the superceding question before the legal cause which  
 (2) is what their format provides in the seven eight ten and 11  
 (3) THE COURT Tell me what s wrong with that I  
 (4) understand from a lawyer s standpoint it looks like it s  
 (5) backwards but from the jury s standpoint does it make any  
 (6) difference?  
 (7) MR OESTING It does because we re dealing with a  
 (8) simple continuum When a superceding cause becomes such  
 (9) legal  
 (9) cause terminates It is my preference as we have done in  
 (10) seven and eight while they reflect upon that issue it be  
 (11) consolidated as we have done here You run the risk in the  
 (12) form they submitted yes it was a superceding cause answered  
 (13) by yes it was a legal cause and we have got clear error in  
 (14) the verdict form  
 (15) THE COURT Well if they are both answered yes there  
 (16) should be no damages and we can fix it can t we  
 (17) MR OESTING Well arguably one could but you have a  
 (18) confusion problem and what that produces in my mind is what  
 (19) we  
 (19) call yet another fertile plot to fool around in and there is  
 (20) more than enough available in this case  
 (21) MR O NEILL If you re going to go that direction a  
 (22) way to fix it is if you answer X number no skip the next two  
 (23) questions and move on I mean that is how we do it in patent  
 (24) cases  
 (25) MR DAUM Either one of those is fine Your Honor

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- (1) We would have happy to stipulate if they answer yes to both no  
 (2) damages be awarded  
 (3) MR OESTING What we have done is make it one  
 (4) consideration to think about because it s real substantive in  
 (5) nature or we have to add fix to that first question or we get  
 (6) two answers that are inconsistent  
 (7) THE COURT I understand your positions on it and  
 (8) I ll make a decision on that Is there anything else that we  
 (9) need to do at this stage of things to lay the groundwork for  
 (10) your closing arguments?  
 (11) MR DAUM There is before Your Honor - Mr Lynch has  
 (12) some points but there before Your Honor is a stipulation to  
 (13) the second amended - third amended trial plan that  
 (14) stipulation is a portion of a bargain which eliminated some  
 (15) disputes about the special verdict form it therefore needs to  
 (16) be signed  
 (17) THE COURT I will do that  
 (18) MR OESTING That s it for us Your Honor  
 (19) MR DAUM Thank you Your Honor  
 (20) MR O NEILL And for the record the objections that  
 (21) we make now to the jury instructions are deemed to be made  
 (22) after Your Honor instructs and prior to the jury retaining  
 (23) THE COURT That s your other circuit rule isn t it  
 (24) MR OESTING 8th circuit rule  
 (25) THE COURT That s fine

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- (1) MR DAUM If Your Honor does make any changes we will  
 (2) need a new brief session just to put on the record what the  
 (3) objections are even in the 9th Circuit we'll have to do that  
 (4) if for example Your Honor should change the verdict - when  
 (5) Your Honor decides what the special verdict form will be one  
 (6) side or the other needs to make an objection  
 (7) MR O NEILL If you decide against us we've already  
 (8) made our objection  
 (9) THE COURT I sort of thought so  
 (10) MR LYNCH Your Honor I have two minor housekeeping  
 (11) matters On Friday I offered 8634 Alpha but I read 8364 and  
 (12) the correct number should be DX8634-Alpha transcript reflects  
 (13) the wrong number The other item Your Honor was that the  
 (14) stipulation concerning Phase II A evidence which was  
 (15) submitted  
 (16) on June 20 or 21 has not been read at any time to the jury and  
 (17) we request you read it before the start of closing arguments  
 (18) THE COURT That's a matter we discussed in one of our  
 (19) conferences Thursday or Friday Do you have a copy of that  
 (20) handy so that I can put it right here where I'll be sure to  
 (21) read it  
 (22) MR LYNCH Yes it's just that first indented series  
 (23) of paragraphs there is other text but I'm sure it will be  
 (24) self-explanatory when it's read  
 (25) THE COURT Yes this is what I looked at Friday I  
 (26) will read that to the jury before we do anything else

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- (1) MR O NEILL And we have no objection to the  
 (2) correction of the exhibit number so the record is clear  
 (3) MR LYNCH Thank you Your Honor  
 (4) THE COURT We'll stand done now until approximately  
 (5) 9:00  
 (6) (Recess at 8:45)  
 (7) (Jury in at 9:05 a.m.)  
 (8) THE COURT Good morning ladies and gentlemen We  
 (9) have one remaining piece of business that I need to take care  
 (10) of before we have opening arguments The parties reached a  
 (11) stipulation or agreement as to a matter during court of Phase  
 (12) II A that I was to read to you and it has not been read to you  
 (13) yet so I'm going to take care of that right now  
 (14) All of the parties through counsel have stipulated as  
 (15) follows For purposes of Phase II A in 1989 Exxon had a  
 (16) claims program for fishermen and others Payments were  
 (17) made on  
 (18) account to many fishermen Those payments were calculated  
 (19) by  
 (20) Exxon based on preseason and post season harvest estimates  
 (21) made  
 (22) by the Alaska Department of Fish & Game whichever was  
 (23) higher  
 (24) and on the price then being offered by processors for the same  
 (25) or equivalent fish  
 (26) Separate from the claims program as described some  
 (27) fishermen were able to secure employment in 1989 by  
 (28) contracting  
 (29) for the use of their boats in Exxon's clean up program Other  
 (30) fishermen were not able to charter their boats to Exxon and

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- (1) some did not seek to do so Exxon paid a total of \$137 million  
 (2) to fishermen who did enter into clean up contracts This  
 (3) information is provided as background information only  
 (4) Payments Exxon has made to fishermen are not to be  
 (5) considered  
 (6) in determining the fishermen - fishermen plaintiff actual  
 (7) damages The Court will resolve any matters relating to those  
 (8) payments in a later proceeding That's the stipulation  
 (9) We are now ready for closing arguments that will be  
 (10) followed by my jury instructions As you will recall from  
 (11) Phase I these arguments will be divided on the party of the  
 (12) plaintiff between an opening and a closing statement and we  
 (13) do  
 (14) this because the plaintiff has the burden of proof must  
 (15) convince you of their claims so the plaintiff may divide its  
 (16) argument between an opening statement and a closing  
 (17) statement  
 (18) And in between we will hear from the defendants We have an  
 (19) agreement that the opening - that the total amount of time for  
 (20) closing arguments will be two hours per side and I think Mr  
 (21) O'Neill is going to divide his opening and closing about an  
 (22) hour and a half opening and a half hour closing statement so  
 (23) that you'll know where we are going  
 (24) We'll take a break at the end of Mr O'Neill's opening  
 (25) argument We'll take another break after the defendants  
 (26) arguments and then we'll have the last segment of argument  
 (27) and  
 (28) the instructions Please remember that the arguments being  
 (29) made by counsel at this time are not evidence It is the

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- (1) purpose of these discussions to pull together the evidence to  
 (2) suggest to you what counsel think has been proved but it is  
 (3) for you to decide what has or has not been proven by the  
 (4) evidence in accordance with the instructions I will give you  
 (5) MR O NEILL May I approach briefly Your Honor?  
 (6) THE COURT Yes  
 (7) (Discussion off the record)  
 (8) MR O NEILL May it please the Court counsel ladies  
 (9) and gentlemen of the jury  
 (10) We talked about science and economics and fish and herring  
 (11) but in fact this case is about fishermen and what happened to  
 (12) fishermen as a result of the 1989 Exxon Valdez spill And when  
 (13) we talk about lost fish and lost profit we're talking about  
 (14) real impacts on their lives and we're talking about the real  
 (15) impacts on the lives of 3300 permits holders and a total of  
 (16) 10,000 Alaskan fishermen People who have spent their lives  
 (17) fishing in the one great last wild fishery  
 (18) They are family businesses and as we have seen in some  
 (19) respects they are relatively substantial small businesses  
 (20) with permits costing hundreds of thousands of dollars and in  
 (21) some cases boats costing hundreds of thousands of dollars  
 (22) But  
 (23) the Exxon oil spill comes along and it ruins their seasons  
 (24) and it ruins their fish markets and it ruins their permits and  
 (25) it ruins their ability to go to the bank to borrow money to  
 (26) improve their boats

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(1) It ruins their lives and that's what these dollars and  
 (2) fish and herring and salmon and science represent. It  
 (3) represents ruined lives.  
 (4) Now I started with the concept or the precept that oil and  
 (5) fish don't mix and they don't mix. And you don't need to be a  
 (6) genius to figure out that oil and fish don't mix. And indeed  
 (7) probably the only institution that would come before you and  
 (8) say oil and fish mix is Exxon Corporation.  
 (9) Now we know the following. We know that in 1989 fishermen  
 (10) didn't fish and Prince William Sound, Kodiak, Chignik, Upper  
 (11) Cook Inlet, and in Balboa, Stepovak, they caught fewer fish. We  
 (12) know that. We know that herring in 1989 went through oil as  
 (13) they came in, they spawned in the oil, they ate in the oil, and  
 (14) then they left through the oil, we know that. And we know that  
 (15) in 1993 and 1994 we had a herring crash in Prince William  
 (16) Sound, no season.  
 (17) Now we know the same thing happened to the pink salmon.  
 (18) When they came in, they came in through the oil, they spawned  
 (19) in the oil, they went back out through the oil, and they lived  
 (20) in that intertidal area where there was oil. And we know that  
 (21) in 1992 and 1993 there was a pink crash, we know that. And we  
 (22) know in 1989 there was massive overescapement up the Kenai  
 (23) River, and up the system into Red Lake onto Kodiak, massive  
 (24) overescapement that was the result of the oil spill.  
 (25) And we now know that in 1989 class had no smolts come out.

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(1) and seasons in 1994 and 1995 in Upper Cook Inlet and Kodiak  
 are  
 (2) going to be nil. And we know that salmon prices crashed after  
 (3) the spill, and everybody agrees that the prices crashed after  
 (4) the spill, and we know that herring prices crashed after the  
 (5) spill, and we know that once the long-term effects of the spill  
 (6) were made known, permit prices crashed.  
 (7) We know all of those things. And Exxon Corporation's view  
 (8) is for almost every one of those things, it has to throw a  
 (9) rock at somebody or something else.  
 (10) Which is different than what they told us when we started  
 (11) Phase II, which is different than what they told us when they  
 (12) were trying to get off the hook in Phase I, but I remember  
 (13) these comments from the Phase I opening. Plaintiffs are  
 (14) entitled to compensation, and Exxon Corporation fully expects  
 (15) you will decide what they should be paid. It has a  
 (16) responsibility to pay actual damages. Exxon has always  
 (17) accepted responsibility to pay full and fair compensatory  
 (18) damages, that's what they told you in Phase I when they wanted  
 (19) to get off the hook.  
 (20) Phase II at the beginning, what does Exxon tell you in its  
 (21) Phase II opening? It tells you things like, Exxon has always  
 (22) recognized it was our ship and our oil, and that we should be  
 (23) responsible to pay the damages that resulted from that spill.  
 (24) Exxon should pay no questions asked. The fishermen are  
 (25) entitled to be fully compensated, no one is trying to minimize

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(1) the impact of the spill. Those weren't my statements, those  
 (2) were Exxon Corporation statements. And I submit to you that  
 (3) all they have done - all they have done in here is what they  
 (4) said they wouldn't do, which is minimize the impact of the  
 (5) spill. They have spent the last three weeks trying to get away  
 (6) with something that they did. They spent the last three weeks  
 (7) trying to get away with what they did to those people.  
 (8) I want to talk for a minute about the jury instructions as  
 (9) I did in Phase I. Again in Phase II, the jury - the burden  
 (10) of proof for you is, and you'll get these in the room, so you  
 (11) don't need to write them down, but again the burden of proof is  
 (12) to establish by a preponderance of the evidence, that's 51/49.  
 (13) So we're still operating on the precept that something has to  
 (14) be proven more likely so than not, so burden of proof. And the  
 (15) next jury instruction, and you'll get a packet just like you  
 (16) did the last time, deals with the concept of the numbers. And  
 (17) it gives you two sort of competing goals. A damage award  
 (18) should not be based on speculation or guesswork, but then it  
 (19) says if the evidence is sufficient to afford a reasonable basis  
 (20) for estimating plaintiffs past or future losses, plaintiffs may  
 (21) not be denied recovery by reason of the fact that this amount  
 (22) of their damages is not capable of exact mathematical  
 (23) ascertainment.  
 (24) Now if you'll recall the last couple of damage witnesses  
 (25) that Exxon had on the stand, I asked the question, and it may

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(1) have seemed an off-the-wall question at the time, but I asked  
 (2) them the question, why do we have to estimate? Is it the  
 (3) fishermen's fault that we have to estimate, why do we have to  
 (4) estimate? We have to estimate because Exxon spilled the oil,  
 (5) it's Exxon's fault that we have to estimate, and this  
 (6) instruction, which says that the plaintiffs may not be denied  
 (7) recovery by reason of the fact that the amount of damage is not  
 (8) capable of exact mathematical ascertainment, this is a  
 (9) philosophical statement. A philosophical statement of how we  
 (10) solve the problem that we have to estimate, and that's what  
 (11) this jury instruction is there for, you to help you do.  
 (12) And then the last jury instruction is one that we've seen  
 (13) before, but this deals with the situation where if you have two  
 (14) forces operating to cause a harm, the oil spill is a legal  
 (15) cause of the harm, if it was so important in bringing about the  
 (16) harm that a reasonable person would regard it as a cause and  
 (17) attach responsibility to it. So causally we can have two  
 (18) reasons for something occurring, but this jury instruction says  
 (19) when you're in that situation, bring your life experience and  
 (20) your common sense to the situation.  
 (21) This jury instruction is a recognition that in life we just  
 (22) can't separate out one thing. Life is like a stew, I guess in  
 (23) many respects, but this jury instruction is a philosophical  
 (24) recognition and a philosophical guidance to you when you talk  
 (25) about this, about the fact that when we have two causes, if

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- (1) your common sense and life history in the context of His  
 (2) Honor s instruction tells you that the oil spill was so  
 (3) important in bringing about the harm that a reasonable person  
 (4) you would regard it as a cause and attach responsibility to  
 (5) it  
 (6) So these three instructions will be in the package and I  
 (7) call your attention to these three instructions I was going  
 (8) to talk here about the special verdict form but I m going to  
 (9) wait until my last 30 minutes to talk about the special verdict  
 (10) form and it isn t my fault they are still typing the special  
 (11) verdict form  
 (12) THE COURT I will give you the answer right now if  
 (13) you want it  
 (14) MR O NEILL I would just like to see the form so I  
 (15) can put it up  
 (16) THE COURT I don t have the form for you at this  
 (17) point  
 (18) MR O NEILL Just so you don t worry while we re  
 (19) talking I am going to go over the special verdict form in the  
 (20) last 30 minutes but this exhibit here you ll have in the jury  
 (21) room and it has these categories here will tie to the  
 (22) different categories on the top of the special verdict for you  
 (23) okay Then these are the plaintiffs numbers and then this is  
 (24) the key exhibit that it takes you back to  
 (25) Now there are other exhibits that will relate to 368 or

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- (1) 369 and I m not going to tell you how to do your business but  
 (2) if you were to pull these exhibits out and you wanted to run a  
 (3) sort with the other exhibits under these exhibits that might  
 (4) or might not be helpful You do have this road map and it  
 (5) lays it out by category like it s laid out in the verdict form  
 (6) by number and by plaintiffs exhibit  
 (7) Now I want to talk a little bit if we can about the  
 (8) witnesses generally I tried to get a feeling for the  
 (9) witnesses generally and I want to do this because with all of  
 (10) the numbers and biologists and stuff they tend to blur in your  
 (11) minds I would guess They blur in my mind and I know sort of  
 (12) numbing sometimes  
 (13) The witnesses include - the plaintiffs witnesses include  
 (14) Pete Peterson who was the first one who talked about ecology  
 (15) He s a scientific advisor and peer reviewer for the Trustees  
 (16) and has worked for every major government agency on the  
 (17) subject  
 (18) of ecology But he is a scientific advisor and peer reviewer  
 (19) for the Trustees He s the one with the big board talked  
 (20) generally about ecology  
 (21) Ken Parker was a fisheries biologist hip boot biologist  
 (22) and spent the last 12 years of his career as the deputy  
 (23) director of the Alaska Department of Commercial Fisheries and  
 (24) as the director of the Alaska Department of Commercial  
 (25) Fisheries Parker helped us with among other things Prince  
 William Sound pinks

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- (1) Now this is the guy who ran commercial fisheries for the  
 (2) State of Alaska for 12 years Dr Don Rogers big rough guy  
 (3) Port Moller test fishery guy who when asked do the Upper  
 (4) Cook Inlet biologists know more about salmon than you sort of  
 (5) blustered out hell no 35 years in forecasting salmon runs  
 (6) and is the most accurate forecaster of salmon runs in the  
 (7) world  
 (8) Greg Ruggerone who testified for us on the subject of  
 (9) Chignik runs that s what he does for a living is estimate  
 (10) Chignik run sizes and has done so for the last ten years  
 (11) Dick Kocan who testified about herring he again works for  
 (12) the State and Federal Trustees and he works for the State and  
 (13) Federal Trustees as a peer reviewer and he work for them on  
 (14) the  
 (15) subject of herring and that s his specialty  
 (16) All of these people came in and they testified on their  
 (17) very narrow specialties as did the rest of the crew Steve  
 (18) Hughes who did some herring valuation for us does fisheries  
 (19) valuation for banks He comes in as a regular part of his  
 (20) business and values fisheries  
 (21) Dr Phil Mundy who testified about overescapement up the  
 (22) Kenai and Fish & Game Study 27 was the former chief fisheries  
 (23) scientist for Alaska and again works with the State and  
 (24) Federal Trustees Now these State and Federal Trustees are  
 (25) our  
 (26) scientists all of our scientists All this research that s  
 (27) being done for the public is being done by the State and

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- (1) Federal Trustees  
 (2) Dr Crutchfield comes in foremost fish economist in the  
 (3) world This is what he does salmon economics He was the  
 (4) one  
 (5) that said a professor of eminentis is a professor without merit  
 (6) I don t think in this case that s true  
 (7) Rob Mendelsohn from Yale University Dr Mendelsohn is an  
 (8) expert on building mathematical modeling to tell us what prices  
 (9) would have been that s what he does in his career  
 (10) specifically does that in his career with relationship to  
 (11) environmental disasters  
 (12) Snooks Moore and Roger Lohrer who testified for us about  
 (13) the permit crash This is the knowledge with regard to what  
 (14) happens with Alaska limited entry permits  
 (15) And last Dr John Karpoff who did all the original  
 (16) research and published papers on how you model permits  
 (17) Now I  
 (18) would submit to you that this collection of expert witnesses  
 (19) was brought in to testify on things that they know about The  
 (20) areas that they have spent the most important portions of their  
 (21) life studying And now let s look at the Exxon scientists and  
 (22) I think we get a very different feeling or flavor  
 (23) Now Exxon lead off with this Hans Jahns Now Mr Jahns  
 (24) has been an Exxon employee for 32 years with a strong  
 (25) allegiance to Exxon but he was the environmental coordinator  
 (26) of Exxon s NRDA and litigation support group Now you  
 (27) remember  
 (28) that when all of the Exxon scientists wanted to start to put

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(1) the public spin there was the ASTM conference where they  
 (2) participated with these  
 (3) Mr Jahns was the coordinator for that And he made sure  
 (4) that lawyers reviewed the ASTM papers and even more so than  
 (5) the lawyers reviewing the ASTM papers the thing I can't  
 (6) understand is Exxon's These are supposedly scientific papers  
 (7) that they were sending up through the public affairs spin-on  
 (8) but Jahns was in charge of that process  
 (9) Page - Dr Page has a history out of Bowden College of  
 (10) working for the oil industry Second and all he's done for  
 (11) most of his life is work for the oil industry and try to get  
 (12) oil spillers off the hook when they spill oil  
 (13) Dr Jerry Neff he was cautioned about note taking because  
 (14) the notes would be discovered in the litigation He met with  
 (15) the lawyers he gave an ASTM presentation and his ASTM  
 paper  
 (16) like all of the other papers were run through the spin doctors  
 (17) in the public relations department  
 (18) Ernie Brannon testified that Exxon would only allow me to  
 (19) know what I needed to know and he also submitted his science  
 (20) through the public affairs department Tom Carlson testified  
 (21) on fish counts and instead of bringing in somebody with 30 or  
 (22) 35 years in the field Mr Carlson had spent a majority of his  
 (23) time as a salesman  
 (24) Having sold myself on the past on occasion I don't have  
 (25) anything against salesmen but do you recall at the end when  
 he

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(1) put in the valuation numbers and I said are you a novice at  
 (2) this? And he said well I think I did a pretty good job for my  
 (3) first time  
 (4) Peter Nickerson who testified on permits He never had  
 (5) done permit work before This is his first time on permits  
 (6) and he wasn't the Snooks Moore or Roger Lohrer or a Karpoff  
 who  
 (7) had worked in the area for their whole lives and Nickerson  
 (8) gives seminars to lawyers on how to use expert witnesses this  
 (9) guy is a professional witness on a variety of topics Have  
 (10) gun will hire  
 (11) Richard Denso he used the conservative approach to the  
 (12) damage numbers Now the conservative approach to the  
 damage  
 (13) numbers is a heck of a lot different than the promises we  
 (14) looked at a couple minutes ago that Exxon made And Mr  
 Denso  
 (15) testified on fisheries that he had only been to once before  
 (16) and that was with Mr Cooper  
 (17) Walter Pearson like many of the Exxon people has testified  
 (18) or done work for prior work for the American Petroleum  
 (19) Institute These witnesses who have all done work for the  
 (20) American Petroleum Institute and the industry are a lot like  
 (21) the witnesses that we saw in Phase I where we had a witness on  
 (22) alcoholism come in and tell you in Phase I that it was okay for  
 (23) a recovering alcoholic to drink again and then we find out  
 (24) that his books are sponsored by the Distilled Spirits  
 (25) Association of the United States Exactly the same game And

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(1) Pearson didn't study a lot of things or was not allowed to  
 (2) study a lot of things that he wanted to study but he again  
 (3) went through the public affairs spin doctors  
 (4) Olle and Bjorndal testified on things that have little  
 (5) relevance on things in this courtroom Ms Kusakabe brought  
 (6) you again - Ms Kusakabe and Dr Anderson work for the oil  
 (7) industry have testified on behalf of the oil industry Ms  
 (8) Kusakabe brings you that survey of 34 brokers in which most of  
 (9) the brokers didn't have anything to do with what we were  
 (10) talking about And Dr Anderson - Exxon is Dr Anderson's  
 (11) biggest client British Petroleum is his second biggest client  
 (12) his income comes from the oil industry And the interesting  
 (13) thing like a lot of these people he didn't bring you answers  
 (14) he came here to throw rocks He didn't bring you answers but  
 (15) the flavor that you get from these two batting orders is very  
 (16) very different. The general flavor the gestalt that you get  
 (17) from these two batting orders is very very different  
 (18) Now we saw a lot of slides and this slide is kind of  
 (19) interesting because it shows tracks through the oil These are  
 (20) oil tracks Let me do it this way I don't need the Elmo  
 (21) These are blowups of the Natalie Fobes slides we saw at the  
 (22) beginning Oil coming off the island Oil on the bear This  
 (23) is a spectacular photo until you come to groups with what it  
 (24) shows  
 (25) It's beautiful and then when you think about it for a

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(1) minute it's horrifying at the same time As is this one  
 (2) horrifying As is this one and as is this one And the  
 (3) relevance of these pictures is quite simply to understand the  
 (4) point that this oil hurts things  
 (5) Now I want to talk if I could about some categories of  
 (6) damages and I'm going to put this up in front of my friends  
 (7) over here for a couple minutes This category the UCI salmon  
 (8) harvest category the Kodiak salmon the Chignik salmon  
 (9) harvest and the Balboa Stepovak harvest category all deal with  
 (10) 1989 And the exhibits will be in evidence with regard to  
 (11) valuation  
 (12) The one primary issue that makes a difference in the damage  
 (13) determinations with regard to the '89 harvest is the Upper Cook  
 (14) Inlet salmon harvest The fish counter issue And I want to  
 (15) talk for a minute about the fish counter issue This is  
 (16) Dr Rogers regression  
 (17) The statement was made the plaintiffs take the position  
 (18) that the fish counters are inaccurate and that isn't the  
 (19) plaintiffs position The plaintiffs position is the fish  
 (20) counters are good for what they do and at lower ranges they  
 (21) work better than at higher ranges But when you get massive  
 (22) escapement on the Kenai River so that the fish are lined five  
 (23) or six or seven or eight across and they are not coming through  
 (24) like kindergartners and fish don't come through like  
 (25) kindergartners that is at the higher ranges the fish counters



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(1) tend to undercount and the Roger study on the Nushagak  
 (2) everybody agrees is the only multi year study with complete  
 (3) seasonal harvest information  
 (4) And they have - each of these dots is a whole year's worth  
 (5) of data and he applies this learning or this teaching to his  
 (6) estimation And he supplements that - this isn't the only  
 (7) basis for Dr Rogers' opinions he supplements that with  
 (8) Susitna tagging exploitation reports and a number of other  
 (9) issues with regard to that fishery This is what Dr Rogers  
 (10) does for a living And I would submit to you that Dr Rogers  
 (11) view is that this curve applied to the numbers from the only  
 (12) multi year study is the way to go That issue is the big  
 (13) issue swing issue with regard to 1989  
 (14) Now when we move beyond 1989 we get into long term  
 damage  
 (15) issues herring and salmon Now the science that we presented  
 (16) to you was primarily Trustee science your scientists It was  
 (17) overseen by peer reviewers I submit to you it was done by the  
 (18) best minds in the business and it didn't go through a public  
 (19) relations department And the Trustees have reported to us as  
 (20) the testimony was that as a general matter these resources are  
 (21) not recovering Some resources are recovering but these  
 (22) resources are not recovering  
 (23) Starting at the bottom of the food chain and moving up to  
 (24) the top we have everything from intertidal ecosystems to  
 (25) subtidal ecosystems and salmon and herring and sockeye  
 salmon

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(1) on the Kenai up to the higher life forms on the top of the  
 (2) food chain They are all related to a sickness that was caused  
 (3) by that oil spill But this is what the Trustees report to us  
 (4) which is very different than what Exxon Corporation reports to  
 (5) us  
 (6) Now Exxon's science let's talk a little bit if we could  
 (7) about Exxon science Exxon designs its science to give us no  
 (8) answers It's an approach to science to come up with rocks to  
 (9) throw at other people who are trying to do their job It's  
 (10) inconclusive by design Pen Tech we had some discussions  
 (11) about Pen Tech Exxon scientists who were fired in 1989  
 (12) because they wanted to speak their minds Scientists at Exxon  
 (13) were given information on a need to know basis The expert  
 (14) reports were scientists who had worked for the industry the  
 (15) control of the science was at the highest levels of Exxon  
 (16) Corporation including Mr Mel Harrison a businessman not a  
 (17) scientist  
 (18) We put the spin on it by having it reviewed by the  
 (19) litigation departments and the public affairs departments And  
 (20) these independent scientists published only with the approval  
 (21) of Exxon Corporation  
 (22) Now Exxon spent huge amounts of money Remember that  
 (23) herring guy who said at one point in time he had 60 people  
 (24) working for him Why would a herring researcher have 60  
 people  
 (25) working for him? Because Exxon wanted them to get them off  
 the

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(1) hook Exxon's approach to science and scientists If you look  
 (2) at it specifically and herring there is an awful lot of  
 (3) things that weren't done  
 (4) And I want to put up - or I'll bring over to you the  
 (5) pictures these are the pictures that we have of these deformed  
 (6) herring with their eyes on one side of their body and deformed  
 (7) jaws and spines Everybody agrees there is no more herring  
 (8) Exxon's science was that it passed up on one herring study  
 (9) after the other and that's why we asked those herring  
 (10) scientists this question Did you do this study? Did you do  
 (11) that study? Did Exxon kill this study did Exxon kill that  
 (12) study?  
 (13) The study was designed not to give us any answers they  
 (14) were inconclusive by design The key one potential  
 (15) bioaccumulation of hydrocarbons was not done The water  
 study  
 (16) that they couldn't give you a conclusion on they went to one  
 (17) little place in all of Prince William Sound and pulled the data  
 (18) on that  
 (19) Salmon science did that have affects on pink salmon from  
 (20) exposure to crude oil by Exxon Salmon strangle research not  
 (21) done They would put 60 guys on a rock throwing project 60  
 (22) guys on a rock throwing project and not do a good  
 comprehensive  
 (23) study that would come up with answers and why? Because  
 they  
 (24) don't want answers Because if they get answers the answers  
 (25) won't minimize the impact of the spill on the Sound

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(1) Now let's look at what we know The herring are gone  
 (2) Adult fish swam through oil and spawned in oiled areas  
 (3) Juveniles 1988 class year ate oiled food and bioaccumulated  
 (4) hydrocarbons Embryos ate oiled food and bioaccumulated  
 (5) hydrocarbons smaller yolk sacs pericardial deformities I  
 (6) think are heart deformities deformed jaws kinked spines and  
 (7) deformed tails increased cell damage chromosome damage  
 (8) suppression of the immune system increased susceptibility to  
 (9) virus And now we have a salmon (sic) population that is sick  
 (10) because of the virus and the mechanism is obvious  
 (11) The herring and salmon was stressed by oil and the herring  
 (12) were stressed by oil making them susceptible to the virus and  
 (13) they got the virus And Exxon brought in nobody with regard to  
 (14) viruses and such to testify on that because it was an answer  
 (15) Pink salmon wild and hatchery fish were exposed to oil in  
 (16) the ecosystem they ate oiled food they bioaccumulated  
 (17) hydrocarbons There was damage to the nursery habitat the  
 (18) area along the shores There was a loss of food we find egg  
 (19) mortality larval mortality loss of juvenile growth Genetic  
 (20) damage and a continuing exposure to oil in the ecosystem  
 Pink  
 (21) salmon have crashed  
 (22) Overescapement in the Kenai system and I'm going to talk  
 (23) about this and just to be fair to Exxon when I come back in my  
 (24) last half hour I'm going to talk about the questions on the  
 (25) verdict form that have to do with this because there are two

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- (1) questions that I want to call to your attention to make sure
- (2) that we don't get a hook ear on and I'll give you those when
- (3) we talk about the verdict form. And I'm going to want you
- (4) write them down.
- (5) In 1989 in Upper Cook Inlet what happened? There are two
- (6) fleets that fish in the inlet, the setnetters fish along the
- (7) shore, the drifters fish out in the center. The fish managers
- (8) control escapement up the Kenai River system using these two
- (9) fleets. In 1989 they didn't have the drift fleet and the
- (10) season is closed. And throughout the season the manager has
- (11) problems and problems and problems and there is massive
- (12) overescapement up to Skilak Lake and in Kenai Lake which in
- (13) the history of the world are two of the most spectacular salmon
- (14) producing lakes there are.
- (15) A first principle of salmon management is you don't allow
- (16) overescapement and the reason for that is like goats in a
- (17) field, if you get too many salmon in Skilak and Kenai Lakes
- (18) they overgraze and that's what happened in 1989.
- (19) In '87 there in fact was overescapement as a result of
- (20) the spill of the SS Glacier Bay and in '88 there was modest
- (21) overescapement but the scientific data shows there was no
- (22) problem with outmigrations of smolt from the '87 year and
- (23) there was no problem with outmigrations of smolt for the '88
- (24) year. It's the 1989 class year where we get these lakes
- (25) producing no more fish.

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- (1) And who tells you this, do the plaintiffs tell you this?
- (2) The Trustees tell you this in the famous Fish Study 27 and
- (3) what Fish Study 27 says is there is a collapse with regard to
- (4) the productivity of the Kenai River system as a result of the
- (5) Valdez spill. And Fish Study 27 unlike Exxon the Trustees
- (6) don't say well it was the '87 Glacier Bay's fault or it was
- (7) the '88 fault. Trustees don't say that it was Exxon
- (8) Corporation's fault.
- (9) Now Exxon Corporation will have a million excuses for this
- (10) one. They have had a million excuses for this one and they
- (11) will among other things, in their closing arguments try to
- (12) blame it on ADF&G. Ask say that ADF&G should have I don't
- (13) know bottomed the opening of the Kenai so that the fish
- (14) couldn't have got up but they will try to blame it on ADF&G
- (15) because Exxon Corporation is a rock thrower and a blamer.
- (16) And the same thing happened in Kodiak and I have here a
- (17) picture of Kodiak of the Red Lake and Akalura Lake system in
- (18) Kodiak also suffered from overescapement and Fish Study 27
- (19) comes to the same conclusion about Red and Akalura Lake
- (20) systems.
- (21) as it does with regard to Kenai. So we see the same
- (22) phenomenon
- (23) happening in two places as a result of the 1989 Exxon Valdez
- (24) oil spill.
- (25) Now I'm going to do something that I've never done in an
- (26) opening or closing before. I'm going to switch topics. We've
- (27) covered '89 salmon harvests and the big reasons for the future

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- (1) harvest levels that's what we've been talking about. We're
- (2) going to move onto price. So I'm going to take a couple of my
- (3) precious moments and just have everybody stretch for a minute
- (4) and see if I can keep your attention for another half hour but
- (5) it's on my clock and on nobody else's clock and I assume the
- (6) Court has no objection if it's on my clock.
- (7) THE COURT: It's on your clock.
- (8) (Pause)
- (9) MR. O'NEILL: Okay. Is His Honor here?
- (10) I want to talk about fish price and the reason that I have
- (11) this picked up is because one doesn't need to be Sherlock
- (12) Holmes to figure out that people don't buy fish from an oiled
- (13) fishery and indeed in Exxon's Phase II opening Exxon told you
- (14) that that was a very reasonable hypothesis and why is it a
- (15) very reasonable hypothesis? Because we know from history it's
- (16) true. With the Tory Canyon spill in France with the Glacier
- (17) Bay spill in Alaska with the Braer spill in the Shetland
- (18) Islands, we know that oil and fish price don't mix.
- (19) Now the Braer spill is kind of interesting because when I
- (20) was talking with Mr. Bjorndal from Norway and we were talking
- (21) about it I couldn't get a conclusive answer from him but I
- (22) did get this answer from him on the Braer spill, who would he
- (23) want to talk to about the conclusion of a study on the Braer
- (24) spill before he gave an opinion. It wasn't Jim Anderson, it
- (25) was Jim Crutchfield. He said with regard to the Braer spill I

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- (1) guess I would want to know what the results of
- (2) Dr. Crutchfield's studies are and Dr. Crutchfield came here
- (3) and he told us the results of his studies of the Braer spill.
- (4) The Braer spill, the botulism incident with canned tuna
- (5) (sic) from Alaska and then other instances with Corona beer
- (6) Perner Alar with apples, Chilean grapes, baby nightwear
- (7) The taint effects which Dr. Anderson and his wife had
- (8) written an article about is a fact and it's a fact not only
- (9) because of case history but common sense.
- (10) Now I have here a summary of some of the witnesses and
- (11) their testimony and some of them are Exxon witnesses but
- (12) Crutchfield, the premiere salmon economist of the world
- (13) testified not only is it a fact but it happened here and Rob
- (14) Mendelsohn decided to test it mathematically, to test history
- (15) mathematically and came to the conclusion that the Exxon
- (16) Valdez oil spill reduced prices.
- (17) Peggy Parker and Mary Tuten both from ASMI said buyers
- (18) were
- (19) concerned. Peter Nickerson, the Exxon permit guy said fish
- (20) prices crashed in '89. Lloyd Kirban from Burson Marsteller
- (21) we're going to talk about Burson Marsteller, you're going to
- (22) have to bear with me but we're going to talk about it
- (23) testified about buyers and traders concerns.
- (24) James Brady from ADF&G, Prince William Sound, who
- (25) testified about the '89 season for Exxon testified that every
- (26) major processor complained about a low price from the spill.

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(1) first thing and he testified with regard to the pink salmon in  
 (2) 89 they were of lower quality because they couldn't catch  
 (3) them until they had started to soften up And Ernie Brannon  
 (4) testified that spilled oil negatively affects the marketability  
 (5) of fish Nickerson was called by Exxon Brady was called by  
 (6) Exxon Brannon was called by Exxon Now let's take a look if  
 (7) we will for a minute at what in fact happened  
 (8) Sockeye from Alaska wild sockeye salmon was the premiere  
 (9) product a premiere product in the Japanese market and I tried  
 (10) to figure out a way to ask the question of Dr Anderson from  
 (11) Exxon so that we could focus on it today and I think I did  
 (12) the redder the better  
 (13) And indeed Dr Anderson had talked about the redder the  
 (14) better at great length in his prior works And Dr Crutchfield  
 (15) told us that in spring of 1989 sockeye inventories were smaller  
 (16) than they were in 88 so there was less fish the fish was  
 (17) dearer and Dr Anderson agreed with that and Japanese  
 (18) demand  
 (19) was increasing prior to the spill and sockeye prices were  
 (20) increasing in early 1989 on the Tokyo Central Wholesale  
 (21) Market  
 (22) they were And then there was the oil spill  
 (23) And we talked for a minute with one of the witnesses about  
 (24) the Pike Street Market in Seattle where people would advertise  
 (25) fish saying not from Alaska Now that can't be a good sign  
 for the price of Alaska fish And I want to stop just right,  
 here for a second The price at which they can sell their fish

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(1) is as important to them as the number of fish they can catch  
 (2) That price is how they feed their families and for years the  
 (3) fishermen and the processors in the state of Alaska have done  
 (4) the best they could to tout premium Alaskan wild salmon  
 against  
 (5) other species and they had done a good job  
 (6) Now all the people saying salmon not from Alaska we  
 (7) have cartoons making fun of Alaska salmon Dr Anderson  
 (8) confirmed that and you can see people making jokes could I  
 (9) have some salmon? Yeah do you want regular or unleaded  
 (10) The Burson Marsteller findings the one study we have about  
 (11) consumer attitudes and then the sockeye prices crash in June  
 (12) about the time the Copper River packet from Prince William  
 (13) Sound gets to Japan Now this stuff wasn't Spam when we  
 (14) started as Exxon would have you believe and I think Dr  
 (15) Anderson put that to bed but it's Spam now and we had NRC  
 and  
 (16) Rob Mendelsohn build us models and I'm going to talk as  
 (17) boring as regression is and I'm going to talk about it and  
 (18) I'm going to jump up and down so you'll pay attention  
 (19) The Tokyo Central Wholesale Market is a good barometer of  
 (20) what's happening in Japan it's the largest fish market in  
 (21) Japan And this accurately depicts what happened As a  
 (22) general statement life was good and getting better and then  
 (23) it crashes and it crashes after the oil spill Why?  
 (24) Burson Marsteller report gives us some indication 83 percent of  
 (25) consumers were aware of the spill 50 percent of the consumers

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(1) were not eating at much seafood 58 percent of the consumers  
 (2) avoided eating Alaska seafood 48 percent of Alaska  
 consumers  
 (3) didn't believe Alaska seafood was safe to eat Only 13 percent  
 (4) believed it was safe to eat Same thing with the traders  
 (5) Now is this good for price? Can't be Like the Pike  
 (6) Street market and the cartoons it's got to kill price What  
 (7) do we see in the French market Now this is sort of the pink  
 (8) direction as opposed to the red direction 31 percent of the  
 (9) consumers said they would avoid eating Alaska seafood  
 Exxon  
 (10) throws rocks at Burson Marsteller like they throw rocks at  
 (11) everybody else  
 (12) These people are professional survey people who did this  
 (13) and the months after the spill who wanted to find answers 47  
 (14) percent of the traders believed that the spill would affect  
 (15) consumer purchases Now I will admit that in Burson Marsteller  
 (16) you can read it in the four volumes and you'll have those  
 (17) four volumes and you can read it and you find conflicting  
 (18) information in it but the one clear message and the reason  
 (19) that Dr Anderson repudiates it is because the specific data  
 (20) sets and the specific conclusions in the Burson Marsteller  
 (21) survey though that Alaskan wild salmon is now Spam To the  
 (22) English market which is again in the direction that pink  
 (23) salmon goes in it's canned and goes in that direction  
 (24) 42 percent of consumers indicated that they would avoid  
 (25) eating Alaskan seafood 31 percent of the consumers do not

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(1) believe that Alaskan seafood is safe to eat 99 percent of the  
 (2) traders were aware of the spill 58 believed the spill would  
 (3) impact consumer purchases Not good for price  
 (4) In the U.S. almost three quarters believed that the spill  
 (5) affected Alaskan seafood and only 20 percent were confident  
 (6) about industry reassurances ASMI was trying to reassure  
 (7) people about seafood The people at ASMI had the job of  
 trying  
 (8) to solve this problem the best they could but the problem  
 (9) like the spill, was too big to be solved by man So I want to  
 (10) go back if we could for a minute and take a look at what  
 (11) happens with regard to sockeye and the same thing essentially  
 (12) happens with regard to other Alaskan wild salmon but in 1988  
 (13) we have sockeye prices increasing We had demand  
 increasing,  
 (14) which is good because if demand increases prices ought to  
 (15) increase We have consumption increasing The sockeye  
 market  
 (16) had a significant potential to expand I had Dr Anderson read  
 (17) that to us from his paper in 1988 before he was on the  
 (18) payroll  
 (19) In 1989 sockeye inventories were down Sockeye consumption  
 (20) was increasing From January to June sockeye prices in Japan  
 (21) were increasing The Exxon Valdez spreads The  
 (22) Burson Marsteller survey is complete we know what's  
 happening  
 (23) in the market The Tokyo Central Wholesale Market prices  
 crash  
 (24) in June ground prices crash Now in order to beat the obvious  
 (25) effects of this chain of events we need to do some awfully

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- (1) fancy dancing and that's what we saw And what happens to  
 (2) Alaskan salmon prices as they are paid to these fishermen and  
 (3) these are the actual pink and red salmon prices paid through  
 (4) the years - and it's interesting from 1983 84 85 86  
 (5) 87 88 because of the work that the industry is doing  
 (6) because of the work that the fishermen are doing because of  
 (7) the premium that Alaskan salmon gets because of a strong  
 world  
 (8) market for sockeye and for pinks things are good And then  
 (9) they fall off the chart They actually fall off the chart and  
 (10) we get the same kind of crash with regard to salmon prices and  
 (11) herring prices that we got with regard to salmon numbers and  
 (12) fish numbers And I guess this is all a coincidence I guess  
 (13) if you spill 12 million gallons of oil that the world is hunky  
 (14) dory a couple weeks or a couple months or a year later but I  
 (15) don't think so  
 (16) This chart which shows the crash in these salmon prices  
 (17) also shows a crash in their lives it shows a crash in your  
 (18) fishing neighbors lives And we see the same thing happen in  
 (19) the sac-roe herring market. The same healthy increases and  
 (20) then a crash Now this is kind of interesting Because with  
 (21) regard to herring we don't have this red herring about farmed  
 (22) salmon So the same thing is actually happening in the sac roe  
 (23) herring market  
 (24) I want to take a look two exhibits that I don't have blown  
 (25) up but we see the Japanese consumption and this is a  
 document

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- (1) I talked with Ms Kusakabe about is good Japanese are  
 (2) consuming prices ought to be good and this is an exhibit that  
 (3) was used by Dr Mendelsohn which shows you that Japanese  
 (4) buying power was good which means the price should have  
 been  
 (5) good And Dr Crutchfield testified with us here about his  
 (6) reasons in believing that the salmon market for reds and pinks  
 (7) from Alaska was good and he went through a variety of  
 (8) generalized factors And then he said I want to test my  
 (9) hypothesis And it's interesting the way he chose to test the  
 (10) hypothesis  
 (11) The first quarter Tokyo Central Wholesale Market price and  
 (12) I want you to stick with me, for a minute Z out in another  
 (13) minute but the first quarter Tokyo Central Wholesale Market  
 (14) price captures the economy It captures supply demand  
 world  
 (15) events and it also looks specifically at issues dealing with  
 (16) certain specific kinds of salmon And then the oil spill  
 (17) happens right at the end of the first quarter  
 (18) Let's compare the first quarter Tokyo Central Wholesale  
 (19) Market price to the price the fishermen get every year on red  
 (20) salmon and see if we can capture in that market for the first  
 (21) quarter some kind of predictability And they did that We  
 (22) showed you this on the Elmo but it is an exhibit  
 (23) And they observed Cook Inlet and predicted Cook Inlet are  
 (24) run off the Tokyo Central Wholesale Market prices and what  
 (25) this shows is from 1976 through 1988 he could compare the first

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- (1) quarter Tokyo Central Wholesale price to the grounds price and  
 (2) if the TCM price was \$5 and the grounds price was a buck 50  
 (3) that relationship exists and you compare the relationship a  
 (4) year after year and it works But when doesn't it work  
 (5) Botulism 1987 the Glacier Bay spill and then in 1989  
 (6) when we get an event of such earth shaking - proportions that  
 (7) most of the people we know in France England Japan and the  
 (8) United States knew about it that was in the newspapers and  
 (9) that event is the Exxon Valdez oil spill and low and behold we  
 (10) find in fact that this model verifies the fact that the fish  
 (11) price crashed because of the Valdez Oil Spill  
 (12) Now this model was used to give us an answer the  
 (13) relationship between the spill and the price But to give us a  
 (14) complete answer we needed to go to some very very  
 (15) sophisticated econometric studies and Dr Mendelsohn who is  
 (16) an econometrician came to us and he mathematically measured  
 all  
 (17) of these factors Now I don't have the attention span to do  
 (18) that, but he does and he ran all of these factors through a  
 (19) computer to find out which ones work and have market affects  
 (20) and have predictable power and which ones don't  
 (21) And he picked the ones that Exxon Corporation attempts to  
 (22) blame including farmed salmon real interest rates exchange  
 (23) rate with Japan and he actually builds a mathematical model  
 (24) And you didn't hear in this courtroom that any of his numbers  
 (25) were wrong He builds the model through a computer and let's

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- (1) see how the model works  
 (2) You'll have this back in the jury room with regard to all  
 (3) four species of affected salmon and the Mendelsohn model  
 (4) predicts closely the rise and fall of salmon prices from 1984  
 (5) through the year of the spill and nobody came in and said it  
 (6) didn't It predicts from 1984 through the year of the spill  
 (7) and these data points here are by running those numbers  
 They  
 (8) are not by guesses they are not arrows that somebody puts up  
 (9) on a board and vaguely tries to explain away something but  
 (10) these data points predict And if I could I want to go back to  
 (11) a jury instruction  
 (12) The reason I don't have the number on the instruction is I  
 (13) don't have them yet but I will if the evidence is sufficient  
 (14) to afford a reasonable basis for estimating plaintiffs past or  
 (15) future losses plaintiffs may not be denied recovery by reason  
 (16) of the fact that the amount of their damage was not capable of  
 (17) exact mathematical ascertainment His Honor will tell you that  
 (18) and you'll have that on the jury instruction back in the room  
 (19) but I'll tell you, Dr Mendelsohn did his damndest and with  
 (20) regard to pink salmon with the exception of this wrinkle in  
 (21) the board the model pictures from - from 1984 that's the  
 (22) amazing thing about this model and it shows the same thing we  
 (23) have seen with regard to red salmon by both Dr Crutchfield  
 and  
 (24) Dr Mendelsohn and is this going to be consistent when we look  
 (25) at roe are we going to see the same factors when we look at

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(1) roe?  
 (2) Low and behold - let s look at the factors He studied  
 (3) over the years for which there is data and then with regard to  
 (4) roe there is a shorter time period which when there is  
 (5) available data You can t go back to 1964 with regard to roe  
 (6) the data only allows him to go back to 1981 He looks at all  
 (7) of the factors to test he looks at the factors that work and  
 (8) puts them in a model and low and behold we get good  
 (9) predictability we get the same kind of rise with the respect  
 (10) for Alaskan seafood and we get the same crash and we got the  
 (11) same pattern with the same predictability for reds kings  
 (12) pinks and chum and all grow products same thing  
 (13) We saw a crash with regard to silvers but the reason that  
 (14) we re not here talking about silvers is Dr Mendelsohn could  
 (15) not develop a model for silvers that would give you the  
 (16) predictability that science requires Now I asked him do you  
 (17) run tests on the predictability of these models are there  
 (18) mathematical tests that you can run on the predictability of  
 (19) these? And he said yes they are sound highly predictive  
 (20) mathematical models and they give us an answer And there  
 (21) are  
 (22) models as I said for pink red chum king and we give you  
 (23) numbers for 89 90 and 91 and now I want to talk a little  
 (24) bit generally about what happened  
 (25) Alaskan salmon was a premium product Alaskan wild salmon  
 was a premium product through the time of the oil spill and

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(1) then the oil spill happened and we get the leaded unleaded  
 (2) effect and the Pike s Market effect and it losses it s  
 (3) premium And when it losses it s premium people move over to  
 (4) other products or substitutes they don t come back the next  
 (5) day and we tested that effect for 89 90 and 91 and we can  
 (6) show you with mathematical precision and certainty with  
 models  
 (7) that worked for 89 90 and 91 but these guys may never get  
 (8) that premium back They may never get it back  
 (9) And the one thing that I did get from listening to Dr  
 (10) Anderson was that the fish market is a highly competitive  
 (11) market and new things happen and while farmed salmon only  
 had  
 (12) a one or two percent - external farmed salmon only had a one  
 (13) or two percent impact in Japan and while there are these other  
 (14) salmon market and salmon suppliers as a competitive matter  
 (15) what happens to the integrity of your product when the area  
 (16) from which you take it is oiled its integrity its core  
 (17) integrity what happens to it? What happens to the premium?  
 (18) You lose the integrity and you lose the premium and they may  
 (19) never get it back It s not my premium It s their premium  
 (20) and they may not ever get it back  
 (21) And 89 90 and 91 we give it to you by pink red chum  
 (22) king and by year and this exhibit is listed on the big exhibit  
 (23) and you re going to end up having to break it out by pink red  
 (24) chum king but you can do that  
 (25) And with regard to herring these are the numbers from the

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(1) regions and that s how the verdict form will ask you by  
 (2) year Now you may want to write this down but if you go  
 (3) through the exhibits you can figure out that sac roe versus  
 (4) pound roe that the sac roe market is about 90 percent Most  
 (5) of the dollars deal with sac roe The sac roe is the stuff  
 (6) that s seined The pound roe and wild roe on kelp markets are  
 (7) much smaller so the sac roe is about 90 percent and if that  
 (8) becomes relevant in your determinations there is that  
 (9) information for you  
 (10) I want to talk for a minute about permit prices I m going  
 (11) to use the Exxon exhibits on the permit prices Can I have the  
 (12) Elmo please  
 (13) Cook Inlet set gillnet permit prices this is the Exxon  
 (14) exhibit and for all of the arguing there was about what  
 (15) happened to the market when Fish Study 27 becomes  
 available  
 (16) the prices drop drastically and this is the Exxon exhibit  
 (17) The other interesting thing is if I take the corresponding  
 (18) Exxon exhibit - we again see the drastic permit price crash in  
 (19) 91 92 and we see the price crash Now Exxon in every one  
 (20) of these charts that it prepared is set to argue against the  
 (21) permit price crash Here is a Cook Inlet drift gillnet  
 (22) permit Let s take this one for a minute because it s real  
 (23) interesting Exxon is going to come in here and tell you if  
 (24) indeed there was an affect on permit the total effect was  
 (25) \$393 000 for over 200 permits Watch when they show you that

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(1) watch when they show you that  
 (2) Now why that interesting let s just do a little math  
 (3) Let s take this Exxon chart from the high that this permit sold  
 (4) of 200 000 to where it is in 92 and 93 about 70 000 that s  
 (5) 130 000 permit price drop off of the Exxon chart  
 (6) Now it only takes three permits to come up with 290 000  
 (7) what happened to the other 197? And the answer to that is  
 (8) Exxon s position is balderdash and you look at every one of  
 (9) these charts of Exxon s and you see exactly the same thing that  
 (10) Dr Karpoff was telling you exactly the same thing Dr Karpoff  
 (11) was telling you has happened to the permit and the pattern  
 (12) like the price pattern is the same in every case And the  
 (13) reason that it s the same in every case is because as  
 (14) Ms Moore and Mr Lohrer told you permit prices crashed in  
 (15) Alaska when people found out that the fisheries were sick And  
 (16) the interesting thing about all the various studies that I ve  
 (17) talked about is that they all make exactly the same sense And  
 (18) I want to recall Exxon s response in our opening and Exxon s  
 (19) response in the opening to most of these things was well  
 (20) yeah that makes a lot of sense on first blush but if you  
 (21) really look into it we can find a rock to throw but you can t  
 (22) throw rocks at the truth and get away with it  
 (23) Now with regard to these permits there is specific data in  
 (24) the big thick exhibits that backs up the permit price drop and  
 (25) when we put our exhibit together in point of fact we did not

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- (1) catch \$3 000 000 worth of permit sales in which the permit was  
 (2) sold twice in the same period so the analysis was incorrect  
 (3) and I fixed it on the chart  
 (4) So when you look at that chart Exhibit 3645 also look at  
 (5) Exhibit 3645-A which has it fixed Now Exxon is going to say  
 (6) they didn't fix the whole problem they didn't fix the whole  
 (7) problem because some of these transfers dealt with boats  
 some  
 (8) of these transfers were enter family transfers  
 (9) The law requires that when you sell your permit you sign a  
 (10) declaration that you file with the government saying what the  
 (11) purchase price was for and it requires that you break out  
 (12) boat permit and it requires that you be accurate with regard  
 (13) to what the purchase prices are and those are the numbers that  
 (14) we used  
 (15) We used the data off of people's declarations submitted to  
 (16) the government that that's what the purchase price was and I  
 (17) submit to you that that is as good as we're going to do  
 (18) That's as good as anybody is going to do in this situation but  
 (19) we ought to trust our fellow citizens when they submit  
 (20) documents to the government And there are over 200 permit  
 (21) sales and those permit prices crashed 100 000 a permit  
 (22) 130 000 a permit so you can test our \$20 million number with  
 (23) common sense  
 (24) Now I want to talk a little bit about all of these separate  
 (25) numbers and I'm going to apologize for life and the court

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- (1) system It would have been better in this case for me to have  
 (2) Les Meredith come - see Les over in the corner hiding to come  
 (3) in here and try his case individually to you and have him on  
 (4) the stand for a day and testify about his damages and it would  
 (5) have been easier to put them in the context of Les's life and  
 (6) Les's business and the pain that he felt as a result of what  
 (7) happened in 1989  
 (8) But the system can't try 10 000 cases and with the effort  
 (9) that everybody is putting into the trial of this case and that  
 (10) you're putting into the trial of this case and the emotional  
 (11) energy that it takes from you and us and the court system the  
 (12) parties with the assistance of the court decided that we were  
 (13) going to try the claims of 10 000 people through the use of  
 (14) these mechanisms and I brought you some of the fishermen I  
 (15) didn't bring you all but I brought you some of the fishermen  
 (16) but these damage numbers are not fungible and the reason  
 that  
 (17) they are not fungible is that each of these different  
 (18) categories of people in each of these years represents a hurt  
 (19) to different segments of the fishing population  
 (20) It represents a hurt to different segments of the fishing  
 (21) population so with regard to each category you're dealing with  
 (22) people that fish different gear types in different areas who  
 (23) were hurt so each of these categories is important. Each of  
 (24) these categories is vitally important to somebody out there  
 (25) And that's why each category should be important to us and I'm

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- (1) just about finished so we won't need another stretch break  
 (2) Now Exxon in its opening said no one is trying to minimize  
 (3) the impacts of the spill What have they done for the last  
 (4) three weeks? Get away with what they did by minimizing the  
 (5) impacts of the spill It is like they did in Phase I - Exxon  
 (6) is in denial and denial is not the same of a river in Egypt  
 (7) and these are not coincidences  
 (8) There was an Exxon Valdez oil spill and 1989 fishermen  
 (9) didn't fish in Upper Cook Inlet Chignik Kodiak Prince  
 (10) William Sound and that the oil was where the herring came in  
 (11) where they spawned where they ate and where they left and  
 (12) there are no more herring and the oil was where the pink  
 (13) salmon came into the Sound and where they spawned and  
 where  
 (14) they lived and where they left, and there are no more pink  
 (15) salmon and there was overescapement up into the Kenai River  
 a  
 (16) violation of the first principle of fisheries management and  
 (17) there were no smolt that came out of that 1989 class and there  
 (18) wouldn't be a fishery of any significance in 94 and 95 And  
 (19) before the spill prices were good and after the spill  
 (20) fish prices are terrible and before news of the results of the  
 (21) spill permit prices were good and after news of the result of  
 (22) the spill permit prices were terrible  
 (23) And what these guys did to these people is terrible And  
 (24) like in Phase I they are so big and so powerful that in our  
 (25) system you're all that the fishermen have The system relies

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- (1) on your sound judgment You're the only ones that can stop  
 (2) them  
 (3) And I'm going to use the last five minutes that I have to  
 (4) play the videotape of the Oliver Holm family fishing to try to  
 (5) let us focus for four minutes or four-and-a-half or five  
 (6) minutes on the fact that we're not dealing with fish and we're  
 (7) not dealing with fish price we're dealing with people's lives  
 (8) and the ruin that the wreck of the Exxon Valdez did to 10 000  
 (9) Alaska fishers  
 (10) If you could play the tape I would appreciate it  
 (11) ( Videotape played)  
 (12) MR O NEILL. I have nothing further Your Honor  
 (13) Thank you  
 (14) THE COURT Ladies and gentlemen we will take our  
 (15) first recess at the same time We will be in recess for 15  
 (16) minutes  
 (17) (Jury out at 10 40 a m )  
 (18) (Back on record 11 00 a m )  
 (19) THE COURT We're convened without the jury Mr  
 (20) Daum?  
 (21) MR DAUM Your Honor we have delivered to Mr  
 (22) Murtiashaw hopefully for the Court's signature a stipulation  
 (23) dealing with the very complicated matter of the intersection of  
 (24) the 9th circuit's order and this verdict  
 (25) We think it's quite important that the order be entered

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- (1) before there is any chance that the jury will actually reach a  
 (2) verdict and since that s theoretically possible before the end  
 (3) of the day today we thought we ought to bring this to your  
 (4) attention  
 (5) THE COURT I think you re a little bit optimistic  
 (6) MR DAUM I said theoretically The stipulation has  
 (7) been executed by lead trial counsel for plaintiffs by co lead  
 (8) counsel by the representatives of most of the plaintiffs  
 (9) groups but not all  
 (10) No one - all plaintiffs have indicated informally that  
 (11) they will sign before you - we would ask Your Honor to enter  
 (12) the order notwithstanding the absence of a full set of  
 (13) signatures of the principal counsel for plaintiffs and  
 (14) defendants  
 (15) We think that it s prudent to get as many signatures as  
 (16) possible but not necessary given the authority of plaintiffs  
 (17) trial structure  
 (18) THE COURT Mr Oesting?  
 (19) MR OESTING That is correct and we did make a  
 (20) stipulation with the Court s indulgence that we filed further  
 (21) signed versions to fill in that signature  
 (22) THE COURT Based on counsel s representation that  
 (23) this stipulation has in fact been approved by the people who  
 (24) have not yet had an opportunity to sign I will enter the order  
 (25) approving the stipulation at this time

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- (1) MR DAUM Thank you Your Honor  
 (2) MR OESTING Thank you Your Honor  
 (3) MR DAUM There is a lot of work in that stipulation  
 (4) and we appreciate the cooperation of all counsel who worked  
 (5) on  
 (6) it  
 (7) THE COURT And I appreciate your getting the job  
 (8) done I think it was important to the good sense and good  
 (9) development that this thing be worked out and I appreciate  
 (10) your getting it done  
 (11) MR DAUM Thank you Your Honor  
 (12) THE COURT While we re convened without the jury one  
 (13) of the jurors caught my attention in the hallway as I was  
 (14) leaving here and indicated that she had not been feeling well  
 (15) yesterday and is not feeling real good today We re just going  
 (16) to play it by ear and see how it goes It s her preference to  
 (17) try to tough it out but just to alert you if she signals me  
 (18) that she s having a problem I ll have to stop the work here  
 (19) for a minute and take care of the problem  
 (20) Would you call the jury back please  
 (21) (Jury in at 11 00 a m )  
 (22) THE COURT You may be seated The defense may make  
 (23) its closing argument  
 (24) MR RUSSO Thank you Judge  
 (25) THE COURT Mr Russo  
 (26) MR RUSSO Good morning ladies and gentlemen I m

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- (1) glad to have this opportunity to take a few minutes and speak  
 (2) to you once again on behalf of Captain Hazelwood and in  
 (3) thinking about the summation I thought it was somewhat  
 (4) symbolic that I would have the opportunity to speak to you  
 (5) between the plaintiffs summation and between Exxon s  
 (6) summation  
 (7) In some ways I think that epitomizes Captain Hazelwood in  
 (8) this trial a lone individual one person between a large group  
 (9) of plaintiffs with multiple attorneys as you see sitting here  
 (10) before you and a large corporation A lone individual who  
 (11) as a result of your verdict in Phase I is now going to be  
 (12) legally liable for the damages that you re about to impose in  
 (13) this phase of the trial  
 (14) In a practical sense what does that mean for a lone  
 (15) individual? It means he s going to have a judgment against him  
 (16) for whatever the amount is that you decide Now think about  
 (17) that in terms of your own lives what that means to a lone  
 (18) individual to have a judgment against him for  
 (19) I believe the figure that was originally made for in  
 (20) opening was \$978 million what does that mean? It means no  
 (21) credit it means no possibility of loans mortgages college  
 (22) loans for your children emergency loans for sickness and  
 (23) illness It means economic limbo for Captain Hazelwood  
 (24) Now as a result of your verdict in Phase I I can t stand  
 (25) here and ask you not to award any damages in this phase but I

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- (1) can ask you in your opening to be fair about the damages that  
 (2) you re awarding to take the issues very seriously in terms of  
 (3) the numbers that you come up with realizing that this is also  
 (4) affecting an individual person  
 (5) Now in line with that I want to make a couple points and  
 (6) I m not going to be very long Mr Cooper who is going to sum  
 (7) up immediately after me the details of all these things you  
 (8) heard But I think there is a few points on behalf of Captain  
 (9) Hazelwood that I have to stress for you  
 (10) One is despite the verdict in Phase I the plaintiffs are  
 (11) not entitled to a blank check in this phase of the case  
 (12) You re going to get instructed by the Judge as to the law he s  
 (13) going to give you jury instructions which you re going to take  
 (14) into the jury room And Mr O Neill hit upon those  
 (15) instructions a little bit and I would like to comment a little  
 (16) bit about them also  
 (17) The burden of proof is still on the plaintiffs not the  
 (18) defendants Plaintiffs have to prove to you by a preponderance  
 (19) of the evidence that each of the losses each and every single  
 (20) loss and claim that they are claiming and you re going to see  
 (21) on the special verdict form which we re going to get soon  
 (22) they have to prove by a preponderance of the evidence each of  
 (23) those claims they have to prove that it s more likely than not  
 (24) that each and every one of those particular claims were a  
 (25) result of the oil spill

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- (1) Now we've all been sitting here listening to the evidence  
 (2) and of course the only evidence comes from the witness stand  
 (3) not anything any lawyer says to you but I submit to you that  
 (4) there are going to be a number of those claims in which based  
 (5) upon the evidence that you've heard you don't know whether  
 (6) they were caused by the oil spill  
 (7) You can't figure out whether or not that loss is caused by  
 (8) the oil spill And if that's the case in any one of those  
 (9) specific claims that you're going to go through where you come  
 (10) to that conclusion I submit to you that that means that that  
 (11) claim has not been proved And what that means you as  
 jurors  
 (12) if you come to that conclusion cannot award any damages on  
 (13) that particular claim  
 (14) Now in terms of this case there is certainly absolutely  
 (15) no question about it going to be claims that you find are a  
 (16) result of the oil spill The defendants can see that on a  
 (17) number of issues as you will see when Mr Cooper sums up for  
 (18) you and as you know from the opening statements but your  
 job  
 (19) doesn't end there  
 (20) Suppose you get these claims now after you've eliminated  
 (21) the claims you can't say was caused by the oil spill now you  
 (22) have claims that you believe were caused by the oil spill  
 (23) Your job doesn't end there Now you have to figure out how  
 (24) much is the loss  
 (25) And once again ladies and gentlemen the plaintiffs have

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- (1) to prove that to you Now Mr O'Neill showed you a specific  
 (2) jury instruction relative to this issue He had a chart with  
 (3) this jury instruction on it and I got the feeling that he was  
 (4) trying to lead you to believe that you really didn't have to  
 (5) prove that number because you don't have to prove it to a  
 (6) mathematical certainty but you have to prove it to a  
 (7) reasonable certainty and that's the portion of the chart that  
 (8) he didn't read to you  
 (9) Plaintiffs must prove their losses with reasonable  
 (10) certainty on the basis of such evidence as might reasonably be  
 (11) expected to be available under the circumstances And the  
 key  
 (12) as far as I'm concerned and I submit to you as far as you're  
 (13) concerned is that that means certainty A certainty that is  
 (14) reasonable and it doesn't mean a reasonable uncertainty it  
 (15) doesn't mean a guess it doesn't mean speculation it doesn't  
 (16) mean well nobody knows really how much this is so accept  
 the  
 (17) amount that we offer that's not what it means  
 (18) Now suppose you're in a situation now where you believe you  
 (19) have a claim that was caused by the oil spill but the number  
 (20) that the plaintiffs are asking you feel has not been proven to  
 (21) you beyond a reasonable certainty Does that mean that you  
 (22) don't award any money for that claim? I submit to you maybe  
 (23) that is the case if there is no figure that you believe rises  
 (24) to that level of reasonable certainty  
 (25) But on the other hand there may be a lesser figure lesser

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- (1) than the figure they are offering which rises to that level of  
 (2) reasonable certainty And if that is the case then your duty  
 (3) as jurors could be to award that figure  
 (4) Now when I made my opening statement to you I asked you to  
 (5) do one thing and that was to be fair in this case And I told  
 (6) you at that point that Captain Hazelwood's position was that  
 (7) the plaintiffs are entitled to their actual damages in this  
 (8) case and everything that I have said to you thus far is  
 (9) consistent with that proposition it's consistent with the  
 (10) plaintiffs being awarded no more and no less than their actual  
 (11) damages  
 (12) You've heard the evidence in this case you've seen a lot  
 (13) of very technical scientific testimony from fish doctors  
 (14) Ph D's economists whatever but don't lose your common  
 sense  
 (15) in terms of being dazzled by all these fancy titles and fancy  
 (16) scientific evidence  
 (17) Use your common sense and I submit to you if you look at  
 (18) the evidence as it's been submitted to you your common sense  
 (19) will tell you that many of these claims and amounts have been  
 (20) exaggerated It's your duty and responsibility as jurors to  
 (21) eliminate the exaggerated portions of these claims To get the  
 (22) exaggeration out get to the actual damages That's what being  
 (23) fair means  
 (24) I can ask you as jurors to do no more than that to be  
 (25) fair And I can also tell you as jurors you have the duty to

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- (1) do no less than that Thank you  
 (2) MR COOPER May it please the Court counsel ladies  
 (3) and gentlemen of the jury I did not think some time ago when  
 (4) my partner Pat Lynch came to me and said Bert you like to  
 (5) fish don't you? And I said yes I do thinking there was  
 (6) some exotic fishing trip in the works I did not know he had in  
 (7) mind that I would start working on the on Exxon Valdez oil  
 (8) spill case but I must say to Pat all is forgiven because I  
 (9) have enjoyed this experience and it has been very educational  
 (10) at times tedious and at times for you tedious when we were  
 (11) dealing with science issues and economics issues but it has  
 (12) been educational and that is truly one of the things that we  
 (13) wanted to do was to make sure that you had enough of a  
 (14) foundation from expert witnesses as to what the basics of the  
 (15) science was is so that you can make up your own minds Now  
 (16) I'd like to make a few points right at the outset  
 (17) We have been lambasted maybe that's too strong a word but  
 (18) we have certainly been hit into for being blamers and rock  
 (19) throwers well I don't think that We're going to try to  
 (20) point out where we think the plaintiffs are wrong we're not  
 (21) going the try to pin the blame unfairly on anybody and I don't  
 (22) think we're going to throw out a whole lot of rocks a lot of  
 (23) rocks came our way with respect to scientific qualifications  
 (24) and expert qualifications and I'll address that  
 (25) But fundamentally what we hope you'll do is address these



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- (1) issues on their merits not on the basis of emotion and there  
 (2) is a lot of it and understandably so not on the basis of a  
 (3) few little snippets of - little bit of mud here a little bit  
 (4) of mud there Not on the basis necessarily of well this  
 (5) particular expert first time he went to Alaska to look at the  
 (6) sockeye lakes was with Mr Cooper  
 (7) I think there is a lot in the merits that should interest  
 (8) you and it's by looking at the merits I think you'll find the  
 (9) answers to the questions that we're trying to resolve  
 (10) Now Mr O'Neill does say reminds us that we have stood  
 (11) before you in the past and said that Exxon wants to be fair we  
 (12) don't want to shortchange fishermen and I'll say that again  
 (13) If you find that on some of these issues that are not easy  
 (14) issues if you find that the fishermen are entitled to  
 (15) additional compensation so be it  
 (16) But by the same token Exxon doesn't mean that by that that  
 (17) it simply has to roll over and open up its coffers for damages  
 (18) that aren't really damages from harm that really doesn't  
 (19) result from the oil spill especially when we start talking  
 (20) about things that happened years - three four, five years  
 (21) after the oil spill  
 (22) There are serious questions as to whether the spill can be  
 (23) blamed for those events and that's what we want and I'm sure  
 (24) we'll get your serious attention as to those issues  
 (25) One example I can't help but throw out Mr O'Neill stood

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- (1) the fishermen who were unable to fish in 1989 because of the  
 (2) fisheries closures  
 (3) So there are some valid long term issues here but I want  
 (4) everybody to understand that at the outset Exxon took  
 (5) extraordinary steps in order to put that claims program in  
 (6) place and made sure the fishermen were getting paid as what  
 (7) the Judge read indicated for lost harvest in 1989 for the  
 (8) price that were available  
 (9) Well what are we really talking about here I've got a  
 (10) little chart that came in right at the end of the evidence I  
 (11) don't think you've seen it before but maybe it will put all of  
 (12) this in some perspective for you and this is Defendants  
 (13) 6136  
 (14) These are basically all the salmon and herring fishery  
 (15) revenues and damage revenues for oil impacted areas Now let  
 (16) me show you what this is in 1980 and 1984 this is the  
 (17) average annual revenue of these various fisheries that are at  
 (18) issue here about a hundred million dollars and the blue  
 (19) indicates that the money that the fishermen were receiving  
 (20) were revenues from the fishery  
 (21) In 1985 and 1988 time frame the average annual revenues  
 (22) were about a little over 200 million Now in 1989 what the  
 (23) fishermen actually earned the blue line is down The yellow  
 (24) portion is what Exxon recognizes and has recognized and is  
 (25) reflected in the material that you'll be getting in connection

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- (1) in front of you in his opening statement for Phase II A and he  
 (2) gave you a number and the number that he gave you was \$978  
 (3) million or as he put it \$978 million almost a billion  
 (4) dollars  
 (5) Well of course we've seen during the course of the trial  
 (6) some of those numbers change We had that one rather  
 (7) interesting exchange at least I thought it was where Mr  
 (8) O'Neill had the wrong number he had gotten from his own  
 expert  
 (9) Mr Karpoff so he asked our expert Mr Nickerson to do the  
 (10) numbers and hand wrote it on a piece of paper that was a  
 (11) \$3 million reduction maybe in the whole scheme of thing but  
 (12) \$3 million is not chicken feed  
 (13) And if I read their numbers now they ended up with \$890  
 (14) million So what I'm saying is you can see maybe there is some  
 (15) reason why Exxon doesn't simply say here is all the money that  
 (16) you want There are some valid issues here and apparently on  
 (17) their own the plaintiffs have already eliminated about \$80  
 (18) million worth of damages that they were originally claiming  
 (19) As part of the process for which or part of the motivation  
 (20) that Exxon had to treat the fishermen fairly Exxon did have a  
 (21) claims program You heard first thing this morning what the  
 (22) Judge read about the subject of that claims program  
 (23) Every fishermen that came here and testified that they  
 (24) participated in that claims program and that was a program by  
 (25) which Exxon wanted to and I think did alleviate the needs of

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- (1) with the verdict and the verdict form recognize that there is  
 (2) a lost harvest that results from the oil spill and that is the  
 (3) amount  
 (4) Now the plaintiffs on the other hand which is the next  
 (5) bar here for 1989 are saying that this red amount is their  
 (6) lost harvest estimate Now it's a difference of \$37 million  
 (7) What Exxon recognizes and concedes is the lost harvest  
 amount  
 (8) About 137 million or so is what the plaintiffs are seeking  
 (9) Now what's this dark blue bar Well the dark blue bar is the  
 (10) plaintiffs price claim This is for 1989 how much additional  
 (11) they claim they should have earned and would have earned if  
 (12) there hadn't been an oil spill that they claim impacted the  
 (13) price As you can see that's a pretty big increment  
 (14) And if you look at what's happening now what they are  
 (15) basically saying is they want to be much better off than they  
 (16) had been in the years preceding the spill And if you find  
 (17) that we're wrong and the plaintiffs are right then that's the  
 (18) effect of that they would be better off and so be it We  
 (19) don't think however that the fishery would have improved that  
 (20) much in terms of total revenues  
 (21) As you go then in 1990 and 1991 as you see the dark blue  
 (22) portion their price claim rose more and more and continues to  
 (23) keep if they were - if this had actually happened if there  
 (24) had been no spill if those had been the prices what they claim  
 (25) they would have been it would have been way above the

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- (1) historical averages  
 (2) So I hope this puts it in a little bit of perspective We  
 (3) don't think that the incomes and the total revenues would have  
 (4) exceeded the historical averages by as much as plaintiffs are  
 (5) claiming  
 (6) Now just to give you a little bit of a road map as to what  
 (7) I'm going to talk about let me show you this which is just a  
 (8) demonstrative exhibit It was not one that was entered into  
 (9) evidence But this is just an attempt to sort of characterize  
 (10) or put into the right category the monetary elements of the  
 (11) plaintiffs claim  
 (12) As I said before in terms of the 1989 harvest the fishery  
 (13) was closed because of the oil which we all know happened  
 Exxon  
 (14) recognizes basically utilizing ADF&G figures for the most part  
 (15) where it can that there is a hundred million dollars that the  
 (16) fishermen suffered the plaintiffs estimate is 137  
 (17) We then come to the price claims those dark blue bars that  
 (18) I showed you And in 1989 the plaintiffs claim they would  
 (19) have earned \$144 million more for higher prices In 1990 they  
 (20) claim they would have earned even more \$182 million and in  
 (21) 1991 they claimed that the price differential caused by the  
 (22) spill was between actual prices and what they would have  
 (23) gotten albeit three years from the spill and they seek \$254  
 (24) million  
 (25) And why he spent so much time is it's a \$580 million part

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- (1) their claim And here we have the 1989 post harvest where the  
 (2) spill was the cause of the run failures that occurred for  
 (3) herring and salmon in recent years in Prince William Sound  
 and  
 (4) the plaintiffs say will happen with respect to Upper Cook Inlet  
 (5) sockeye this year and those numbers vary quite a bit but if  
 (6) you add them up it's another 178 million  
 (7) What I'm going to do is talk basically about three of these  
 (8) post '89 lost harvest claims I'm not going to touch on all of  
 (9) them because there is not enough time and if I did I'd  
 (10) probably bore you all to death  
 (11) On the pricing I'm going to spend a fair amount of time on  
 (12) that because that's obviously a claim that involves a lot of  
 (13) money On the lost harvest from 1989 I'll talk briefly about  
 (14) only one of those and that's the question whether in Upper  
 (15) Cook Inlet there would have Bristol Bay more sockeye caught in  
 (16) 1989 had there not been an oil spill  
 (17) I want to say I just cannot resist responding directly to  
 (18) some of the charges at the outset here that Mr. O'Neill made  
 (19) respecting the scientists and the expert witness the  
 (20) economists that Exxon brought here to testify Let me try and  
 (21) put some things in focus for you here  
 (22) We presented a number of witnesses who testified to things  
 (23) that the plaintiffs never produced any evidence on at all For  
 (24) instance you heard Mr. Carlson Dr. Tom Carlson why smolt  
 (25) traps are inaccurate in the Upper Cook Inlet why you cannot

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- (1) presume there is going to be a run crash this year with respect  
 (2) to what happens to these run traps Never heard anything  
 (3) addressed by that by the other side  
 (4) Mr. O'Neill never put anybody on the stand to talk about  
 (5) whether those smolt traps are inaccurate probably because  
 they  
 (6) realize they are inaccurate You heard Dr. Brannon's  
 (7) conclusion that there was a food supply problem in Prince  
 (8) William Sound And he showed you the charts that indicated  
 (9) that while literally hundreds of millions of hatchery fish are  
 (10) being released into the Sound  
 (11) The food supply has shown some signs of decreasing and  
 (12) ultimately you reach a point where the Sound can just not  
 (13) support these ever increasing numbers of pink salmon and  
 (14) herring and that's probably what caused the run to ultimately  
 (15) fail But you never heard the plaintiffs put on anybody to  
 (16) address that particular theory as to why the run failed  
 (17) Well, there is a whole list on these and I could go on and  
 (18) on but the point I'm trying to make here a lot of the merits  
 (19) on these scientific issues were not even addressed by the  
 (20) plaintiffs in the presentation of their evidence So that kind  
 (21) of leaves them in the position where they have to attack the  
 (22) credentials of the persons who are making these claims in order  
 (23) to have anything to say at all about them  
 (24) Well is that attack that they made fair? No it's not  
 (25) fair Let me give you a few examples why I say that For

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- (1) instance Hans Jahns the scientist from Exxon who is a very  
 (2) fine scientist who did the calculation as to how much oil was  
 (3) still left in the Sound where did the oil go, how much  
 (4) evaporated and so forth Now we hear this more or less attack  
 (5) on Dr. Jahns but remember one thing Dr. Jahns' conclusions  
 (6) and his numbers came out very close to the numbers of the  
 (7) National Oceanic and Aeronautics Administration NOAA who  
 (8) tried to calculate the same thing but whatever you think about  
 (9) his credentials his work was sound as compared by NOAA  
 That  
 (10) happened in other instances  
 (11) For instance Dr. Neff the man who produced all the water  
 (12) quality samples to test the water quality Were there  
 (13) sufficient hydrocarbons in the water to cause a problem to  
 (14) animals based on testing of a certain number of key species  
 (15) Now it is I guess understandable that the plaintiffs  
 (16) would want to attack the credentials of Dr. Neff because they  
 (17) presented absolutely no evidence to indicate that the water  
 (18) quality was anything other than what Dr. Neff said it was But  
 (19) even if you don't think his credentials are appropriate or  
 (20) even if you fault him because he presented a paper at the ASTM  
 (21) and sent it into Exxon for review the point is he also showed  
 (22) you samples of the water column taken by NOAA the  
 government  
 (23) agency There was no difference we showed you all of those  
 (24) both Dr. Neff's and NOAA's Now I think if you look at the  
 (25) merits you will find that the science was indeed good

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(1) science  
 (2) I'd have to say though - I suspected from plaintiffs what  
 (3) they said earlier from their cross examinations would make  
 (4) that attack i.e. the attack of the credentials on the persons  
 (5) who were providing the testimony So we looked a little bit  
 (6) into the situation of the economist who testified on this price  
 (7) issue which involves so much money  
 (8) And I guess I can't help but show you a little summary of  
 (9) what we turned up when he looked a little closer at that Now  
 (10) for instance and this is all material that was from the record  
 (11) in this case Dr Crutchfield the plaintiffs produced to  
 (12) testify about sockeye prices indicated or testified that he  
 (13) was not a modeler he had never looked at export prices from  
 (14) the U S key ingredient in this whole issue He did not  
 (15) interview processors or wholesalers  
 (16) And yet what he was testifying to was why prices were where  
 (17) they were the prices that the processors and the wholesalers  
 (18) were paying He did not know about the Japanese way of  
 (19) consuming salmon He thought sockeye was the filet mignon of  
 (20) seafood in Japan  
 (21) And you heard the only Japanese person who came here and  
 (22) testified although the issue of what the Japanese consumers  
 (23) and buyers are doing is a key one here Dr Kusakabe testified  
 (24) that that's not the case  
 (25) If the price of sockeye goes higher high enough the

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(1) Japanese people will quickly turn to chum which they regard  
 as  
 (2) more of a delicacy or at least as much of a delicacy as  
 (3) sockeye  
 (4) Dr Mendelsohn the man who created this computer model no  
 (5) prior background in economics he's in the forest industry  
 (6) department He had no knowledge of the Japanese markets  
 and  
 (7) didn't know how or when salmon was eaten in Japan So you  
 can  
 (8) see that - obviously it's very difficult to find the expert  
 (9) who knows everything about everything that happens to be in  
 (10) issue  
 (11) But I think when you look at the economists for instance  
 (12) what you will find is the presentation and the information  
 (13) given you the - which I'm going to come to in a moment by Dr  
 (14) Anderson Dr Kusakabe Dr Bjorndal came in and testified  
 (15) pretty overwhelmingly to the proposition that there was no and  
 (16) could not have been an affect on price of Alaska salmon  
 (17) What I'm going to do and what I hope to do here is I'm  
 (18) going to first start with these post 1989 harvests And I want  
 (19) to start there deal with three of them And the first one I  
 (20) want to start with is Prince William Sound pink salmon  
 (21) Now the whole issue here is whether or not oil has somehow  
 (22) caused the pink salmon to stop returning to Prince William  
 (23) Sound that's the issue And this is an issue that involves a  
 (24) fair amount of money if I recall correctly \$45 million That  
 (25) number there

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(1) Now you listened to a lot of science the plaintiffs called  
 (2) Dr Mundy who kind of said yes there was oil out there and  
 (3) yes he thinks that the run failures were a result of it but  
 (4) he never really gave you much of an explanation how you get  
 (5) from the oil to the run failures several years later  
 (6) You heard from Dr Brannon who tried to show you what the  
 (7) real explanation for the run failure was but there is one  
 (8) piece of evidence that seems to me to be more dramatic and  
 more  
 (9) compelling probably than anything else And that is the fact  
 (10) as we pointed out that pink salmon in Prince William Sound in  
 (11) Alaskan spawning streams apparently for eons have been  
 (12) successfully reproducing and utilizing streams that are oiled  
 (13) by natural oil seeps  
 (14) If we could run that snip of the video I'm just going to  
 (15) play just a portion of this This was from Dr Page's  
 (16) testimony He went out in the field and actually videotaped  
 (17) many of these streams  
 (18) I think what we're going to see is one 8658-A Well this  
 (19) is Well Creek in Western Cook Inlet flows into Oil Bay  
 (20) appropriate enough name and you can see the sheens right  
 there  
 (21) on top of the stream And this stream which has more - here  
 (22) is some fish in the stream that stream had higher  
 (23) concentrations of oil in it than the streams that Exxon  
 (24) measured after the Exxon Valdez oil spill but yet it supports  
 (25) a pink salmon population

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(1) You have to stop and think if that's the case is the oil  
 (2) really that bad for these pink salmon? Did it really do them  
 (3) in to the extent that the plaintiffs were claiming?  
 (4) You heard Dr Brannon's testimony One of the first things  
 (5) he looked at was how did these fish do after the oil spill  
 (6) And if you look at that what you find is that they did very  
 (7) well They came back after the spill in record numbers  
 (8) Spill happened in 1989 pink salmon returned in '90 and '91  
 (9) in record numbers Those you may recall were the fish that  
 (10) were the most potentially at risk because they were the ones  
 (11) given their short two-year life cycle who were around at the  
 (12) time of the spill  
 (13) So - now this also tells you that something isn't quite  
 (14) making sense here Fish can live in oiled streams naturally  
 (15) if the fish that were exposed came back in such record  
 numbers  
 (16) are we making a mistake if we conclude that the oil spill was  
 (17) what caused ultimately the salmon runs to fail in 1992 and  
 (18) 1993? We don't know yet for '94 yet because the run hasn't  
 (19) happened  
 (20) Dr Brannon also looked at the effects of oil if there was  
 (21) an effect by determining their extent of their actual  
 (22) exposure He very carefully tried to figure out how many of  
 (23) the wild pink salmon from the various streams were ones that  
 (24) were actually subject to the oil because as it turns out the  
 (25) oil wasn't everywhere in Prince William Sound Although the

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- (1) run failures were Sound wide the oil was not  
 (2) And what did he find? He found that when you take out the  
 (3) hatchery fish who were never exposed to oil while they were in  
 (4) the hatchery and you take out the fish from the districts that  
 (5) were never oiled you end up with less than ten percent of the  
 (6) wild pink salmon being in those streams that were subject to  
 (7) oiling So again it's very difficult to find any scientific  
 (8) connection between what happened years after the spill and  
 that  
 (9) spill  
 (10) You recall Dr Brannon also did a number of scientific  
 (11) studies For instance he compared embryos of pink salmon  
 from  
 (12) oiled and unoled streams to see if he could detect a  
 (13) difference He could not So ultimately after he did those  
 (14) studies he looked at those various things, he concluded that he  
 (15) couldn't find much of an affect of the spill Well was he the  
 (16) lone ranger there The plaintiffs would have you believe that  
 (17) for some reason he was but that's not right  
 (18) The plaintiffs have talked about the Trustee Council and  
 (19) their chief scientist is a man named Dr Spies you've heard  
 (20) his name mentioned several times here and you also heard  
 (21) Dr Brannon I believe it was testify that Dr Spies has  
 (22) concluded that the effects of the oil spill on pink salmon  
 (23) cannot account for more than ten percent of the population a  
 (24) loss of more than ten percent of the population  
 (25) Dr Brannon didn't think it was that high but he did say

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- (1) given did difficulty of measuring some of these things that's  
 (2) a number that could rep the upper end of where an effect might  
 (3) be  
 (4) So the Trustee Council themselves at least their chief  
 (5) scientist comes up with a ten percent population impact and  
 (6) that's all but the plaintiffs damage claim that \$45 million  
 (7) number they are asking for is a number that assumes that the  
 (8) entire difference between the forecasted amount of pink salmon  
 (9) and what actually comes in is caused by the oil spill not just  
 (10) the ten percent number that the chief scientist for the Trustee  
 (11) Council has indicated is the amount  
 (12) Well the second one that I wanted to talk about the other  
 (13) species that I want to talk about is herring Now just again  
 (14) to put this in perspective on the question as to whether the  
 (15) herring run failures in the past couple years have been caused  
 (16) by the oil spill we're talking about a 37 million dollar  
 (17) damage the for the plaintiffs  
 (18) They claim that they would have enjoyed \$37 million more in  
 (19) income if there had been no oil spill because of its alleged  
 (20) effect on herring  
 (21) Well when it came to herring you will recall we  
 (22) presented testimony from Dr Pearson of Batelle - do you  
 (23) recall Dr Pearson is the one that said normally he and his  
 (24) organization does not act as expert witnesses this was the  
 (25) first case he had ever been an expert witness in Hardly the

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- (1) professional expert witness that Mr O'Neill referred to  
 (2) earlier but he obviously had an abiding interest in the  
 (3) science involved here  
 (4) He was given a free hand by Exxon to conduct what studies  
 (5) he wanted and he did He conducted a lot of studies on the  
 (6) 1989 year class of herring the ones that were most vulnerable  
 (7) to the spill because they were present as young ones as  
 (8) larvae and as embryos or eggs at the time of the spill And  
 (9) he had some very interesting conclusions I thought He did  
 (10) not agree that the herring run failure starting in 1993 four  
 (11) years after the spill was because of the spill  
 (12) One of the ways that he got there he did something I think  
 (13) makes a lot of common sense he looked to see what proportion  
 (14) of the total biomass of herring were going to be represented by  
 (15) or were going to be constituted by this 1989 year class, even  
 (16) if there hadn't been a spill and the answer he came up with  
 (17) and there is no secret and I don't think there is any debate  
 (18) about it you never heard it contested by any scientist  
 (19) because of that four-year dominance where the 84 year class  
 (20) was very large the 1988 year class was very large the 1989  
 (21) class would not have been more than three or four percent of  
 (22) the herring in biomass from the Prince William Sound even  
 (23) without the oil spill So if you count the herring in that  
 (24) class it wouldn't have made much of a difference  
 (25) Another key factor with respect to herring much like the

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- (1) case of the pink salmon in Prince William Sound the herring  
 (2) have come back in recent years right after the spill in  
 (3) basically record numbers If I can find the right chart here  
 (4) This was Exhibit 4948-A and as you can see in 1990 '91 and  
 (5) '92 the three years after the spill the harvest of herring  
 (6) based upon the amount of herring in the Sound were  
 outstanding  
 (7) and indeed set records in 1991 and then another record in  
 (8) 1992 So again this does not suggest that the oil had some  
 (9) dramatic impact upon the herring in Prince William Sound  
 (10) Now Dr Kocan who the plaintiffs put on had a theory that  
 (11) you heard him testify to and was briefly referred to by Mr  
 (12) O'Neill and that theory basically boiled down to this  
 (13) proposition I'll try and state it the way Dr Kocan stated  
 (14) it  
 (15) It's a little tough to follow and I don't think it makes a  
 (16) whole lot of sense but as I understood what he said he said  
 (17) somehow some of these herring that were exposed to oil had  
 (18) their immune system compromised that is to say it fouled up  
 (19) their immune system somehow  
 (20) Now right away he's got theory and supposition going here  
 (21) instead of fact because he also testified that that was  
 (22) nothing - there was no testing of their immune systems to  
 (23) determine if the oil had hurt their immune systems Nobody  
 (24) ever looked at the herring in Prince William Sound in order to  
 (25) determine that, which tells you something about whether or not

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- (1) it makes much sense as a scientific theory
- (2) He then says that apparently - I'll sit down very fast if
- (3) I lose my voice entirely - he said that apparently what
- (4) happened next was that these fish survived although their
- (5) immune system was somehow compromised was that they
- survived
- (6) for several years until they ultimately joined up with the rest
- (7) of the adult herring population
- (8) Again there is no real proof that they were out there with
- (9) compromised immune systems And when they joined up with
- the
- (10) new batch of herring he says they apparently contracted some
- (11) disease with from this adult batch of herring and then they
- (12) developed a disease which then became even more
- contagious and
- (13) they gave it back to all the adults
- (14) Now this is so much just hypothesis and supposition that
- (15) not even the Trustee Council buys into it You will recall in
- (16) cross examination of Dr Kocan we pointed out that the Trustee
- (17) Council itself in June of this year had published what s
- (18) called an "Expression of Interest" which was for the expressed
- (19) purpose of setting scientific studies to determine to
- (20) investigate why the Pacific herring runs in Prince William
- (21) Sound Alaska have failed for two years in a row with respect to
- (22) Dr Kocan s disease virus theory They point out that the role
- (23) of this virus remains uncertain
- (24) The successful proposal will investigate anthropogenic I
- (25) think that s a fancy word for human caused thing
- environmental

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- (1) and microbial causes affecting population decline So the
- (2) bottom line is that the Trustee Council does not agree with Dr
- (3) Kocan
- (4) The plaintiffs expert witness on this Dr Kocan was
- (5) willing to stand here and tell you without having any
- (6) scientific information for his theory this theory is what
- (7) happened but yet the Trustee Council does not agree
- (8) Well what did happen with respect to the herring? What
- (9) did happen with respect to the pink salmon? We tried to
- (10) provide you with answers to those questions We had both Dr
- (11) Brannon address that and Dr Pearson who were speaking of pink
- (12) salmon and herring and what they both came up with
- (13) independently was basically signs that the Sound had a
- problem
- (14) taxing its carrying capacity to the limit with 200 million or
- (15) even more hatchery fry released into the Sound every year
- (16) increasing populations of herring and pink salmon Sooner or
- (17) later it s going to get to the point where it just stops
- (18) producing There is not enough food to go around for all the
- (19) fish and that is indeed probably what happened starting in
- (20) 1992 93 and 94
- (21) It - this does not match much up with the spill the spill
- (22) occurred in 1989 these events all happened years later
- (23) Dr Pearson for instance looked at the food supply in
- (24) Prince William Sound And what he found was that although
- the
- (25) average is up here starting in about 1985 it began with the

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- (1) one exception of 89 it began to go down Well on a downward
- (2) trend before the spill ever happened
- (3) He showed you with respect to herring that starting again
- (4) in 1984 1985 well before the spill ever occurred the herring
- (5) were experiencing a reduced weight change reduced growth
- each
- (6) year between the fall and the spring harvest until finally you
- (7) get down to 1992 and 1993 and they actually experience a
- weight
- (8) loss
- (9) That s indicative there is a food supply problem there So
- (10) you put those pieces of the puzzle together and what you find
- (11) is you ve got increasing numbers of fish decreasing food
- (12) supply and that s got to lead to a crash It didn t happen
- (13) until years after the spill but that certainly looks like a
- (14) lot better candidate for an explanation than the oil spill
- (15) You shouldn t fall into the trap of thinking just because
- (16) the spill happened everything bad that follows thereafter,
- (17) even if it s four or five years thereafter is because of the
- (18) spill
- (19) I urge you to look at the scientific evidence and ask
- (20) yourself does that claim make sense? I don t think it does
- (21) Now there is another area that the plaintiffs are claiming
- (22) this kind of delayed damages for and trying to blame
- something
- (23) that they say is going to happen years after the spill on the
- (24) spill and that s this matter of the Upper Cook Inlet returns
- (25) starting this year

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- (1) Again on this breakdown to kind of give you some
- (2) perspective as to where this claim fits We talked about the
- (3) Prince William Sound pinks we talked about the herring, and
- (4) now I want to talk about this Upper Cook Inlet sockeye run
- (5) Now here we re dealing with a run that has not yet failed
- (6) Do you recall the plaintiffs claim that the cause - the Upper
- (7) Cook Inlet was closed in 1989 on account of the spill too many
- (8) fish went up the system to spawn ended up rearing in the
- (9) rearing lakes And basically for whatever reason by reason
- (10) of some mechanism there were too many of them in the lakes
- and
- (11) so they all started dying off None of them left as smolt So
- (12) starting this year when they were expected to come back they
- (13) say they ll not come back
- (14) Well this is really ironic because this run is now just
- (15) beginning and nobody will know whether or not the plaintiffs
- (16) are right that is to say whether the fish are going to come
- (17) back or not until - for some time yet but because of the
- (18) timing of the trial we have to just use our best guesses as to
- (19) whether or not this run will even fail but it hasn t failed at
- (20) this point because it hasn t happened yet
- (21) Now how valid scientifically is it that the plaintiffs make
- (22) this contention Well I don t think it s very valid One of
- (23) the problems is the whole evidence all of the evidence that
- (24) the run is going to fail are based upon the accuracy of the
- (25) smolt traps that catch smolt coming out of the river system

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- (1) count them so ADF&G can make an estimate  
 (2) You recall Dr Carlson talked about this This is a not  
 (3) very good photograph Maybe we could bring it up on the other  
 (4) system Rob 9271  
 (5) This is the Kenai River you'll recall that we have the  
 (6) smolt traps trying to catch the smolt coming down the river  
 (7) over here And you will recall that the ADF&G counts the  
 (8) smolts that they catch in the trap assume a certain catch rate  
 (9) and estimate from there  
 (10) Now we know that in fact their estimates have not been  
 (11) very good Some of the fish that they counted and estimated  
 (12) this way have already come back And if we look at the  
 (13) numbers I call this "the big fish chart" but if you look at  
 (14) the numbers this is the number of smolt that were counted in  
 (15) the traps from which the ADF&G estimated that were that many  
 (16) smolt 71 000  
 (17) And in fact the number of smolt that came back or the  
 (18) number of fish that came back were ten times that amount  
 (19) 708 000 You can't have more fish come back than go out but  
 (20) yet that's what happens if you believe the smolt traps  
 (21) So obviously that smolt trap information is certainly  
 (22) suspect The plaintiffs have not addressed that at all You  
 (23) haven't heard any of their witnesses address the accuracy of  
 (24) the smolt traps They realize those traps are very inaccurate  
 (25) but that's the premise for this claim this \$66 million claim

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- (1) Even if you assume the smolt traps are accurate can you say  
 (2) that in fact the run failure if it fails this year is due to  
 (3) the oil spill?  
 (4) Again we depart with the plaintiffs at this point We  
 (5) don't think you can say that I think that's a legitimate  
 (6) dispute The plaintiffs may blame us for not rolling over and  
 (7) say I give it's all caused by the spill, but if you listen  
 (8) to the testimony of Dr Carlson the plaintiffs are the ones  
 (9) here who are exaggerating not Exxon And I'll tell you why I  
 (10) say that  
 (11) First you recall that the claim is that there was this  
 (12) overescapement in 1989 because of the spill that ended up  
 (13) putting too much fish in the system But the fact is as  
 (14) Dr Carlson testified that there were highest escapements not  
 (15) only in 1989 but also in 1987 and 1988 So there were three  
 (16) years of high escapements not just one, not just the oil spill  
 (17) year  
 (18) Now one thing the plaintiffs never did although you think  
 (19) it would be a logical thing to do would be to try to figure  
 (20) out how many fish that escaped in 1989 up into the system did  
 (21) so because of the oil spill There would have been fishing  
 (22) escaping even if there wasn't an oil spill  
 (23) If you want to blame it on the oil spill I have to figure  
 (24) out how much fish went up in the system because of the oil  
 (25) spill Dr Denso did it and came up with a foregone catch of

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- (1) 475 000 So of all the fish that went up in the river of 1987  
 (2) 1988 and 1989 475 000 is the number that you can attribute at  
 (3) most to the oil spill  
 (4) Well how does that compare then with that total of three  
 (5) years worth of escapement? Through Dr Carlson we showed  
 (6) you  
 (7) that number these are the escapement numbers for 87 88 and  
 (8) 89 And this green portion here as you can see is only ten  
 (9) percent of the total escapement  
 (10) So they are asking two things They are asking for the \$66  
 (11) million based upon first these smolt trap counts that are -  
 (12) we know to be inaccurate and second based upon the fact  
 (13) that - based upon a very small number of fish a very small  
 (14) percentage of fish that went up into that system because of the  
 (15) oil spill  
 (16) Now we didn't stop there we wanted to go a little  
 (17) farther I think what we have shown you there says that the  
 (18) oil spill doesn't look like it was the cause of this situation  
 (19) if in fact it's going to be a run failure But we went a  
 (20) little further and we tried to find out what is the cause? Not  
 (21) this ten percent of escapement caused by the oil spill what  
 (22) might be at work here?  
 (23) And you will recall that Dr Carlson explained how the  
 (24) first - that the theory that the food system in the lakes is  
 (25) getting low just doesn't work because when you look at the  
 food systems in the lakes as ADF&G has done what you find is

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- (1) that there hasn't been any major change in it Nothing like  
 (2) Frazer Lake when the similar thing happened there The other  
 (3) thing that Dr Carlson pointed out was that he measured the  
 (4) size of the smolt that were leaving the lake And what he  
 (5) found is that they weren't getting smaller unlike the  
 (6) situation in Frazer Lake where something like this happened  
 (7) years ago where the smolt were getting shorter the smolt that  
 (8) were coming out of the lakes in the Kenai system were getting  
 (9) larger  
 (10) So it just doesn't square Now he can't tell you for sure  
 (11) what other factor may be causing this but he sure found  
 (12) something that would be valuable to pursue other than blame it  
 (13) on the oil spill You remember he testified that predators  
 (14) could wipe out a population of sockeye quickly and he  
 (15) mentioned Chignik Lake where it had been studied by ADF&G  
 (16) where the predators assumed about half the 307 lakes those  
 (17) predators were coho salmon  
 (18) Dr Carlson in his joint work with ADF&G - and  
 (19) incidentally I ought to point out that notwithstanding the  
 (20) plaintiffs' criticisms of Dr Carlson's credentials - they are  
 (21) certainly enough for the ADF&G to work jointly with him for  
 (22) several years on the Kenai system  
 (23) But when he was up there looking with sonar equipment at  
 (24) what's in the lake what he found was indication - he found  
 (25) that the sockeye fry were schooling And schooling means

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- (1) that s a defensive maneuver to try to protect themselves from  
 (2) predation that s why fish school one of the reasons  
 (3) So you add all that together and it doesn t look like an  
 (4) oil spill caused problem It s a different problem it s  
 (5) caused by something else  
 (6) Now I listened closely to try to hear some evidence by the  
 (7) plaintiffs on these basic points on the accuracy of the smolt  
 (8) traps on the possibility of predation on these lakes the  
 (9) reason that the starvation - that this hypothesis is blaming  
 (10) on it oil reasons why that may or may not be good but I  
 (11) didn t hear any of that That s because they presented no  
 (12) witnesses on that and I guess their theory is if they throw  
 (13) enough stones at the people who did the work they won t have  
 (14) to address those issues but they are there you cannot avoid  
 (15) them  
 (16) Just doesn t look like there is any way you can get from  
 (17) the oil spill in 89 to a crash that may occur but hasn t yet  
 (18) occurred and we don t even know if it will occur  
 (19) I want to mention another lake system sockeye system that  
 (20) Mr O Neill mentioned very briefly and it s on that big damage  
 (21) chart that he showed you and it is Red Lake  
 (22) On this chart of the damages that I showed you this is not  
 (23) a big item in the whole scheme of things Kodiak sockeye \$7  
 (24) million they are asking for that That s really a function  
 (25) two different lakes there that they say have or are going to

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- (1) Well in 1989 the year of the spill we have a very  
 (2) similar escapement And the plaintiffs have been claiming that  
 (3) as a result of this spill escapement the production in the  
 (4) lake is going to crash and there is not going to be any  
 (5) smolt - very few smolt returning starting this year or next  
 (6) year  
 (7) Now if we look at DX4652 this shows you how many fish came  
 (8) back from that year that it had the high escapement Those  
 (9) fish from that year of the high escapement were basically ones  
 (10) that returned in 1980 We re now looking at the return year  
 (11) and low and behold they came back in good numbers You  
 (12) certainly can t look at these numbers and say that that excess  
 (13) escapement that occurred in 1980 caused a problem in that  
 (14) lake We don t know if there is a problem we don t even know  
 (15) if there is a problem in that lake at that point in time All  
 (16) we know is that the high escapement occurred in 1989 and it  
 (17) seems to be you can say let s look at history and history  
 (18) teaches us that it s probably not going to cause a problem  
 (19) Now I know I have to kick myself every time I say this I  
 (20) know it s only \$7 million but that s a lot of money but more  
 (21) importantly it s demonstrative I think of the fact that what  
 (22) you ve seen here is kind of this curious situation where the  
 (23) plaintiffs have put some people on who just testify well here  
 (24) is a problem here is a problem we think it s because of the  
 (25) oil spill

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- (1) crash for much the same reason there is going to be a run  
 (2) failure in Upper Cook Inlet starting this year  
 (3) Those two lakes are Red Lake and Akalura Lake I started  
 (4) to say if you can remember all the testimony but I m not going  
 (5) to assume that anybody can remember it all I know I certainly  
 (6) can t But there was no testimony at all with respect the one  
 (7) of those lakes Akalura Lake no witness for the plaintiffs  
 (8) ever got up here at least I sure couldn t find it and said  
 (9) there is a problem with Akalura Lake and here is why, and here  
 (10) is why it s attributable from the spill  
 (11) So we have a damage claim for two lakes but they only  
 (12) presented evidence on one that one was Red Lake You heard  
 (13) Dr Carlson address that situation and as it turned out there  
 (14) is a historical precedent that is right squarely analogous with  
 (15) the situation here  
 (16) It turns out that lake also experienced as overescapement  
 (17) in 1980 I believe it was of almost the same magnitude that  
 (18) occurred in 89 when they couldn t fish there because of the  
 (19) spill and more fish went up the river than ADF&G wanted  
 (20) So you would think it would be pretty significant to see  
 (21) what would happen then in 1980 when that earlier  
 (22) overescapement occurred And that earlier overescapement is  
 (23) reflected on DX4653 and as you can see with that big bar in  
 (24) 1980 they had an escapement of about well almost 800 000  
 (25) fish

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- (1) When you stop and look at it it just doesn t look like the  
 (2) oil spill did it And places where there is a legitimate claim  
 (3) that the oil spill has caused a problem Exxon is belly up to  
 (4) the bar and through its claims program and its position that  
 (5) it s taken here I think has belied up to the bar very  
 (6) fairly  
 (7) And as I said we recognized a hundred million dollars of  
 (8) lost harvest that the plaintiffs suffered in 1989 but in  
 (9) places like this where you just can t get from the spill to  
 (10) all this money that the plaintiffs are claiming that s where  
 (11) we feel we have to draw the line  
 (12) I keep putting these folders down here and I keep falling  
 (13) over and I realize I put them on top of a glass of water  
 (14) Now I m not going to talk about anymore of these - well  
 (15) there is not much more to talk about of these post 89 harvest  
 (16) issues Oh these issues up here the 1989 lost harvest where  
 (17) we certainly recognize that there was about a hundred million  
 (18) dollars of lost harvest that the plaintiffs - harvest that the  
 (19) plaintiffs lost because of the spill that they should have  
 (20) enjoyed their estimate is \$137 million  
 (21) I m just going to take and talk very briefly about the  
 (22) largest single element about a \$10 million claim that they  
 (23) would have in 1989 had a higher harvest or had a harvest of  
 (24) sockeye in Upper Cook Inlet  
 (25) We re not talking about here what s happening this year or

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(1) whether there will be a run failure but how many fish would  
 (2) they have caught in '89 had there not been an oil spill that  
 (3) closed the fishery This is the claim that took us into what I  
 (4) thought at least was a fascinating land of hydroacoustics and  
 (5) sonar counting of fish Something I'm sure everybody in this  
 (6) courtroom probably always wanted to learn about At least if  
 (7) you're a fisher person and you got a boat and you got a little  
 (8) sonar in it you probably wanted to learn about it  
 (9) In a nutshell very briefly this is the claim where the  
 (10) plaintiffs expert Mr O'Neill I think was found of calling  
 (11) Dr Salmon Dr Rogers came in here and testified that  
 (12) although he never breathed word one about the sonar gear  
 (13) itself but he testified that nevertheless he believed that the  
 (14) sonar on the Kenai River that counts not smolt coming down  
 (15) we're not talking about these smolt traps but we're talking  
 (16) about this tried and proven technology of fish going up the  
 (17) river that is to say the adults going up the river that they  
 (18) try to count to determine what the escapement is about \$10  
 (19) million give or take a few million of this claim depends on  
 (20) the proposition that ADF&G does not count all the fish that are  
 (21) going through the sonar group  
 (22) Put another way that there are still fish getting by the  
 (23) sonar unit It's based entirely upon this curvilinear  
 (24) relationship on this one chart that Mr O'Neill showed you  
 (25) earlier You may remember this is the one that Mr Neal was

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(1) cross examining Dr Rogers about that had the pink points on it  
 (2) and he pulled the pink points off and so forth Although the  
 (3) plaintiffs never really explained how this machine could be  
 (4) undercounting the sonar could be undercounting  
 (5) We tried to look at that picture and we tried to present  
 (6) you with a pretty full picture of what the situation is here  
 (7) Maybe we're being accused of unfairly defending this claim but  
 (8) I don't think you can say that we're unfairly defending it when  
 (9) you look at what the evidence was on it  
 (10) We presented to you Bruce King as a witness he was the  
 (11) man who stood up there and he has actually operated I think  
 (12) like 15 years or maybe longer the unit on the Kenai He  
 (13) testified that his crew knew what they were doing and he  
 (14) testified that that counter - that that counter was accurate  
 (15) Well that doesn't show very well does it?  
 (16) Well let me just read it here Do you have a general  
 (17) opinion as to the accuracy of the sonar counting device? The  
 (18) Bendix side scan sonar counter Yes Do you have a general  
 (19) opinion as to the accuracy of that device with respect to  
 (20) counting sockeye? And he says, answer I think the numbers  
 (21) that we produced using that gear are accurate  
 (22) Now this isn't an Exxon paid expert coming in to tell you  
 (23) this this is the ADF&G personnel that run the unit  
 (24) Plaintiffs own expert witness Dr Mundy they haven't ask him  
 (25) a single question about the sonar He testified on other

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(1) matters but since he worked with ADF&G and others we asked  
 (2) him what he thought about that unit and his testimony was I  
 (3) asked him now when you were working for the ADF&G you  
 (4) never  
 (5) had any reason to think that the counter on the Kenai was  
 (6) providing data that was significantly wrong did you? And his  
 (7) answer was statisticians always hesitate the word wrong has a  
 (8) lot of different connotations I had no reason to expect that I  
 (9) couldn't use that information to manage the fishery that was  
 (10) important to me  
 (11) You had no reason to think that the escapement was not  
 (12) accurate  
 (13) I had no specific reason to believe that is inaccurate  
 (14) no  
 (15) Now this is the plaintiffs own expert witness telling you  
 (16) the counting is accurate and stones are coming our way  
 (17) because  
 (18) we're defending this claim and suggesting that the counter is  
 (19) accurate  
 (20) I'll just add that another plaintiffs witnesses  
 (21) Dr Parker who testified at their request was also asked if he  
 (22) was familiar with the equipment he said he was and he was  
 (23) asked did you consider it accurate and reliable? Answer We  
 (24) considered it reliable and accurate  
 (25) He also produced video deposition testimony of Al Menin who  
 (26) was the person the co-inventor of the unit And Mr Menin  
 (27) described for you how they had conducted clear water tests of

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(1) this type of a sonar unit in clear water rivers so they could  
 (2) see them and count them as they went by and compare them to  
 (3) the  
 (4) sonar He compared that to the Anvik and on the Wood River  
 (5) he  
 (6) testified about that was a 95 percent accuracy  
 (7) The plaintiffs claim this \$10 million or so is based on  
 (8) the notion that there was a 60 percent undercount in that unit  
 (9) that it was undercounting by that much  
 (10) Now the final thing we did is present Dr Carlson here  
 (11) who although Mr O'Neill would quarrel with him his expertise  
 (12) because he was the president of the company and had to get  
 (13) involved in sales and marketing for a period of time but he  
 (14) was basically a founder of BioSonics and his whole  
 (15) background  
 (16) is in hydroacoustics published papers done studies on it  
 (17) ADF&G hires him to work out  
 (18) We put on his testimony I won't say it again but the  
 (19) first thing he looked at are any fish beyond the range of the  
 (20) sonar unit out there in the river so we can't count them And  
 (21) he found an ADF&G test in 1992 where they brought a longer  
 (22) range sonar unit in and checked that point didn't find any  
 (23) appreciable undercounting because of that  
 (24) The second question are the fish going through so many at  
 (25) a time that they are too close to be counted individually by  
 (26) the sonar is that why we have the Stealth fish He showed you  
 (27) the photographs he found the thousands of photographs of the  
 (28) Wood River of the fish going by and he was able to make



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- (1) calculations from how close those fish were in the Wood River  
 (2) and discovered when you do that there is no undercounting by  
 (3) the sonar unit  
 (4) So while plaintiffs are fond of continuing with this claim  
 (5) the evidence is just overwhelming Everybody who has looked  
 at  
 (6) it except Dr Rogers has come to a completely different  
 (7) conclusion so there again we draw the line and we don't  
 (8) think it's fair to blame Exxon for that  
 (9) Now I've got to do one kind of administrative thing here  
 (10) What I'd like you to do is to write down a number I'm going to  
 (11) tell you how I got it and it's going to be this kind of  
 (12) mysterious little question on the verdict form that you're all  
 (13) going to get And it's going to basically ask you a question  
 (14) I'm sorry I don't have the number on it it's basically going  
 (15) to ask you the question how many sockeye salmon or how many  
 (16) fish would the setnetters have caught if - on the Upper Cook  
 (17) Inlet if there had been no oil spill and you're just going to  
 (18) be asked to come up with a number of fish and this involves  
 (19) the question of how many fish - how would the fish that were  
 (20) caught in Upper Cook Inlet in 1989 if there had not been the  
 (21) spill been divided or allocated between the two kinds of  
 (22) fishermen who fish for those sockeye salmon?  
 (23) One is the driftnetters and one is the setnetters And  
 (24) there is in evidence 6114 and I have just added some numbers  
 (25) to it I've done some addition This shows in the yellow what

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- (1) the ADF&G says was the actual catch in Upper Cook Inlet in  
 (2) 1989 That's how many fish were actually caught (indicating)  
 (3) Now this is from Dr Deriso estimated harvest if there had  
 (4) not been a spill and you see that he estimated that the setnet  
 (5) harvest would be 2 637 567 fish So if we want to know how  
 (6) many fish the setnetters here would have caught if there had  
 (7) been no spill since only the setnetters fished then and the  
 (8) driftnetters didn't fish because of the spill the setnetters  
 (9) caught all of these - actually I'm exaggerating somebody told  
 (10) me that the driftnetters caught three fish that year but we'll  
 (11) consider it zero If the setnetters caught 5.5 million had  
 (12) there been no spill they would have caught this many fish 2.63  
 (13) million They ended up enjoying 2 907 571 more fish than they  
 (14) actually would have caught if there hadn't been a spill  
 (15) Said another way because the driftnetters could not fish  
 (16) the setnetters caught all the fish normally the two different  
 (17) types catch and what this calculation does is come up with the  
 (18) number of fish that the setnetters would have caught in 1989 if  
 (19) there hadn't been a spill What it does is remove what they  
 (20) actually caught what the driftnetters would have caught if the  
 (21) driftnetters would have been allowed to fish  
 (22) I want to make - I do have to reply to one thing that Mr  
 (23) O'Neill said He referenced somebody who testified seems like  
 (24) a long time ago but it was not that long ago one of the first  
 (25) witnesses in Phase II A and that's Dr Peterson and you will

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- (1) recall that Dr Peterson testified about what was happening in  
 (2) the near shore area in the intertidal area and tried to make  
 (3) the claim that the oil had somehow had a tremendous amount of  
 (4) effect on this intertidal near shore area  
 (5) He's the one that drew that exhibit that had the lines  
 (6) going everywhere and the plaintiffs continued to utilize his  
 (7) testimony from the proposition that something must have  
 (8) happened to the fish because this near shore area I think what  
 (9) they call the nursery area was damaged  
 (10) Once again you got to start looking at the numbers what  
 (11) actually happened I think the first place you would look to  
 (12) see if that claim is right or not if you're saying that the  
 (13) damage by the oil to the near shore areas caused the fish  
 (14) population to decrease which is what they are suggesting it  
 (15) doesn't work that way  
 (16) Again looking at the Prince William Sound pink salmon  
 (17) runs this is DX5140-B These fish - the pink salmon who are  
 (18) fish that feed in those near shore areas after they are  
 (19) released from the hatcheries or emerged from the streams they  
 (20) did that in 1989 not long after the oil spill  
 (21) These fish came back notwithstanding having been exposed to  
 (22) the oil in this nursery area under Dr Peterson's theories  
 (23) those fish came back and set records That proof is in the  
 (24) pudding How could they have been so fouled up by what was  
 (25) going on in the near shore area if they came back and set

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- (1) records  
 (2) So as interesting as Dr Peterson's testimony was and as  
 (3) educational as it may have been about food webs it doesn't fit  
 (4) the facts here  
 (5) Now another thing that plaintiffs suggested you recall  
 (6) through Dr Bush who was about the second witness I think they  
 (7) called was tried to leave you with images of massive oiling  
 (8) persisting in Prince William Sound show you pictures of oiling  
 (9) that took place in 1989 talked about oil still being on the  
 (10) beaches I don't want to spend too much time on this because  
 (11) if you simply recall some of those photographs that we showed  
 (12) you of some of the same sites that Dr Bush portrayed as  
 (13) impacted heavily by oil this is Squirrel Island if I read it  
 (14) correctly one of the sites and it is basically a clean  
 (15) beach  
 (16) As he testified you'd have to look awfully hard to find any  
 (17) oil on there The other one I wanted to show you was one that  
 (18) has been shown to you I think several times Some advantages  
 (19) sometimes of being tall This is the one that you've seen with  
 (20) the oil streaming off of it is 89 and I believe this was  
 (21) taken in 1994 As you can see you don't have that situation  
 (22) anymore  
 (23) Now I want to address again fairly quickly this question  
 (24) of permit value These are the fishing permits that have  
 (25) indeed lost value Nobody disputes the fact that they have

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- (1) lost value This is the claim that originally the plaintiffs  
 (2) were seeking 23 some odd million dollars and then after the  
 (3) first day or after Dr Karpoff their expert witness  
 (4) testified Mr O Neill ended up in handwriting correcting the  
 (5) chart that he put in to 20 million dollars  
 (6) We know that the material that Dr Karpoff looked at was  
 (7) not appropriately analyzed He used a technique where he  
 (8) essentially utilized all the transactions that appeared in this  
 (9) CFEC data base even though many of these transactions  
 involved  
 (10) gifts with no consideration exchanging hands trades  
 (11) combination sales and various things all of which are  
 (12) unreliable indicators mean that you have an unreliable  
 (13) indicator as to what the prices were So that's the -  
 (14) fundamentally there was a problem with the data set  
 (15) But the basic point that I want to make is what is really  
 (16) driving the price of these permits is the price of fish I'm  
 (17) not even sure that Mr O Neill and we are very far apart on  
 (18) that maybe that's an area where we agree but if you basically  
 (19) look at overlay that's the price per pound of salmon you can  
 (20) see that the permit prices tend to behave perhaps with a year  
 (21) lag the way the price of salmon does So I think probably -  
 (22) let me show you another way of saying that  
 (23) This was an exhibit that was put into the evidence or put  
 (24) into evidence but not much time was spent on it What this  
 (25) does is kind of looks through the eyes of a fisherman as to

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- (1) what's happening with respect to income if prices drop Now  
 (2) what we're going to do is we've assumed the fishermen in 1988  
 (3) has a harvest of 48 000 pounds that uses the actual 1988  
 (4) price \$2.22 His income would have been \$102 000 Now if  
 you  
 (5) go to 1993 assumes he catches the same pounds of fish we  
 look  
 (6) at the actual price for these fish in 1993 and I might add  
 (7) that - plaintiffs are not making a price claim for 1992 they  
 (8) are making claims for 89 90 and 91 and that's all I  
 (9) don't think anybody could begin to blame current prices on the  
 (10) oil spill These were market prices in 1993 84 cents a  
 (11) pound So obviously at this point the fishermen is only  
 (12) earning 39 000 even though he's caught the same amount of  
 fish  
 (13) price has had a big impact.  
 (14) And the point is what's driving those permit prices in  
 (15) large part are fish prices and as I'm about to show to you  
 (16) well as I just showed to you those are fish prices that  
 (17) aren't affected by the Exxon Valdez oil spill and even if they  
 (18) were for reasons that I'm about to move to - well for  
 (19) reasons I'm about to move to I'm going to show you that the  
 (20) plaintiffs claim which involves most of the money in this  
 (21) case or the largest chunk of money prices were impacted by  
 (22) the oil spill just doesn't make sense  
 (23) While that chart is being called up we're now getting to  
 (24) this issue important issue of price and this is the issue  
 (25) where we presented you with expert testimony from Dr  
 Anderson

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- (1) right at the end you recall who had the charts up here in  
 (2) front of you I'll be talking about some of the things he  
 (3) said And incidentally I don't think that the plaintiffs  
 (4) would find any way to quarrel with Dr Anderson's credentials  
 (5) he's probably one of the world's premier economist dealing  
 with  
 (6) salmon he's published worked extensively in that area very  
 (7) familiar with all that  
 (8) We also presented you with expert testimony from  
 (9) Dr Kusakabe who as you recall testified about buying - her  
 (10) consumer habits in Japan concerning salmon who testified  
 about  
 (11) her survey of Japanese processors We presented you with  
 (12) testimony by Trond Bjorndal who is heavily involved in salmon  
 (13) farming in Norway so you could get that picture and we also  
 (14) gave you testimony by Robert Olley from Canada who testified  
 at  
 (15) length about this whole situation from the perspective of a  
 (16) Canadian  
 (17) One I think I do want to say at the outset it seemed to me  
 (18) very strange that you have this claim that the plaintiffs make  
 (19) that the oil spill affected the price and we're basically  
 (20) talking about prices in Japan as everybody knows now but  
 there  
 (21) we have this claim that the plaintiffs make that there was  
 (22) this drastic prices in Japan and Japanese processors used the  
 (23) spill to bargain down in price and so forth but yet they  
 (24) didn't call a single witness who is involved in the business  
 (25) in the salmon business in Japan You didn't see a single

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- (1) person you didn't see a single buyer come in here and testify  
 (2) from the plaintiffs You didn't see a single processor come in  
 (3) here and testify Given the fact that the linchpin of their  
 (4) whole theory involves those kinds of people that struck me as  
 (5) strange  
 (6) Now what is the claim of the plaintiffs? If you look at  
 (7) the chart that we have on here you've seen it several times  
 (8) before this is I think the one that probably basically in  
 (9) one fashion or another demonstrates many of the points here  
 (10) the key points One you're looking at is a chart over time of  
 (11) the prices of sockeye salmon in Alaska in British Columbia  
 (12) and in the state of Washington The Alaskan price is the  
 (13) purple line there on the bottom As you can see historically  
 (14) since 1980 there is some variation in the prices of British  
 (15) Columbia and the state of Washington sockeye tend to be  
 higher  
 (16) than the Alaska sockeye salmon And now the spill occurred in  
 (17) 1989 and of course the plaintiffs point to this drop in the  
 (18) price of the salmon from Alaska sockeye salmon from Alaska  
 (19) and try to blame that on the spill So essentially what they  
 (20) are saying is that the price of Alaskan sockeye would have  
 (21) behaved differently than the prices of sockeye behaved in  
 (22) British Columbia and in the state of Washington and would  
 have  
 (23) stayed - woops I didn't mean to do that - and would have  
 (24) stayed somehow high whereas the pattern clearly for the other  
 (25) countries or for the other country British Columbia and the

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(1) state of Washington go down I don't think anybody is going to  
 (2) claim that somehow the oil spill impacted the price of salmon  
 (3) in the state of Washington or in British Columbia you're  
 (4) talking thousands of miles away or thousand miles away from  
 (5) the spill There was never any claim by anybody in those areas  
 (6) that the price was affected All the claims have been that  
 (7) there is this despaired price impact in Alaska So basically  
 (8) the plaintiffs are asking you to believe that somehow the price  
 (9) of salmon in Alaska would have behaved differently than it did  
 (10) everywhere else if there hadn't been an oil spill  
 (11) Now this is the claim on my little chart here where they  
 (12) get \$580 million of their total damage most all of it is 1990 and  
 (13) 1991 two years after the spill not even the year of the  
 (14) spill What I'd like to do is start dealing with this claim by  
 (15) talking about what the plaintiffs witness Dr Crutchfield  
 (16) said  
 (17) Now his - he had a very narrow focus He basically talked  
 (18) about only one year 1989 he didn't talk about 1990 and 1991  
 (19) He talked about only one species sockeye although the  
 (20) plaintiffs are making a price claim for a variety of species  
 (21) and the plaintiffs' attorneys use the number that he comes up  
 (22) with and they abandon that number and use the one slightly  
 (23) higher that Dr Mendelsohn comes up with  
 (24) Now Dr Crutchfield his basic scenario they outlined on  
 (25) the stand was largely based on this notion that the price of

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(1) square with what the facts are shown to be  
 (2) As that one article indicated it was getting to be a  
 (3) bloodbath the supply was increasing You cannot continue to  
 (4) have these increases in supply and expect prices to hold up it  
 (5) was inevitable that the sockeye prices were going to fall as  
 (6) Dr Anderson testified to  
 (7) Now Dr Crutchfield in order to extricate himself from  
 (8) this little problem claimed that the sockeye prices would have  
 (9) stayed high because sockeye was different He said there was  
 (10) no substitutes for sockeye and this is kind of a variant of  
 (11) Mr Olley's redder is better theory That's interesting to  
 (12) speculate about how sockeye is regarded in Japan but  
 (13) fortunately we had a witness Dr Kusakabe tell us correctly  
 (14) about that  
 (15) Now I'd have to say with respect to Dr Kusakabe I thought  
 (16) it would be difficult to find a more forthright and careful  
 (17) witness than Dr Kusakabe She stood up there on the stand  
 (18) and  
 (19) make careful that she had her facts right and information  
 (20) right And I think obviously she was somebody who was  
 (21) explaining what she saw as truthfully as can possibly be done  
 (22) What she said was that if the price of sockeye gets high  
 (23) the Japanese will substitute for that As she put it when she  
 (24) was asked what are the other kinds of fish when considering  
 (25) price might be substituted for sockeye salmon if the price got  
 too high everything but particularly sea trout rainbow

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(1) sockeye salmon in the Tokyo Central Wholesale Market in  
 (2) March  
 (3) of '89 was high and that the signs were good that it would  
 (4) stay high Now what do we know?  
 (5) Well one thing we know is that prices of other species  
 (6) were already falling by that time in Japan Maybe sockeye  
 (7) hadn't got there quite yet but the picture was clear prices  
 (8) were already falling  
 (9) What I'm going to do is put up the March April Seafood  
 (10) Leader article that you heard Dr Olley talk about Now what  
 (11) this article says as 1989 began the frozen salmon market was a  
 (12) bloodbath with buyers and consumers balking at the high  
 (13) prices In December December of 1988 they are talking about  
 (14) here U.S. frozen salmon holdings were 50 percent over 1987  
 (15) levels and product was moving slowly  
 (16) Now this is the point in time at which Dr Crutchfield is  
 (17) saying everything is hunky dory in the salmon market and  
 (18) obviously it was not And in fact we know that at the point  
 (19) in time when Dr Crutchfield's theory has salmon prices all  
 (20) being very optimistic and staying high that the price of the  
 (21) United States sockeye exports to Japan was already declining  
 (22) If we look at Exhibit 6097 Maybe you better call that  
 (23) up You can see that these prices of sockeye exports to Japan  
 (24) from the United States were already declining and that's  
 (25) before the oil spill the blue is all before the spill So  
 again Dr Crutchfield's premise that he's operating on doesn't

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(1) trout chum salmon and king salmon it's all interchangeable  
 (2) So this fillet mignon notion that Dr Crutchfield was  
 (3) trying to sell doesn't really hold over in Japan which is of  
 (4) course where most of the sockeye goes  
 (5) Now a final point I want to make about Dr Crutchfield's  
 (6) testimony Dr Crutchfield did not use what you would think  
 (7) would be a very logical way of looking at salmon prices here  
 (8) He did not use the same benchmark method as it's called that is  
 (9) reflected in this chart I showed you earlier  
 (10) In other words the logical way that economists go about  
 (11) trying to figure out if one price for a particular reason  
 (12) behaved differently is to look and see what that price did  
 (13) somewhere elsewhere that particular event that's being  
 (14) analyzed  
 (15) didn't occur  
 (16) Mr O'Neill talked about how Dr Crutchfield looked at and  
 (17) examined the effect of some other oil spills the Braer and I  
 (18) think the other one was the Amoco Cadiz although I may be  
 (19) wrong on that on the effect of prices and fish  
 (20) And Dr Crutchfield testified when he did that in those  
 (21) other cases he used this benchmark method He took a price  
 (22) somewhere else or a price for fish from somewhere else and  
 (23) then compared that to the price in the area that had been  
 (24) impacted by the spill to see if there was a difference Well  
 (25) his model that uses the Tokyo Central Wholesale price doesn't  
 do that I suspect the reason he abandoned that technique

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- (1) here when you look at it as we have seen the Alaska prices  
 (2) behaved just the same as the prices for sockeye do in British  
 (3) Columbia and in the state of Washington so the benchmark  
 (4) method basically says there was no difference  
 (5) Let s leave Dr Crutchfield here and talk about the  
 (6) theoretical underpinning for the whole plaintiff s price  
 (7) claim That theoretical underpinning is that there is some  
 (8) kind of a taint attached to the fish from the area as a result  
 (9) of the oil spill and that consumers will fear buying those  
 (10) fish and that processors people who buy fish from the  
 (11) fishermen will use that fear of taint as some sort of  
 (12) bargaining weapon in order to gain an advantage I need to get  
 (13) a drink of water or I may lose that voice entirely  
 (14) Now if in fact that theory about taint was correct and  
 (15) that that was producing some sort of an extraordinary  
 (16) bargaining tool that Japanese buyers could utilize you would  
 (17) think that that would turn up when Dr Kusakabe basically went  
 (18) out and interviewed all of these Japanese buyers the 35  
 (19) largest buyers of salmon in Japan and in fact that didn t turn  
 (20) up  
 (21) You will recall when she surveyed those major Japanese  
 (22) importers that and they ranged one two three high medium or  
 (23) low the importance of these various factors the Exxon oil  
 (24) spill was all the way down here next to last with very few  
 (25) people - very few of these major Japanese salmon imports are

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- (1) importers rating the spill as an important factor contributing  
 (2) to the price decline  
 (3) In fact as she pointed out 28 said the spill did not  
 (4) contribute to the price decline at all Five had spill as a  
 (5) minimal factor only one had spill one of the - I think this  
 (6) was a number two rating one of eight factors contributed to  
 (7) price decline and one more had spill one of 13 factors So  
 (8) obviously the spill is not playing a very large role in the  
 (9) mind of these Japanese buyers whom Dr Kusakabe  
 interviewed  
 (10) Now Mr O Neill may in fact quarrel with how she did the  
 (11) interview but in point of fact these are sophisticated  
 (12) respondents And it s obvious from their responses that none  
 (13) of them thought that the spill had played a very significant  
 (14) role  
 (15) Another point is that Dr Anderson and Dr Kusakabe  
 (16) reviewed trade literature in a number of trade magazines and  
 (17) newspapers and they didn t find any indication in there that  
 (18) the spill had in fact played a role in what was happening to  
 (19) prices that s because it wasn t really playing that much of a  
 (20) role  
 (21) And in fact what we know from some of the other testimony  
 (22) is that the effect of the oil spill in Prince William Sound was  
 (23) being stressed by fishermen as a reason to ask and to try to  
 (24) seek increased prices because of the reduced supply resulting  
 (25) from the fishery closures as a consequence of the oil spill

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- (1) Merry Tuten testified to that and you heard Dr Anderson and  
 (2) others testimony to that same effect  
 (3) Now Mr O Neill showed you on a poster board a long list of  
 (4) other situations where there he said was a taint effect on  
 (5) some kind of a product or a food But you stop and think about  
 (6) those for a minute I think you ll readily see that we re  
 (7) talking about things that are not comparable The botulism  
 (8) incident you ve all heard testimony about the botulism scare  
 (9) in 1982 when some Alaska canned salmon turned out to have  
 (10) botulism  
 (11) Well what happened in that situation? The testimony has  
 (12) shown number one that somebody died from getting a can of  
 (13) this I believe it was over in Europe that resulted in an  
 (14) immediate embargo for a period of time and what you saw was  
 (15) sales decline Here of course the zero tolerance policy went  
 (16) into effect No tainted fish no fish pointed as a consequence  
 (17) of the oil spill ever reached the marketplace  
 (18) Merry Tuten said that in her videotape deposition this was  
 (19) the person who was the former executive director of the Alaska  
 (20) Salmon Marketing Institute But there was no evidence of any  
 (21) tainted fish reaching the market thanks to ADF&G s zero  
 (22) tolerance policy which prevented that from ever happening  
 (23) The second thing as a consequence of that consumers never  
 (24) had to fear if they went to the market and bought some fish  
 (25) that it was going to be contaminated by oil it s not a

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- (1) situation like the Chilean grape fright or the Alar on apple  
 (2) situation where the tainted product had already reached the  
 (3) supermarket shelves and of course people would be frightened  
 (4) to buy it You reach up on the shelf and buy it and you might  
 (5) get some bad product.  
 (6) The state of Alaska never let that happen not a single  
 (7) tainted fish ever reached the marketplace So the whole  
 (8) theoretic underpenny of the plaintiffs claim is not on firm  
 (9) ground  
 (10) Now as it happens I think we know for sure that there was  
 (11) no taint effect thanks to the zero tolerance policy and the  
 (12) reason we know for sure if you stop and think about it what  
 (13) do you know for - what you re looking for here Was there a  
 (14) taint effect that reduced the demand for Alaska salmon? Where  
 (15) would you go to look?  
 (16) One way you could go to look for that you could see  
 (17) whether in fact in the basic market places the consumption of  
 (18) salmon was declining I ll show you Exhibit 4893-A You may  
 (19) remember this chart but this showed that overall seafood  
 (20) consumption in Japan in 1988 89 90 and 91 was trending  
 (21) downward but while that was happening and after the spill  
 (22) occurred in 89 what was happening with salmon consumption  
 in  
 (23) Japan? It was increasing  
 (24) So during this period when the plaintiffs claim that taint  
 (25) was scaring people off from buying this product taint so In

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- (1) fact the salmon consumption was increasing in the principal marketplace in Japan
- (2) marketplace in Japan
- (3) Now I think a good way to approach this is to - well let me see if I can find the right exhibit Another way to approach this is to think about what would be happening if in fact the Alaskan salmon had somehow suffered some terrible fall
- (4) from grace as a result of the oil spill and consumers and buyers were avoiding it What would you expect to see then is the consumption - well you would expect to see is consumption
- (5) of salmon from other places go up
- (6) If for some reason the buyers aren't buying the salmon from Alaska because of a consumer fear of taint they got to get it from somewhere else This means they would go to British Columbia the state of Washington or other areas to buy it and if they were buying more of that well what would happen the price would go up As we've already seen that didn't happen in British Columbia that didn't happen in the state of Washington Prices stayed the same relative to one another So there is more evidence that in fact that taint was not a phenomena that was operating in the marketplace
- (7) THE COURT Five minutes Mr Cooper
- (8) MR COOPER Well that brings you kind of to the basic question as to why did prices fall Now we again have tried to give you information on that so you can be fully armed to make up your own minds as to why prices fell

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- (1) I'm just going to remind you that in one word as Dr Olley put it prices fell because of supply The supply got very high Exhibit 5419 A the catch went from the lowest in the past decade to a record harvest in 89 and other one in 90 If you look at the world harvest in wild and farmed salmon What you find is that at the time of the spill the supply was increasing especially the farmed salmon component there which
- (2) meant that the inevitable had to occur prices had to fall
- (3) Now I want to show you this because I want to make a point This is the plaintiffs - well this is the same chart we were just looking at prices of sockeye in Alaska British Columbia and in the state of Washington
- (4) Dr Mendelsohn predicted what the price would be for Alaska salmon based on his computer model as you may recall The prediction that he came up with basically is this one the price would be 1990 at this level for Alaska salmon if there hadn't been a spill and at '91 would have been at this level What that means is you would have this strange situation and if you believed his model where the Alaskan price of salmon let's say in 1991 for about a six and a half pound fish would be \$23 that's what the buyer would have to pay for this Alaska salmon if his price predictions were in fact during that time accurate why would the buyer have been willing to pay \$23 when the buyer could go to the state of Washington and
- (5) pick up the fish for \$9 because that was the actual price at

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- (1) the time I don't think you need to add much more than that to point out that Dr Mendelsohn's model doesn't make a whole lot of sense Why does he make that analysis? Because he used the
- (2) farmed factor to create the applies of Alaska salmon
- (3) If you gave away tons of farmed salmon we'd still have an effect of increasing price of salmon in Alaska clearly something is wrong with that model We have shown you that a number of other studies that have looked seriously at the question of sockeye prices in Japan and elsewhere to see what
- (4) has driven them down all come to the conclusion that factors other than the oil spill caused those declines the government accounting of studies that you saw the work by ASMI that you saw all comes down to the fact that these other world supply problems were what was driving the price of salmon down
- (5) Plaintiffs mentioned the Burson Marsteller survey they enjoy putting up the poster board of the statements in there about buyers having concern but the one thing to remember is that survey had an earlier question that basically asked if they had changed their buying habits because of the spill and the answer is to that was no although they may have had concerns they didn't change their buying habits That is reflected in the fact that the monthly consumption of salmon in Japan actually increased after the oil spill
- (6) THE COURT Mr Cooper it's time
- (7) MR COOPER Can I just mention one other exhibit?

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- (1) THE COURT We had an agreement you were going to use two hours
- (2) MR COOPER All right Your Honor I will stop there then
- (3) THE COURT Thank you sir We will take our second recess at this point ladies and gentlemen There will be one brief thing that I will need to take up with counsel before we call you back in so our recess for you will be maybe 20 minutes 15 minutes for everybody else
- (4) (Jury out at 1:05)
- (5) (Recess 1:05 to 1:18)
- (6) THE COURT We are back on the record without the jury At this time I have had Mr Murtashaw distribute to counsel the final jury instructions as I proposed to give them and also I've distributed the verdict form which we have revised based upon the submissions that were made this morning
- (7) I want you to look particularly at the one instruction that we modified it's number 32 Is what we have done with that satisfactory to you?
- (8) MR O'NEILL Yes it is Your Honor
- (9) MR DAUM Yes Your Honor
- (10) THE COURT Thank you Secondly with respect to the verdict form as you will see we have made a choice between the competing versions that we had on balance I thought this was

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- (1) the better approach to the matter Anything further that we  
 (2) need to do with respect to the verdict form?  
 (3) MR DAUM Your Honor in the event we need to  
 (4) preserve the record we do object to the change in the verdict  
 (5) form on the ground that we think under Rule 49 it fails to  
 (6) submit an issue specifically to the jury that ought to be  
 (7) submitted to it  
 (8) THE COURT I understand Let s call the jury back  
 (9) and we will finish closing arguments  
 (10) (Jury in at 1 20)  
 (1) THE COURT Mr O Neill you may make your final  
 (2) presentation  
 (13) MR O NEILL Thank you Your Honor  
 (14) As an accommodation to Bert Cooper, the last exhibit he  
 (15) wanted to mention was 6176A and 6176A is sort of their  
 (16) scorecard like ours so this is what he would have told you  
 (17) 6176 A And now could we have the Elmo This statement no  
 (18) one is trying to minimize the impact of the spill was what you  
 (19) were told at the beginning of Phase II by Exxon And I would  
 (20) submit that what we have seen is the Exxon two-step  
 (21) And that is no one is trying to minimize the impact of the  
 (22) spill but and then we get the second step I want to address  
 (23) very specifically before I get to the verdict form what people  
 (24) can do with numbers and Exxon showed you at the beginning  
 (25) of its closing argument Exhibit 6136 Defendants Exhibit 6136 in

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- (1) which they compared the early years to what the plaintiffs  
 (2) claims were in 89 90 and 91 Do you remember that?  
 (3) Now what I did was I took the exhibit while I was sitting  
 (4) at the table there because nobody had come here and talked  
 (5) about it I hadn t really focused on it and I went and I  
 (6) changed it slightly Let s see if we can get it in front Now  
 (7) this dark stuff where my finger is and this red line and these  
 (8) scribbles are mine  
 (9) Now the purpose of this exhibit before the dark stuff was  
 (10) to pick early years and to average 1985 86, 87 and 88 and  
 (11) then get you to draw the conclusion that plaintiffs were asking  
 (12) for more money that they can have conceivably caught or got  
 (13) for their fish and the reason in this second bar here that this  
 (14) was 1985 and 86 87 88 the reason that they took those and  
 (15) they averaged those was because 85 was a crummy year  
 (16) So what I did was I said let s take the two most recent  
 (17) years in fishing history and see what happens and 1988 is the  
 (18) year just prior to the spill and I put in what the total  
 (19) income would be and then I draw this line here and low and  
 (20) behold the plaintiffs damage claims including price and  
 (21) harvest compare very nicely with what in fact was harvested  
 (22) and sold in 988 do you see how I did that?  
 (23) I said let s not take an average that has the 1985 bad year  
 (24) at it let s look at 87 and 88 and you can see that for  
 (25) 1989 with the damages the level is a little bit higher than

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- (1) 88 and then 90 91 and 92 and 93 again you can see that  
 (2) these damage calculations if you don t play funny games with  
 (3) averages compare favorably to 1988  
 (4) Now that puts a circle around the damage claims It tests  
 (5) the damage claims as a whole against what we know in 1988  
 Now  
 (6) you are not going to have my marked up analysis back in the  
 (7) jury room with you because I did it sitting here but I did it  
 (8) to make two points  
 (9) Number one this chart is not a fair analysis Number two  
 (10) if you look at 1987 and 1988 it puts the plaintiffs damage  
 (11) claims into a real real context and it sells us that those  
 (12) damage claims make sense in the real world  
 (13) Now I want to now go over the special verdict form which  
 (14) is your ballot and on the special verdict form you re going to  
 (15) get to go through probably in great detail a series of  
 (16) questions and I m going to try to simplify all of the  
 (17) questions for you but three  
 (18) Most of the questions are set out in this format so that  
 (19) you re asked for each item of damage do you find from a  
 (20) preponderance of the evidence that the oil spill was a legal  
 (21) cause of the reduced harvest and it will go through each of  
 (22) the categories of damage so you find a legal cause yes or no  
 (23) and then if in fact it s a legal cause yes you go and you fill  
 (24) in the damage numbers so that s the process a determination  
 (25) as to legal cause and then a filling in the damage numbers

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- (1) Makes sense  
 (2) And I call your attention to the fact that it says a legal  
 (3) cause not "the legal cause" and we discussed that in Phase I  
 (4) and it s in the instructions again in Phase II  
 (5) Now I said that this was the pattern of the instructions,  
 (6) and it is with three exceptions and I want you to write these  
 (7) down Interrogatory number three and four interrogatory  
 seven  
 (8) and eight and interrogatory ten and 11 three and four seven  
 (9) and eight and ten and 11 and now I m going to go over those  
 (10) instructions with you  
 (11) Three and four deal with this setnet issue and it reads  
 (12) number three do you unanimously find from a preponderance  
 of  
 (13) the evidence that the oil spill was a legal cause of increased  
 (14) harvests of salmon by setnet fishermen in Upper Cook Inlet in  
 (15) 1989? And both Exxon and the plaintiffs both want you to  
 (16) answer this yes because it's a fact but I would suggest to  
 (17) you that when you answer number four that this be the one  
 (18) blank on the verdict form that you put in a zero and I ll tell  
 (19) you why it s unseemly that Exxon is asking for the fish back  
 (20) and we haven t heard any good proof as to what this number  
 (21) ought to be so I recommend to you that you put in a zero here  
 (22) and this be the only zero on the verdict form  
 (23) Now the next one deals with a similar issue and the issue  
 (24) is the same in interrogatories ten and 11 and seven and eight  
 (25) let me put seven and eight up Interrogatory seven asks you

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- (1) and the reason I want to call it to your attention it asks you  
 (2) two questions  
 (3) Do you unanimously find from a preponderance of the  
 (4) evidence that the oil spill was a legal cause of reduced  
 (5) harvests in Upper Cook Inlet in 1994 That s the first  
 (6) question but it s got a subquestion If you find that the  
 (7) state s management of the sockeye fishery is a superceding  
 (8) cause then you have to answer this no  
 (9) Now the plaintiffs want a yes answer and if I could find  
 (10) the superceding cause instruction which I did this question  
 (11) is an attempt by Exxon to pawn off responsibility for the 1994  
 (12) and 1995 Kenai losses on Fish & Game  
 (13) The second half of the question is an attempt to pawn it  
 (14) off on Fish & Game And the argument is that Fish & Game  
 makes  
 (15) the ultimate decision with regard to the sockeye run so if  
 (16) there is overescapement it was Fish & Game s problem But we  
 (17) asked witness after witness isn t it true that the  
 (18) overescapement was because of the oil spill, and because of  
 the  
 (19) oil spill Fish & Game was unable to manage the fishery so the  
 (20) oil spill started it It s sort of like somebody who starts a  
 (21) house fire saying it s the fireman s fault that the house did  
 (22) burn down because the fireman didn t put the fire out in quick  
 (23) enough time It s the same game  
 (24) The superceding cause the Judge will instruct you must be  
 (25) something more than a subsequent act in a chain of causation

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- (1) It must be an act that was not reasonably foreseeable at the  
 (2) time of defendants harmful conduct And then he goes onto  
 (3) say if the independent intervening act is highly unusual or  
 (4) extraordinary or not reasonably likely to happen then hence  
 (5) not foreseeable its a superceding cause and the defendants  
 are  
 (6) not liable  
 (7) If Fish & Game s activities would have been highly unlikely  
 (8) or highly unusual or extraordinary then maybe Exxon could get  
 (9) off of the hook but they weren t The oil spill caused a loss  
 (10) of control of the harvest and that caused the damage So we  
 (11) ask you to answer seven and eight and ten and 11 yes  
 because  
 (12) by answering seven and eight and ten and 11 yes as this  
 (13) question instructs you you re saying no to the fireman s  
 (14) excuse and I think that as a general proposition on the  
 (15) verdict form a fishermen s answer is a yes answer an Exxon s  
 (16) answer is a no answer  
 (17) Now the last specific item I m going to mention on the  
 (18) verdict form is the value of the fishing permits The value of  
 (19) the fishing permits issue is going to require you to go through  
 (20) that big thick stack of paper whether we like it or not and I  
 (21) would submit to you that when you do that the sale prices that  
 (22) are listed for the fishermen on that big exhibit are the sale  
 (23) prices that they are required to swear to the government So  
 (24) we ask that you put in the \$20 million number here not my  
 (25) first \$23 million number but my \$20 million number and the

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- (1) reason I changed the number from 23 to 20 is because the 23  
 (2) million dollar wasn t right And I hope that is the kind of  
 (3) forthnghteousness and care and attention you expect of us but  
 (4) when it was called to my attention I changed it with regard to  
 (5) the herring collapse the salmon collapse and the 19 -  
 (6) projected 1994 and 95 collapse in Upper Cook Inlet and  
 Kodiak  
 (7) the Trustees agree with the plaintiffs and Dr Mundy and Dr  
 (8) Kocan who came here to testify are with the Trustees enough  
 (9) said  
 (10) With regard to the 1994 and 1995 losses the Judge will  
 (11) instruct you and it is your duty to assess as the law  
 (12) requires past or future losses and the fact that the 1994 and  
 (13) 95 seasons haven t yet collapsed they are in the process of  
 (14) collapsing, makes no difference because we re here now the  
 (15) system works on the basis that we re here now and if you do  
 (16) not give the 94 and 95 losses the same care and attention as  
 (17) the others it s inconsistent with the instruction and these  
 (18) people will not get another chance  
 (19) This is the Burson Marsteller specific findings with regard  
 (20) to 185 traders and this is what in fact happened to local  
 (21) sockeye salmon on the Tokyo Central Wholesale Market And  
 this  
 (22) is what we know happened with regard to sockeye  
 (23) Now the biggest defense to the price drop that we have  
 (24) heard is the fact that British Columbia and Washington prices  
 (25) dropped too and they did What is the relationship between

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- (1) this and the British Columbia and Washington prices? They are  
 (2) all North American sockeye the Japanese distinguish between  
 (3) sockeye and other kinds of fish but they can t distinguish  
 (4) between North American sockeye Most of the North American  
 (5) sockeye comes from Alaska The Alaska sockeye comes out of  
 (6) Alaska first.  
 (7) The harvest starts in Bristol Bay goes down the coastline  
 (8) and ends in British Columbia So the market forces that drive  
 (9) sockeye prices in Alaska as Dr Crutchfield testified to  
 (10) result in shoddy movements in British Columbia and the state of  
 (11) Washington  
 (12) And can we confirm that How can we confirm that? How can  
 (13) we confirm if there is a taint effect on Alaska fish that that  
 (14) taint effect goes to British Columbia? By asking Dr Olley  
 (15) what happened with regard to canned salmon in 1982 and 1983  
 in  
 (16) British Columbia when Alaskan canned salmon price dropped  
 (17) because of the botulism incident what happened in British  
 (18) Columbia that dropped too  
 (19) Most of the sockeye that comes out of north America comes  
 (20) out of Alaska and what happened to these Alaska fishermen  
 (21) unfortunately had a spill-over effect into British Columbia and  
 (22) the state of Washington but thank God that they don t catch as  
 (23) many fish and the impacts weren t as great  
 (24) It is beyond comprehension that we can have this huge oil  
 (25) spill in the newspapers in the Sound in the market and then

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- (1) have all of the terrible things that followed and have the  
 (2) Trustees and the best economists in the world conclude that the  
 (3) oil spill caused these things it's beyond comprehension and  
 (4) then have Exxon come in here and nickel and dime and quarter  
 (5) these fishermen today  
 (6) And I want you to remember that for Phase III And so we  
 (7) can get out of here as quickly as possible I thank you for  
 (8) your time and attention the reason I used some of this time to  
 (9) go through the verdict form is I think it's my responsibility  
 (10) to take you through the verdict form talk a little bit about  
 (11) the verdict form and I'm not going to sit here and go over for  
 (12) a half an hour what I went over for the first hour and a half  
 (13) it's a waste of everybody's time And I'm sure you paid good  
 (14) attention so I'm going to thank you on their behalf because  
 (15) this is not Mr O'Neill's case I'm going to thank you on their  
 (16) behalf and sit down  
 (17) THE COURT Members of the jury we've now completed  
 (18) Phase II A of this trial Now that you've heard the evidence  
 (19) and the arguments it becomes my duty to give you the  
 (20) instructions as to the law applicable to this part of the  
 (21) case Copies of these instructions will be available for you  
 (22) in the jury room for further review I urge you to review these  
 (23) instructions from time to time as you progress with your  
 (24) deliberations  
 (25) It is your duty as jurors to follow the law as stated in

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- (1) these instructions and to apply that law to the facts as you  
 (2) find them from the evidence in this case You are not to  
 (3) single out one instruction alone as stating the law but must  
 (4) consider the instructions as a whole  
 (5) Neither are you to be concerned with the wisdom of any rule  
 (6) of law stated by the Court Regardless of any opinion you may  
 (7) have as to what the law ought to be it would be a violation of  
 (8) your sworn duty to base a verdict upon any other view of the  
 (9) law than that given in the instructions of the Court  
 (10) Similarly it would be a violation of your sworn duty as judges  
 (11) of the facts to base a verdict upon anything but the evidence  
 (12) in the case presented here in open court  
 (13) Nothing I say in these instructions is to be taken as an  
 (14) indication that I have an opinion about the facts of the case  
 (15) or what that opinion is It is not my function to determine  
 (16) the facts but rather yours  
 (17) Justice through trial by jury must always depend on the  
 (18) willingness of each individual juror to seek the truth as to  
 (19) the facts only from the same evidence presented to all the  
 (20) jurors and to arrive at a verdict by applying the same rules  
 (21) of law as given in the instructions of the court  
 (22) You have been chosen and sworn as jurors in this case to  
 (23) try the issues of fact presented by the plaintiffs and the  
 (24) defendants You are to perform this duty without bias or  
 (25) prejudice as to any party

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- (1) Our system of law does not permit jurors to be governed by  
 (2) sympathy prejudice or public opinion as to either party The  
 (3) law requires and both the parties and the public expect that  
 (4) you will carefully and impartially consider all the evidence  
 (5) in the case follow the law as stated by the court and reach a  
 (6) just verdict regardless of the consequences  
 (7) Unless otherwise stated the jury should consider each  
 (8) instruction given to all the parties and to all the  
 (9) defendants - oh I'm sorry to all the plaintiffs and to all  
 (10) of the defendants in the case  
 (11) This case should be considered and decided by you as an  
 (12) action between persons of equal standing in the same  
 (13) community  
 (14) of equal worth and holding the same or similar stations in  
 (15) life  
 (16) in your decisions on issues of fact a corporation is  
 (17) entitled to the same fair trial at your hands as a private  
 (18) individual All persons including corporations partnerships  
 (19) unincorporated associations and other organizations stand  
 (20) equal before the law and are to be dealt with by the Judge and  
 (21) the jury as equals in a court of justice  
 (22) For purposes of this trial the parties will refer to Exxon  
 (23) Shipping Company and Exxon Corporation as the Exxon  
 (24) defendants  
 (25) and you should consider all evidence arguments and  
 questions  
 (1) submitted to you for decision as though the Exxon defendants  
 (2) were one party

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- (1) Any act or failure to act of Exxon Shipping Company or any  
 (2) knowledge or information known or available to Exxon Shipping  
 (3) Company shall be considered to be equally the act or  
 (4) knowledge  
 (5) of Exxon Corporation Any act or failure to act by Exxon  
 (6) Corporation or any knowledge or information known or  
 (7) available  
 (8) to Exxon Corporation shall be considered the act or failure to  
 (9) act or the knowledge of Exxon Shipping Company  
 (10) There are generally speaking two types of evidence from  
 (11) which a jury may properly find the truth as to the facts of a  
 (12) case One is direct evidence such as the testimony of  
 (13) eyewitnesses The other is indirect or circumstantial  
 (14) evidence The proof of a chain of circumstances pointing to  
 (15) the existence or non-existence of certain facts  
 (16) The law makes no distinction between direct or  
 (17) circumstantial evidence but simply requires that the jury find  
 (18) the facts in accordance with the preponderance of all the  
 (19) evidence in the case both direct and circumstantial  
 (20) The evidence from which you are to decide what the facts  
 (21) are consists of One the sworn testimony of witnesses on both  
 (22) direct and cross examination regardless of who called the  
 (23) witness Two the exhibits which have been received into  
 (24) evidence and three any facts to which all the lawyers have  
 (25) agreed or stipulated  
 (1) Plaintiffs and the defendants have agreed or stipulated to  
 (2) certain facts you shall treat those facts as having been



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- (1) proved
- (2) Certain things are not evidence and you may not consider
- (3) these things exist insofar as they are supported by the
- (4) evidence. These things include: One, arguments and statements
- (5) by lawyers are not evidence. The lawyers are not witnesses
- (6) What they say in their opening statements, closing arguments
- (7) and at other times is intended to help you interpret the
- (8) evidence, but it is not evidence.
- (9) If the facts, as you remember them, differ from the way the
- (10) lawyers have stated them, your memory of them controls. Two,
- (11) objections by lawyers are not evidence. Attorneys have a duty
- (12) to their clients to object when they believe a question is
- (13) improper under the rules of evidence.
- (14) You should not be influenced by the objection or the
- (15) Court's ruling on it. Three, testimony that has been excluded
- (16) or stricken, or that you have been instructed to disregard, is
- (17) not evidence and must not be considered.
- (18) Four, evidence admitted for a limited purpose is not
- (19) evidence for any other purpose, thus, when I have admitted in
- (20) evidence for a limited purpose, it would be improper to
- (21) consider that evidence for any other purpose.
- (22) Five, anything you may have seen or heard when the court
- (23) was not in session is not evidence. You are to decide the case
- (24) solely on the evidence received during trial.
- (25) Six, some of you have taken notes during the trial. Such

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- (1) Notes are not evidence and are only for the personal use of
- (2) the person who took them.
- (3) Certain charts and summaries have been shown to you in
- (4) order to help explain the facts disclosed by the books, records,
- (5) and other documents which are in evidence in the case.
- (6) However, such charts or summaries are not in and of
- (7) themselves
- (8) evidence or proof of any facts. If such charts or summaries do
- (9) not correctly reflect facts or figures shown by the evidence
- (10) in this case, you should disregard them.
- (11) In other words, such charts or summaries are used only as a
- (12) matter of convenience, so if, and to the extent that you find
- (13) that they are not in truth, summaries of facts or figures shown
- (14) by the evidence in the case, you are to disregard them
- (15) entirely.
- (16) You are to consider only the evidence in the case, but in
- (17) your consideration of the evidence, you are not limited to the
- (18) bald statements of the witnesses. In other words, you are not
- (19) limited solely to what you see and hear as the witnesses
- (20) testify or what appears on the face of exhibits. You are
- (21) permitted to draw from facts which you find have been proved
- (22) by
- (23) the evidence in this phase of the trial, such reasonable
- (24) inferences as seem justified in light of your experience.
- (25) Inferences are deductions or conclusions which reason and
- (26) common sense lead a jury to draw from the facts which have
- (27) been
- (28) established by the evidence in the case.

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- (1) You are not bound to decide any issue of fact in accordance
- (2) with the testimony of any number of witnesses which does not
- (3) produce in your mind a belief in the likelihood of truth, as
- (4) against the testimony of a lesser number of witnesses or other
- (5) evidence which does not produce such belief in your minds.
- (6) The test is not which side brings the greater number of
- (7) witnesses, or presents the greater quantity of evidence, but
- (8) which witness, and which evidence, appeals to your minds as
- (9) being most accurate and most trustworthy.
- (10) The testimony of a single witness, which produces in your
- (11) mind a belief in the likelihood of truth, is sufficient for the
- (12) proof of any fact, and would justify a verdict in accordance
- (13) with such testimony, even though a number of witnesses may
- (14) have
- (15) testified to the contrary, if, after consideration of all the
- (16) evidence in the case, you hold greater belief in the accuracy
- (17) and reliability of the one witness.
- (18) During this part of the trial, certain depositions were
- (19) read or played to you. These consist of sworn, recorded
- (20) answers
- (21) to questions asked of the witness in advance of the trial, by
- (22) one or more of the attorneys for the parties to the case.
- (23) Such testimony is entitled to the same consideration, and
- (24) is to be judged as to credibility and weighed, and otherwise
- (25) considered by the jury, insofar as possible, in the same way as
- (26) if the witness had been present, and had testified from the
- (27) witness stand.

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- (1) The rules of evidence ordinarily do not permit witnesses to
- (2) testify as to opinions or conclusions. An exception to this
- (3) rule exists as to those whom we call expert witnesses.
- (4) Witnesses who, by education or experience, have become
- (5) expert
- (6) in some art, science, profession or calling, may state their
- (7) opinions as to relevant and material matters in which they
- (8) profess to be expert, and may also state their reasons for the
- (9) opinion.
- (10) You should consider each expert opinion received in
- (11) evidence in this case, and give it such weight as you may think
- (12) it deserves. If you should decide that the opinion of an
- (13) expert witness is not based upon sufficient education
- (14) and experience, or if you should conclude that the reasons
- (15) given in support of the opinion are not sound, or if you feel
- (16) that it is outweighed by other evidence, you may disregard the
- (17) opinion entirely.
- (18) The burden is on the plaintiffs in a civil action, such as
- (19) this, to prove every essential element of their claims by a
- (20) preponderance of the evidence. If the proof should fail to
- (21) establish any essential element of a claim by a preponderance
- (22) of the evidence in the case, the jury should find for the
- (23) defendant as to that claim.
- (24) To quote, "establish by a preponderance of the evidence"
- (25) end quote, means to prove that something is more likely so than
- (26) not so. In other words, a preponderance of the evidence in the

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- (1) case means such evidence as when considered and compared with
- (2) that opposed to it has more convincing force and produces in
- (3) your mind s belief what is sought to be proved is more likely
- (4) true than not true
- (5) This rule does not of course require proof to an absolute
- (6) certainty since proof is an absolute certainty is seldom
- (7) possible in any case
- (8) In determining whether any fact in issue has been proved by
- (9) a preponderance of the evidence in the case the jury may
- (10) unless otherwise instructed consider the testimony of all
- (11) witnesses regardless of who may have called them and all
- (12) exhibits received in evidence regardless of who may have
- (13) produced them
- (14) When I say in these instructions that a party has the
- (15) burden of proof on any proposition or use the expression if
- (16) you find\* or if you decide\* I mean you must be persuaded
- (17) considering all the evidence in the case that the proposition
- (18) is more probably true than not true
- (19) In deciding whether plaintiffs have proved a fact or an
- (20) element of a claim by a preponderance of the evidence you
- must
- (21) evaluate all the evidence In doing this you must decide which
- (22) testimony to believe and which testimony not to believe You
- (23) may believe all or any part or none of any witnesses
- (24) testimony In making that decision you may take into account a
- (25) number of factors including the following One was the

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- (1) witness able to see or hear or know the things about which
- (2) that witness testified Two how well was the witness able to
- (3) recall and describe those things Three what was the
- (4) witness manner while testifying Four did the witness have
- (5) an interest in the outcome of this case or any bias or any
- (6) prejudice concerning any part or any matter involved in the
- (7) case Five how reasonable was the witness testimony
- (8) considered in light of all the other evidence in the case
- (9) Six was the witness s testimony contradicted by what that
- (10) witness has said or done at another time or by the testimony
- (11) of other witnesses or by other evidence
- (12) In deciding whether or not to believe a witness keep in
- (13) mind that people sometimes forget things You need to
- consider
- (14) therefore whether a contradiction is an innocent lapse of
- (15) memory or an intentional falsehood and that may depend on
- (16) whether it has to do with an important fact or only a small
- (17) detail
- (18) A witness may be discredited or impeached by contradictory
- (19) evidence or by evidence that at some other time the witness
- (20) has said or done something or has failed to say or do
- (21) something which is inconsistent with the witness present
- (22) testimony
- (23) If you believe any witness has been impeached and thus
- (24) discredited its your exclusive province to give the testimony
- (25) of that witnesses such credibility if any as you may think it

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- (1) deserves
- (2) If a witness was shown knowingly to have testified falsely
- (3) concerning any material matter you have a right to distrust
- (4) such witness testimony in other particulars and you may reject
- (5) all the testimony of that witness or give it such credibility
- (6) as you may think it deserves
- (7) And act or omission is quote knowingly end quote done if
- (8) done voluntarily and intentionally and not because of mistake
- (9) or accident or other innocent reason
- (10) It has been established that the negligent acts of the
- (11) Exxon defendants and Defendant Hazelwood were a legal
- cause of
- (12) the oil spill You will now be asked to determine if the oil
- (13) spill was a legal cause of harm to plaintiffs and if so to
- (14) determine the amount of money sufficient to compensate
- (15) plaintiffs for the harm caused by the oil spill
- (16) Plaintiffs contend that the oil spill was a legal cause of
- (17) the reduction in the number of salmon they caught or will catch
- (18) in Prince William Sound for 1989 through 1995 in Upper Cook
- (19) Inlet from 1989 - I m sorry in Upper Cook Inlet for 1989
- (20) 1994 and 1995 in Kodiak for 1989 1994 and 1995 in Chignik
- (21) for 1989 and in Balboa Stepovak for 1989
- (22) Plaintiffs contend that the oil spill was a legal cause in
- (23) the reduction of the number of herring they caught in Prince
- (24) William Sound for 1989 1993 and 1994 in Lower Cook Inlet for
- (25) 1989 and in Kodiak for 1989

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- (1) Plaintiffs contend that the oil spill was a legal cause of
- (2) the decline in prices they were paid for salmon and herring
- (3) caught in 1989 1990 and 1991
- (4) Plaintiffs would sold their limited entry fishing permits
- (5) contend that the oil spill was a legal cause of losses or
- (6) damages they suffered to the value of their limited entry
- (7) fishing permits
- (8) The defendants acknowledge that the spill caused a
- (9) reduction in the harvest of salmon and herring in these
- (10) fisheries in 1989 but contend that plaintiffs are overstating
- (11) the size of the harvest reduction in that year Defendants
- (12) deny that the oil spill was the cause of reductions in harvest
- (13) in years after 1989
- (14) Defendants deny that the oil spill reduced the prices that
- (15) plaintiffs received for the fish they caught either in 1989 or
- (16) in any later years and contend that any reduction in prices in
- (17) that period of time was the result of market forces and
- (18) conditions unrelated to the oil spill
- (19) Defendants deny that the spill was a legal cause of a
- (20) reduction in value of plaintiffs limited entry fishing
- (21) permits
- (22) In order to receive a favorable verdict as to an item of
- (23) loss or harm plaintiffs must prove two elements by a
- (24) preponderance of the evidence One that the oil spill was a
- (25) legal cause of a particular item of loss or harm and two if

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- (1) so what amount of money will fairly compensate the plaintiffs for that loss or harm
- (2) As to each item of loss or harm you should first decide
- (3) the issue of causation You must determine separately for each
- (4) reduction in harvest or price decline claimed by plaintiffs
- (5) whether the oil spill was a legal cause of that specific
- (6) harvest reduction or price decline
- (7) If you should determine that the oil spill was a legal
- (8) cause of a harvest reduction in one fishery in one year that
- (9) does not mean that you must then find that it was a legal cause
- (10) of reductions of harvest in other fisheries in other years
- (11) Similarly if you should find that the oil spill was a
- (12) legal cause of a price decline for one species in one year
- (13) that does not mean that you must then find that the oil spill
- (14) was a legal cause of price declines for other species in other
- (15) years If causation element number one has been proved by a
- (16) preponderance of the evidence you should next consider what
- (17) amount of damages will fairly compensate plaintiffs for each
- (18) item of loss or harm
- (19) If causation element number one has not been established
- (20) in accordance with these instructions damages may not be
- (21) awarded and you should enter zero for that item of loss or
- (22) harm
- (23) I will now define legal cause for you In order to be a
- (24) legal cause of harm an event in this case the oil spill must

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- (1) be a substantial factor in bringing about the harm For the
- (2) oil spill to be a substantial factor in bringing about harm
- (3) the evidence must prove it is more likely true than not true
- (4) that one the oil spill was so important in bringing about the
- (5) harm that a reasonable person would regard it as a cause and
- (6) attach responsibility to it and two the harm would not have
- (7) occurred but for the oil spill
- (8) There is however one exception to the requirement that the
- (9) harm would not have occurred but for the oil spill
- (10) If two forces operate to cause the harm one being the oil
- (11) spill and the other not and if each force by itself was
- (12) sufficient to cause the harm then the oil spill is a legal
- (13) cause of the harm if it was so important in bringing about the
- (14) harm that a reasonable person would regard it as a cause and
- (15) attach responsibility to it
- (16) The principle of a superceding cause is a variant of the
- (17) doctrine of legal causation A superceding cause is the
- (18) independent intervening act of a third person which prevents
- (19) defendants from being liable for harm to plaintiffs
- (20) A superceding cause must be something more than a
- (21) subsequent act in a chain of causation it must be an act that
- (22) was not reasonably foreseeable at the time of defendants
- (23) harmful conduct If the independent intervening act is highly
- (24) unusual or extraordinary not reasonably likely to happen and
- (25) hence not foreseeable it is a superceding cause and the

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- (1) defendants are not liable
- (2) You have heard evidence with respect to the State of
- (3) Alaska s management of the sockeye fishery in Cook Inlet and
- (4) concerning the extent to which overescapement of sockeye in
- (5) 1989 into the Kenai River may have caused a reduction of
- (6) sockeye harvest in 1994 and later years
- (7) Similar evidence was presented with respect to the sockeye
- (8) fishery on Kodiak in 1989 If you find that the failure of the
- (9) State of Alaska to take action to prevent overescapement of
- (10) sockeye in 1989 was a superceding cause of any reduction in
- (11) sockeye harvest in 1994 and later years then you must find
- (12) that the oil spill was not the legal cause of any reductions in
- (13) sockeye harvests in 1994 and later years
- (14) If you unanimously find by a preponderance of the evidence
- (15) that the oil spill was a legal cause of reduced salmon harvests
- (16) by the commercial fishing plaintiffs in the areas and for the
- (17) years specified below you must decide the actual extent of
- (18) such loss or damage so caused and employing the specific
- (19) damage instructions which follow How much money if any
- (20) the
- (21) Exxon defendants should pay these plaintiffs to fairly
- (22) compensate the plaintiffs for each of these items of loss
- (23) Prince William Sound area 1989 through 1995 Upper Cook
- (24) Inlet
- (25) area 1989 1994 and 1995 Kodiak area 1989 1994 and 1995
- (26) Chignik area 1989 and Balboa Stepovak area 1989
- (27) If you unanimously find by a preponderance of evidence that

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- (1) the oil spill was a legal cause of reduced herring harvests by
- (2) the commercial fishing plaintiffs in the areas and for the
- (3) years specified below you must decide the actual extent of
- (4) such loss or damage so caused and employing the specific
- (5) damage instructions which follow how much money if any the
- (6) Exxon defendants should pay these plaintiffs to fairly
- (7) compensate these plaintiffs for each of these items of loss
- (8) Prince William Sound area 1998 1993 1994 Cook Inlet area
- (9) 1989 and Kodiak area 1989
- (10) If you unanimously find by a preponderance of evidence that
- (11) the oil spill was a legal cause of decline in the prices the
- (12) commercial fishing plaintiffs were paid for salmon and herring
- (13) caught in 1989 1990 and 1991 you must decide the amount of
- (14) price decrease so caused and employing the specific damage
- (15) instructions which follow how much money if any the Exxon
- (16) defendants should pay these plaintiffs to fairly compensate
- (17) these plaintiffs for each item of loss
- (18) The purpose of the law of damages is to award just and fair
- (19) compensation for an injury In this case you are to award the
- (20) plaintiffs sufficient damages to compensate them for any harm
- (21) legally caused by the oil spill These are known as
- (22) compensatory damages If you find by a preponderance of
- (23) evidence that the oil spill was a legal cause of harm to
- (24) plaintiffs you should award compensatory damages for the
- (25) harm
- (26) that the plaintiffs have actually suffered and are reasonably

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- (1) likely to suffer in the future Plaintiffs must prove their
- (2) losses with reasonable certainty on basis of such evidence that
- (3) might reasonably be expected to be available under the
- (4) circumstances
- (5) A damage award should not be based on speculation or guess
- (6) work If the evidence is sufficient to afford a reasonable
- (7) basis for estimating plaintiffs past or future losses
- (8) plaintiffs may not be denied recovery by reason of the fact
- (9) that the amount of their damage is not capable of exact
- (10) mathematical ascertainment
- (11) You have heard the plaintiffs and the Exxon defendants
- (12) present different methodologies for calculating damages If
- (13) you should decide to award damages to the plaintiffs you are
- (14) not required to accept either party s methodology or suggested
- (15) amount of damages Based upon the facts as you find them by
- (16) a
- (17) preponderance of evidence you may calculate an award - you
- (18) may calculate and award such damages as will reasonably
- (19) compensate the plaintiffs for the harm that you find was or
- (20) will be legally caused by the oil spill
- (21) The remaining issue that you must decide is the claim of
- (22) certain plaintiffs for alleged losses in the value of their
- (23) fishing permits Only certain plaintiffs those who sold their
- (24) permits make this claim Other plaintiffs do not make this
- (25) claim If you unanimously find by a preponderance of the
- (26) evidence that the oil spill was a legal cause of decline in the

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- (1) value of commercial fishing plaintiffs limited entry permits
- (2) you must decide employing the specific damage instructions
- (3) how much money, if any the Exxon defendants should pay
- (4) these
- (5) plaintiffs to fairly compensate these plaintiffs for these
- (6) items of loss
- (7) If you find that the oil spill was a legal cause of a
- (8) decline in the value of plaintiffs permits you must
- (9) determine separately for each plaintiff who claims a decline
- (10) in the value of his or her permit and who did not purchase
- (11) that permit subsequent to the spill One the amount of money
- (12) which the permit would have sold for in the absence of the oil
- (13) spill two-A the amount of money or other consideration which
- (14) plaintiff received upon sale of the permit and two-B the
- (15) actual fair market value of the permit at the time of sale
- (16) The amount of damages you should award to such plaintiff is
- (17) the difference between one and the greater of two-A or two B
- (18) If the greater of two-A or two-B is equal to or exceeds one no
- (19) damages may be awarded
- (20) The total amount of damages you should award to plaintiffs
- (21) is the sum of the damage awards you have calculated pursuant
- (22) to
- (23) the provisions of this paragraph for each plaintiff who sold
- (24) his or her permit
- (25) To simplify the presentation of evidence the parties have
- (26) agreed and the court has ordered all of the plaintiffs whose
- (27) claims for actual damages are presented in this Phase II A may

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- (1) be - I'll start it again
- (2) To simplify the presentation of evidence the parties have
- (3) agreed and the Court has ordered that all of the plaintiffs
- (4) whose claims for actual damages are presented in this Phase
- (5) II A may prove their damages as a single amount You need not
- (6) consider whether variations exist between individual
- (7) plaintiffs
- (8) The law forbids you to decide any question in this case by
- (9) relying on chance For example it would be unlawful for each
- (10) juror to make an individual estimate of damages and for the
- (11) jury as a whole to agree in advance to use the average of these
- (12) estimates as the proper measure of any damages that are to be
- (13) awarded Each juror may express views on the correct amount
- (14) of
- (15) damages so that all jurors may thoughtfully consider each
- (16) others views in order to determine what damages if any
- (17) reasonably should be awarded in light of the law and the
- (18) evidence
- (19) You may not assume because I explain how to measure a
- (20) particular loss that you are required to award damages for
- (21) such a loss The verdict must represent the considered
- (22) judgment of each juror In order to return a verdict it is
- (23) necessary that each juror agree thereto Your verdict must be
- (24) unanimous
- (25) It is your duty as jurors to consult with one another and
- (26) to deliberate with a view to reaching an agreement if you can

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- (1) do so without violence to individual judgement Each of you
- (2) must decide the case for yourself but only after an impartial
- (3) consideration of the evidence in the case with your fellow
- (4) jurors In the course of your deliberations do not hesitate
- (5) to re-examine your own views and to change your opinion if
- (6) convinced it is erroneous But do not surrender your honest
- (7) conviction as to the weight or effect of evidence solely
- (8) because of the opinion of your fellow jurors or for the mere
- (9) purpose of returning a verdict Remember at all times that you
- (10) are not partisans You are judges judges of the facts Your
- (11) sole interest to is to seek truth from the evidence in the
- (12) case
- (13) It is proper to add the caution that nothing said in these
- (14) instructions and nothing in any form of verdict prepared for
- (15) your convenience is meant to suggest or convey in any way or
- (16) manner any intimidation as to what verdict I think you should
- (17) find What the verdict shall be is your sole and exclusive
- (18) duty and responsibility Upon retiring to the jury room the
- (19) presiding juror you previously chose will preside over your
- (20) deliberations and will continue to be your spokesman here in
- (21) court
- (22) Special verdict forms have been prepared for your
- (23) convenience These special verdict forms contain a number of
- (24) interrogatories You are to answer each interrogatory and each
- (25) sub part of each interrogatory submitted to you on these

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- (1) special verdict formation If you decide that no amount should
- (2) be awarded as compensatory damages in your answer to any
- (3) interrogatory or any sub part of any interrogatory you should
- (4) enter a zero as your answer to that interrogatory The answer
- (5) to each interrogatory must be the unanimous answer of the
- (6) jury The presiding juror will right the unanimous answer of
- (7) the jury in the space provided under each interrogatory
- (8) When you have finished answering the interrogatories you
- (9) will have your presiding juror date and sign the form and then
- (10) return with your verdict to the courtroom In your
- (11) deliberations and in any verdict which you may render you
- (12) shall not consider the matters of interest costs or attorneys
- (13) fees These subjects are matters for the court to consider
- (14) after your verdict has been rendered
- (15) If you should agree on your verdict before 2 p m this
- (16) afternoon which is obviously impossible this afternoon your
- (17) presiding juror should date and sign the verdict This will
- (18) indicate that all of you have agreed on the verdict You
- (19) should return the verdict immediately into open court in the
- (20) presence of the entire jury together with the exhibits and
- (21) these instructions If you do not agree upon your verdict
- (22) before 2 p m this afternoon you may return to your homes
- (23) And don t talk about the case or your deliberations outside the
- (24) jury room Before you go home the presiding juror should lock
- (25) the jury room so the exhibits instructions and unsigned

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- (1) verdict form will remain undisturbed None of these materials
  - (2) should be removed from the courtroom until you reach a
  - (3) verdict You should return at your jury room at 8 a m
  - (4) tomorrow morning to continue your deliberations
- Deliberations
- (5) shall not commenced until all jurors are present in the jury
  - (6) room
  - (7) If it becomes necessary during your deliberations to
  - (8) communicate with the Court you may send a note by a bailiff
  - (9) signed by your presiding juror or by one or more members of
  - (10) the jury Any note to the Court should include the date and
  - (11) time the note was signed No member of the jury should ever
  - (12) attempt to communicate with the Court by any means other than
  - (13) by a signed writing and the Court will not communicate with
  - (14) any jury member on any subject touching the merits of the case
  - (15) otherwise than in writing or orally here in open court
  - (16) Bailiffs as well as all other persons are forbidden to
  - (17) communicate in any way or manner with any member of the jury
  - (18) on
  - (18) any subject touching the merits of the case
  - (19) Bear in mind that are not to reveal to any person not even
  - (20) to the Court how the jury stands numerically or otherwise on
  - (21) the questions before you until after you have reached a
  - (22) unanimous verdict
  - (23) That completes the reading of the jury instructions With
  - (24) respect to the time factors here it has been my assumption
  - (25) that counsel s assumption is that you will operate on the same

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- (1) 8 to 2 schedule for deliberations that you did during Phase I
- (2) If you should decide to change that at any time you re going
- (3) to have to warn us in advance but we will assume you re going
- (4) to operate until 8 until 2 unless you tell us otherwise In
- (5) spite of what was said in the written instructions I don t
- (6) think it s reasonable or necessary for you all to wait around
- (7) for the exhibits to be given to you before you adjourn today
- (8) I will see to it that Mr Murtiashaw locks the exhibits up in
- (9) the jury room with the instructions and other materials as soon
- (10) as they are available from counsel and they will be there
- (11) waiting for you when you get here tomorrow morning One last
- (12) thing
- (13) There is a little phrase in there somewhere that tells you
- (14) that you re supposed to give us the instructions back They
- (15) have disappeared last time We really want them back when
- (16) you re through with them so see that we get them back this
- (17) time if you would please The jury is excused to the jury
- (18) room at this time and may leave as soon as you re ready and
- (19) counsel would please remain
- (20) (Jury out at 2 23)
- (21) THE COURT Counsel as we did before please be sure
- (22) that we know who we are he supposed to contact for each side
- (23) when and if we have communications from the jury Some of
- (24) attempts at that were a little ragged last time and we would
- (25) like it to be a little cleaner this time if possible so please

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- (1) tell us who the contact is and will the contact please be
- (2) where you said you would be
- (3) MR O NEILL Yes sir
- (4) THE COURT Second thing I know you re aware of the
- (5) need to do this but we have gobbs of exhibits please
- (6) carefully review that what goes to Mr Murtiashaw to be
- (7) transmitted to the jury please double check one another so
- (8) that the plaintiffs are looking at the defendants exhibits and
- (9) the defendants are looking at the plaintiffs exhibits We
- (10) don t want a miscue on this
- (11) The jury has requested additional copies of the
- (12) instructions We re going to give them six copies this time so
- (13) is that they will have plenty of paper to look at over and
- (14) above what you all have produced Anything else we need to
- (15) do
- (15) now?
- (16) MR JAMIN There is one small things Your Honor In
- (17) connection with our process of mutually looking at each others
- (18) exhibits there will be a stipulation for the court tomorrow
- (19) morning that all parties are executing indicating a couple
- (20) minor clarifications need to be made where DX5164 becomes
- (21) 6154
- (21) and we will give you that with a clear clarification
- (22) THE COURT Anything else?
- (23) MR O NEILL No
- (24) THE COURT We will be in recess subject to call
- (25) (Recessed at 2 28 p m)

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- (1) STATE OF ALASKA )
  - (2) Reporter s Certificate
  - (3) DISTRICT OF ALASKA )
  - (6) I Leonard J DiPaolo 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) LEONARD J DiPAOLO RPR
  - Notary Public for Alaska
  - (22) My Commission Expires 2 3 96
-

Look-See Concordance Report

UNIQUE WORDS 2,793
TOTAL OCCURRENCES 12,934
NOISE WORDS 385
TOTAL WORDS IN FILE 36,751

SINGLE FILE CONCORDANCE

CASE SENSITIVE

NOISE WORD LIST(S)
NOISE NOI

INCLUDES ALL TEXT OCCURRENCES

IGNORES PURE NUMBERS

WORD RANGES @ BOTTOM OF PAGE

- \$ -

\$10 [3] 6931 22, 6932 18, 6935 5
\$102,000 [1] 6941 4
\$137 [2] 6858 1, 6931 20
\$144 [1] 6908 19
\$182 [1] 6908 20
\$2 22 [1] 6941 4
\$20 [2] 6961 24, 25
\$20-million [1] 6892 22
\$23 [3] 6953 21, 24, 6961 25
\$254 [1] 6908 23
\$3 [2] 6905 11, 12
\$3,000,000 [1] 6892 1
\$37 [2] 6907 6, 6917 18
\$393,000 [1] 6890 25
\$45 [2] 6913 24, 6917 6
\$5 [1] 6886 2
\$580 [2] 6908 25, 6944 12
\$68 [2] 6924 25, 6926 9
\$7 [2] 6928 23, 6930 20
\$80 [1] 6905 17
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(1) IN THE UNITED STATES DISTRICT COURT  
 (2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No A89 0095 CIV (HRH)  
 (5) ) Anchorage Alaska  
 The EXXON VALDEZ ) Tuesday August 2nd 1994  
 (6) ) 11 35 a m  
 TRANSCRIPT OF PROCEEDINGS  
 ORAL ARGUMENT RE EXXON DEFENDANTS MOTION FOR ORDER DEFINING  
 (9) MEMBERS OF CERTIFIED CLASSES (DOCKET NO 5074)  
 BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE  
 (13) VOLUME 1 Pages 1 34  
 (14) Realtime Transcription  
 (15) APPEARANCES  
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(1) PROCEEDINGS  
 (2) THE CLERK All rise  
 (3) (Call to order of the court)  
 (4) (Jury out at 11 35 a m )  
 (5) THE COURT Good morning ladies and gentlemen We  
 (6) have scheduled at this time oral argument on a motion by the  
 (7) Exxon defendants for an order defining members of the certified  
 (8) classes in the Exxon Valdez litigation Case A89 0095 civil  
 (9) We have reviewed the rather substantial pile of written  
 (10) submissions that have been made and we re interested in oral  
 (11) argument at this time to cover at least a couple of things  
 (12) I m not sure it s entirely clear from the papers at least at  
 (13) this point it s not entirely clear in my mind how we got into  
 (14) the mess that gives rise to this motion The class action side  
 (15) of this case was I thought being pursued by people who were  
 (16) really skilled in class action litigation and so I m asking  
 (17) myself how could this happen how could we have a situation  
 (18) where we re this far down the road and we have a dispute over  
 (19) whether somebody has opted out or not It seemed to me that  
 (20) the notices were quite specific about how one did that and I  
 (21) don t understand really how people could have failed to  
 (22) understand how to opt out of this class if they wished to  
 (23) The other thing that I want people to be sure to say  
 (24) something about is this question of whether we re dealing with  
 (25) claims being opted out or people opting out I have the

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(1) For Defendant DOUGLAS J SERDAHELY  
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 O Melveny & Myers  
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 (7) In Court  
 Deputy Clerk TOM MURTIASHAW  
 U S District Court  
 222 W 7th Avenue #4  
 Anchorage AK 99513  
 Ph 907/271 4529  
 Reported by LEONARD J DIPAOLO RPR  
 (11) Registered Professional Reporter  
 Midnight Sun Court Reporters  
 2550 Denali Street Suite 1505  
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(1) feeling that that aspect of the thing didn t really start to  
 (2) develop until toward the end maybe in a reply memorandum  
 so I  
 (3) want to be sure that you say something to us about that  
 (4) because I have a - oh I really have a concern that we re  
 (5) headed for extreme difficulty if we can have people who were  
 (6) both in and out of the class because they have claims that fall  
 (7) into different categories and as to some they have said we re  
 (8) in the class and to others some permit holder maybe has said  
 (9) this person is out  
 (10) There are other things but please be sure we touch on  
 (11) those things if you would  
 (12) Mr Daum have you got the laboring oar today?  
 (13) MR DAUM I have somewhat we sometimes call in this  
 (14) case the conn Your Honor  
 (15) THE COURT Conn right  
 (16) MR DAUM May it please the Court John Daum for  
 (17) Exxon Corporation  
 (18) Your Honor before I begin the argument I d like to  
 (19) introduce to the Court my colleague Kevin Harwine (ph) is here  
 (20) for the first time Your Honor has read a fair amount of his  
 (21) prose but I don t think you ve seen him  
 (22) THE COURT Welcome sir  
 (23) MR DAUM Let me begin by responding to Your Honor s  
 (24) concern about how we got here because that s exactly  
 (25) defendants view here

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(1) Our view about this motion is that it should not have been  
 (2) necessary and the problems that I m going to talk about should  
 (3) never have arisen  
 (4) When the classes were certified the stipulation set out a  
 (5) very clear rule It said if you were a named plaintiff in a  
 (6) complaint your lawyer could opt you out of the class if you  
 (7) were not a named plaintiff you had to sign an opt out form  
 (8) personally  
 (9) That was what the parties agreed to and I would emphasize  
 (10) that the procedure for the class was stipulated and agreed to  
 (11) It was what the Court ordered and that s what the class notice  
 (12) plainly said  
 (13) And the reason for that procedure was quite obvious The  
 (14) Court owes a duty of protection to absent class members as  
 (15) long as they are in the class their rights will be safeguarded  
 (16) because the Court is going to look over the shoulder of class  
 (17) counsel and make sure that the interests of the absent class  
 (18) members are not impaired If an absent class member is going  
 (19) to give up that protection and give up the right to proceed in  
 (20) the class it s important to make sure that the class member  
 (21) himself is making that choice and the requirement for a  
 (22) personal signature makes certain that it s the class member  
 (23) who  
 (24) is making that choice and not some lawyer  
 (25) We re here because for some reason plaintiffs chose not to  
 do what the class notice said they ought to do Instead they

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(1) have attempted to remove from the class the claims of several  
 (2) thousand absent class members not named plaintiffs to any  
 (3) action that was on file and they have tried to do that on the  
 (4) strength of documents filed by lawyers with no personal  
 (5) signature by any class member at all  
 (6) And what that means is that on this motion the parties  
 (7) and the Court have to do exactly what the notice was designed  
 (8) to prevent We have to guess with imperfect information about  
 (9) the intentions of several thousand people who aren t here  
 (10) Now that course the course plaintiffs chose creates legal  
 (11) problems and it creates practical problems Let me talk about  
 (12) the legal ones first  
 (13) And the first legal problem is the one Your Honor  
 (14) identified What plaintiffs are trying to do simply cannot be  
 (15) done under Rule 23 there is no such thing as a partial  
 (16) opt out You cannot pursue some claims in the class and some  
 (17) class claims individually You re either a member or you re  
 (18) not Rule 23 says that the Supreme Court says that in  
 (19) American Pipe and the Muldrow case which I ve cited holds  
 (20) that plaintiffs haven t cited any contrary authority and to  
 (21) the best of our knowledge there isn t any  
 (22) Now Your Honor raised the issue of are we really dealing  
 (23) with a partial opt out or not A sufficient answer to that I  
 (24) think is the stipulation that the various plaintiffs  
 (25) themselves thought

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(1) And if Your Honor will look I don t know if Your Honor has  
 (2) it before you but if you look at the first paragraph in lines  
 (3) 9 and 10 when they want to do -  
 (4) THE COURT Of what?  
 (5) MR DAUM Excuse me Your Honor If I may approach  
 (6) the Court I ll give you a copy It s a stipulation  
 (7) THE COURT Have you got a docket number for it?  
 (8) MR DAUM 5639  
 (9) THE COURT Yeah I ve got it right here on top  
 (10) MR DAUM Direct your attention to paragraph one on  
 (11) the second page which defines what the plaintiffs want to do  
 (12) The following persons have validly opted out claims from the  
 (13) stipulated class classes herein and to the extent specified  
 (14) in their respective opt outs That being a general reference  
 (15) to the voluminous documents that were filed with Ms Muckle s  
 (16) affidavit and Ms Eptison s which I ll get to in a moment  
 (17) which doesn t shed perfect light on what that means but there  
 (18) is no question what the plaintiffs are talking about here is  
 (19) opting out claims  
 (20) A crew member who worked for a Faegre plaintiff in 1989 and  
 (21) worked for a permit holder in 1990 who is in the class will  
 (22) pursue the 1989 claims with the Faegre permit holder will  
 (23) pursue the 1990 claims in the class That s what plaintiffs  
 (24) want to do and it clearly involves opting claims out not  
 (25) members

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(1) So that s the first legal problem with what plaintiffs want  
 (2) to do You can t do it under Rule 23  
 (3) And the second problem is that the absent class members  
 (4) the people who aren t here had the right to rely on the notice  
 (5) that they received The notice told them that if they did  
 (6) nothing they would be in class All the thousands of people  
 (7) who aren t here did nothing and that decision can t be treated  
 (8) by the parties it can t be treated by the Court as if it never  
 (9) happened or as if it doesn t matter The whole theory of class  
 (10) actions depends on the proposition that a class member who  
 (11) receives a notice like that and does nothing makes a real  
 (12) choice decides to go with a class and then stands or falls  
 (13) depending on how the class lawsuit comes out  
 (14) What the plaintiffs are trying to do is to reverse the  
 (15) choice that those absent class members made and to reverse it  
 (16) without notice to them or any opportunity to object  
 (17) Once again you just can t do that They made their  
 (18) choice we have to honor it and if it s to be changed as an  
 (19) absolute minimum they are entitled to a notice and an  
 (20) opportunity to speak  
 (21) Now the plaintiffs say it s not a problem because the  
 (22) derivative plaintiffs all want the permit holders to pursue  
 (23) their claims and I don t have any doubt that in some cases  
 (24) that s true But there is no reason to think it s true for  
 (25) each and every absent class member Some crew members get

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(1) along with their permit holder some don't And without  
 (2) notice without an opportunity to object without some kind of  
 (3) evidence about each and every absent class member there is  
 no  
 (4) way to tell which of them want to be in the class and which  
 (5) want to be out That was precisely why the class notice said  
 (6) that an absent class member himself had to execute the opt out  
 (7) form it was to give the Court and the parties in a definitive  
 (8) way information that we still don't have  
 (9) Those are the legal problems with what plaintiffs are  
 (10) trying to do Let me talk now about the practical problems  
 (11) The first of those is that on this record it's going to be  
 (12) hard to be certain who is bound by a judgment and who is not  
 (13) If an absent class member is excluded from the class as  
 (14) plaintiffs propose he can hardly be bound by a class judgment  
 (15) and if that class member has a falling out with the permit  
 (16) holder or never wished the permit holder to pursue his claim in  
 (17) the first place or doesn't get his money from the permit  
 (18) holder he's going to have an excellent argument that he isn't  
 (19) bound by the judgment for or against the permit holder  
 (20) So we have a real prospect if the plaintiffs achieve what  
 (21) they are trying to do of creating a group of people of  
 (22) unknown size but up to several thousand members who won't  
 be  
 (23) bound by any of the judgments that are going to be entered  
 (24) here That's an undesirable result and it's an unnecessary  
 (25) one

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(1) The second problem is related to that Plaintiffs efforts  
 (2) at a partial opt out not only create uncertainty who will be  
 (3) bound but they create uncertainty as to what claims are in the  
 (4) class and what aren't  
 (5) Let me give a real example named Jon Clucas which is  
 (6) involved in the Arness case which Your Honor probably doesn't  
 (7) know that we removed this morning Clucas is on the mazel tov  
 (8) as we - Clucas is on the Faegre opt out list as a derivative  
 (9) plaintiff because he's a shareholder in a salmon fishing  
 (10) business  
 (11) So far as one can tell from the opt out list that's the  
 (12) only claim that's been opted out But it turns out that Clucas  
 (13) has a herring permit too and since only the salmon claim was  
 (14) opted out you'd think on plaintiffs theory that the remaining  
 (15) claim the herring claim would be in the class yet in the  
 (16) Arness case Clucas has filed a lawsuit as a herring  
 (17) fishermen  
 (18) So we have a situation already today where plaintiffs are  
 (19) asserting the right to make claims individually that on their  
 (20) own theory ought to be in the class and there is every  
 (21) likelihood that allowing the kind of partial opt out that the  
 (22) plaintiffs are looking for will have disputes about what claims  
 (23) are in the class and what claims are outside the class  
 (24) And of course that's precisely the practical common sense  
 (25) reason that the law doesn't allow partial opt outs

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(1) The first practical problem has to do with cases where the  
 (2) Court has already made a ruling on the ground of Robbins or  
 (3) something else that particular groups of plaintiffs don't have  
 (4) a claim  
 (5) Consider the derivative plaintiffs and there are a lot of  
 (6) them who come from unholed fisheries like Bristol Bay Their  
 (7) claims were in Subclass 8 and the Court dismissed those  
 (8) claims  
 (9) Or consider the derivative plaintiffs who are not crew  
 (10) members of fishermen they are tender boat operators spotter  
 (11) pilots landowners and other people who happen to be  
 (12) compensated not by a flat payment but by a percentage of the  
 (13) profits The Court's ruled that those claims aren't  
 (14) cognizable and that ruling will be fully applicable to the  
 (15) class but if all those people are allowed now belated to opt  
 (16) out of the class after a ruling the effect is to let them  
 (17) evade the Court's ruling deprive the defendants of the  
 (18) benefits of that ruling and the judgment which will come on it  
 (19) and permit one way intervention opting out of a class after a  
 (20) ruling has been made It's the one thing that it was  
 (21) absolutely clear that the 1966 amendments to Rule 23 were  
 (22) intended to prevent  
 (23) So from our point of view plaintiffs proposal creates  
 (24) insuperable legal problems and serious practical ones  
 (25) Granting the motion on the other hand involves nothing

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(1) more than insisting that the procedures set out in the class  
 (2) notice and that everybody agreed with be carried out The  
 (3) absent class members can pursue their claims in the class they  
 (4) will be bound by any judgment for or against the class The  
 (5) permit holders can pursue their claims outside the class They  
 (6) will get everything they are entitled to personally and will  
 (7) be spared the task of having to distribute part of a recovery  
 (8) to crew members Unless they were intending to keep some of  
 (9) the crew members recovery for themselves they have got  
 (10) nothing to complain about  
 (11) Our solution we think is simple it's easy and it's in  
 (12) accordance with the law and it's in accordance with the plain  
 (13) terms of the notice  
 (14) We ask Your Honor to grant our motion Thank you  
 (15) If Your Honor has any further questions I'll be happy to  
 (16) respond  
 (17) THE COURT Not at this point  
 (18) MR SCHROER Your Honor Steve Schroer for Faegre and  
 (19) Benson plaintiffs  
 (20) I'm going to start out with questions you asked as well  
 (21) I'm going to start out however with a fundamental fact which  
 (22) I think is true  
 (23) I believe that this attempt now to take some 1500 Faegre  
 (24) and Benson clients from their direct action status and create  
 (25) 1500 new class claims that didn't previously exist really

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(1) Ignores the pleadings in this case five years of pretrial  
 (2) practice established procedures that were developed in the  
 (3) course of not only this litigation but before that the claims  
 (4) program  
 (5) If you grant the relief that Exxon is seeking here you re  
 (6) creating problems that don t now exist and never will come  
 (7) about if you deny it  
 (8) Your first question was why are we here how could this  
 (9) have happened The answer to that question is it didn t really  
 (10) happen The procedures that were involved in opting out the  
 (11) people at issue in this motion - and I m talking specifically  
 (12) for the Faegre and Benson people which is a great majority  
 (13) but this applies as well to the Gerry people and others - we  
 (14) followed exactly the procedures set out in the class notice  
 (15) That class notice specifically provided that direct action  
 (16) plaintiffs could opt out over the signature of their counsel  
 (17) and that s exactly what we did We followed the procedures  
 (18) The reason In my view that an ambiguity was later created  
 (19) was when class counsel submitted an affidavit to the Court  
 (20) identifying the opt outs All of the people who you are  
 (21) dealing with today were in fact categorized as opt outs by  
 (22) class counsel however the affidavit added some detail that I  
 (23) don t think needed to be there  
 (24) Certain of the opt outs were categorized as derivative  
 (25) plaintiffs That is I think the detail that was unnecessary

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(1) and that is I think what created the circumstance that got us  
 (2) here  
 (3) The fact is that these people are only derivative - that  
 (4) the term derivative only arose in that circumstance it  
 (5) didn t appear in any pleading before that affidavit it didn t  
 (6) appear in the class notice It was put in for I think a  
 (7) matter of administrative convenience which has unfortunately  
 (8) turned into being just the opposite  
 (9) The fact is that these claims were all sued out by the  
 (10) permit holders in a - the crew claims you re dealing with were  
 (11) sued out in accordance with Rule 9 by the permit holders  
 (12) expressly suing in a representative capacity The complaints  
 (13) from day one said these permit holders to the extent the  
 (14) rights by these permits are at issue are suing on behalf not  
 (15) only of the themselves but also on behalf of crew members  
 (16) That pleading was - has been on file for years and the  
 (17) pleading was followed by five years of - three years of  
 (18) pretrial practice consistent with the pleading  
 (19) As our brief points out these crew people and others -  
 (20) what are called now derivative plaintiffs were treated as  
 (21) direct action plaintiffs all along We provided individual  
 (22) discovery on their behalf We served in fact 63 linear feet  
 (23) of documents on behalf of these so called derivative plaintiffs  
 (24) alone  
 (25) The proposition is made that we don t have an indication

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(1) from these people that in fact they are represented by Faegre  
 (2) and Benson It is not a coincidence that we obtained six years  
 (3) of tax returns from these people and produced 63 linear feet of  
 (4) documents These people know that we represent them and  
 that s  
 (5) why we gave discovery on their behalf and have done so  
 (6) consistently  
 (7) The second question you asked is the distinction between  
 (8) opting out claims and opting out people and I would submit  
 (9) that the analysis you ve been given on that is not complete  
 (10) You first have to start out with the proposition that we  
 (11) are not dealing with a garden variety class action where there  
 (12) is only one kind of claim at issue Indeed the jury that s  
 (13) deliberating as we speak is looking at numerous kinds of claims  
 (14) covering several fisheries over several years None of the  
 (15) cases that have been cited to you involve that circumstance  
 (16) and as a practical matter given the changes in time some  
 (17) claims apply to some years some claims apply to others  
 (18) It is inevitable that there will be changes in the  
 (19) underlying business realities Personnel change crew  
 changes  
 (20) permit and boats change hand and the like There is no case  
 (21) cited to you where a plaintiff who may have several different  
 (22) kinds of claims covering several different time periods  
 (23) resulting in - claiming different kinds of damages must  
 (24) pursue all of those as part of one action A joinder of claims  
 (25) is permissive it s not mandatory and the essential

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(1) circumstance you have here is that these claims are - and  
 (2) these plaintiffs essentially have unified claims - there will  
 (3) be relatively rare circumstances where a crew member changes  
 or  
 (4) a permit changes hand where an individual may be in the class  
 (5) as to some claims but not all but there is no case that I m  
 (6) aware of in this kind of a complicated circumstance where the  
 (7) passage in time and the nature of claims makes it that way  
 (8) where it s prohibited  
 (9) This notion of not opting out claims arose in my  
 (10) understanding for the first time in Exxon s reply brief The  
 (11) case cited on that is the District of Alabama case Muldrow I  
 (12) think a more apt authority is Crawford versus Bell which is  
 (13) 599 F 2d 890 That s a Ninth Circuit case in which I believe  
 (14) it is made clear that where a plaintiff does pose separate  
 (15) claims some of which may be included in pending class actions  
 (16) and others which are severable that they may be asserted  
 (17) separately  
 (18) We have cited also authority the Laughlin case and the  
 (19) Amoco Cadiz case which as you know expressly holds that a  
 (20) permit holder may sue in a representative capacity on behalf of  
 (21) crew and that of course is what we did in Glacier Bay  
 (22) In Glacier Bay you had a very similar circumstance where  
 (23) roughly 800 permit holders brought individual claims and the  
 (24) administration of that case and the precedent you set shows  
 (25) that the way we re doing it works There was not one separate

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(1) claim made by a crew that caused any problem in administration  
 (2) of the case  
 (3) What is the answer? The answer starts with I think the nature of the real interest that Exxon may have here and I think there are two parts to that  
 (4) I think that Exxon is entitled to repose that is to know that ultimately it's not going to be subject to continuing lawsuits and I think that separately it's entitled to know that there will not be duplicative claims made against it The relief that they seek is not necessary to protect either of those interests  
 (5) With respect to duplicative claims Your Honor has before him the plaintiffs stipulation in which as between the plaintiffs we have made clear that we understand the difference between the kinds of claims involved and we know where the line is to be drawn and we are in a position to avoid any duplicative claims  
 (6) The time that that question should be answered is when and if any duplicative claims are ultimately made if and when a claims administration program is developed following the judgment The plaintiffs are confident that that's never going to be a problem  
 (7) In that connection I would also point you to the Eyak stipulation which is the stipulation filed last week or the week - actually it's three weeks ago now I've forgotten how

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(1) long the jury has been out - which affirms as a fundamental principle here it's unto the plaintiffs to deal with allocation issues between the plaintiffs' interests We are sophisticated enough to understand the difference between a 1989 claim of a permit holder and a 1990 claim of a different permit holder and our apparatus is set up to deal with any potential duplication in that regard  
 (2) So I think that first issue possible duplicative claims is just a non issue  
 (3) With respect to the second issue repose that too I think is answered by long standing law and an order you could enter now It is common for plaintiffs to sue in a representative capacity and the people on whose behalf they sue are bound by the judgment based on the privity or other person who sued in a representative capacity  
 (4) To the extent any duplicative claims were made Exxon's res judicata defense simply because the people in the individual circumstance who have had his claim pursued by a representative capacity -  
 (5) THE COURT Does that same concept in your view meet Exxon's concern that we've resolved a lot of claims we thought in the class context which might theoretically be resurrected now? Are we going to have to fight the Bristol Bay question all over again?  
 (6) MR SCHROER Certainly not at least not in this

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(1) court The rights arising from the Ninth Circuit's decision in the Eyak appeal are just not implicated by this motion It's for the Ninth Circuit to make that decision and after remand for the state court to determine whether or not any changes would be made on any prior rulings that you've made  
 (2) THE COURT That's not quite what I was concerned about although admittedly that's another problem  
 (3) If I go along with what the plaintiffs want here I'm going to carve out of the class X number of people who are going to have direct action claims Am I going to have to relitigate with you things that have been litigated and ruled on when we thought these people were here in a class capacity rather than an individual capacity - and I'm thinking about people who are going to stay here  
 (4) MR SCHROER The simple answer to that I think is that the people you have been dealing - or have been direct action plaintiffs from day one they are sued out as such and the decisions you have made I don't think are substantive decisions that were directed as such solely to the classes  
 (5) The classes were not certified until February or so of this year The claims you're dealing with here as to opt outs were asserted as direct action claims years ago and whatever precedent you have set and whatever is law of the case as to the classes which remain in your court I think is unimpacted by this motion

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(1) To the extent that some direct action claims may go back to the state court - and there are further proceedings there - you just don't need to deal with that today  
 (2) A particular point made - and I just want to comment on this specifically - Mr Daum made reference to a claim by a plaintiff named Ciucas The fact is that Mr Ciucas's claim was specifically opted out  
 (3) And the last thing I wanted to do before I sit down is get back to your very first question why are we here I want you to understand the nature of the opt out pleadings that we in fact served in this case and they are attached to Melanie Muckle's affidavit  
 (4) But with respect to each and every individual here we identified a permit holder by name by reference to the specific permit issue at issue and by reference to Social Security number  
 (5) The specific permit at issue carves out those parts of the case which definitely are opted out The what are called derivative plaintiffs or late called derivative plaintiffs are listed separately Specific crew members who are suing under the permit holder are listed individually by Social Security number under that permit Our only claim is that the people so listed the permit holders and crew are opted out as specifically set out in that opt out form  
 (6) So the question of whether - taking Ciucas as an example

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(1) who now asserts a herring claim under a herring permit he may  
 (2) have a salmon claim under a different permit for a different  
 (3) year which hypothetically could be part of the class That  
 (4) raises separate issues It does not however bring to rise  
 (5) any possible double recovery because the herring part of his  
 (6) claim is separate from the salmon part  
 (7) Further there will be repose as to the entire situation by  
 (8) virtue of the final judgments as to all herring claims and  
 (9) salmon claims either because he is a direct action plaintiff  
 (10) or because as to other things he is a member of the class  
 (11) This is certainly - can be conceptually complicated The  
 (12) complication arises only from the nature of the tort and the  
 (13) nature of the damages that resulted  
 (14) And you're also finally dealing with a stipulated class  
 (15) Faegre and Benson as you know opposed classes for a long  
 time  
 (16) and has never consented to certification of classes but the  
 (17) effect of the order that Exxon is asking you to enter in this  
 (18) case is to take away 1600 of our clients and we have I think  
 (19) in good faith sued those claims out expressly alleged the  
 (20) representative capacity of the plaintiffs suing expressly  
 (21) opted them out provided discovery on their behalf and it  
 (22) would be a miscarriage (sic) of justice to fundamentally change  
 (23) the nature of those claims five years later  
 (24) Unless you have any questions I'll sit down  
 (25) THE COURT Thank you sir

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(1) we can dispose of and that was starting with day one with our  
 (2) trial plan and going forward hopefully to a verdict and  
 (3) judgment in this phase of the case and on to the next step  
 (4) which is handled by the mandatory nature of that punitive  
 (5) damages class  
 (6) So I agree with Mr Schroer in his observations and the  
 (7) statements and it is an effort on our part to assure  
 (8) completeness of that universe and to accommodate those  
 (9) individuals who are in fact adequately fully and represented  
 (10) either by the class or by the direct action people but they  
 (11) are not going to fall in the cracks and create a problem for  
 (12) anyone later That's what the defendants are entitled to and  
 (13) they have got that under the present state of affairs as we  
 (14) have cast it thank you  
 (15) THE COURT Let me - I've either lost my focus on  
 (16) something here or - help me with this  
 (17) We've completed the trial of the commercial fisheries  
 (18) class  
 (19) MR OESTING That's right  
 (20) THE COURT I'm either missing something at this  
 (21) moment or I have the impression that the way that evidence was  
 (22) developed for that class - we presented you all presented the  
 (23) whole universe of fisheries loss how many herring in what  
 (24) place in each year How many salmon of one breed or  
 another  
 (25) in each place for each year Total numbers of loss What

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(1) MR OESTING Your Honor Dave Oesting May I just  
 (2) add or amplify one thought?  
 (3) THE COURT I guess so  
 (4) MR OESTING Thank you  
 (5) Very very simply put the repose issue I would submit to  
 (6) the Court that the universe of commercial fishing claims that  
 (7) set is closed under the pleadings and the trial we have just  
 (8) completed but more so as to persons asserting them As a  
 (9) closed universe with the class certification orders and the  
 (10) direct action cases pending the defendants gain repose from  
 (11) the judgment entered on all of these claims in any of these  
 (12) classes because in fact this individual is not formally  
 (13) suing on his claim and represented directly or claims that he  
 (14) is not at a later date then he is in the class and you've  
 (15) closed the set so the defendants are entitled to no more in  
 (16) that regard structurally insofar as there arises a situation  
 (17) which Mr Daum has listed as a series of horrors as the  
 (18) confusion over - one person with two claims or some dispute  
 (19) we have that system in place and it's the plaintiffs system  
 (20) that will solve this sort of thing Our matrixes our data  
 (21) bases all of it is designed to deal with precisely those kind  
 (22) of issues as addressed in the stipulation that we filed It is  
 (23) not that we've been idle or are making any effort here in this  
 (24) process to double dip with the defendants that's not our  
 (25) purpose the purpose was simply to create a unified while that

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(1) I've lost my hold on it if the total loss has been put in in  
 (2) the commercial fishing class What - do we have a mechanism  
 (3) for allocating that between class and direct action plaintiffs  
 (4) is there an express agreement that divides that up?  
 (5) MR OESTING There is Your Honor between the  
 (6) plaintiffs' interests Now that will obviously come before  
 (7) this court in conjunction with distribution of the monetary  
 (8) judgment when it is monetized because the Court has to  
 (9) approve in its supervisory power about the class part of it  
 (10) and by definition when one divides the whole you've got both  
 (11) halves even though one of them by default  
 (12) THE COURT As I talked myself through it it started  
 (13) coming back to me  
 (14) MR OESTING All I'm suggesting is the consistency of  
 (15) that whole is reflective from the consistency of the class  
 (16) direct whole on the parties side because the two necessarily  
 (17) have to match and the defendants have protection and the  
 Eyak  
 (18) stip provides for exactly that kind of discharge upon  
 (19) monetization of that  
 (20) THE COURT Thank you Mr Daum back to you  
 (21) MR DAUM Let me address a few points mostly made by  
 (22) Mr Schroer Your Honor He began by saying that the  
 (23) plaintiffs had complied with the rules and properly opted out  
 (24) the absent class members He said that the problem was  
 created  
 (25) by class counsel who called them derivative plaintiffs Now



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(1) what the rules required for people who weren't named plaintiffs  
 (2) was an exclusion form signed by the plaintiffs Your Honor can  
 (3) look at the massive materials that were filed with Ms Muckle's  
 (4) affidavit which is the exclusion that Faegre created and you  
 (5) will find that while certain permit holders and certain  
 (6) people – well certain permit holders and certain people did  
 (7) sign a form there is not a signed exclusion form for all the  
 (8) people who are listed as opt outs in the class in Mr Sarko's  
 (9) affidavit The concept of derivative plaintiffs I don't know  
 (10) who invented it but what Mr Schroer is criticizing class  
 (11) counsel for is not creating a problem he is criticizing them  
 (12) for telling the truth because they said there is something  
 (13) different about these absent class members who are being  
 (14) opted out in this way they are not named plaintiffs the plaintiffs  
 (15) did not comply with the rules Mr Schroer is not telling you  
 (16) what's going on Mr Sarko's affidavit did tell the defendants  
 (17) and the court what had happened here and he's not subject to  
 (18) criticism for creating a problem he ought to be subject for  
 (19) some praise for letting us know what's going on  
 (20) Mr Schroer also talked about the situation where a class  
 (21) member has claims that are outside the class I haven't read  
 (22) the Crawford case I will obviously when I get down here but  
 (23) as Mr Schroer described it it appears to be a situation where  
 (24) a person has a claim which is in the class and a person also  
 (25) has claims which is outside the class In that situation

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(1) obviously – or outside the class in the sense that they are  
 (2) not encompassed by the class definition In that circumstance  
 (3) obviously a plaintiff can pursue the class claims and can  
 (4) pursue the individual claims but that's not the situation we  
 (5) have here There are many claims for different types of  
 (6) fishing for different areas but they are all in the class  
 (7) and what we are talking about is somebody who wants to say  
 (8) out  
 (9) of this universe of class claims I'll pursue some in the class  
 (10) and I'll pursue some of those class claims individually and  
 (11) that's what you can't do That's different from the situation  
 (12) where the class is limited  
 (13) To take an example from this case if we had a fisherman  
 (14) who alleged that fishing in Puget Sound had been damaged by  
 (15) the  
 (16) spill at one time there were some those claims are not in the  
 (17) class and obviously a fisherman can pursue that claim without  
 (18) opting out that's a different problem  
 (19) Mr Schroer says we don't have any duplicative claims we  
 (20) don't have to worry about that problem Well Jon Clucas's  
 (21) claim exists here and it is duplicative and let me talk a  
 (22) little bit about what he said about whether that had been opted  
 (23) out Your Honor it's bulky but if Your Honor takes a look at  
 (24) Exhibit 2 to Ms Muckle's affidavit which is – I think it's  
 (25) thick enough that Your Honor can find it without the docket  
 number  
 (25) THE COURT I've got the thick one here

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(1) MR DAUM Okay Exhibit 2 is request for exclusion  
 (2) and if Your Honor turns to the second page of that you'll  
 (3) notice that it involves several sub exhibits Exhibit 3 is for  
 (4) Upper Cook Inlet salmon Exhibit 6 and 7 are for Prince William  
 (5) Sound herring and Lower Cook Inlet and Kodiak herring Now if  
 (6) Your Honor turns to page 18 of that Exhibit 3 you will see  
 (7) about halfway down the page  
 (8) THE COURT I don't have page numbers  
 (9) MR DAUM Well you should be looking at the top of  
 (10) something that says Exhibit 3 Faegre and Benson's request  
 from  
 (11) exclusion of fishermen class and then the 18th page of that  
 (12) document  
 (13) THE COURT Got it  
 (14) MR DAUM This is the salmon this is the salmon  
 (15) exclusions and you'll see Jon Clucas about halfway down  
 (16) there listed as a derivative plaintiff on account of a salmon  
 (17) permit or a fishing business more precisely owned by Robert  
 (18) Clucas who I assume is a brother or father or something like  
 (19) that There is no Jon Clucas in the exhibits that relate to  
 (20) herring neither Exhibit 6 nor Exhibit 7 so what we have here  
 (21) contrary to what Mr Schroer says is not that Mr Clucas opted  
 (22) himself out but that he opted his salmon claim out the  
 (23) herring claim is not opted out is in the class and in the  
 (24) Arness case is making exactly that herring claim So the  
 (25) duplicative claim argument despite what plaintiffs say it's

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(1) not a bogeyman that Exxon created it's here we have  
 (2) duplicative claims this is a real problem  
 (3) Your Honor asked Mr Schroer about the problem of evasion  
 (4) of the Court's rulings Mr Schroer's response was they  
 (5) weren't going to challenge the rulings at least in this court  
 (6) I think were his words That's exactly the problem that we are  
 (7) concerned about The Bristol Bay class has been dismissed  
 (8) that's a ruling it is binding on the class it will become a  
 (9) judgment by this Court in due course it should not be the  
 (10) consequence of a belated opt-out that members of that class  
 can  
 (11) take those claims go back to state court and try their luck  
 (12) again That's the meaning of a ruling that's the meaning of a  
 (13) judgment and we're entitled to that and it's not – it's  
 (14) simply not right for that judgment to be opened up again That  
 (15) is the repose that we are entitled to That's why we are  
 (16) bringing this motion and it is simply not true to say that  
 (17) there is no repose problem presented  
 (18) Similarly Mr Oesting and Mr Schroer say well there won't  
 (19) be any problem because the plaintiffs have a formula for  
 (20) division of all the various money they are going to get I  
 (21) don't doubt that the plaintiffs have a formula for dividing up  
 (22) the money but the problem is we expect – well we will either  
 (23) prevail on some claims or we will get a judgment which will  
 (24) limit the amount of money that the plaintiffs can get and the  
 (25) problem is not dividing that amount of money up among the

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(1) existing plaintiffs the problem is that this technique creates  
 (2) a class of people who will be entitled to say Exxon I don't  
 (3) care whether you won a judgment against these plaintiffs you  
 (4) still owe me money And a group of people who can say I don't  
 (5) care what the jury found in terms of the amount of money for  
 (6) the class and the Faegre plaintiffs you still owe me more  
 (7) because I disagree with that finding And if they are not  
 (8) bound by the judgment they have the ability to do that And  
 (9) the fact that the plaintiffs may have a formula for dividing  
 (10) the loot up doesn't change the fact that we have exposure to  
 (11) people who are not bound by the judgment  
 (12) The Eyak stipulation does not solve this problem because  
 (13) it relates only to people who are represented by the direct  
 (14) action counsel here and because of that - because of that if  
 (15) somebody is in a position to say I don't want my claim pursued  
 (16) through the permit holder the Eyak stipulation gives us no  
 (17) protection at all I think I've said what I have to say Your  
 (18) Honor I'd be happy to respond to any questions  
 (19) THE COURT Let me go back to what I last asked Mr  
 (20) Oesting about the existence of an agreement that in effect  
 (21) built a fence around Exxon's total exposure based upon all of  
 (22) the evidence of the fishery loss coming in in this class  
 (23) trial What I hear you saying is that you disagree with that  
 (24) that it isn't going to work that way  
 (25) MR DAUM Absolutely Your Honor If there is

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(1) somebody who is not bound by this judgment they are not  
 bound  
 (2) and it doesn't matter what evidence came in they can pursue us  
 (3) again they can say it was wrong they can say the jury made a  
 (4) mistake  
 (5) THE COURT As to people who have effectively opted  
 (6) out and there isn't any disagreement about it -  
 (7) MR DAUM We're in that circumstance  
 (8) THE COURT - is there some agreement that allows  
 (9) them to share somehow in the fruits of all of the evidence that  
 (10) has been presented in the class trial?  
 (11) MR DAUM No quite the contrary  
 (12) THE COURT They are on their own  
 (13) MR DAUM They are on their own Quite the  
 (14) contrary The so-called Eyak stipulation provides that a share  
 (15) will be deducted from any jury award ostensibly to represent  
 (16) the share of those opt outs now that's some protection for  
 (17) Exxon but it's not total protection because the opt outs are  
 (18) entitled to say the jury's finding was wrong But the opt outs  
 (19) absolutely the true opt outs absolutely will not share in any  
 (20) recovery that the jury may award  
 (21) THE COURT Thank you sir  
 (22) MR DAUM That is of course why we opted out  
 (23) Thank you Your Honor  
 (24) MR SCHROER May it please the Court May I be heard  
 (25) on the very last subject because I -

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(1) THE COURT Let me just finish my note yeah I'm  
 (2) coming back to you All right Mr Schroer I'm with you now  
 (3) MR SCHROER On the last subject that Mr Daum raised  
 (4) on interpretation of the Eyak stipulation as it may apply here  
 (5) that of course has not been briefed however our interpretation  
 (6) of that stipulation at least as it applies to the issues today  
 (7) is very different We would refer you to the - well really  
 (8) paragraph S 5 ultimately provides for the allocations that will  
 (9) be made and the adjustments that would be made to respective  
 (10) persons who may not be involved here however I want you to  
 (11) understand that if you look at the definitions and these were  
 (12) heavily negotiated definitions of Eyak plaintiffs D 6 federal  
 (13) plaintiffs D 8 opt outs D 9 Phase II plaintiffs D 10 were  
 (14) carefully drafted so as to include all Faegre and Benson and  
 (15) Gerry clients in a way that they will in fact be bound by the  
 (16) trial that has just been held before you Indeed the  
 (17) definition of Eyak plaintiffs D 6 specifically refers to claims  
 (18) of other persons if any whose claims for compensatory  
 damages  
 (19) may properly be asserted by Eyak plaintiffs That refers to  
 (20) the - it was intended and does on its face refer to the  
 (21) situation where a plaintiff permit holder is suing in a  
 (22) representative capacity on behalf of crew and thereby includes  
 (23) all of our permit holders and all of our crew as persons who  
 (24) are in fact bound by the results of Phase II A There is not  
 (25) a Pandora's box being opened here by any means Similarly in

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(1) D 10 we have expanded on that by saying Phase II-A plaintiffs  
 (2) people bound by the trial held just before you also include  
 (3) all opt outs represented by any counsel for Eyak plaintiffs  
 (4) that's Faegre and Benson whether or not such person has filed  
 (5) a lawsuit in any court We have bound all of our permit  
 (6) holders and crew to the results of Phase II A and that's the  
 (7) practical impact of the Eyak stipulation To the extent that  
 (8) there is anybody who is not bound by what's just happened  
 (9) before you maybe Mr Oesting can speak to this I don't know  
 (10) of anybody who would fall into the category  
 (11) There is a hypothetical carve out for those people but we  
 (12) don't know anybody who has validly opted out of a Phase II A -  
 (13) I don't know of anybody who has opted out of a class who is not  
 (14) represented by direct action plaintiffs and who would in that  
 (15) capacity be bound by this Eyak stipulation So if the  
 (16) argument being made is that if you don't grant this relief  
 (17) you're inviting another trial that's just not the case  
 (18) Final point I would submit that the argument that we  
 (19) haven't complied really assumes the answer to the question  
 (20) The technical question you have before you is whether crew  
 (21) people should to the extent plead it out in claims like ours  
 (22) should be considered named plaintiffs or not We have alleged  
 (23) we are suing on behalf of these people in a representative  
 (24) capacity and the Gibbons case out of the 2nd circuit I think  
 (25) describes a very similar circumstance establishing who should

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- (1) be considered named plaintiffs should be looked at in light of
- (2) the reality of the pleadings and the practice and not merely
- (3) what you see in the caption
- (4) THE COURT Mr Daum anything
- (5) MR DAUM Just one thing I ll speak from here with
- (6) Your Honor s permission
- (7) THE COURT Sure
- (8) MR DAUM Mr Schroer I think said exactly what I
- (9) said about the Eyak stipulation If a plaintiff is in fact
- (10) represented by these counsel that plaintiff is bound But the
- (11) problem we are dealing with is the potential for one of these
- (12) absent class members who has been excluded from the class to
- (13) say I did not want the permit holder to pursue my claim I am
- (14) not represented by Faegre and Benson they didn t speak for
- (15) me And that person is not covered by the Eyak stipulation
- (16) and is not bound by the judgment and that s precisely the
- (17) situation we re concerned about
- (18) THE COURT Thank you very much we ll get you a
- (19) decision fairly shortly on this I think
- (20) MR DAUM Thank you Your Honor
- (21) THE COURT Be in recess subject to call
- (22) THE CLERK This court is in recess subject to call
- (23) (Proceedings recessed at 12 35 p m )

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- (1) STATE OF ALASKA )
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA )
- (6) I Leonard J DiPaolo 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) LEONARD J DiPAOLO RPR
- Notary Public for Alaska
- (22) My Commission Expires 2 3 96

**Look-See Concordance Report**

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TOTAL OCCURRENCES 2,757

NOISE WORDS 385

TOTAL WORDS IN FILE 7,814

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SINGLE FILE CONCORDANCE

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CASE SENSITIVE

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NOISE WORD LIST(S)

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- (1) IN THE UNITED STATES DISTRICT COURT
- (2) FOR THE DISTRICT OF ALASKA
- (3) In re ) Case No A89 0095 CIV (HRH)
- (4) ) Anchorage Alaska
- (5) The EXXON VALDEZ ) Wednesday August 10 1994
- (6) ) 3 00 p m
- (7) TRANSCRIPT OF PROCEEDINGS
- (8) PRELIMINARY HEARING FOR PRELIMINARY APPROVAL
- (9) OF THE SETTLEMENT OF PHASE II B
- (10) BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE
- (11) VOLUME 1 Pages 1 32
- (12) Realtime Transcription
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- (1) PROCEEDINGS
- (2) (Jury not present.)
- (3) (Call to Order of the Court.)
- (4) THE COURT Good afternoon ladies and gentlemen We
- (5) have scheduled at this time in Case A89-0095 in re the Exxon
- (6) Valdez preliminary hearing on preliminary approval of the
- (7) settlement of Phase II-B case
- (8) Mr Miller you have the laboring duty do you?
- (9) MR MILLER Yes, I do May it please the Court I
- (10) would like to introduce Charles Totemoff who is the Tribal
- (11) Council Chairman for Chenega Bay
- (12) THE COURT How are you doing sir
- (13) MR MILLER Your Honor, we have filed with you the
- (14) joint motion for preliminary approval, joint between the
- (15) settling plaintiffs, in narrow respects all plaintiffs and
- (16) Exxon defendants We've also lodged with the Court Exhibits 4
- (17) 5 and 6 which we will be asking at the conclusion of this
- (18) hearing be entered by Your Honor
- (19) They stay certain proceedings from the Native villages
- (20) they direct the entry of final judgment under Rule 54(b)
- (21) regarding the order 190 and order 237 claims and finally
- (22) approve the form of notice and summary notice to go to the
- (23) class
- (24) I will not repeat the points made in our joint brief
- (25) regarding fairness and adequacy Your Honor is familiar with

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- (12) Deputy Clerk TOM MURTIASHAW
- (13) U S District Court
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- (16) Ph 907/271 4529
- (17) Reported by KATHERINE L NOVAK RPR
- (18) Registered Professional Reporter
- (19) Midnight Sun Court Reporters
- (20) 2550 Denali Street Suite 1505
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- (22) Ph 907/258 7100

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- (1) the brief The one issue outstanding that bears mention is
- (2) the mention in the notice regarding the potential for early
- (3) distribution of funds The genesis of this provision in the
- (4) agreement which is in 4 7 4 and 4 8 is the problem we have
- (5) experienced in connection with the Alyeska settlement and the
- (6) delayed distribution of that settlement We attempted to put
- (7) together a provision which would permit the early distribution
- (8) of funds prior to the resolution of all appeals If in the
- (9) judgment of counsel doing so represented the sound of risk in
- (10) light of what Exxon was asking for in return The role in the
- (11) notice is that Exxon is now asking that the notice stayed with
- (12) considerable specificity exactly how this contingency would
- (13) operate if it ever came to bear
- (14) If Your Honor would turn to Exhibit 2 A, having had an
- (15) opportunity of course to read it Your Honor will see there are
- (16) five paragraphs which Exxon is now proposing which would
- (17) discuss how the potentially - potential early distribution of
- (18) funds would occur It requires the agreement to judicially
- (19) imposed lien it requires that one of the parties has withdrawn
- (20) from the settlement due to a material change in the settlement,
- (21) that withdrawal is only triggered either by a reversal of Your
- (22) Honor's final approval or a modification of Your Honor's final
- (23) approval of the settlement in other words their several
- (24) contingencies which lead to the potential for early
- (25) dissolution

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(1) We think that the provisions set forth in proposed  
 (2) paragraph part three of the notice by Exxon is more than that  
 (3) is required, and worse than that would be confusing and  
 (4) alarming to the class, and for that reason we have suggested to  
 (5) Your Honor the language in Exhibit 2 on Page 3, which would  
 try  
 (6) to encapsulate in one paragraph, three or four sentences what  
 (7) the gist of this early distribution is  
 (8) With regard to case law in the area that bears the ninth  
 (9) circuit has noted that notice in a class suit may consist of a  
 (10) very general description of the proposed settlement. It must  
 (11) present a fair recital of the subject matter and proposed  
 (12) terms. And that's reading from *Mendoza versus United States*  
 (13) 623 F 2d 1338. Also, there is authority in *Reynolds versus*  
 (14) *National Football League* the Court's discretion is limited  
 (15) only by the broad reasonableness standard imposed by due  
 (16) process regarding the content of the notice. And of course  
 (17) *Newburg* quoted by all the cases, the notice should be brief and  
 (18) reasonably clear to the minimally sophisticated layperson  
 (19) in our proposal, we would state that early distribution is  
 (20) possible. We state generally the terms under which early  
 (21) distribution would be an imposition of a lien under class  
 (22) members - other class members under Exxon and we further  
 (23) recite for the reader the consequence of failure to repay  
 (24) within 80 days which is the forfeiture of 190 and 237 claims  
 (25) And then we believe most importantly, stated at the end

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(1) further information regarding these provisions as set forth in  
 (2) the settlement agreement.  
 (3) Your Honor will recall towards the end of the notice the  
 (4) readers informed they can secure a copy of the settlement  
 (5) agreement by writing to me and I will send it to them. There  
 (6) is ample time for the recipient to do so and to hear back from  
 (7) me and to receive a copy of the settlement agreement to study  
 (8) these provisions in detail and so for that reason we would  
 (9) propose that Exhibit 2 be approved by Your Honor rather than  
 (10) the alternative 2-A as proposed by the Exxon defendants  
 (11) The only other aspects of the settlement I'd like to review  
 (12) with Your Honor is just to make clear this is settlement of 2 A  
 (13) and the claims of certain villages which overlap the claims -  
 (14) excuse me 2-B. I misspoke Your Honor  
 (15) THE COURT How about 2-B?  
 (16) MR MILLER My apologies is a settlement of 2 B  
 (17) and the claims of certain Native villages which duplicate those  
 (18) made by the class in 2-B. It does not encompass the claims of  
 (19) those that have chosen to opt out of the class the Alaska  
 (20) Native class. It does not encompass the claims of any other  
 (21) persons that may have claims of this nature that are not  
 (22) identified in the settlement agreement. Those include claims  
 (23) at least one Native village, the Eyak Native village. Your  
 (24) Honor may be aware recently Eyak filed litigation in the Alaska  
 (25) Superior Court that case was removed to this court, case

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(1) number - the superior court number was 94-5697. That was  
 (2) filed by other counsel Mr Richard Jameson, who's in the Court  
 (3) today. We have discussed whether or not he will be  
 (4) substituting in or requesting that that earlier case be  
 (5) dismissed so his new case can proceed further. I'm sure he and  
 (6) I will work something out there. I just want the record to be  
 (7) clear who is in and who is not in this settlement. If His  
 (8) Honor has questions that's all we have  
 (9) THE COURT I think there are a couple of things, so  
 (10) bear with me just a second  
 (11) There is a statement I believe at Page 10 or thereabouts of  
 (12) your memorandum that seems to me to say that the only thing I  
 (13) am to look at in giving preliminary approval is the  
 (14) reasonableness of the proposed agreement  
 (15) Am I reading you wrong or do I not have more to do than  
 (16) that?  
 (17) MR MILLER Well the fundamental issue for Your  
 (18) Honor is whether there is any reason to give notice to the  
 (19) class at all  
 (20) THE COURT Sure  
 (21) MR MILLER If the proposed settlement is in the  
 (22) range of reasonableness that Your Honor may approve finally at  
 (23) a later date then notice should go forth  
 (24) THE COURT Let me be more specific. What's bothering  
 (25) me is the recitation that you gave me from the manual for

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(1) complex litigation which says, and I quote. If the proposed  
 (2) settlement appears to be the product of serious informed  
 (3) non-conclusive negotiations has no obvious defects does not  
 (4) peripherally guarantee preferential treatment to class  
 (5) representatives or segments of the class and falls within the  
 (6) range of possible approval the Court should direct notice to  
 (7) be given  
 (8) It seems to me that I'm a little short on a record. I  
 (9) mean, I think I probably have in my head enough information to  
 (10) answer those concerns but I'm not sure that we have a record  
 (11) should anyone raise the question to adequately demonstrate  
 (12) that this agreement is the product of serious informed  
 (13) non-conclusive negotiations that - and so forth. Am I missing  
 (14) something or -  
 (15) MR MILLER No Your Honor I don't think so. With  
 (16) regard to those factors however, I think the record is  
 (17) apparent from the moving papers, with regard to the nature of  
 (18) the negotiations serious informed non-conclusive  
 (19) negotiations. We have advised Your Honor of the parties  
 (20) respective position regarding the Phase II B potential  
 (21) liability of the plaintiffs that Exxon claims nine million  
 (22) dollars owed and plaintiffs claim 27 million dollars in round  
 (23) numbers. Those are records of the - and the record does fall  
 (24) comfortably within those ranges  
 (25) With regard to the obvious deficiencies that might exist

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(1) we think those would exist on the face of the settlement  
 (2) agreement In the absence of any issue being raised, it would  
 (3) be difficult to argue in the negative that there are no  
 (4) deficiencies  
 (5) Finally, with regards to the preferential treatment of  
 (6) class representatives there are no distinctions set forth in  
 (7) proposed settlements between any class representatives or any  
 (8) members of the class or any segments of the class or any  
 (9) subclasses of the class On that last score we should note  
 (10) that the parties do anticipate - plaintiffs anticipate moving  
 (11) Your Honor for relief to file a motion to go forward to the  
 (12) class regarding distribution at such future time as  
 (13) distribution may occur and would expect that there would be  
 (14) comment from the class from Your Honor s approval of any  
 (15) ultimate distribution  
 (16) THE COURT Taking that just a little bit further, I  
 (17) did some rough figuring based on information that it was your  
 (18) position, and came up with a number that suggests that the  
 (19) potential gross recovery per your estimate of the total class  
 (20) would be \$6 000 plus a little bit per claimant. Have I got  
 (21) that about right?  
 (22) MR MILLER Your Honor, that is the math - that is  
 (23) the product - that is the sum that is yielded from the math  
 (24) you have described That's correct We do recommend a  
 (25) statement in the notice at page three that it is presently the

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(1) communities where there was a higher lost harvest poundage  
 (2) But beyond that we follow the same model as the Alyeska  
 (3) settlement in terms of deferring to the next phase the actual  
 (4) determination as to how to best distribute the funds  
 (5) THE COURT Where will that information come from as  
 (6) far as who lost what?  
 (7) MR MILLER The Alaska Department of Fish & Game both  
 (8) sides have been relying on in preparing Phase II-B case  
 (9) THE COURT Do you have any feeling as to whether  
 (10) we re getting into a squabble over ADF&G numbers as opposed  
 to  
 (11) somebody's own personal numbers that could be used are we  
 (12) going to face those kind of qualms?  
 (13) MR MILLER I think in the context of the Phase II-B  
 (14) case the plaintiffs are fair bound from the representations of  
 (15) the Court over the past two years That they will go with the  
 (16) phase - excuse me, the ADF&G figures in Phase II B Now,  
 (17) whether somebody out there will not claim that they were under  
 (18) reported or over reported or however, I can't speak to that  
 (19) It s certainly possible there will be people where the comment  
 (20) would be made and Your Honor would have to determine  
 whether it  
 (21) was fairest with the class to go with the ADF&G figures or to  
 (22) go on some other basis  
 (23) THE COURT Your view of it though, and I assume  
 (24) you ve counseled with your clients in this regard that ADF&G  
 (25) numbers are a fair and acceptable way to -

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(1) intention to use lost harvest as the basis for distribution  
 (2) rather than per capita numbers, that is the two ends of the  
 (3) spectrum The Native village of Chenega suffered greatly in  
 (4) terms of the harvest related to lost harvest that Fish & Game  
 (5) measured in pounds as compared with -  
 (6) THE COURT You re right with me Mr Miller That  
 (7) was the next question how does that all interrelate I  
 (8) haven t a clue as to - as to what that - what injecting that  
 (9) concept does to a potential claimant s recovery here Can  
 (10) you -  
 (11) MR MILLER This puts us exactly in the same position  
 (12) in the Alyeska settlement when at the time of the settlement  
 (13) we had not made any determinations nor recommendations of  
 the  
 (14) Court regarding how the Alyeska settlement proceeds would be  
 (15) distributed except in one narrow respect involving one of the  
 (16) regional corporations In the same way it is not appropriate  
 (17) we believe at this time to go forward with all of the elaborate  
 (18) calculations and alternatives for distribution of the  
 (19) settlement if Your Honor determines in the end not to approve  
 (20) the settlement at all  
 (21) In the interest of balancing those we thought it was best  
 (22) to alert all of the class that our thinking right now is to  
 (23) recommend to Your Honor a distribution based on lost harvest  
 (24) That puts people on notice where there was fewer lost harvest  
 (25) pounds there will be a lesser amount relative to those

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(1) MR MILLER They are the best that we can do with  
 (2) resulting with our experts  
 (3) THE COURT Rather than just a per capita?  
 (4) MR MILLER That's correct Your Honor  
 (5) THE COURT Let's see if I ve got anything else here  
 (6) I understand the notice that you proposed to send out to  
 (7) require that someone who wishes to object send a certified  
 (8) letter three different places in order to properly comply with  
 (9) that notice have I got that right?  
 (10) MR MILLER Let me turn to it Your Honor  
 (11) The model we used with regard to the notice was the Alyeska  
 (12) settlement model  
 (13) THE COURT My question stands  
 (14) MR MILLER Correct Yes sir It must be filed  
 (15) with the Court and sent by certified mail to Mr Serdahley and  
 (16) to me  
 (17) THE COURT Three places?  
 (18) MR MILLER Correct  
 (19) THE COURT Why do we need to have people send things  
 (20) three different places in order to do the objecting is that  
 (21) really necessary?  
 (22) MR MILLER One moment Your Honor  
 (23) THE COURT Sure  
 (24) MR MILLER If the objection is sent to my post  
 (25) office box, that would be sufficient and give them one point,

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- (1) then it will be our obligation to report to the Court on all  
 (2) objections received  
 (3) THE COURT I'll buy that. I think that's much  
 (4) cleaner and obviates the problem that I would anticipate  
 (5) because you know, with as many people as we have in this case  
 (6) if anything can go wrong seemingly it will You know, what  
 (7) happens if somebody sends the objection one place and not  
 the  
 (8) other  
 (9) MR MILLER Yes  
 (10) THE COURT I would think it much better for all of us  
 (11) if it came to you, and you as liaison counsel would report to  
 (12) the parties, to the Court and I'd like that much better  
 (13) MR MILLER I would suggest then at that paragraph  
 (14) beginning with the words "and to Douglas Serdahley", be  
 (15) stricken through the words "filed with the Court" on Page 5 of  
 (16) Exhibit 2  
 (17) THE COURT You're looking at the notice I guess,  
 (18) and I'm not.  
 (19) MR MILLER Correct  
 (20) THE COURT Let me find the notice  
 (21) Okay And your suggestion again is?  
 (22) MR MILLER On the line that begins "avenue suite  
 (23) 700" on the right side of that line strike "the records" and  
 (24) "to Douglas" on the next line, and to the words "filed with  
 (25) the Court and comma" strike all that

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- (1) THE COURT All right So it would read Certified  
 (2) mail postage paid et cetera to your firm and its address as  
 (3) liaison counsel for plaintiffs a written objection and/or  
 (4) notice of intention to appear, et cetera That will solve my  
 (5) problem  
 (6) As long as we're at it let me ask you about something  
 (7) else I found the language in Paragraph 7 of the proposed  
 (8) order and this language that we're looking at, at page 5 of  
 (9) Exhibit 2 just a bit confusing It's not clear to me whether  
 (10) one who wishes to object and be heard -  
 (11) MR MILLER And be heard  
 (12) THE COURT - has to file two pieces of paper  
 (13) MR MILLER That's how it is specified at this time  
 (14) Would Your Honor prefer just to have an expression of desire to  
 (15) appear be stated to liaison counsel without service?  
 (16) THE COURT Say that again  
 (17) MR MILLER Would you prefer the same procedure for  
 (18) appearing to govern as it now governs for objections?  
 (19) THE COURT Yes  
 (20) MR MILLER Because I think that has to do more with  
 (21) His Honor's docket If Your Honor has more people the  
 hearing  
 (22) will be more time less people there will be less time  
 (23) THE COURT I would just as soon it all come to you  
 (24) but I would also recommend that you take another look at this  
 (25) in terms of maybe making it a bit clearer that there are two

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- (1) things that have to be filed here that somebody who wants to  
 (2) object may file an objection secondarily, if in addition to  
 (3) objecting you want to appear and be heard at the final hearing  
 (4) you got to do something else, file another piece - or leave  
 (5) with you another piece of paper  
 (6) Now, I'm not addressing the question of what happens if  
 (7) somebody wants to try and roll the two together in one  
 (8) document, I don't really care one way or another about that,  
 (9) but I wish you'd look at whether or not you can clarify a  
 (10) little bit so that it is crystal clear to somebody who wants to  
 (11) be heard that he's got to do something more than just file his  
 (12) objection I felt a little unsure that that was clear  
 (13) MR MILLER Okay Would you like us to address that  
 (14) separately after this hearing or would you like us to try to do  
 (15) that now?  
 (16) THE COURT I'll trust you to - you're going to run  
 (17) this document through your typewriter again or your computer  
 (18) again anyway I'm perfectly willing to trust you to give us a  
 (19) little help in this notice on the subject of having to do two  
 (20) things if you want to be heard  
 (21) MR MILLER And we will lodge a fresh order with Your  
 (22) Honor  
 (23) THE COURT The summary notice let's think about  
 (24) that for a second  
 (25) It would appear to me that there could be people who would

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- (1) see only that summary notice and would want to file an  
 (2) objection It doesn't appear to me to tell them where to file  
 (3) the objection Don't we need an address presumably yours, in  
 (4) the summary notice?  
 (5) MR MILLER With regards to objections of summary  
 (6) notice simply speaks to filing a written objection  
 (7) THE COURT Yeah  
 (8) MR MILLER And securing additional information from  
 (9) plaintiff's liaison counsel  
 (10) THE COURT Right  
 (11) MR MILLER We could modify that consistent with the  
 (12) longer notice and restate the address in paragraph four This  
 (13) is on Page 4 of Exhibit 3  
 (14) THE COURT Which exhibit is it? I can't -  
 (15) MR MILLER Exhibit 3 Your Honor summary notice on  
 (16) Page 4  
 (17) THE COURT There it is All right  
 (18) It seems to me what you need to do in that article or  
 (19) paragraph three is say that -  
 (20) MR MILLER Your Honor this paragraph three? What  
 (21) page is Your Honor on?  
 (22) THE COURT I'm on Page 3 Exhibit 3  
 (23) MR MILLER Okay  
 (24) THE COURT And article or paragraph three  
 (25) MR MILLER Thank you

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- (1) THE COURT Maybe there's a better place to put it,  
 (2) but I didn't offhand see it.  
 (3) MR MILLER Okay The next page speaks to how the  
 (4) objection is made we now need to conform that to Your Honor's  
 (5) change on the notice  
 (6) THE COURT All right If you put it there put an  
 (7) address there to file objections with yourself I think that's  
 (8) fine You might also - in taking a look at this, you might  
 (9) want to also think about whether you want to clarify here this  
 (10) business of filing objections and appearing at the hearing  
 (11) You say here you are entitled to appear and be heard at the  
 (12) hearing As I understand the drill we're going to hear  
 (13) anybody who tells us they want to be heard this implies  
 (14) otherwise this implies they can just show up and be heard  
 (15) MR MILLER Either way is fine with the plaintiffs  
 (16) and with the class counsel I think it is an issue for Your  
 (17) Honor If Your Honor wants to deem anybody who files an  
 (18) objection eligible to appear and speak briefly to Your Honor,  
 (19) that can be done  
 (20) THE COURT I like the way you did it, I just want to  
 (21) have it all internally consistent and clear in terms of what  
 (22) people have to do to appear and be heard  
 (23) MR MILLER We can accomplish that  
 (24) THE COURT The last thing that I wanted to ask you a  
 (25) little bit about is the 54(b) certification I'm not sure I

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- (1) class, the class would be allowed to go forward with its appeal  
 (2) if the class was successful and 190 claims came back to Your  
 (3) Honor for trial than the class and villages would go forward  
 (4) to trial If the class was unsuccessful in its appeal and  
 (5) order 190 was sustained by the class then the class claims  
 (6) would be dismissed as well as the class claims to the mandate  
 (7) of this Court  
 (8) THE COURT Do we have that understanding in the  
 (9) record anyway?  
 (10) MR MILLER It's in the settlement agreement, Your  
 (11) Honor  
 (12) THE COURT There's a lot in that and I obviously  
 (13) missed that.  
 (14) What I'm concerned about here is the salability of the  
 (15) 50(b) order with the circuit It's my sense of things that  
 (16) with the caseload they've got they're getting tougher and  
 (17) tougher and tougher all the time about taking things that they  
 (18) can avoid taking I'm a little concerned that we don't say  
 (19) enough in this proposed 50(b) order to get this situation past  
 (20) the circuit I think it can be justified, because I think one  
 (21) can say, look we have this settlement as to the class we have  
 (22) an agreement with the people who were not bound by order  
 (23) 190,  
 (24) that they will be bound by whatever comes out of it. We've got  
 (25) other people who are gone from the case because they've  
 opted  
 out, so really, I think, although I have one more problem area,

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- (1) really understand where we are in that regard and let me  
 (2) rattle on for just a moment and maybe then you can straighten  
 (3) me out on it  
 (4) We have a settlement that's going to take care of the class  
 (5) people who are in A91-568, which is one of our consolidated  
 (6) cases We've entered two orders in that case which you refer  
 (7) to in the settlement agreement as what do you call it as the  
 (8) order 190 claims or something like that they are subject to  
 (9) being appealed  
 (10) MR MILLER Correct  
 (11) THE COURT Am I correct that those orders have been  
 (12) entered in a fashion so as to bind everybody that's in 91-568  
 (13) except people who have opted out of the case?  
 (14) MR MILLER No Your Honor  
 (15) THE COURT Okay That's where I'm lost then  
 (16) MR MILLER Those orders were entered into a manner  
 (17) so as to bind the Alaska Native class excluding the opt outs  
 (18) period When Exxon moved -  
 (19) THE COURT Who else is there then?  
 (20) MR MILLER The Native villages And because order  
 (21) 190 did not by its term bind the Native villages the settling  
 (22) parties agreed that the Native villages would stay those  
 (23) claims since technically they had not been the subject of  
 (24) Exxon's motion in order 190 so we would simply stay those  
 (25) claims and their faith would then be tied with the faith of the

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- (1) I think one can fairly say to the circuit, look this case  
 (2) technically isn't over but it really is done so it is time to  
 (3) take these issues up on appeal because of the settlement  
 (4) because of the agreement because of the opt outs If you  
 (5) decide this appeal one way, the case is over, if you decide it  
 (6) the other way, admittedly we've got some more work to do, but  
 (7) we've already done our work on those issues and if it's wrong  
 (8) you simply have to straighten us out on it  
 (9) My point is I think we need to beef that up a little bit  
 (10) and I think it can be done  
 (11) MR MILLER Very good  
 (12) THE COURT The other area of concern that I have  
 (13) though is whether we really have accounted for all of the  
 (14) parties Something in here led me to believe that - was it  
 (15) Alyeska still somehow or other is hooked up in this case? Tell  
 (16) me about who else is in there that I've overlooked  
 (17) MR MILLER Well at this moment in time there is an  
 (18) appeal to the ninth circuit of Your Honor's approval of  
 (19) modifications to the Alyeska settlement.  
 (20) THE COURT Right  
 (21) MR MILLER And theoretical possibility that the  
 (22) Alyeska settlement would collapse and we'd find ourselves in  
 (23) litigation against Alyeska and for that reason Exxon wanted to  
 (24) credit the pipeline which we've provided that theoretical  
 (25) possibility is not possible in light of the third modification

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- (1) of the Alyeska settlement, which will be brought before Your  
 (2) Honor at a later time  
 (3) THE COURT Say that again  
 (4) MR MILLER Those appeals of the circuit proceedings  
 (5) will eventually be dismissed provided that all parties agree  
 (6) We are circulating an agreement at this time  
 (7) THE COURT I m sorry, I got lost there  
 (8) MR OESTING If the Court please Mr Miller was  
 (9) right until he said that the - either the eighth modification  
 (10) which is circulating or those appeals would become moot As a  
 (11) result Alyeska could in fact reappear in the courtroom as a  
 (12) form of plaintiffs, including these plaintiffs but the  
 (13) participant Exxon pipeline company, one of the Alyeska sisters  
 (14) or siblings is protected from that contingency by the term  
 (15) included in this settlement agreement Nevertheless that same  
 (16) ruling in 190 would be applicable or available to Alyeska as a  
 (17) defense as it is to Exxon here, and we have the stare decisis  
 (18) as a result of the ninth circuit only to bind them although  
 (19) technically, because we have not entered the judgments  
 (20) implementing that Alyeska settlement - well one we have but  
 (21) not the class action judgments, there's still a party present  
 (22) in this record, though they ve not dealt with this, and this  
 (23) settlement wouldn't solve the claims against them unless that  
 (24) settlement becomes final  
 (25) I have a second concern about that.

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- (1) THE COURT We re all laughing because I think I  
 (2) followed that but I m not so sure that it isn't more confusing  
 (3) than what Mr Miller told me  
 (4) MR OESTING This case has that characteristic I  
 (5) was concerned only by the opt out plaintiffs that are direct  
 (6) action plaintiff subsistence claimants and I do not know off  
 (7) the top of my head whether 190 and 237 reached those by case  
 (8) numbered at the time that motion was brought so that they are  
 (9) properly within this 54(b) tying the package of direct and  
 (10) class together on the way to the circuit as opposed to a  
 (11) subsequent extension of 190 upon focused motion practice to  
 (12) those direct action opt out Native plaintiffs and hauling them  
 (13) uphill Am I making any sense?  
 (14) THE COURT What did he say, Mr Miller?  
 (15) MR MILLER Yes Just joking  
 (16) The opt outs are in Phase IV Phase II B, unlike Phase  
 (17) II A was just a trial of the class claims of the Alaska Native  
 (18) class claims  
 (19) THE COURT Yes  
 (20) MR MILLER So the opt outs are in class four and  
 (21) Mr Oesting is saying that these opt outs that are in Phase IV  
 (22) have claims that were not barred by 190 because Exxon failed  
 (23) to  
 (24) move against them I have not reexamined order 190 with that  
 (25) perspective since our job is to represent the class and we know  
 190 binds the class but that is a possibility It is a real

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- (1) possibility there could be claims present in Phase IV that  
 (2) involve order 190 claims by opt outs  
 (3) THE COURT And there s I guess one other mutation  
 (4) that this thing could go through in that the direct action opt  
 (5) outs are probably people who are potentially subject to a  
 (6) remand  
 (7) MR MILLER Some are and some are not.  
 (8) THE COURT Some are and some aren't.  
 (9) MR MILLER Those who were parties in the case that  
 (10) was remanded by the ninth circuit are those that were not or  
 (11) those that were not, are not  
 (12) THE COURT And they re probably both  
 (13) MR MILLER Correct. Now Exxon can cure that by  
 (14) moving against them for a similar ruling as Your Honor made in  
 (15) order 190 if they choose to do so They may settle with them  
 (16) or they me interpret order 190 as binding them  
 (17) THE COURT I think we've probably thrashed this more  
 (18) than enough If you would, please, let s see if we can't beef  
 (19) up the 54(b) order so that it presents the strongest possible  
 (20) argument for it making sense for the circuit to take these two  
 (21) issues now, even though in fact there are a couple of loose  
 (22) ends  
 (23) MR MILLER We will do that, I will work with my  
 (24) colleague Mr Rader  
 (25) THE COURT That s all I had for you

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- (1) MR MILLER Thank you  
 (2) THE COURT Mr Rader  
 (3) MR RADER Yes Good afternoon Your Honor Alan  
 (4) Rader with O Melveny and Myers and Exxon defendants Since  
 (5) we ve settled Phase II B I guess this will be my one and only  
 (6) appearance before you on this matter at least Unless Your  
 (7) Honor has any questions for me on the subject you already  
 (8) discussed with Mr Miller let me just speak to one matter  
 (9) which is the one issue on which we had some disagreement  
 (10) THE COURT That s fine Go ahead  
 (11) MR RADER Let me begin by explaining briefly how we  
 (12) got to this situation As Mr Miller said as we were  
 (13) negotiating this settlement they expressed the desire to have  
 (14) an opportunity to make a distribution to the class in the event  
 (15) there were - there was appeal by another plaintiff which is  
 (16) really the class that we re talking about even before the  
 (17) appeal had been resolved  
 (18) And the position that we took was that we were willing to  
 (19) agree with that as long as there was some protection offered to  
 (20) Exxon in the event that appeal was successful and the  
 (21) settlement was undone and the two protections we have which  
 (22) is  
 (23) the lien which we take against any oil spill related claim  
 (24) against class members, whether they are subsistence related or  
 (25) not and the provision if money is not repaid, if the  
 settlement creditors then the order 190 claims we re just

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(1) talking about disappear  
 (2) We think that those are eminently fair provisions and are  
 (3) confident for final approval You will approve them under the  
 (4) circumstances under which they operate, however, we also feel  
 (5) they are not intuitively operative provisions and easy to  
 (6) understand and we think - what we suggest is that the  
 (7) explanation of them to the class ought to be as clear as we  
 (8) could make it so that people understand what might occur if  
 (9) those circumstances should come into play The concern we  
 have  
 (10) is that our rights under those two provisions remain  
 (11) enforceable, to give an example If such an appeal should  
 (12) occur, and if the counsel for the class should decide to make a  
 (13) distribution in the interim and if we should get this lien and  
 (14) then by chance one of those appeals is successful and this  
 (15) settlement is dissolved and if we are unavailable to  
 (16) voluntarily get repayment and we re back in front of Your Honor  
 (17) or in front of some other court seeking to enforce that  
 (18) judicial lien or to enforce the provision that the order 190  
 (19) claims be dismissed, we think it s important that we not be in  
 (20) a position where a class member could come into this court and  
 (21) say, I didn't realize that my claim for loss of my commercial  
 (22) fishing business could be put on the table to pay back money  
 (23) that was paid to counsel for the Native class, that's not fair  
 (24) to me I didn't understand that from the notice that was sent  
 (25) out If I had realized that was happening I would have

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(1) objected  
 (2) I think there s been enough litigation in this case and I  
 (3) think we can eliminate some more by making sure that the  
 notice  
 (4) we give to class members is as clear as it could be made I  
 (5) don t disagree with the description that plaintiffs have put in  
 (6) their notice my concern with it is it s too summary, it goes  
 (7) by too quick I think it s understandable to all of us who  
 (8) negotiated this agreement I think it's to some lawyers that  
 (9) know what it s about I don't think it's understandable or  
 (10) easily understandable to people who aren t familiar with the  
 (11) kind of proceedings that are being discussed in that notice I  
 (12) think what it requires is a little more explanation a little  
 (13) more detail a little more concrete example so the people can  
 (14) understand this is one of the provisions in the agreement in  
 (15) the event that counsel for the class decide to make a  
 (16) distribution a lien could exist that would affect their rights  
 (17) unrelated to subsistence and these cultural claims could be  
 (18) jeopardized if money isn t repaid And the reason that we  
 (19) think it s appropriate and quite frankly I didn t quite  
 (20) understand what the concern of plaintiffs is about it is that  
 (21) the class members have a very clear idea of what is happening  
 (22) This is not a normal provision I don t think in this  
 (23) settlement and I think somebody reading the plaintiff s notice  
 (24) could easily glide over it and not quite get the point And I  
 (25) think we are all better off if the notice is as clear as we can

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(1) make it, so that if anyone is concerned about it or needs an  
 (2) explanation of it, they can object and we re not in a position  
 (3) a year from now where we have to be arguing about this again  
 (4) I think if we give the kind of notice that we have in here,  
 (5) and obviously it s subject to change and subject to  
 (6) improvement If we give that kind of notice and objection a  
 (7) year from now by a class member that I didn't get fair notice  
 (8) with the explanation and I think an ounce of prevention now is  
 (9) well worth it That s it Your Honor Thank you Your Honor  
 (10) THE COURT Thank you sir  
 (11) MR RADER Anything else on any other matters  
 (12) THE COURT No, I have my problems taken care of with  
 (13) Mr Miller Mr Miller anything more you want to say about  
 (14) this notice situation?  
 (15) MR MILLER We re operating here according to the  
 (16) case law and contents of due process Your Honor has an  
 (17) obligation to protect the members of the class as does class  
 (18) counsel We can notify the parties, the class members by  
 (19) giving them a copy of the entire settlement agreement that  
 (20) would be permissible but it wouldn't be meaningful, they would  
 (21) not understand 29 times At times Mr Rader and I failed to  
 (22) understand what we negotiated the night before The  
 agreement  
 (23) is complex So the point is to have it balance in the notice  
 (24) Tell the class members something in plain English that gives  
 (25) them the gist of this important point I believe we ve done

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(1) that on Page 4 We tell them there could be an early  
 (2) distribution before an appeal is over We tell them, quote  
 (3) you will be obligated to repay previously distributed funds  
 (4) Simple statement We tell them that if you don't, the right to  
 (5) the proceeds - Exxon will have the right to the proceeds of  
 (6) other claims of class members against Exxon Pretty plain  
 (7) vanilla English sentence And finally we tell them if they  
 (8) don't pay on time, they will quote forfeit all claims That  
 (9) gives them the essence It doesn't tell them how withdrawal  
 (10) occurs It doesn't tell them even indeed about their right of  
 (11) withdrawal It doesn't tell them how a change needs to be  
 (12) material all these things are addressed in the settlement  
 (13) agreement. We have an interest in making sure that everybody  
 (14) in the class understands the terms of the settlement more than  
 (15) anybody We negotiated this agreement and want it to stick we  
 (16) don't want the class members to be confused For that reason  
 (17) we ask Your Honor to approve the Exhibit 2 version of part  
 (18) three  
 (19) MR RADER No further argument, but one point of  
 (20) clarification if I might When Your Honor raised the issue  
 (21) earlier of the summary notice It reminded me that there is no  
 (22) mention in the summary notice at all of this subject that we're  
 (23) discussing and what I d like to suggest is at a minimal the  
 (24) summary notice should at least include some provision that  
 (25) gives some notice of this perhaps the notice of the plaintiffs

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- (1) adopted proposed if you were to adopt ours for the primary
- (2) notice
- (3) MR MILLER Well, Your Honor, we do object to the
- (4) suggestion, the purpose of the summary notice is as it states
- (5) to be summary One of the advantages of this case is we have
- (6) already gone through the last procedure on the Alyeska
- (7) settlement. We actually have a list of class members The
- (8) summary notice therefore is not designed to generate
- (9) thousands
- (10) of class members who had previously not been identified The
- (11) summary notice is therefore most useful forgetting someone
- (12) who
- (13) has not learned before and is a potential class member getting
- (14) them notified that there is a settlement, and then they can get
- (15) more information from liaison counsel we can send them the
- (16) whole notice, we can send them the whole settlement notice
- (17) whatever they wish
- (18) THE COURT Does the summary notice make any mentions
- (19) of this repayment possibility?
- (20) MR MILLER No, it does not. Because it's such an
- (21) obscure provision and only arises in the event we propose a
- (22) distribution to Your Honor at a time when no appeal has yet
- (23) been concluded
- (24) THE COURT I don't see any need to open up this new
- (25) subject in the summary notice, however, on the full notice the
- (26) one that's going to get mailed to everybody, I really would
- (27) prefer to see you use the longer version that Exxon has

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- (1) proposed Be quite candid with you about it, I had a little
- (2) trouble following the summary version myself when I read it the
- (3) first time, and when I read Exhibit 2-A, I then felt I more or
- (4) less understood what it was about so - you know and I was
- (5) reading it cold before I read the entire agreement so I tend
- (6) to think that maybe the longer explication of it is preferable
- (7) and frankly gentlemen since the issue arose and the junk kind
- (8) of got put into the courtroom we are all at some greater risk
- (9) down the road simply because we had this discussion about the
- (10) possible adequacy of it So partially, simply because the
- (11) issue arose I would rather see you avoid the risk that
- (12) somebody will say well see, there was a problem and you
- (13) didn't deal with it correctly, so let's use the long version
- (14) I don't think there's anything wrong with what you've got in
- (15) there Mr Miller but I think under the circumstances I'd
- (16) rather have you use the longer version of it, the more complete
- (17) explanation
- (18) MR MILLER Very good Your Honor Would you like us
- (19) to prepare the fresh -
- (20) THE COURT If you would make those changes I would
- (21) be happy to sign
- (22) Now having said that we need to get it done tomorrow
- (23) MR MILLER Very good
- (24) THE COURT You're going to lose me - I hope I
- (25) fervently hope, and so do a lot of other people, that we'll be

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- (1) gone all of Friday and all of next week
- (2) MR RADER We should have no problem getting it to
- (3) you tomorrow
- (4) THE COURT Thank you gentlemen Anything else we
- (5) need to do?
- (6) MR MILLER No, Your Honor
- (7) THE COURT Thank you We'll be in recess subject to
- (8) call
- (9) THE CLERK. This Court's in recess subject to call
- (10) (Proceedings concluded at 3:47 p.m.)

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- (1) STATE OF ALASKA )
- (2) Reporter's Certificate
- (3) DISTRICT OF ALASKA )
- (4) I Katherine L. Novak RPR a Registered
- (5) Professional 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) KATHERINE L. NOVAK, RPR
- (15) Notary Public for Alaska
- (16) My Commission Expires 6-21-97



**Look-See Concordance Report**

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UNIQUE WORDS 928  
 TOTAL OCCURRENCES 2,351  
 NOISE WORDS 385  
 TOTAL WORDS IN FILE 6,940

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SINGLE FILE CONCORDANCE

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CASE SENSITIVE

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NOISE WORD LIST(S)  
NOISE NO1

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INCLUDES ALL TEXT  
OCCURRENCES

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IGNORES PURE NUMBERS

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(1) IN THE UNITED STATES DISTRICT COURT  
 (2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No A89 0095 CIV (HRH)  
 (5) ) Anchorage Alaska  
 The EXXON VALDEZ ) Thursday August 11 1994  
 (6) ) 1 00 p m  
 TRANSCRIPT OF PROCEEDINGS  
 (8) VERDICT PHASE II A  
 TRIAL BY JURY 65th DAY  
 BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE  
 (12) VOLUME 39 Pages 6989 6999  
 (13) Realtime Transcription  
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(1) PROCEEDINGS  
 (2) (Jury in at 1 03 p m )  
 (3) THE CLERK. All rise  
 (4) (Call to Order of the Court)  
 (5) THE COURT Mr Murray would you hand your verdict to  
 (6) the bailiff please? Thank you  
 (7) Counsel, we have what appears to me to be a complete  
 (8) verdict. As I indicated to you, at some point I think it s my  
 (9) intention to make copies of the verdict at this point for you  
 (10) so that you won't all have to do a bunch of writing to get it  
 (11) down  
 (12) Secondary to that are either of you going to want me to  
 (13) poll the jurors individually?  
 (14) MR LYNCH Yes Your Honor  
 (15) MR O'NEILL No Your Honor  
 (16) THE COURT With one request, I m going to do it. The  
 (17) logistics of that can be pretty simple or they can get a little  
 (18) complicated Do you have any problem with my reading the  
 (19) entire verdict into the record and then polling the jurors  
 (20) individually as to whether or not the entirety of it is their  
 (21) verdict?  
 (22) MR LYNCH Your Honor I had suggested to Mr Heady  
 (23) that perhaps if the jurors had a copy to follow along on  
 (24) that - my concern is it s such a complicated verdict that the  
 (25) poll might not be significant if everybody had to carry it in

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(1) their head  
 (2) MR O NEILL We have no objection However Your  
 (3) Honor wants to do it.  
 (4) THE COURT And I don t have any particular objection  
 (5) to giving them all copies but if I m going to do that I m  
 (6) disinclined to read it all into the record  
 (7) MR LYNCH That would be fine Your Honor  
 (8) THE COURT I ll make copies for you all for the  
 (9) jury we'll take a few minutes for everyone to look at it and  
 (10) then I ll poll the jurors individually as to the verdict  
 (11) MR LYNCH Fine Your Honor  
 (12) THE COURT We'll stand down for just a few moments  
 (13) please  
 (14) (Recess from 1 12 p m to 1 20 p m )  
 (15) THE COURT Please be seated If everybody would  
 (16) please take a few moments now to review the verdict including  
 (17) the jury please I know you ve looked at this piece of paper  
 (18) an awful lot but you re at a stage where I will be asking you  
 (19) in a few moments if this verdict is in it s entirety your  
 (20) agreed verdict on an individual basis So take one last look  
 (21) at it Be sure that this is your verdict and then after  
 (22) everyone has had a chance to look at it, we will ask you the  
 (23) question  
 (24) I have a tape and can give you the final number if anybody  
 (25) is interested in hearing that right off the top

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- (1) \$286 787 738  
 (2) Mr O'Neill are we ready?  
 (3) MR O NEILL. Yes sir  
 (4) THE COURT As I indicated a moment ago, I will be  
 (5) asking you each individually one single question about whether  
 (6) or not this is your true and correct verdict. If you are in  
 (7) agreement with all of the answers in this verdict you should  
 (8) answer yes If you disagree with any of the answers you  
 (9) should say no understood?  
 (10) Ms Smith, is the verdict which the court has received your  
 (11) true and correct verdict?  
 (12) JUROR SMITH Yes  
 (13) THE COURT Ms Hood, is the verdict which we have  
 (14) received your true and correct verdict?  
 (15) JUROR HOOD Yes  
 (16) THE COURT Mr Dean, is the verdict which we have  
 (17) your true and correct verdict?  
 (18) JUROR DEAN Yes sir  
 (19) THE COURT Ms Provost is the verdict we have your  
 (20) true and correct verdict?  
 (21) JUROR PROVOST Yes  
 (22) THE COURT Mr Graham is the verdict which we have  
 (23) your true and correct verdict?  
 (24) JUROR GRAHAM Yes  
 (25) THE COURT Ms Moor, is the verdict we have your true

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- (1) and correct verdict?  
 (2) JUROR MOOR Yes it is  
 (3) THE COURT Ms Spann is the verdict we have your  
 (4) true and correct verdict?  
 (5) JUROR SPANN Yes sir  
 (6) THE COURT Ms Wilson, is the verdict we have your  
 (7) true and correct verdict?  
 (8) JUROR WILSON Yes it is  
 (9) THE COURT Ms Garrison is the verdict we have your  
 (10) true and correct verdict?  
 (11) JUROR GARRISON Yes  
 (12) THE COURT Ms Johnson is the verdict we have your  
 (13) true and correct verdict?  
 (14) JUROR JOHNSON Yes  
 (15) THE COURT Mr Murray is the verdict we have your  
 (16) true and correct verdict?  
 (17) JUROR MURRAY Yes it is  
 (18) THE COURT Ladies and gentlemen counsel all of the  
 (19) jurors have answered in the affirmative Is there any reason  
 (20) why I should not direct the clerk of court to file the  
 (21) verdict?  
 (22) MR O NEILL There is none Your Honor  
 (23) MR LYNCH No reason Your Honor  
 (24) THE COURT The clerk will file the jury's verdict  
 (25) Is there anything that we need to do, counsel, before I give

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- (1) the jurors some closing instructions as to this phase of the  
 (2) case?  
 (3) MR O NEILL There is none, Your Honor  
 (4) MR LYNCH Nothing Your Honor  
 (5) THE COURT Fine Ladies and gentlemen you have  
 (6) completed the trial of Phase II-A of this case I'm pleased to  
 (7) tell you at this time that Phase II-B of the case which we  
 (8) told you about has been settled As a consequence when we  
 (9) take up again after the recess which we are going to take at  
 (10) this point, we will begin then with Phase III of the case  
 (11) As we announced at the outset of this case we will be  
 (12) taking a furlough as it were in the trial proceedings for  
 (13) this case beginning tomorrow and until the 19th Our first day  
 (14) back in court on this matter will be August 22 at 8 00 a m  
 (15) in the interim it is really very very important that you  
 (16) remember a number of instructions that I have given you along  
 (17) the way You probably recall what they are but I really need  
 (18) to repeat them for you at this time just so there isn't any  
 (19) misunderstanding  
 (20) Although you have completed Phase II A of the case, you are  
 (21) not through with your work in the case As a consequence you  
 (22) must continue to observe the Court's instructions about not  
 (23) reading or listening to or watching any program about this  
 (24) case There has been a lot of publicity about the case You  
 (25) must continue to insulate yourself from all of this publicity

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- (1) There will be more publicity about this verdict in the next few  
 (2) days and you need to insulate late yourself from that even  
 (3) though you know what the verdict is because there will be  
 (4) other commentary about it I suppose  
 (5) Also there has been some publicity in the last few weeks  
 (6) about some general fisheries matters It would be  
 (7) inappropriate for you to read anything about general fisheries  
 (8) matters in this state because that may conceivably have some  
 (9) impact on your thinking about Phase III  
 (10) So in summary as to this point, the rules the instructions  
 (11) about not listening to reading or watching anything that  
 (12) could conceivably have anything to do with this case must  
 (13) continue to be observed  
 (14) Secondly you must continue to avoid any contacts  
 (15) discussions either with you or in your presence about this  
 (16) case or anything that might have to do with this case There  
 (17) may be people out there in the community who wrongly assume  
 (18) that you're through with your work now and that it's okay for  
 (19) them to talk to you about the case It's not okay You still  
 (20) have some more to do So please make sure that your family,  
 (21) your co-workers your friends understand that it's not  
 (22) appropriate for you to have any discussions about the case  
 (23) even  
 (24) at this point I would suggest that especially for the next  
 (25) few days if you haven't already been doing this routinely  
 that you have someone screen your telephone calls so that you

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- (1) don't inadvertently wind up talking with someone about this
- (2) case whom you don't know and didn't expect to talk to
- (3) Finally remember my instruction that it's inappropriate
- (4) for you to undertake any investigation or research or inquiry
- (5) of any kind on your own about the case generally or in
- (6) anticipation of Phase III Let your mind work on something
- (7) else for a change I suspect you're ready for a rest from this
- (8) case anyway but do not do any research or anything of the like
- (9) on your own
- (10) Before you leave this afternoon please be sure to leave
- (11) your notes they will be gathered up by Mr Murtiashaw and
- (12) kept Leave the exhibits that were with you including any
- (13) copies of the instructions and supplemental instructions that
- (14) we gave you Leave all of that stuff in the jury room Don't
- (15) take any of it with you We'll gather it up and take care of
- (16) all of it
- (17) Let's see one final piece of information We will
- (18) presumably have a normal trial day on the 22nd but at the end
- (19) of our regular day on the 22nd we're going to have a brief in
- (20) camera which means kind of private, safety session for the
- (21) jurors only in connection with the view that we still
- (22) anticipate we will take of Prince William Sound For safety
- (23) reasons it's necessary that we have this kind of a session to
- (24) familiarize each of you with what we're going to be doing
- (25) safety equipment safety concerns and this sort of thing We

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- (1) STATE OF ALASKA )
- (2) Reporter's Certificate
- (3) DISTRICT OF ALASKA )
- (4) I Leonard J DiPaolo, 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) LEONARD J DiPAOLO RPR
- (15) Notary Public for Alaska
- (16) My Commission Expires 2-3-96

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- (1) will be doing that at the close of business on Monday
- (2) We have no way of knowing at this point when we will do the
- (3) view We will simply do it when we can weather permitting
- (4) That's the main determinative factor
- (5) Is there anything else counsel that we ought to be
- (6) telling the jury at this point?
- (7) MR LYNCH Not that I know of
- (8) MR O NEILL Nothing Your Honor
- (9) THE COURT Ladies and gentlemen thank you very much
- (10) for your efforts on this I know you worked really hard on
- (11) this Have a good week off and we will see you on Monday the
- (12) 22nd of August
- (13) (Jury out at 1 31 p m )
- (14) THE COURT Mr O Neill anything else we need to do
- (15) at this point?
- (16) MR O NEILL There is nothing Your Honor
- (17) MR LYNCH No Your Honor thank you
- (18) THE COURT Thank you very much ladies and
- (19) gentlemen We will be in recess subject to call Have a good
- (20) week
- (21) MR O NEILL Thank you Judge
- (22) MR LYNCH Thank you
- (23) THE CLERK This court is in recess subject to call
- (24) (Proceedings recessed at 1 33 p m )



**Look-See Concordance Report**

UNIQUE WORDS 315

TOTAL OCCURRENCES 594

NOISE WORDS 385

TOTAL WORDS IN FILE 1,984

SINGLE FILE CONCORDANCE

CASE SENSITIVE

NOISE WORD LIST(S)

NOISE NOI

INCLUDES ALL TEXT

OCCURRENCES

IGNORES PURE NUMBERS

WORD RANGES @ BOTTOM OF PAGE

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\$286,787,738 [1] 6993 1

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(1) IN THE UNITED STATES DISTRICT COURT  
 (2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No A89 0095 CIV (HRH)  
 (5) ) Anchorage Alaska  
 The EXXON VALDEZ ) Monday August 22 1994  
 (6) ) 8 00 a m  
 TRANSCRIPT OF PROCEEDINGS  
 (9) TRIAL BY JURY 66TH DAY  
 (10) BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE  
 VOLUME 40 Pages 7000 7159  
 Realtime Transcription

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In Court  
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 (16) U S District Court  
 222 W 7th Avenue #4  
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Reported by  
 (19) LEONARD J DIPACLO  
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 (21) Ph 907/258 7100

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(1) P R O C E E D I N G S  
 (2) (Jury in at 8 02 a m )  
 (3) (Call to Order of the Court)  
 (4) THE CLERK All rise  
 (5) MR O NEILL We re all back together again Judge  
 (6) THE COURT Good morning ladies and gentlemen This  
 (7) is the continuation of trial in case A89 0095 civil in re the  
 (8) Exxon Valdez We are ready to commence Phase III of this trial  
 (9) and I have some further preliminary instructions for you  
 (10) We will now begin Phase III of the trial in the case  
 (11) arising from the Exxon Valdez oil spill In Phase I of this  
 (12) case you found that Joseph Hazelwood and the Exxon  
 defendants  
 (13) were guilty of reckless conduct which resulted in the grounding  
 (14) of the Exxon Valdez on March 24th 1989 In Phase II A of the  
 (15) trial you awarded sums of money for actual damages to various  
 (16) commercial fishermen to compensate them for the losses  
 legally  
 (17) caused by the Exxon Valdez oil spill  
 (18) In this Phase III of the trial you will decide the amount  
 (19) of punitive damages if any that should be awarded against the  
 (20) Exxon defendants and/or Joseph Hazelwood In this third  
 phase  
 (21) of the trial the claims of all who suffered actual damages  
 (22) caused by the oil spill have been consolidated into a single  
 (23) proceeding for purposes of determining whether punitive  
 damages  
 (24) should be awarded against the defendants and if so the  
 amount  
 (25) of such damages

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(1) This includes claims of persons who are suing for their  
 (2) actual damages in the state courts because of these - because  
 (3) of this consolidation of claims There will be no other claims  
 (4) for punitive damages in any other court with the exception of  
 (5) the claims that you resolved in Phase II-A You will not be  
 (6) asked to decide the true amount of the actual damages if any  
 (7) to which other claimants are entitled  
 (8) In a few cases the parties have agreed to the amount of  
 (9) actual damages sustained by certain claimants As to other  
 (10) claimants the parties have entered into a stipulation which  
 (11) states the approximate amount of the actual damages claimed  
 by  
 (12) other persons who contend that they were injured as a legal  
 (13) result of the oil spill This information will be provided to  
 (14) give you an idea of the amounts of additional actual damages  
 (15) claimed by other plaintiffs although those claims are disputed  
 (16) in whole or in part by the defendants  
 (17) The purposes for which punitive damages are awarded are  
 (18) one to punish a wrongdoer for extraordinary misconduct and  
 (19) two to warn others against doing the same The amount of any  
 (20) award of punitive damages should be fixed using calm  
 discretion  
 (21) and sound reason You must not be influenced by sympathy  
 for  
 (22) or dislike of any party in the case  
 (23) Punitive damages are not favored in the law and are never  
 (24) awarded as a right no matter how egregious the defendants  
 (25) conduct This does not mean however that the plaintiffs

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(1) burden of proof of punitive damages is any different from this  
 (2) of Phase I You must decide whether or not plaintiffs have  
 (3) established by a preponderance of the evidence that one an  
 (4) award of punitive damages should be made in this case and  
 (5) two if so in what amount  
 (6) To quote establish by a preponderance of the evidence end  
 (7) quote means to prove that something is more likely so than not  
 (8) so In other words a preponderance of the evidence in the  
 (9) case means such evidence as when considered and compared  
 with  
 (10) that opposed to it has more convincing force and produces in  
 (11) your minds belief what is sought to be proved is more likely  
 (12) true than not true This rule does not require proof to an  
 (13) absolute certainty since proof to an absolute certainty is not  
 (14) possible in any case  
 (15) As in Phase I and II there are certain general  
 (16) propositions which you must bear in mind in reaching your  
 (17) verdict in Phase III Although this may be repetitive it is  
 (18) important that you keep them in mind as you hear the evidence  
 (19) presented in Phase III of the trial  
 (20) As in Phases I and II plaintiffs will begin by making an  
 (21) opening statement outlining their case The defendants will  
 (22) also make an opening statement outlining their case  
 immediately  
 (23) after the plaintiffs statement At the conclusion of this  
 (24) phase of the trial each of the parties will present closing  
 (25) arguments to you as to what they consider the evidence has

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(1) to the same instructions that apply to witnesses testifying in  
 (2) open court Many of the exhibits will be presented to you on  
 (3) television screens Exhibits thus presented are entitled to  
 (4) the same consideration of you as papers or objects received  
 (5) into evidence  
 (6) Statements of counsel are not evidence unless identified by  
 (7) the Court as an admission or stipulation of fact When the  
 (8) attorneys from both sides stipulate or agree to the existence  
 (9) of a fact you must unless otherwise instructed accept that  
 (10) evidence as regard that fact as proved in this trial  
 (11) Any evidences to which an objection has been sustained by  
 (12) the Court and any evidence ordered stricken by the Court must  
 (13) be disregarded Anything you may have seen or heard outside  
 (14) the courtroom is not evidence and must be entirely  
 (15) disregarded This does not apply to what you may see and be  
 (16) told by designated counsel for the parties during a planned  
 (17) jury view of Prince William Sound Some evidence is admitted  
 (18) for a limited purpose only When I instruct you that an item  
 (19) of evidence has been admitted for a limited purpose you may  
 (20) consider it for only that purpose and no other  
 (21) You are to consider only the evidence in the case but in  
 (22) your consideration of the evidence you are not limited to the  
 (23) bold statements of the witnesses In other words you are not  
 (24) limited solely to what you see and hear that the witnesses  
 (25) testify You are permitted to draw from the facts which you

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(1) shown and as to the inferences which they think you should  
 draw  
 (2) from the evidence presented I will give you additional  
 (3) instructions on the law then you will be asked to retire and  
 (4) deliberate on the questions asked and return a special verdict  
 (5) dealing with punitive damages  
 (6) Your function as jurors is to find and determine the facts  
 (7) of this case Under our system of civil procedure you are the  
 (8) sole judges of the facts If at any time I should make any  
 (9) comment regarding the facts you are at liberty to disregard  
 (10) it It is especially important that you perform your duty of  
 (11) determining the facts diligently and conscientiously  
 (12) Ordinarily there is no means for correcting erroneous  
 (13) findings by a jury I instruct you that the law given by the  
 (14) Court constitutes the only law for your guidance and it is your  
 (15) duty to accept and follow it It is your duty to follow the  
 (16) law as I give it to you even though you may disagree with my  
 (17) statement of the law The evidence in the case consists of all  
 (18) the testimony exhibits and other evidence that has been  
 (19) admitted in Phases I and II of this trial This evidence will  
 (20) be supplemented by the sworn testimony of additional  
 witnesses  
 (21) called in this next phase and additional exhibits received in  
 (22) evidence in this next phase  
 (23) Evidence may also consist of facts to which the lawyers  
 (24) have agreed or stipulated Depositions may also be received in  
 (25) evidence Deposition testimony may be accepted by you  
 subject

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(1) find has been proved by evidence at the trial such reasonable  
 (2) inferences that you feel is justified in the light of your  
 (3) experience  
 (4) At the end of the trial of Phase III you will have to make  
 (5) your decision based upon what you recall of the evidence You  
 (6) will not have a written transcript to consult and it is  
 (7) difficult and time consuming for the reporter to read back  
 (8) lengthy testimony I urge you to pay close attention to the  
 (9) testimony as it is given  
 (10) As in Phases I and II you may if you wish take notes to  
 (11) help you remember what witnesses said If you do take notes  
 (12) please keep them to yourself until you and your fellow jurors  
 (13) go to the jury room to decide this phase of the case and do  
 (14) not let note taking distract you so you do not hear other  
 (15) answers by witnesses When you leave for the night leave your  
 (16) notes in the jury room  
 (17) If you do take notes you should rely upon your own - I m  
 (18) sorry If you do not take notes you should rely upon your own  
 (19) memory of what was said Similarly if the notes of other  
 (20) jurors do not conform with your memory of what evidence was  
 (21) offered at trial you should rely upon your memory of such  
 (22) evidence  
 (23) In deciding the facts of this case you will have to decide  
 (24) what witnesses to believe and what witnesses not to believe  
 (25) You may believe everything a witness says or only part of it or

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(1) none of it In deciding what to believe you may consider a  
 (2) number of factors including the following One the witness  
 (3) ability to see or hear or know the things the witness testified  
 (4) to two the quality of the witness memory three the  
 (5) witness manner while testifying four whether the witness had  
 (6) an interest in the outcome of the case or any motive bias or  
 (7) prejudice five whether the witness was contradicted by  
 (8) anything the witness said or wrote before trial or any other  
 (9) evidence and six how reasonable was the witness testimony  
 (10) when considered in the light of other evidence which you  
 (11) believe  
 (12) A witness may be discredited or impeached by contradictory  
 (13) evidence or by evidence that at some other time the witness has  
 (14) said or done something or has failed to say or do something  
 (15) which is inconsistent with the witness present testimony If  
 (16) you believe any witness has been impeached and thus  
 (17) discredited it is your exclusive province to give the  
 (18) testimony of that witness such credibility if any as you may  
 (19) think it deserves If a witness has shown knowingly to have  
 (20) testified falsely concerning any material matter you have a  
 (21) right to distrust such witness testimony and other particulars  
 (22) and you may reject all the testimony of that witness or give it  
 (23) such credibility as you may think it deserves  
 (24) In determining whether any fact in issue has been proved by  
 (25) a preponderance of the evidence in the case the jury may

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(1) unless otherwise instructed consider all the testimony of all  
 (2) the witnesses regardless of who called them and all exhibits  
 (3) received in evidence regardless of who may have produced  
 (4) them  
 (5) Rules of evidence ordinarily do not permit witnesses to  
 (6) testify as to opinions or conclusions An exception to this  
 (7) rule exists for those whom we call expert witnesses Witnesses  
 (8) who by education and experience have become expert in some  
 (9) science profession or calling may state an opinion as to  
 (10) relevant and material matters in which they profess to be  
 (11) expert and may also state their reasons for the opinion  
 (12) You should consider each expert opinion received in this  
 (13) case and give it such weight you may think it deserves If you  
 (14) should decide the opinion of an expert witness is not based  
 (15) upon sufficient education and experience or if you should  
 (16) conclude that the reasons given in support of the opinion are  
 (17) not sound or if you feel it is outweighed by other evidence  
 (18) you may disregard the opinion entirely  
 (19) No statement ruling remark or comment which I may make  
 (20) during the course of the trial is intended to indicate my  
 (21) opinion as to how you should decide the case or to influence  
 (22) you in any way in your determination of the facts At times I  
 (23) may ask questions of a witness If I do so it is for purposes  
 (24) of bringing out matters that I feel should be brought out and  
 (25) not in any way to indicate my opinion about the facts or the

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(1) weight that you should give the testimony of the witness  
 (2) Attorneys representing the parties in this trial have a  
 (3) right and duty to object to questions or arguments offered by  
 (4) the opposing side if such attorneys believe in good faith that  
 (5) such offered questions evidence or arguments are under the  
 (6) rules of procedure At times the attorneys may request the  
 (7) opportunity to discuss matters out of your hearing We will  
 (8) endeavor to keep these kind of conferences to an absolute  
 (9) minimum We will defer matters requiring discussion until the  
 (10) end of the day so the period of your attendance in court can be  
 (11) devoted almost exclusively to the taking of testimony  
 (12) You should not be critical of any lawyer or client because  
 (13) objections are made regardless of whether I sustain or  
 (14) overrule those objections and you should draw no inference for  
 (15) or against any party because objections were made because  
 (16) matters were discussed out of your hearing or because I  
 (17) sustained or overruled such objections It is the duty of the  
 (18) Court to admonish any attorneys who out of zeal for the cause  
 (19) of his or her client does something that is not in keeping  
 (20) with the rules of evidence or procedure You are to draw no  
 (21) inference against the side to whom an admonition of the Court  
 (22) may be addressed during the trial of this case  
 (23) There has been substantial publicity prior to and during  
 (24) the trial Statements contained in the media accounts are not  
 (25) evidence Except as to the planned jury view of Prince William

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(1) Sound you must lay aside and completely disregard anything  
 you  
 (2) may have read or heard about the case outside the courtroom  
 (3) and your verdict must be based solely and exclusively on the  
 (4) evidence presented in court  
 (5) In connection with the Court s instructions at the  
 (6) conclusion of the case about the law you must apply it to the  
 (7) evidence If you read or hear anything about this case outside  
 (8) the courtroom other than while on the jury view you should  
 (9) bring such facts to my attention at once  
 (10) Let me repeat a few words about your conduct as jurors Do  
 (11) not talk to each other about the case or with anybody who has  
 (12) anything to do with it until the end of this phase of the case  
 (13) when you go to the jury room to decide your verdict  
 (14) Do not talk with anybody else about this case or with  
 (15) anyone who has anything to do with it until all phases of the  
 (16) trial have ended and you have been discharged as jurors  
 (17) Quote anyone else end quote includes members of your  
 family  
 (18) and friends You may tell them that you are a juror in the  
 (19) case but don t tell them anything else about it until you have  
 (20) been discharged by me  
 (21) Do not let anyone talk to you about the case or with anyone  
 (22) who has anything to do with it If someone should try to talk  
 (23) to you you should report it to me immediately Do not read  
 (24) any news stories or articles or listen to any radio or  
 (25) television reports about the case or about anyone who has

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- (1) anything to do with it  
 (2) Do not do any research or make any investigation about the  
 (3) case on your own If at any time and until you are discharged  
 (4) by me at the end of the trial any information about this case  
 (5) should happen to be seen or heard by you inadvertently or  
 (6) otherwise from any source other than here in the courtroom or  
 (7) while on the jury view you should promptly make a note of what  
 (8) happened and what you saw or heard You should pass a note  
 to  
 (9) Mr Murtiashaw my in court clerk or one of the jury clerks  
 (10) They will pass the note to me and I will take any necessary  
 (11) action  
 (12) Do not make up your mind about what the verdict should be  
 (13) until after I have given you my instructions on the law and you  
 (14) have gone to the jury room to decide this phase of the case  
 (15) Even then do not make up your mind until you and fellow jurors  
 (16) have discussed the evidence  
 (17) As previously this trial will be conducted from 8 a m to  
 (18) 2 p m We will take two evenly spaced 15-minute breaks during  
 (19) that time Each morning of the trial you should first report  
 (20) to the jury assembly room The jury clerk will take roll and  
 (21) escort you to the jury room As a courtesy please arrive at  
 (22) the court jury assembly room at least 15 minutes before 8 a m  
 (23) It is our desire to start at 8 00 promptly and we will adjourn  
 (24) promptly at 2 00 p m except today we will have a little  
 (25) something for you today

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- (1) That completes the instructions for Phase III Do we have  
 (2) an understanding about the length of opening statements? If  
 we  
 (3) do I lost my note  
 (4) MR O NEILL One hour  
 (5) MR SANDERS We do  
 (6) THE COURT Mr O Neill you re up  
 (7) MR O NEILL Thank you Judge  
 (8) May it please the Court Counsel Ladies and Gentlemen of  
 (9) the jury What is the appropriate punishment for reckless  
 (10) conduct by one of the largest institutions in the world?  
 (11) That s why we re here the conduct that we re talking about you  
 (12) have found to be reckless and I m going to take about three  
 (13) minutes and revisit Phase I but I m going to do it very  
 (14) briefly  
 (15) The Phase I jury instruction that you were given at the  
 (16) time described a defendant who was conscious of a particular  
 (17) grave danger He disregarded the risk or it disregarded the  
 (18) risk and the conduct in ignoring the danger or risk was a  
 (19) gross deviation from the level of care That s good old jury  
 (20) instruction 28 to revisit what happened and in response to  
 (21) that instruction and other instructions which you read as a  
 (22) whole you returned this special verdict in which you found the  
 (23) conduct was reckless and this is why we re here If you would  
 (24) have said no no no we wouldn t be here so this is a session  
 (25) that you convened

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- (1) This conduct this reckless conduct was a finding by you  
 (2) that Exxon Corporation deviated grossly deviated from the  
 (3) standard of care that we expect of it and all others like it  
 (4) So we re back here in Phase III to decide on the amount of  
 (5) punishment  
 (6) Now briefly the punishable conduct spanned five years  
 (7) from 1985 to 1989 and it included within Exxon Shipping  
 (8) Company almost everybody in Exxon Shipping Company We  
 had the  
 (9) West Coast fleet manager Gulf Coast fleet manager we had  
 (10) Frank larossi we had everybody up and down the chain of  
 (11) command at Exxon that had complicity in what happened so it  
 (12) wasn t a lark And with regard to Exxon Corporation and the  
 (13) defense of what happened we had complicity again from the  
 top  
 (14) to the bottom  
 (15) We had the people who run Exxon Corporation the most  
 (16) powerful people in the world involved in telling Congress what  
 (17) did and didn t happen and they were involved in coming in  
 here  
 (18) and telling you what did or didn t happen And the Exxon  
 (19) Corporation medical department were involved in what  
 happened  
 (20) the head of the medical department So Exxon Corporation and  
 (21) Exxon Shipping Company up and down the chain of command  
 (22) participated in this conduct  
 (23) And with regard to their position on what happened in Phase  
 (24) I they told you that it was okay for recovering alcoholics to  
 (25) drnk again They told you that relapsed alcoholics can pilot

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- (1) supertankers They told you that alcohol had nothing to do  
 (2) with the grounding and they told you that Captain Hazelwood  
 was  
 (3) the most closely monitored man in the fleet And that it  
 (4) wasn t told to you - none of those things were true but that  
 (5) wasn t told to you by low level Exxon employees that was the  
 (6) position of Exxon in this courtroom in Phase I and none of  
 (7) those things were true  
 (8) Now that s about all I want to say about the conduct  
 (9) We ll revisit the conduct in the closing but I do want to talk  
 (10) a little bit about the risk taking because the risk taking  
 (11) the risk that they took with the public just wasn t right  
 (12) This was Mr Rouse s testimony right at the end of Phase I So  
 (13) your policies knowing the risk to the public of the  
 (14) catastrophic results of a supertanker accident allow a  
 (15) relapsed alcoholic to command a supertanker? Yes sir that s  
 (16) possible under our policy  
 (17) This is a foolish callous risk it is doesn t accord with  
 (18) anybody s common sense and Mr Rouse was from Exxon  
 (19) Corporation not from Exxon Shipping Company  
 (20) Now another risk that they took so we can put the conduct  
 (21) into some kind of context was with spill sizes in Prince  
 (22) William Sound and this is Mr Stevens who testified before the  
 (23) Congress My own view is that that occurrence 200 000 barrels  
 (24) in Prince William Sound was viewed quote so highly unlikely  
 (25) that the consequences of it which have occurred pretty much

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(1) well - which have occurred pretty well as much as envisioned  
 (2) were viewed as acceptable by today's retrospective that may be  
 (3) incomprehensible Mr Chairman well it is incomprehensible  
 (4) but this is a risk taken with specifically Prince William  
 (5) Sound and it was a conscious knowing risk that they took with  
 (6) the Sound if there was a big spill oil was going to hit the  
 (7) beaches a knowing conscious risk  
 (8) Now there were other risks that were taken but I'm not  
 (9) going to go into all of those but I do want to highlight the  
 (10) testimony of two Exxon chief executive officers Frank Iarossi  
 (11) the president of the shipping company and Mr Raymond who  
 (12) at the time was the president of Exxon Corporation Now Mr  
 (13) Raymond is with us today and is going to testify but  
 (14) Mr Iarossi was aware of the risk associated with the  
 (15) transportation of crude oil we understood the risks in the  
 (16) business yes we understand the responsibilities yes sir  
 (17) And Mr Raymond was aware that with regard to managing this  
 (18) risk and it is a big risk that the selection of the master  
 (19) and the evaluation of the master was a good way to manage the  
 (20) risk  
 (21) So there were chances taken with the public with the  
 (22) alcohol policy with the selection of the master with the  
 (23) knowledge that if there was a big spill in the Sound oil was  
 (24) going to hit the beaches These were all risks that they  
 (25) took

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(1) Now the risk that they took were with people that didn't  
 (2) have a choice If you're a fisherman in Prince William Sound  
 (3) or a landowner in Prince William Sound or a Native subsistence  
 (4) harvester in Prince William Sound you didn't have any input  
 (5) into these risks these were risks that were taken by other  
 (6) defenseless people at Exxon Corporation and knowing that  
 (7) these risks consisted you have found that they acted recklessly  
 (8) Now they also took risks with regard to the enforcement of  
 (9) rules and laws the fatigue rules and laws They took risk  
 (10) with regard to ice they took risk with regard to their  
 (11) attitudes towards the treatment of employees they took risks  
 (12) with regard to widespread people problems throughout the  
 (13) institution and they chose those risks  
 (14) I mean this is a collection of smart well-educated  
 (15) talented people who should know better but in any event the  
 (16) verdict - we don't need it again the verdict is such that the  
 (17) conduct requires punishment and the conduct requires  
 (18) punishment  
 (19) in this case even more so because of the nature of the  
 (20) individuals involved These are people who ought to know  
 (21) better and they will show you in this next phase that they do  
 (22) know better  
 (23) Now Exxon is one of the biggest institutions in the world  
 (24) and is given a privileged status in society And why do I say  
 (25) it's given a privileged status? If 50 or a hundred of us got  
 together and went out and got involved in an activity in a lot

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(1) of instances the law condemns that it's a mob conspiracy but  
 (2) the law recognizes that there are advantages in allowing people  
 (3) to act together And we have corporations and a corporation  
 (4) is a sanction from society that says we're going to allow you  
 (5) to pull people in together and operate together but that is a  
 (6) gift from society and Exxon is allowed to operate as a  
 (7) corporation in a lot of countries It has a tremendous size a  
 (8) hundred thousand employees and in Alaska it's allowed to  
 (9) extract the people's oil This isn't Exxon's oil it's the  
 (10) people's oil it comes primarily from public lands That's a  
 (11) gift to it  
 (12) The Exxon executives mostly the Exxon employees acquire  
 (13) some wealth while they work with Exxon Corporation and they  
 (14) are given this in exchange for two things They provide a  
 (15) service to society a very valuable service They provide us  
 (16) with our oil and gas they do but the second half of that is  
 (17) if we're going to allow you to become wealthy and rich and  
 (18) operate in a corporate form and take our oil out of the ground  
 (19) we want you to be responsible we want you to be careful we  
 (20) want you to be caring And in this case that trust that deal  
 (21) with regard to Exxon Corporation and oil and size and wealth  
 (22) was broken  
 (23) Now as His Honor said the purpose of punitive damages is  
 (24) to punish the wrongdoer and deter others and the size of the  
 (25) award has to be looked at in terms of punishment and

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(1) deterrence and I'll talk more about that in the closing when I  
 (2) know more about what His Honor's instructions are going to be  
 (3) in the closing But right now punishment and deterrence and  
 (4) this is okay but it isn't okay What is punishment for a poor  
 (5) man could be nothing for a rich man and in legal terms they  
 (6) call that the rule of proportionality  
 (7) Punishment for a poor man can be nothing for a rich man so  
 (8) we have to - and the primary proof that you're going to see in  
 (9) Phase III we're going to see two but the primary proof is  
 (10) going to be with Exxon's size wealth  
 (11) Now I'm going to go over for a minute in some detail how  
 (12) we talk about corporate wealth and I'm going to show you the  
 (13) exhibits and when we put our numbers guy on he's going to  
 (14) go  
 (15) through it and when Mr Raymond takes the stand we'll go  
 (16) through it and then I'll go through it in the closing  
 (17) And you say why is the dummy going to go through it four  
 (18) times It's to avoid jury question triple Z Little jury  
 (19) humor  
 (20) THE COURT Too early in the morning  
 (21) MR O NEILL Pat Lynch and I had to sit and wait for  
 (22) the questions if you wonder where these come from from  
 (23) sitting at our office  
 (24) But it is important and corporations publish year end  
 (25) reports and annual statements and this is one of the exhibits  
 and you're going to get these for a number of years in exactly

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(1) this form color nice They are required by law to publish  
 (2) them  
 (3) The Securities and Exchange Commission and the 1934  
 (4) Security and Exchange Act required that they file things with  
 (5) the Securities and Exchange Commission There are  
 requirements  
 (6) that they publish financial data to their shareholders and the  
 (7) investing public These are put together by accounting firms  
 (8) the big six or seven accounting firms and the company - and  
 (9) they are very serious documents and they contain information  
 (10) that is as accurate as - a company with the size of Exxon  
 (11) Corporation with its accountants can make  
 (12) They include at the beginning sort of a pitch on how well  
 (13) investors do in Exxon Corporation and highlights for the year  
 (14) and then there is a letter to the shareholders which is sort  
 (15) of the top guy's view of what happened last year and then  
 (16) there is sort of a - I guess sort of a fluff - sections of  
 (17) fluff pieces on the different departments and when you get  
 (18) back to the different colored pages and I think they are  
 (19) different colored because of time deadlines and putting them  
 (20) together they go through extreme detail all of the financial  
 (21) aspects of the corporation  
 (22) There is an appendix to this that has further financial  
 (23) information in it They are done on a yearly basis These  
 (24) year end reports annual statements they are done on a yearly  
 (25) basis and we will have a Mr Sam Rhodes testimony about  
 these

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(1) at some length  
 (2) We will also put on some summaries of them and Mr Rhodes  
 (3) will tie these reports to the summaries so you'll know exactly  
 (4) where the numbers come from and I'd like to take a look at one  
 (5) of the key summaries for a minute and he's going to go through  
 (6) it and Mr Raymond is going to go through it but I'm going to  
 (7) go through it so we know what we're talking about  
 (8) This is Exhibit 6302-A which will be preadmitted and which  
 (9) will be in evidence and what we have done is we have taken  
 (10) from the year-end statements some of the key indicators and we  
 (11) laid them down by year from 1988 to 1993 so if you were to go  
 (12) to this book and look at assets and trace them through on a  
 (13) year by year basis you'd build this chart  
 (14) Now I'm going to bore you with a little Economics 101 and  
 (15) go through these categories Assets are essentially what the  
 (16) company owns Revenue is the gross amount of money that it  
 (17) generates through whatever it does After-tax net income is  
 (18) what it has left after it spends everything for the year Cash  
 (19) flow includes after tax net income plus other things that the  
 (20) company has money to spend on So if the company has  
 \$10 55  
 (21) billion in cash flow it can take some of that money and  
 (22) reinvest it back into the company \$5 billion and still have a  
 (23) five billion after tax net Makes sense This is property  
 (24) plant and equipment this is what it spends on that  
 (25) The cash dividend and this is in billions is what it paid

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(1) to its stockholders in cash dividends that year all of them  
 (2) This is the stock price that it sold at the end of the year  
 (3) this is the one number that is not in the year end statements  
 (4) You've got to go and look in the Wall Street Journal on the  
 (5) last trading day of the year and see what that is The  
 (6) outstanding number of shares is in here  
 (7) Market capitalization is the stock price times the  
 (8) outstanding number of shares That is what is the investing  
 (9) public - what numbers to place on the company  
 (10) Earnings per share are the earnings of the company per  
 (11) share This is in regular dollars Dividends per share what  
 (12) they paid out on a dividend of one stock and the equity of the  
 (13) company is what its books and records show is the value So  
 (14) you have essentially two valuations You have a market  
 (15) capitalization valuation that is what is stock payers willing  
 (16) to pay and what kind of equity does the company have on its  
 (17) books and records These are a variety of different indexes  
 (18) that one could look at in judging the size wealth of Exxon  
 (19) Corporation Of note to our purpose here is that every year  
 (20) they have had a three four five billion after-tax net  
 (21) In 1989 the after tax net was down a little bit but it's  
 (22) down for a couple reasons The spill is one but they also did  
 (23) a lot of investing in the future in 1989 1989 was a building  
 (24) year But you can see with regard to assets revenue  
 (25) after tax net cash flow investments in the company cash

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(1) dividends their stock price the number of outstanding shares  
 (2) remains constant Market capitalization earnings per share  
 (3) dividends per share and equity that Exxon Corporation is  
 (4) substantially better off today than they were in 1989 they  
 (5) are And indeed on the dividends that they pay to their  
 (6) shareholders they paid \$2 15 in 1988 The year of the spill  
 (7) the shareholders got a higher dividend \$2 30 and increased  
 (8) the next year to \$2 47  
 (9) Now nobody is going to question these numbers Exxon will  
 (10) provide different ways of looking at them and I'm going to  
 (11) talk about those in a couple minutes but these are the numbers  
 (12) and this company is so healthy that a spill like the Valdez  
 (13) spill is with regard to their regularly published numbers to  
 (14) the public a hiccup  
 (15) And I'm going to come back to this probably later today and  
 (16) at the end of the week but as an aside this week is going to  
 (17) go fast Even with the jury view we may be finished with Phase  
 (18) III by Friday just for juror planning May take until Monday  
 (19) you know we've normally had these closing on Monday may  
 take  
 (20) it until Monday but it's going to go fast and our case will  
 (21) probably be over at the end of today or tomorrow  
 (22) We face some of the same problems in Phase III as we did in  
 (23) Phase I We're outside of Exxon and we're attempting to look  
 (24) inside Exxon numerically and add it and we don't have a lot of  
 (25) Exxon people available to us when we want them



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(1) But post-spill Exxon Corporation thrived its officers got  
 (2) bonuses and indeed Mr Raymond and Mr Rawl the year of the  
 (3) spill got bonuses The numbers for the bonuses and I'll talk  
 (4) with Mr Raymond about them are found in these proxy  
 (5) statements and the proxy statements are sent out once a year  
 (6) before the annual meeting and the Security and Exchange  
 (7) Commission requires that they tell the shareholders how much  
 (8) the executives are getting And if I was a shareholder I'd  
 (9) want to know That information is in the proxy statements and  
 (10) it's sort of obtuse but I figure the best person to ask about  
 (11) it will be Mr Raymond so I'm going to ask Mr Raymond about  
 (12) it when he takes the stand for the defendants  
 (13) But in point of fact in 1989 the year of the spill Mr  
 (14) Raymond's salary was \$909,000 He got 27,000 EBUS  
 employee  
 (15) bonus units with a potential of 206,000 and he was awarded  
 (16) 180 stock options that were worth \$300,000 The values of Mr  
 (17) Raymond's unexercised stock options is about \$10 million  
 (18) Mr Rawl got bonuses the year of the spill So the two guys  
 (19) that were running the company the year of the spill were given  
 (20) bonuses  
 (21) We are going to play videotape depositions for you today in  
 (22) which I ask was anybody fired as a result of this Now the  
 (23) only two people that had adverse personnel actions taken at  
 (24) least according to what they told me when I took their  
 (25) depositions and I asked all the appropriate people the head

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(1) guys was that Hazelwood was fired and Cousins was demoted  
 So  
 (2) with regard to all these people the West Coast fleet manager  
 (3) the Gulf Coast fleet manager the president of Exxon Shipping  
 (4) Company the people in charge of the policies and monitoring  
 (5) there was no adverse personnel action taken with regard to any  
 (6) of them It was a look at the two bottom guys and let's dump  
 (7) on the two bottom guys kind of attitude so the company  
 (8) thrived The two top officers got bonuses it thrived and the  
 (9) people who made gross errors are still employed at Sea River  
 (10) Maritime  
 (11) Now what is Exxon going to say in response to all of  
 (12) this I'm going to put on mine for one day, what are they  
 (13) going to do for three days they are going to make some points  
 (14) they are going to say they lightered the vessel and they are  
 (15) going to bring in Captain Deppe who lightered the vessel and  
 (16) Captain Deppe did a good job in lightering the vessel and by  
 (17) lightering the vessel Captain Deppe cut the size way back The  
 (18) risk was much much bigger  
 (19) Captain Deppe will tell you and it is not particularly  
 (20) important but the lightered oil was saved and resold so Exxon  
 (21) made some money off it but the fact that they lightered the  
 (22) vessel was something they had to do You have a vessel that's  
 (23) on the ground spilling oil it's something you got to do They  
 (24) did a good job but they did it because that's what the law  
 (25) requires and common sense They are going to say they paid

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(1) enough and that's why Mr Rawl is here - excuse me Mr  
 (2) Raymond and Mr Raymond is going to say we paid enough  
 and  
 (3) that ought to be the end of it we paid \$2.7 billion with  
 (4) regard to 2 billion in the cleanup and the monies you awarded  
 (5) in Phase II and such and that ought to be the end of it  
 (6) And we're going to show you a videotape of Mr Rawl when he  
 (7) was the chairman of the board about the impact of paying a  
 (8) billion dollars and Mr Rawl will say  
 (9) For the first three minutes you'll say why are the  
 (10) plaintiffs playing the videotape this is sort of boring  
 (11) what's the point The point is when we get to the end of the  
 (12) videotape Mr Rawl will tell you that a billion dollars to  
 (13) Exxon in the context of this spill means almost nothing and  
 (14) that his time - the reason they settled their cases with the  
 (15) federal and state government for a billion dollars was because  
 (16) his time was being diverted and a billion dollars isn't a heck  
 (17) of a lot and I want you to watch that videotape carefully  
 (18) because that's the import of that videotape  
 (19) We will show you Jack Clark who is sitting back in the  
 (20) audience and Mr Clark will tell you that the costs associated  
 (21) with the spill didn't have any impact on the company It's a  
 (22) short three or four minute videotape but he will tell you  
 (23) that But we saw, and we'll see again with regard to these key  
 (24) financial indicators that Exxon Corporation today is better  
 (25) off than it was the year of the spill

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(1) Now I want to take an aside here for a second and talk for  
 (2) a minute about Captain Hazelwood I'm not going to spend a  
 lot  
 (3) of time on Captain Hazelwood In the closing I'm going to ask  
 (4) you to award punitive damages against Captain Hazelwood  
 because  
 (5) I think it's important that the point be made but I'm going to  
 (6) ask you for a dollar against Captain Hazelwood And why is  
 (7) that? Because Captain Hazelwood is not better off today he  
 (8) isn't than he was in 1989 Captain Hazelwood has lost his  
 (9) job he's no longer financially secure There is a year or two  
 (10) in here and I don't recall when it is where Captain  
 (11) Hazelwood's income his revenue was zero And in point of fact  
 (12) with what has happened to Captain Hazelwood and his position  
 in  
 (13) the history books with Captain Hazelwood enough is enough  
 (14) But that isn't the same with Exxon Corporation and with  
 (15) regard to Exxon Corporation They have thrived during the year  
 (16) of the spill and since the year of the spill and so have their  
 (17) executives and everybody who was involved in the events  
 leading  
 (18) up to the spill who works for Exxon Corporation  
 (19) In addition and I'm going to give you a concept here  
 (20) let's assume for the sake of discussion that the spill was  
 (21) totally innocent accidental a storm came up blew the vessel  
 (22) out of the traffic separation scheme and onto the rocks 8  
 (23) miles over and on to the rocks Let's assume that So there  
 (24) is no reckless conduct none nobody contends there was  
 (25) reckless conduct In fact the captain of the vessel

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- (1) heroically saved much of the oil and it was a classic textbook
- (2) save because of weather there was nothing we can do about it
- (3) Let's assume that for the sake of discussion What would
- (4) that company have to pay with regard to cleanup compensation
- (5) victims lightering and those things \$2.7 billion An
- (6) innocent spiller of oil You know that Robert Fulghum book
- (7) All I Ever Wanted to Know I learned in Kindergarten? A spiller
- (8) has to clean up the mess
- (9) While they have paid \$2.7 billion they have not paid one
- (10) cent because of recklessness The items that they are going to
- (11) talk about are compensatory damages and the spiller of oil has
- (12) to pay compensatory damages because it's strictly liable under
- (13) the Pappas Act and other statutes They paid restitution to the
- (14) state and government for oiling state and federal lands they
- (15) are going to pay the fishermen they are going to pay the
- (16) cleanup All of that is required by law for an ordinary
- (17) accidental spiller has nothing to do with the punishment of
- (18) reckless conduct They have paid \$125 million fine but they
- (19) have paid that \$125 million fine for negligence in the context
- (20) of the criminal proceeding so they haven't paid a cent because
- (21) of their reckless behavior
- (22) Now do we have that Steven's quote The consequences of
- (23) the spill which have occurred pretty well as much as envisioned
- (24) were viewed by them as acceptable
- (25) This \$2.7 billion was a cost of doing business This was

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- (1) the cost of doing business but in any event despite it being
- (2) a cost of doing business and the fact that an innocent spiller
- (3) who have had to pay \$2.7 billion and that they haven't been
- (4) punished for their reckless behavior the balance sheet shows
- (5) that the \$2.7 billion had little if any impact on them and
- (6) the Rawl video will show you that in the context of \$1
- (7) billion
- (8) So you say to yourself two minutes in boring video Watch
- (9) it until the end because it gets really really interesting
- (10) Exxon is also going to say we cleaned it up and they did
- (11) clean it up and they spent \$2 billion working on the cleanup
- (12) and my comments are that on the cleanup was a mixed bag A
- (13) lot
- (14) of it was done very well They did spend \$2 billion on it
- (15) they got only 10 to 15 percent of the spilled oil Everybody
- (16) agrees with that Mr. Johns testified they'd gotten to 15
- (17) percent But that gets back to kindergarten you clean up your
- (18) own mess and the laws require that of an innocent spiller and
- (19) they understand the risks of the cleanup
- (20) They took the chance essentially on purpose and they are
- (21) going to say and this is the last point I want to talk about
- (22) that they changed their policies and Mr. Elmer who is the new
- (23) president of Exxon Shipping Company now sea river maritime
- (24) is
- (25) going to testify about that for an hour hour and a half and
- (26) he's going to say something totally different
- (27) This is going to be interesting because it's totally

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- (1) different than what you heard in Phase I In Phase I
- (2) everything they did was right You're going to find out when
- (3) Mr. Elmer testifies that indeed they did have fatigue problems
- (4) they have added additional mates they did have problems with
- (5) regard to alcohol policies they did have problems with regard
- (6) to ice policies they did have problems with regard to the
- (7) bridge manual they had a variety of problems and that the
- (8) problems were institutional deep seated institutional
- (9) problems
- (10) And Mr. Elmer is going to come and tell you about the fact
- (11) that we have changed all these things and the pitch is going
- (12) to be we've changed so don't punish us But that's no
- (13) different than any kid caught and their paper policies and
- (14) oil companies tend to act only by reaction
- (15) The other things about these changes and you're going to
- (16) see this and it's very interesting most of the changes are
- (17) made in response to the law and the Congress and the State of
- (18) Alaska and the states of California Oregon and Washington as
- (19) a result of this passed a variety of laws to force them to
- (20) change their behavior And they could have done all these
- (21) things before and the fact that they had to go through this to
- (22) do what you and I would have expected of them in the first
- (23) place - so as Clint Eastwood would say we have a very serious
- (24) attitude problem here
- (25) And then the last thing they are going to do is come in and

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- (1) say we're not that big and this is going to be done by saying
- (2) you can't look at Exxon Corporation as a whole but you need to
- (3) look at various activities within Exxon Corporation in
- (4) assessing how much to punish us and they are going to talk
- (5) about U.S. activities versus foreign activities they are going
- (6) to talk about oil and gas versus chemicals and try to dice the
- (7) cake a bunch of different ways
- (8) And my comments on that are Exxon is run as a consolidated
- (9) company and the balance sheets are consolidated balance
- (10) sheets
- (11) first answer Second answer has to do with how they manage
- (12) their money and this is from the 1991 Exxon annual report
- (13) The company's global operating activities have provided cash
- (14) flows of about 10 to 12 billion annually in recent years Cash
- (15) flow is centrally coordinated in order to efficiently move
- (16) funds from units generating cash to units where the funds are
- (17) needed to finance new investments or meet operating
- (18) requirements The company is run as a whole
- (19) Now this is from the 1991 Exxon book here page 4 And
- (20) the last answer to it is there is a stipulation that bears on
- (21) it that was read to you in Phase I in which the parties agreed
- (22) for a variety of reasons that we're dealing with the Exxon
- (23) defendants essentially one institution and on the verdict
- (24) form when you get the verdict form in Phase III you will not
- (25) see upstream and downstream or U.S. or foreign or oil and gas
- (26) you'll see the Exxon defendants

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- (1) But when it gets right down to it with regard to punishment  
 (2) and whether they have been punished enough it's best to look  
 (3) at what they say in their annual reports and 1991 was one I  
 (4) happened to make some highlights up from but it's a year or  
 (5) two after the spill Net income of 5.67 billion best in  
 (6) Exxon's history earnings per share 4.45 highest ever return  
 (7) on shareholders equity 16.5 percent total shareholder return  
 (8) for 1991 was 23 percent How would you like to manage your  
 (9) money like that?  
 (10) Capital and exploration spending what they invested in the  
 (11) future 8.8 billion and there are other similar passages but  
 (12) Exxon has thrived during and since the spill because it is as  
 (13) big and powerful as it is  
 (14) So how do we assess punitive damages on a company like  
 (15) Exxon Corporation in any meaningful way? Good question sort  
 (16) of the 64 dollar question  
 (17) Let's take what we know The Rawl videotape will show you  
 (18) what a billion dollars means to the company The fact that  
 (19) Exxon has paid \$2.7 billion in response to the spill combined  
 (20) with how well they have done since the spill shows you that  
 (21) \$2.7 billion is not punishment And I would submit in light of  
 (22) their conduct in Phase I that \$2.7 billion didn't get the  
 (23) message across but in light of the balance sheet we know that  
 (24) 2.7 billion sets the bottom of what we're going to look at  
 (25) Where do you go from there? If I was to submit to you as a

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- (1) proposition let's just take from 1989 to the present day the  
 (2) amount that Exxon stock has appreciated on the market not  
 (3) take  
 (4) the value of the stock but just the amount from 1989 to the  
 (5) end of 1993 what is the amount that the stock - don't look at  
 (6) the answer yet you're cheating - the amount that the stock as  
 (7) appreciated on the market does that strike you as conceptually  
 (8) a fair number?  
 (9) The number is \$20 billion Exxon's stock because it has  
 (10) gone from \$44 a share before the spill to - it was \$63  
 (11) year end now it's about 60 has appreciated about \$20 billion  
 (12) since the spill and it has appreciated \$20 billion since the  
 (13) spill and at the same time Exxon has paid to its shareholders  
 (14) \$17 billion in dividends So we have on the bottom range 2.7  
 (15) which they have spent which we know has no effect on them  
 (16) and  
 (17) it's your job to search out a number that has meaning to Exxon  
 (18) Corporation  
 (19) Since 1989 Exxon stock as appreciated 20 billion after  
 (20) taxes and at the same time they have been able to pay out to  
 (21) their shareholders \$16 billion in dividends For a  
 (22) transnational corporation and Exxon is a transnational  
 (23) corporation 80 percent of its business is outside the U.S.  
 (24) 26th biggest institution in the world with an operating budget  
 (25) that would be the envy of many countries nations a fine must  
 (26) be high enough to challenge the view that the risks of  
 (27) recklessness are worth an occasional spill and that the

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- (1) well-being of local fishermen Natives Native corporations  
 (2) landowners are but a footnote in their annual reports  
 (3) Now I want to talk if I could a little bit about the  
 (4) structure of the case This is going to be more informative  
 (5) about how we're going to proceed It will take about a week  
 (6) We will end at the end of today or very early tomorrow We are  
 (7) going to put on Sam Rhodes who is a CPA and some  
 (8) videotape  
 (9) depositions and read some documents The claimants in Phase  
 (10) III include more than the fishermen than you saw in II A and  
 (11) His Honor alluded to that  
 (12) There is a Phase IV that has a variety of claimants in it  
 (13) whose claims you couldn't try on a global basis people are  
 (14) more individualized claims and shrimpers halibut those kind  
 (15) of people, they also include landowners whose land was oiled  
 (16) and present very unique problems and other people also So  
 (17) there is a Phase IV claimants they are part of Phase III and  
 (18) you will get read a stipulation that will detail all these  
 (19) claimants  
 (20) There is a proceeding in the state court that deals with  
 (21) the Native corporations and municipalities and they are trying  
 (22) compensatory damages in Phase II of the state court right now  
 (23) Their claims are in this court for Phase III and people who  
 (24) have valid claims who haven't sued them out yet right now I  
 (25) can't imagine who that would be but they are technically in  
 (26) the Phase III

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- (1) His Honor said anybody in the world who has a valid claim  
 (2) against Exxon is in Phase III so one jury and one judge can  
 (3) take one overview of punishment of this thing one time and  
 (4) that's the structure and that's why we have a Phase III and a  
 (5) punitive damages class  
 (6) So for the purposes of Phase III if you're in another  
 (7) court system or you're in Phase IV or you're still gearing up  
 (8) your lawsuit or whatever it is they are all your  
 (9) responsibilities I mean they are all in this one phase  
 (10) together so that's structurally something that you need to  
 (11) know  
 (12) I can't think of anything else structurally you need to  
 (13) know  
 (14) The jury view will take place on the first good day we can  
 (15) get this week If there is no jury view because the weather is  
 (16) bad and the helicopters have trouble getting over Portage Pass  
 (17) Mr. Otto Harrison will put on some evidence for the defendants  
 (18) and we will put on Rick Steiner The jury view is dependent  
 (19) upon weather and we will interrupt the proceedings on the first  
 (20) day we can where it appears the helicopters can do get you  
 (21) over to the Sound and we can get back so you're on jury view  
 (22) call I guess is the best way to put it  
 (23) There are going to be in this short period of time some  
 (24) fakes some stutter stepping with regard to punishment I'm  
 (25) going to come back to punishment and then I'm going to sit

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(1) down but I want to remind you of the obvious The conduct was

(2) reckless you found it was reckless it hurt a lot of people

(3) it was done by people who ought to know better and the money

(4) that they paid out to date they would have had to pay out one

(5) if they would have been innocent there has been no punishment

(6) for reckless conduct there had been none and at most it was a

(7) hiccup on their financial statements

(8) The third thing is and His Honor said it and that is half

(9) of it is to punish them and they are to be punished but the

(10) other half of it is to set an example for others and that

(11) setting an example for others half of the purpose of punitive

(12) damages is part of your charge and it is a charge with regard

(13) to corporate responsibility it s a charge with regard to the

(14) environment it s a charge with regard to oil spill

(15) prevention

(16) And I m five minutes early and I m going to sit down

(17) Thank you

(18) THE COURT Mr Sanders

(19) MR SANDERS Might I have a second to get my puny

(20) little exhibits up here Your Honor?

(21) This can come off Mr Chalos s time Your Honor

(22) THE COURT I was going to ask you about that

(23) MR SANDERS May it please the Court Counsel Ladies

(24) and Gentlemen of the jury You wonder how he knows so well

(25) what we re going to say? Because we tell him we re required

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(1) to give him what the witnesses are and he calls me up on the

(2) phone and says what are you going to say and I tell him and he

(3) tells me what he s going to say

(4) Now in spite of his argument this morning I do not intend

(5) to go behind your verdict in Phase I or reopen those issues

(6) You found that we were reckless we respect your verdict we

(7) have taken it to heart even though you disagreed with us but I

(8) cannot ignore his suggestion a while ago that the people at

(9) Exxon were intentionally risking an oil spill of 250 000

(10) barrels in Prince William Sound as extraordinary misconduct

(11) There is not a person in this courtroom that actually

(12) believes that people at Exxon knew that was going to happen or

(13) intended for it to happen That would be stupid That would

(14) be sheer insanity Let me give you an example that you ll

(15) remember from Phase I kind of risk taking to use Mr O Neill s

(16) phrase that occurred in this case

(17) Prior to 1989 prior to the spill we knowingly took the

(18) risk that in calling for a captain to come forward and declare

(19) himself as having an alcohol problem and guaranteeing that

(20) person return to a job that we had the risk that that problem

(21) could recur after he returned to duty Now that s not a risk

(22) that we knowingly took because we wanted to take a risk or

(23) because we didn t care the one thing that he said that I agree

(24) with It is not a lark It was not a lark we took that risk

(25) because at that time knowing what we knew and studying what we

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(1) could study and knowing what everybody else was doing we

(2) thought that was a lesser risk than having an unknown or

(3) undetected and untreated person with an alcohol problem

(4) sailing

(5) around on our ships and we thought it was better to say come

(6) forward and get treatment instead of having the risk of an

(7) unknown ticking time bomb out there

(8) After the spill after what happened in 1989 we completely

(9) changed that The world has completely changed a lot of

(10) things

(11) since 1989 The new policy and Mr Raymond is going to

(12) testify about this takes away any discretion or

(13) decision making in the medical department or at the operational

(14) level that in hindsight was too hard a call to make too hard a

(15) call to make So now under the new policy which was

(16) changed

(17) in 1989 a person who has had an alcohol problem or has had

(18) alcohol treatment can no longer hold a job that is a safety

(19) sensitive job that is a person who has had alcohol treatment

(20) in the past cannot even be a captain or a tanker driver truck

(21) driver any safety sensitive job

(22) Now we still have that other risk make no mistake about

(23) it There is still a risk that other risk that there is

(24) somebody out there who will develop an alcohol problem who

(25) won t come forward because he or she will fear I ll lose my job

(26) if I come forward to get treatment We still have that risk

(27) Now of course we did a lot of things more than we can do in

(28) 1989 or 85 to minimize that risk but you cannot totally

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(1) eliminate it

(2) There are two sides of a very tough question You remember

(3) that from Phase I that s a far cry from a 250 000 barrel

(4) potential oil spill in Prince William Sound the kind of risk

(5) counsel is talking to you about That is not what this Phase

(6) III is about

(7) Mr O Neill has spent a lot of time on something else I

(8) don t think this phase is about Now these financial

(9) statements I don t want to belittle his efforts he s done

(10) quite well and he s proud of it and I think I ll understand

(11) more when he finishes than when he started but that all misses

(12) the point of Phase III It is true that we are a large

(13) corporation and it is true that this corporation has been very

(14) successful If you listen to Mr O Neill s theory and turn it

(15) around the other way if after the oil spill we had done very

(16) badly if we had not worked hard to overcome this if we had

(17) failed and if we hadn t made money and our stock hadn t gone

(18) up

(19) or been bought and we were in bad shape financially and we

(20) couldn t have cleaned up we couldn t have made changes

(21) then

(22) he wouldn t be asking for any money here

(23) Nah nah it is true that we have worked hard that we have

(24) been successful It is also true that of every dollar that

(25) comes in five cents of that goes to profit It is also true

(26) that the range of numbers that he showed you towards the end

(27) of

(28) his argument 15 17 \$20 billion is more than we have invested

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- (1) in oil in the United States of America
- (2) And I m not talking about just buying leases He talked
- (3) about a gift we got that we get this oil it s the people s
- (4) oil we pay for that exploration leases refining marketing
- (5) service stations buying the land where the service stations
- (6) are All of that together in the United States of America is
- (7) not \$17 billion It all misses the point because it skips over
- (8) the issues that Phase III is about It skips over the reasons
- (9) for punitive damages
- (10) As the Court has told you and you will hear in the
- (11) instructions today and later your job in Phase III is not
- (12) simply to determine how much Exxon has in order for you to
- (13) select how much to take away from its owners the
- (14) shareholders No the critical issues in Phase III involve the
- (15) conduct you ve determined the harm that resulted the
- (16) question
- (17) of whether future punishment is necessary to deter and whether
- (18) Exxon and others have gotten the message in the interest of
- (19) deterrence
- (20) Now I do applaud plaintiffs decision to ask one dollar
- (21) from Captain Hazelwood and I strongly agree with their
- (22) reasoning
- (23) Phase III is based merely on their ability to pay? That is
- (24) not the law Do not be misled by that and do not accept their
- (25) invitation to jump ahead and brush over the issues for Phase

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- (1) Now one other thing I want to say about the final
- (2) information and I ll move along He told you on a number of
- (3) times during this opening statement that Mr Rawl said that a
- (4) billion dollars would have no impact on the corporation in
- (5) 1989 That is not true Mr Rawl said it wouldn t bring us
- (6) down That s what he said Don t be mislead
- (7) So the case is not about the kind of risk taking that he s
- (8) talking about because that s not what the proof was and it s
- (9) not about looking at how big we are If that s what it s
- (10) about we lose we are big and I m not going to be up here to
- (11) make apologies for the hard work that was done in order to do
- (12) better since 1989 No the issue framed for you in Phase III
- (13) that the Court told you about this morning is not that you go
- (14) from Phase I to a direct entitlement to money for the
- (15) plaintiffs in Phase III No that s not issue
- (16) The Court told you the issue It was to determine whether
- (17) whether punitive damages should be awarded and if so the
- (18) amount of such damages So the real issues to decide in this
- (19) case this phase are the ones plaintiffs counsel has been
- (20) raising from the very first day of trial and we have finally
- (21) come to the appropriate time to answer his charges that you re
- (22) going to remember now when I repeat them from the very first
- (23) day that this trial started on May 2nd
- (24) You will recall it being repeated a number of times Exxon
- (25) is in denial Exxon is not sorry Exxon has not gotten the

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- (1) message We are here to place the truth before you about
  - (2) these
  - (3) accusations We re not going to come with speeches we are
  - (4) going to come to you with facts We will demonstrate to you
  - (5) that these accusations are not true
  - (6) Why is it relevant now and why is it appropriate to deal
  - (7) with these issues? Because the issues in this phase are
  - (8) whether punitive damages ought to be awarded in order to
  - (9) punish
  - (10) Exxon further for extraordinary misconduct and to deter Exxon
  - (11) and others from repeating the conduct you found reckless in
  - (12) Phase I And in making this important decision your common
  - (13) sense and the law the Court has given you will tell you that
  - (14) you should consider whether Exxon has owned up to its
  - (15) responsibilities We did whether it is sorry for its
  - (16) mistakes, we are and whether or not only has it gotten the
  - (17) message but has it acted in response to that message and we
  - (18) have
  - (19) So I want to talk to you about these matters and about your
  - (20) decision on the question of punitive damages The first place
  - (21) I would like to start is the guidance you have from the law
  - (22) that governs our case the law that you received from the
  - (23) Court
  - (24) You remember back in Phase I and this morning the Court
  - (25) telling you that punitive damages are not favored in the law
- (1) why is that and what guidance and perspective does that give
  - (2) you? Part of the reason I suggest to you is that in civil

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- (1) cases such as the kind we have before you the only
  - (2) punishment
  - (3) permitted by law is money in the form of punitive damages
  - (4) Now these damages are assessed against defendants and
  - (5) they
  - (6) are awarded to plaintiffs Now Mr O Neill didn t mention
  - (7) that a while ago when he talked to you These damages cannot
  - (8) come from anywhere else and they cannot go to anyone else
  - (9) but
  - (10) the plaintiffs By their very nature and under the Court s
  - (11) charge they are over and above the damages actually
  - (12) sustained
  - (13) by the plaintiffs So the money does not go into some public
  - (14) fund or trust It goes to those who have already been paid
  - (15) their actual damages
  - (16) In this case you have spent a lot of time care and effort
  - (17) deciding how much money you should pay the fishermen
  - (18) plaintiffs
  - (19) to make them whole from the damages caused by the spill You
  - (20) worked very very hard Now - and you have decided their
  - (21) actual damages
  - (22) Now these fully compensated plaintiffs and others suggest
  - (23) to you that you should give them more and not hundreds of
  - (24) millions as you decided in Phase II but thousands of
  - (25) millions billions and at whose expense the guys that got the
- (1) bonuses some faceless bloodless creation that you cannot
  - (2) see
  - (3) but you re urged to hit it hard so whatever it is will be
  - (4) taught a lesson? Not on your life
  - (5) The people that own Exxon are the shareholders the people
  - (6) and the institutions who own Exxon stock and as the proof will

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(1) show you they number over 600 000 people who are identified as  
 (2) shareholders and then many more who own Exxon shares through  
 (3) pension plans mutual funds retirement plans and through  
 (4) brokerage accounts Those shareholders will be hurt and it s  
 (5) therefore inevitable that innocent people will be hurt by an  
 (6) award of damages  
 (7) Now to pay actual damages the law says it is perfectly  
 (8) proper as between an injured party and shareholders that  
 actual  
 (9) damages should be paid But that s less true in the case of  
 (10) punitive damages because you have fully compensated  
 plaintiffs  
 (11) like the ones here in this courtroom being enriched at the  
 (12) expense of a lot of innocent people That is a good common  
 (13) sense reason that the law does not favor punitive damages  
 (14) Now the court also has given you other guidance in telling  
 (15) you the two purposes of punitive damages One of those is  
 (16) punishment and the one thing that I would mention about  
 (17) punishment any punishment should fit the conduct and the  
 harm  
 (18) no less but no more And deterrence and I think this is  
 (19) perhaps the most legitimate aim at justice in our society  
 (20) punishment should be inflicted if it is necessary to deter  
 (21) similar conduct in the future these defendants or others in  
 (22) the same situation  
 (23) So our case in Phase III is going to focus on these three  
 (24) issues punishment and deterrence and you can see again now  
 (25) why I told you is the time to consider Mr O Neill s three

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(1) allegations  
 (2) Now in doing this we re not going to tug at your heart  
 (3) strings or curry with you We are going to keep in our minds  
 (4) what I trust has been in yours in your trial and best stated  
 (5) by that great old phrase actions speak louder than words We  
 (6) are sincerely sorry and we said so We said so in March of  
 (7) 1989 We re not going to call a bunch of witnesses here to  
 (8) tell you we are simply sorry It s much better and a lot more  
 (9) helpful to you to show you what we did rather than to keep  
 (10) telling you we re sorry  
 (11) In essence we re going to prove four things to you One  
 (12) we accepted responsibility for the spill two we made a  
 (13) commitment to clean up the spill three we made a commitment  
 (14) to restore the Sound and four we made a commitment to see  
 (15) that it does not happen again  
 (16) Now I want to talk to you a minute or two about punishment  
 (17) before we talk about deterrence and I want to talk to you  
 (18) about the punishment that has already occurred and I want you  
 (19) to remember as we go through this if you will please that  
 (20) what Mr O Neill says about what would have been paid anyway  
 if  
 (21) this ship had been blown off is not true  
 (22) What is the punishment in this case? Well first you  
 (23) decided in Phase I that we were reckless We came to you we  
 (24) presented our case to you They presented their case to you  
 (25) and you found that we were reckless We have accepted that  
 we

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(1) respect that decision That hurts that s punishment And I m  
 (2) not going to stand here and try to reduce either the scope or  
 (3) reach of your decision in Phase I or the import of it  
 (4) Now there is another punishment that s been going on and  
 (5) that has been in the core public opinion Since March 24  
 (6) 1989 this corporation Exxon was criticized around the world  
 (7) for this oil spill Its officers and Exxon employees have felt  
 (8) the sting of public censure for over five years Some was fair  
 (9) and properly aimed some was not but it all came  
 (10) nevertheless and it all hurt and it hurts perhaps more because  
 (11) we knew we had made mistakes not intentionally but no one  
 did  
 (12) say then or can say now that the criticism was deserved  
 (13) Now Mr O Neill said we came to you in Phase I and said  
 (14) everything was all right We started right from the very  
 (15) beginning telling you we made mistakes This corporation will  
 (16) never forget this disaster or punishment The Prince William  
 (17) Sound oil spill is a part of the corporate fabric a part of  
 (18) the corporate life that will never go away It s a lasting  
 (19) punishment  
 (20) What s the other punishments? Well right after the spill  
 (21) we advanced to the federal and state government \$15 billion to  
 (22) study the effects of the spill Indeed much of what you heard  
 (23) in the plaintiffs case about the science was funded by that  
 (24) \$15 billion We also had a grand jury investigation by the  
 (25) state and federal government and a whole lot of publicity about

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(1) it and at the end of that there was a guilty plea by Exxon  
 (2) after we had cooperated in the investigations including the  
 (3) NTSB investigations which was a guilty plea by Exxon which  
 (4) resulted in the largest environmental fine in history and  
 (5) there was a settlement with the federal and state governments  
 (6) through which Exxon is to pay 900 000 000 and a billion dollars  
 (7) over the period of ten years and another hundred million to  
 (8) the State of Alaska and for restoration of the Sound So I ll  
 (9) ask you to consider that and punishment that will continue for  
 (10) as long as the corporation exists in light of our conduct as  
 (11) you determined it and the harm which we have paid  
 (12) That brings me to deterrence and the answer to questions  
 (13) are we sorry, are we in denial have we gotten the message We  
 (14) will demonstrate to you in a number of ways we got it We  
 (15) didn t run we didn t hide didn t even duck We immediately  
 (16) took responsibility We said to the country - well let me  
 (17) show you this You remember hearing about the Glacier Bay  
 (18) You remember Dr Crutchfield was testifying and there was  
 some  
 (19) exchange where Dr Crutchfield was saying I m having trouble  
 (20) finding out who was responsible for that spill and the court  
 (21) said yeah we had trouble with that too  
 (22) That didn t happen here did it? Exxon told the country it  
 (23) is our ship it is our oil it is our responsibility Then we  
 (24) immediately followed up those words with deeds We took over  
 (25) responsibility for the cleanup immediately from Alyeska and we

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(1) never attempted to shift it to the federal government Next we  
 (2) said we were sorry including a letter from the chairman of the  
 (3) board which was published in newspapers all across the land  
 (4) that we acted like we are sorry  
 (5) Lightering it's often overlooked and the fact is as Mr  
 (6) O Neill said the lightering effort kept all or part of a  
 (7) million barrels of oil from getting into the water Now  
 (8) Captain Deppe will come and testify about that and will tell  
 (9) you what was done and I'll ask you to remember you heard  
 (10) about the Braer spill the crew just abandoned the ship Twice  
 (11) as much oil that was lost in Prince William Sound was lost in  
 (12) the Braer spill Compare what we did with what happened  
 (13) there  
 (14) Now I don't think Mr O Neill seriously tried to deflect  
 (15) from the effort it took to lighter that vessel and the response  
 (16) of it by saying we sold the oil What do you want us to do  
 (17) with it? Throw it away  
 (18) Now the cleanup There is a great temptation and Mr  
 (19) O Neill does it to simply put a price tag on it and think that  
 (20) that explains and ends the matter It doesn't and I ask you  
 (21) to listen to the witnesses that we're going to call Mr Otto  
 (22) Harrison Mrs Connie Buhle Mr Jim O'Brien about the  
 (23) cleanup  
 (24) effort I don't want you to listen to numbers I want you to  
 (25) consider the attitude that Exxon and these people took in doing  
 this cleanup I want you to consider please the commitment

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(1) that it represented under the circumstances that they were  
 (2) facing and I want you to consider please the effort that was  
 (3) put into it  
 (4) Connie Buhle is going to come and testify as to one of the  
 (5) many many people that went to work in Houston bright and  
 (6) early  
 (7) on the morning of Good Friday 1989 called all over the world  
 (8) to get equipment and people into Alaska to work on the spill to  
 (9) clean up the spill Mr Otto Harrison who was in charge of  
 (10) the cleanup is going to come and testify to you about what was  
 (11) done and what effort was made to clean up the spill and Mr  
 (12) Jim O'Brien who was one of the world's foremost experts in  
 (13) cleaning up spills gone to all of the big spills one of the  
 (14) best experts that could be found at the time was hired  
 (15) immediately by Exxon and he's going to testify to you about  
 (16) what was involved in cleaning up the spill  
 (17) Now this is not bragging they are not going to brag but  
 (18) what we want you to see is the commitment keeping the  
 (19) commitment and effort that it took and when you hear all this  
 (20) evident you will have clear and unequivocal answers to the  
 (21) questions that I mentioned at the outset  
 (22) And in addition to that we're going to put on some  
 (23) evidence about the claims program that was established  
 (24) immediately It was designed to pay money quickly to those  
 (25) people like fishermen but not just fishermen who were losing  
 money because of the spill and who needed that money to care

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(1) for themselves and their families It paid out over \$300  
 (2) million and that was a very eloquent we're sorry  
 (3) There was a community liaison which was a humanitarian  
 (4) effort to ease the pain that the local communities experienced  
 (5) because of the spill These were a lot more diverse than the  
 (6) clean up program and they included things such as payments  
 to  
 (7) municipalities for their added or incremental cost resulting  
 (8) from the spill effects jobs training program to train people  
 (9) to take the jobs that were working in other jobs and went to  
 (10) work on the spill and also for assistance to Native villages  
 (11) and corporations  
 (12) In a very real sense it cheapens the commitment and the  
 (13) effort to put a price tag on it but punishment and money is  
 (14) the issue It's been phrased in Phase III so the proof is  
 (15) that the cleanup expenditures were over \$2 billion in addition  
 (16) to the \$300 million in claims payment Of course you add to  
 (17) that the monies paid in connection with the federal and state  
 (18) settlements and fines These facts can't be disputed I think  
 (19) so the attack on this effort and what it really means about  
 (20) Exxon and what it stood for will come from a different  
 (21) direction  
 (22) I have to give Mr O Neill credit he's a very skillful  
 (23) lawyer and he's very good at trying to make a sow's ear out of  
 (24) a silk purse What he will do is not only focus on the things  
 (25) he mentioned in the beginning but he's also going to focus

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(1) your attention on some things a PR guy named Don Cornett  
 (2) said  
 (3) after the first few days of the spill and you'll see it and  
 (4) hear it and what he said is offensive particularly taken out  
 (5) of the context which he was operating and out of the context  
 (6) of the other things that were going on And I'm not going to  
 (7) try to stand here and defend it but do not be misled by it  
 (8) Mr Cornett was not involved in the clean up operation at all  
 (9) and Mr Cornett did not set corporate policy and please  
 (10) remember that these remarks came in the first day or two  
 following the spill  
 (11) Mr Cornett was operating in his own department and -  
 (12) worrying about the PR beating he was taking What he said and  
 (13) whatever he was thinking did not influence the clean up effort  
 (14) and certainly cannot be compared with the obviously sincere  
 (15) commitment Exxon made to clean up the spill Compare what  
 we  
 (16) did with Mr Cornett's words and compare Mr Cornett's words  
 (17) with the words of two Coast Guard admirals This is Admiral  
 (18) Ciancaglini that's 89 I think I've painted myself into a  
 (19) trap  
 (20) Here is the end of it That's what he said say about the  
 (21) people then he was replaced by Admiral Robbins or at least  
 (22) Admiral Robbins came along later on This goes to the  
 question  
 (23) of federalizing the spill whether Exxon stayed with the  
 (24) responsibility or whether the responsibility should have been  
 (25) turned over to the federal government This is why it wasn't

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(1) Compare those words with what Mr Cornett said compare the  
(2) actions of Connie Buhle Bill Deppe Jim O'Brien As good as  
(3) he is Mr O'Neill cannot change the undisputable facts about  
(4) what Exxon actually did in response to the spill the effort  
(5) and expense that it took and the duration and the sincerity of  
(6) the commitment to make things right  
(7) Now I do need to say a word here about this PR business  
(8) because we've heard an awful lot about it in this trial and  
(9) the message I get from this PR argument is that you should not  
(10) give Exxon credit for anything good because whatever it does  
(11) good is done for some PR purpose or you can't believe that  
(12) because we have a PR department  
(13) Well let me tell you we did have a PR department they did  
(14) work in the aftermath of the grounding and unfortunately they  
(15) did say some things that help his theory along a little bit if  
(16) you just consider those little snippets in isolation and ignore  
(17) what was going on and if you make the mistake that PR sets  
(18) corporate policy or that PR was in charge of getting any real  
(19) work done  
(20) Let me tell you something else The PR department as you  
(21) well know from the proof you've heard in this case did not  
(22) change a single fact and I doubt they ever changed a single  
(23) opinion The PR effort was like trying to stop a herd of  
(24) buffalo by standing in front of the stampede with a stop sign  
(25) written in Russian The PR argument is an attempt to get you

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(1) underestimated and that everybody had been lulled into to a  
(2) false sense of complacency by a good record of safety before  
(3) that  
(4) There is 8 000 transits without a problem then everyone  
(5) came to the painful and humbling recognition that we were not  
(6) as smart as we thought and suddenly everyone recognized a  
(7) higher level of protection was necessary Now that is really  
(8) what Mr Stevens in that piece that Mr O'Neill kept putting  
(9) up here this morning that's really what I was trying to say to  
(10) Congress and when that testimony comes on you will notice  
(11) that it's preceded by another comment that kind of puts it in  
(12) context  
(13) The chairman of the subcommittee was asking Mr Stevens  
(14) about this and before he says the statement that you saw up on  
(15) the board Mr Stevens says I'll take the broader question and  
(16) try - and then come to the more specific The spill plan  
(17) that's what he's talking about the contingency plan, in place  
(18) was not adequate to handle a spill of that magnitude That was  
(19) recognized in the plan the plan submitted to the federal  
(20) government and to the United States Coast Guard The words -  
(21) you've said - you read the plan used words in that section  
(22) are highly unlikely in other words the prospect of having a  
(23) spill of this magnitude are highly unlikely so therefore the  
(24) spill plan the contingency plan did not have in it a schedule  
(25) of equipment that would be designed to handle a spill of this

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(1) to ignore the forest of truth by focusing your attention on a  
(2) little satchling  
(3) Now there is another large body of truth that I want to  
(4) talk to you about that addresses the question whether we got  
(5) the message or do we need to be punished some more to deter  
(6) us  
(7) from the conduct that caused the grounding of the spill I'm  
(8) talking about the changes made by Exxon as a consequence of  
(9) the spill  
(10) Now all of the changes that we're going to discuss were  
(11) not done just by Exxon and one of the things that was  
(12) necessary to understand to appreciate the situation between  
(13) then and now, is that everybody the industry the governments  
(14) Coast Guard the Environmental Protection Agency everybody  
(15) had  
(16) a similar view of the remote chance that anybody could drop  
(17) 250 000 barrels of oil in Prince William Sound We did not  
(18) stand alone in underestimating or in not appreciating that you  
(19) needed more protection than was available  
(20) You will not hear and you have not heard proof that  
(21) somebody else was doing a lot more When this spill occurred  
(22) it was like a clarion call to Exxon to the entire industry to  
(23) Alyeska to the state governments all across the United States  
(24) and particularly to Alaska and to the United States of America  
(25) particularly the Coast Guard the Environmental Protection  
Agency and the Department of Transportation All of these  
organizations suddenly realized that the risk had been

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(1) magnitude in the water before it hit the beach That's the  
(2) context in which Mr Stevens is talking about and that was  
(3) true for virtually every contingency plan that existed in the  
(4) United States of America in 1989  
(5) Now what happened here was after this happened after the  
(6) unthinkable happened then things changed and today  
(7) contingency plans insofar as physically possible provide that  
(8) there will be equipment on hand to handle this type of spill in  
(9) the water before it gets ashore  
(10) Now on changes the proof is going to show you that Exxon  
(11) reviewed the grounding and spill not in such a way as to limit  
(12) the corrective action it should take but to broaden it It  
(13) would have been easy to fire people blame it on them and run  
(14) off and go into something else That would have been easy  
(15) been a lot cheaper too but instead of trying to narrow the  
(16) focus and narrow the problem solving to the cause or causes of  
(17) the accident Exxon looked at everything in its operations to  
(18) see what could potentially cause an accident of this magnitude  
(19) in other words a new look  
(20) The world viewed this potentiality much more differently  
(21) after March 24th 1989 than it had before and looking at it  
(22) with that blinding clarity of hindsight there were many many  
(23) many changes made and not just by us And some of the  
(24) changes  
(25) we made are in response to changes required by the federal  
and  
state government I'm not trying to claim credit for all the



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(1) claims but I want to tell you about these changes and you'll  
 (2) see that they not only address the problems involved in this  
 (3) grounding but other problems as well whether or not they had  
 (4) anything to do with the grounding  
 (5) In fact we took to heart every criticism every criticism  
 (6) and every suggestion and everybody's theory as to what the  
 (7) cause could be and in any case where we thought that was  
 (8) reasonable a change would reduce the overall risk we made  
 the  
 (9) change  
 (10) Now I mentioned the change in the alcohol policy that Mr  
 (11) Raymond is going to testify about There were other  
 (12) corporate wide changes I want to talk to you a little more  
 (13) specifically about the changes that Mr Elmer is going to talk  
 (14) about Now these are in no particular order and I'm going to  
 (15) try to go fast so I don't take up too much of your time  
 (16) The first of these let's talk about the manning After  
 (17) the accident we decided that it would help reduce a potential  
 (18) for a problem if we put an extra mate on every ship so we  
 (19) did For fear that there was a potential problem with fatigue  
 (20) we added a lightering mate in San Francisco that would make it  
 (21) easy on the front end of the voyage make it easy on the ship's  
 (22) crew going from San Francisco to Valdez and at the other end  
 (23) we added a loading mate here in Valdez a chief mate to  
 reduce  
 (24) the possibility that fatigue could impair performance  
 (25) Now having done that we then pretty quickly realized that

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(1) wasn't enough as we studied the work hour situation so we  
 (2) decided that we needed to do some more things so we put in  
 (3) some work hour restrictions Now shortly after that Congress  
 (4) gave us some too but we had them before we were required to  
 (5) have them and then when Congress passed them in the Oil  
 (6) Pollution Act of 1990 we reformed outside to Congress's That  
 (7) wasn't enough either In order to make sure you're complying  
 (8) with work rules and regulations you have to have something to  
 (9) check and that was a hole in the past  
 (10) You remember officers - we didn't pay overtime for  
 (11) officers because they were on salary and so we didn't have a  
 (12) record of how long people were working on the ships Officers  
 (13) we did if they were unlicensed but we started requiring that  
 (14) logs be kept of the hours officers were working on these  
 (15) vessels so not only would we have the rule that you're only  
 (16) supposed to work this amount of time but we had a way to  
 check  
 (17) on it  
 (18) We also have now an auditor a guy who does nothing but  
 (19) ride the ships and one of the things this guy does is go on  
 (20) the ship and make sure these guys are working the hours they  
 (21) say they are working that they are writing them down and that  
 (22) these comply with the - with our policies and with the  
 (23) regulations This is a good example of making changes even  
 (24) though we didn't think the fatigue problem had anything to do  
 (25) with the accident

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(1) You'll remember what I told you in closing argument in  
 (2) Phase I We didn't think fatigue had anything to do with this  
 (3) grounding nevertheless we made all these changes  
 (4) Now training the first thing we did in terms of training  
 (5) was to go back and eliminate any possible confusion that there  
 (6) was or could have been with respect to who is supposed to be  
 on  
 (7) the bridge when you get into Prince William Sound And what  
 we  
 (8) said was face to face every master every officer every deck  
 (9) officer entering and leaving port gives you but one option  
 (10) that is two officers on that bridge If you're entering or  
 (11) leaving port you cannot operate with one officer up there  
 (12) Now just so you know boys in Prince William Sound you enter  
 (13) port at Cape Hinchinbrook and when you leave port you're  
 (14) leaving at Cape Hinchinbrook There in Prince William Sound  
 (15) the only option you got is two  
 (16) Now we also saw then we looked at our training in 1989  
 (17) that it was possible that people were not getting the training  
 (18) we wanted them to have They weren't getting enough training  
 (19) and some people could be falling through the cracks so what  
 we  
 (20) have done is we have required every deck officer to have a  
 (21) certain kind of training and that training includes a bridge  
 (22) team simulation course in Rhode Island where a whole group  
 of  
 (23) officers the normal contingent that would be on the bridge is  
 (24) taken up there There is a computer simulation this huge  
 (25) wrap around screen very impressive You have this bridge and

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(1) this simulator takes them through conditions in each and every  
 (2) major ports in the United States including Prince William  
 (3) Sound and it goes through expected situations and  
 unexpected  
 (4) situations And you talk about remembering getting the  
 (5) message each one of those teams goes through the voyage of  
 the  
 (6) Exxon Valdez constant reminder constant reminder have we  
 got  
 (7) it we got it  
 (8) Now in addition to that they have a ship handling course  
 (9) imposed right after that where we not only teach the skills  
 (10) and the maneuvering of a vessel to everybody not just the  
 (11) captains not Grenoble this is not Grenoble teach it to  
 (12) everybody and teach them how to use the radar, and we get  
 (13) evaluation read back did Joe do it right did Jack do it  
 (14) right we get feedback  
 (15) The navigation the Loran and MARSAT the plot and fix  
 (16) method you could probably figure out where you were within  
 (17) 1500 feet or so if the satellite was in the right spot you  
 (18) got the right time and all that where you were always trying to  
 (19) figure out where you were based on where you had been  
 (20) Now in today's technology with global positioning  
 (21) system - and in weeks we're going to go to differential global  
 (22) positioning you're going to get to the point in weeks within  
 (23) 20 feet where your ship is you have improved radar and we  
 have  
 (24) a system Mr Elmer is going to explain to you the Ex bridge  
 (25) system It takes this global positioning business the radar

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- (1) and everything else and it puts it on a screen and that screen  
 (2) will project where you are within 20 feet what's around you  
 (3) what's above the water where the other ship is land what's  
 (4) under the water and on that you can even put your course  
 (5) And indeed we require that they put a course in there and  
 (6) you put that course in there and if you get away from that  
 (7) course there is an alarm that goes off and as you go down  
 (8) through that you can see within 20 feet of where you actually  
 (9) are  
 (10) Now what do we do in Valdez? Well instead of having  
 (11) nobody or an Alamar agent up there we have put one of our  
 (12) senior most captains in Valdez and he is now called the Valdez  
 (13) port operations coordinator He's Captain Bill Deppe not only  
 (14) a ship group coordinator coordinates with ships the Coast  
 (15) Guard coordinates with all regulatory agencies and the  
 (16) community and the watchdog  
 (17) We have restrictions on the number of people who can go  
 (18) ashore at all - at any visit at any port  
 (19) There are as you know rules about how much alcohol a  
 (20) person can have within a certain amount of time before he can  
 (21) get on a ship Do you remember the four hour rule 04 and all  
 (22) that? We said that's great for everybody else but for our  
 (23) captains and chief engineers heck with that our captain or  
 (24) chief engineers can no longer drink on a tour of duty period  
 (25) There is no such thing if you're a captain of Sea River

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- (1) have You can't leave the system you can't leave the traffic  
 (2) separation system you can change lanes to account for ice but  
 (3) you cannot leave the system  
 (4) Now you're also going to hear some other changes involving  
 (5) oil spill response and things like that I'm not going to take  
 (6) the time to go into this I do want you to know one other  
 (7) thing though particularly as to sea river You remember  
 (8) hearing there was no after care and there was no formalized  
 (9) monitoring written out monitoring for under the alcohol  
 (10) policy? There is now There is now If you think about it  
 (11) once you hear this proof and you compare what I told you and  
 (12) what Mr Elmer is going to tell you about and what Mr Raymond  
 (13) is going to tell you about we have made a change in virtually  
 (14) every area you've heard about whether it caused the accidents  
 (15) or not during the course of the trial every area  
 (16) Now once again it's going to be hard to dispute those  
 (17) facts but I don't expect that he's going to leave them sitting  
 (18) out there unmolested Probably is going to question the  
 (19) sincerity and the motivation and the sincerity of the effort  
 (20) He's seen that as his job and he's pretty good at it An old  
 (21) stand is to talk about Exxon as some evil group suggesting to  
 (22) you that everyone at Exxon lies everyone at Exxon is bad and  
 (23) everything done by Exxon is for some ignoble purpose in other  
 (24) words don't trust a word that they say the only thing they  
 (25) understand is the lash and the lash you have is money so use

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- (1) Maritime of going - port in Valdez or San Francisco or  
 (2) anywhere else and when you come back and this is required  
 (3) by  
 (4) the State of Alaska take a breathalyzer before you take off  
 (5) and if any of our captains blow anything that's it  
 (6) Check in is required for every member of a crew that goes  
 (7) ashore You've got a security checkpoint but we require a  
 (8) check by the mate on duty breathalyzer already mentioned  
 (9) extra policing of the alcohol policy at every spot in Valdez  
 (10) We got the Valdez port operations coordinator Captain Deppe  
 (11) you have a loading mate a radio officer up here you have all  
 (12) kinds of people up here making sure that the rules are being  
 (13) followed We also have random searches and we have a  
 (14) hotline  
 (15) Now before you leave Valdez going out like that fateful  
 (16) night it is required that you have a voyage plan and you tell  
 (17) people about it and with Ex-bridge you have to put it up there  
 (18) so everybody can see we know what we're going to do and if  
 (19) we're not doing it somebody is going to know about it  
 (20) We have weather rules and ice rules Our policy says if  
 (21) ice can be a hindrance and it's nighttime you cannot go at  
 (22) all if it's daytime and if there is ice and it's not a danger  
 (23) you can go but you have an escort and that escort in that  
 (24) situation will be in front of you so that that person - that  
 (25) vessel will encounter the ice long before you do and  
 obviously in light of all that's happened if it's a problem  
 you got to come back because there is a new rule that we

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- (1) it freely for my side  
 (2) Now we all know from our own personal experiences from  
 (3) the country's experiences what terrible unfairness and  
 (4) uncondemns of whole groups of people to propagandize  
 (5) that  
 (6) way To say or even think that all of a whole group of any  
 (7) human being is bad inevitably is inaccurate it's mean and it's  
 (8) downright stupid it's an insult to everybody  
 (9) When we came into Phase I we knew we had made mistakes  
 (10) and  
 (11) we told you so We told you at the very beginning We also  
 (12) told you we were liable for the actual damages suffered by the  
 (13) plaintiffs In short we came into this case feeling guilty  
 (14) and honestly told you so  
 (15) Now with our feeling of guilt remorse I suspect we've  
 (16) been a little too meek in responding to these suggestions of  
 (17) light and a little too timid in defense of the clients  
 (18) honesty and integrity but now is the time for you to judge us  
 (19) as we are as the truth tells you we are Look at what we did  
 (20) look at the efforts we have made look at the size of the  
 (21) commitment since the spill and look at the wholesale changes  
 (22) we  
 (23) have made since the spill I trust you won't let these side  
 (24) attacks and generalizations deflect you from the truth because  
 (25) they tell you and show you much better than my words that we  
 were sorry we were not and are not in denial and that we have  
 gotten the message  
 These are the facts then that you will have before you as

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(1) you decide this last claim the claim for punitive damages and  
 (2) the potential facts are that we acted responsibly we committed  
 (3) to clean up the spill we committed to restore the Sound and we  
 (4) committed we would do everything we could to see that it didn't  
 (5) happen again  
 (6) In short Ladies and Gentlemen of the Jury I respectfully  
 (7) submit to you that when you consider proof in Phase I and you  
 (8) consider what happened after the spill and what was done after  
 (9) the spill on the main things the main issues you're going to  
 (10) conclude that this corporation behaved like you would want a  
 (11) responsible business to behave after this accident Exxon did  
 (12) what you would want them to do any business to do after this  
 (13) kind of disaster and we were able to do it because of these  
 (14) successes that Mr O'Neill was talking about in part and  
 (15) because of the commitment the sorrow the remorse that we  
 (16) made and if that's the case if I'm right about that and I  
 (17) think the facts are going to lead you in that direction then  
 (18) you have a very solemn and terribly responsible duty as  
 (19) citizens as jurors to say so in your verdict on punitive  
 (20) damages And by saying so you complete the message You  
 (21) complete that message you underscore that message and you  
 (22) make  
 (23) sure that everybody gets it Thanks  
 (24) THE COURT Mr Chalos  
 (25) MR CHALOS I don't know how much time a dollar buys  
 me but I have about five minutes Should we do it now or

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(1) Besides being punished financially he's been punished  
 (2) emotionally and psychologically He was the only individual  
 (3) that's been made a defendant in this case and has come before  
 (4) you and you had to judge him He's endured now five years of  
 (5) litigation of press and media scrutiny of choke I mean  
 (6) every night he turned on the TV he saw Johnny Carson making  
 (7) jokes about him Jay Leno That's a lot for one person to  
 (8) take That's a lot for one person that's punishment  
 (9) He also has had his medical records the most intimate and  
 (10) confidential information that one can have his discussions  
 (11) with his doctors his records and so on open for everyone to  
 (12) see open for experts to scrutinize misscrutinize dissect  
 (13) bisect do whatever they do Person shouldn't have to do  
 (14) that He's endured that he's endured all that punishment and  
 (15) he's been humiliated by all the things that have been said  
 (16) about him he and his family has been humiliated Mr O'Neill  
 (17) is correct when he says enough is enough  
 (18) Now with respect to the second aspect deterrence well  
 (19) Captain Hazelwood is never going to sail again That's a tough  
 (20) thing for someone to accept because you've heard in spite of  
 (21) what happened on that night that he was a very very good  
 (22) captain he was an excellent seaman he's never going to sail  
 (23) again no one is going to hire him again so if you're worried  
 (24) about awarding any punitive damages at all as a deterrent  
 (25) well you don't need to because he's never going to be in that

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(1) after the break?  
 (2) THE COURT No let's do it now  
 (3) MR CHALOS May it please the Court Counsel Ladies  
 (4) and Gentlemen It's nice to see you again I haven't spoken  
 (5) to you for a while I want to on behalf of Captain Hazelwood  
 (6) and on behalf of the Hazelwood defense team if you will thank  
 (7) Mr O'Neill and the plaintiffs for seeking punitive damages of  
 (8) one dollar from Captain Hazelwood I think Mr O'Neill and the  
 (9) plaintiffs have gotten together and they have thought about it  
 (10) and they have come to the same conclusion that we have come  
 (11) and that is that Captain Hazelwood has been punished enough  
 (12) he  
 (13) truly has been punished enough  
 (14) The purpose of punitive damages as you heard is  
 (15) two fold One is to punish the other is to deter Punishment  
 (16) doesn't mean to devastate doesn't mean to devastate the man  
 (17) He was fired immediately after the spill he lost his job lost  
 (18) his benefits There was one year where he made about \$8,000  
 (19) there was another year he made zero He now if this isn't  
 (20) enough punishment he works for lawyers he works for our law  
 (21) firm Imagine having to spend the whole day working with  
 (22) lawyers after being in charge of a vessel  
 (23) Well the fact of the matter is that he doesn't have the  
 (24) financial wherewithal to withstand a punitive damages award  
 (25) He doesn't He has to support a family he has a daughter in  
 college he's doing the best he can to make ends meet

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(1) position he's never going to be able to sail again And if he  
 (2) did sail again he made a mistake he told you on the stand he  
 (3) made a mistake and he's truly sorry for that mistake and if he  
 (4) had to do it again he would never do it again And if the  
 (5) punitive damages are to deter he's been sufficiently  
 (6) deterred If they are to deter other captains or other seaman  
 (7) well rest assured anybody that's followed the Exxon Valdez  
 (8) saga and has seen what happened to Captain Hazelwood what  
 (9) he's  
 (10) had to endure all these years you can rest assured that  
 (11) punitive damages aren't going to be the deterrence The  
 (12) deterrence is what they have already seen and they have seen  
 (13) plenty  
 (14) So Ladies and Gentlemen you don't have to award any  
 (15) punitive damages against Captain Hazelwood In your  
 (16) discretion you can say Captain Hazelwood has suffered  
 (17) enough  
 (18) we're not going to award anything But if you think you need  
 (19) to send a message and you have to award something then I  
 (20) ask  
 (21) you to follow Mr O'Neill's recommendation and award a dollar  
 (22) I would ask you that you award nothing because he has  
 (23) suffered  
 (24) enough but if you need to do something then please listen  
 (25) to what Mr O'Neill says  
 (26) I thank you very much  
 (27) THE COURT We will excuse the jury for our first  
 (28) recess at this point Would counsel stay for just a moment  
 (29) please?

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- (1) (Jury out at 10 18)  
 (2) THE COURT Counsel it s my understanding that we  
 (3) have two stipulations that need be read to the jury at this  
 (4) point I have numbers for them Do you have them handy or  
 (5) should I scare them up?  
 (6) MR O NEILL I have a stipulation  
 (7) MR LYNCH And I think there are a total of three  
 (8) stipulations  
 (9) THE COURT Okay  
 (10) MR O NEILL There is a stipulation concerning  
 (11) impacts there is a stipulation concerning dispersants and  
 (12) there is a stipulation between Hazelwood and the plaintiffs  
 (13) with regard to Mr Hazelwood s annual income  
 (14) MR LYNCH That s correct  
 (15) MR O NEILL And I have copies of the three  
 (16) stipulations  
 (17) MR LYNCH That s correct Your Honor  
 (18) THE COURT Mr Lynch you re satisfied with the three  
 (19) of them?  
 (20) Very well Anything else we need to do before we start  
 (21) taking the evidence?  
 (22) MR O NEILL Not today At some point in time we  
 (23) need a decision on the Coast Guard testimony and other than  
 (24) that I think that s it Isn t it?  
 (25) MR NEAL We thought we had worked something out

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- (1) about rebuttal but then I notice that Mr O Neill alluded to  
 (2) something in his statement that makes that understanding  
 (3) shaky  
 (4) but it doesn t have to be done today  
 (5) MR O NEILL We don t have to worry about it today  
 (6) THE COURT We will be in recess for 15 minutes  
 (7) (Recess from 10 20 to 10 40)  
 (8) (Jury in at 10 40)  
 (9) THE COURT Ladies and Gentlemen as the first  
 (10) evidence to be taken as a part of Phase III I have three  
 (11) stipulations that is agreements as to facts which have been  
 (12) approved by all counsel in the case  
 (13) First is this In the first hours and days after the  
 (14) grounding of the Exxon Valdez one effort that Exxon undertook  
 (15) to clean up the oil spill was to prepare to apply dispersants  
 (16) to the oil slick Exxon s plan for a spill over 200 000  
 (17) barrels included dispersants All regulatory approval was not  
 (18) granted to apply the dispersants on Friday March 24 1989 or  
 (19) Saturday March 25th 1989 No planes were available on  
 (20) Friday  
 (21) and Exxon had one plane available on Saturday morning and  
 (22) one  
 (23) more on Saturday evening On Sunday March 26 a major  
 (24) storm  
 (25) hit the Sound and following this storm it was no longer  
 (26) practical to use dispersants  
 (27) The second stipulation has four separate parts to it  
 (28) First the following Phase II B claims for actual damages were  
 (29) resolved as follows A class consisting of Alaska Natives made

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- (1) claims that their subsistence harvests were reduced as a result  
 (2) of the Exxon Valdez oil spill Exxon has agreed to pay \$20  
 (3) million to the class on these claims The next series has to  
 (4) do with claims for actual damages that will be resolved by  
 (5) proceedings in Phase IV that will not involve you First  
 (6) commercial fishermen in fisheries affected by the oil spill  
 (7) were unable to fish certain fisheries as a result of the Exxon  
 (8) Valdez oil spill including pot shrimp trawl shrimp dungeness  
 (9) crab brown king crab tanner crab king crab halibut  
 (10) sablefish miscellaneous finfish miscellaneous shellfish  
 (11) miscellaneous groundfish smelt scallops and bait herring  
 (12) commercial fishermen participating in these contend  
 (13) \$24 764 000 Defendants admit that there was some loss in  
 (14) each  
 (15) of these fisheries but contend that the actual damages were  
 (16) lower Second commercial fishermen in Lower Cook Inlet  
 (17) salmon seine and salmon setnet fisheries sustained losses due  
 (18) to closures as a result of the oil spill Commercial fishermen  
 (19) in these areas contend that damages in 1989 amounted to  
 (20) \$787 000 Defendants admit that there was some loss in each  
 (21) of  
 (22) these fisheries but contend that the actual damages were  
 (23) lower Three commercial fishermen in fisheries affected by  
 (24) the oil spill contend that they have sustained losses because  
 (25) the prices at which their fishing vessels sold have been  
 (26) reduced as a result of the spill Defendants deny that the  
 (27) Exxon Valdez oil spill caused a drop in the price of vessels

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- (1) sold and contend that the actual damages if any were less  
 (2) than the amount claimed  
 (3) Four certain commercial fishermen from fisheries affected  
 (4) by the oil spill who sold their fishing permits after September  
 (5) 1993 contend that the prices at which their fishing permits  
 (6) have sold have been reduced as a result of the spill  
 (7) Defendants deny that the Exxon Valdez oil spill caused a drop  
 (8) in the price of these permits and contend that the actual  
 (9) damages were less than the amount claimed  
 (10) Five landowners including certain Native corporations  
 (11) who own shoreside lands in the oiled areas of Prince William  
 (12) Sound Kenai Peninsula and Kodiak contend that oiling of  
 (13) those  
 (14) lands by the Exxon Valdez oil spill resulted in damage of at  
 (15) least \$130 million Defendants assert that many of the lands  
 (16) involved were never oiled by the oil from the Exxon Valdez As  
 (17) to lands which were oiled defendants admit that they are  
 (18) responsible for damages if any caused by the oil but  
 (19) defendants contend that such lands have been for the most  
 (20) part cleaned up and that any residual damages are temporary  
 (21) Six the Cook Inlet Aquaculture Association Kodiak  
 (22) Regional Aquaculture Association and Prince William Sound  
 (23) Aquaculture Corporation contend they sustained losses due to  
 (24) a  
 (25) reduction in the price of fish - I m sorry reduction of the  
 (26) price paid for fish actually harvested in 1989 and state that  
 (27) these damages are \$18 860 000 Defendants contend that

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(1) hatcheries the hatcheries damages if any were less than the  
 (2) amount claimed  
 (3) The third area has to do with claims for actual damages  
 (4) that are to be resolved in Alaska state courts First the  
 (5) municipalities of Kodiak Island Borough Larsen Bay Old  
 (6) Harbor Ouzinkie Port Lions and Cordova contend that they  
 have  
 (7) sustained losses due to the Exxon Valdez oil spill and state  
 (8) the damages they have suffered at the present trial  
 (9) 8 784 546 Defendants contend that the damages suffered  
 were  
 (10) less than \$75 000  
 (11) Two other municipalities including Seward Valdez Kenai  
 (12) Kenai Peninsula Borough Chignik Akhiok City of Cordova and  
 (13) Whittier losses at a minimum equivalent to those  
 (14) municipalities presently in trial in paragraph one above  
 (15) Defendants deny that these municipalities were damaged by  
 the  
 (16) Exxon Valdez oil spill or contend that the damages suffered if  
 (17) any were lower  
 (18) We have a second paragraph two and probably all of the  
 (19) numbers from this point on were supposed to have been  
 shifted  
 (20) The Native corporations of English Bay Port Graham Chenega  
 (21) Chugach Eyak and Tatitlek contend that they have sustained  
 (22) losses from the oiling of their land due to the Exxon Valdez  
 (23) oil spill and state the damages they have suffered are  
 (24) 110 898 000 Defendants contend that the lands far back from  
 (25) the shore land and other lands that were not touched by oil

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(1) were not damaged at all and contend that the damage  
 (2) attributable to oiled lands amounts to about 1 500 000  
 (3) Third the Native corporations of English Bay Port Graham  
 (4) Chenega and Chugach contend that they have sustained losses  
 to  
 (5) archaeological sites on their lands due to the Exxon Valdez oil  
 (6) spill and state the damages they have suffered are 35 571 000  
 (7) Defendants deny that archaeological sites were damaged by  
 the  
 (8) Exxon Valdez oil spill  
 (9) Four certain commercial fishermen in fisheries affected by  
 (10) the oil spill have claims in state court for losses they claim  
 (11) for the depressed sales price of their permits and vessels  
 (12) The Exxon defendants dispute these claims  
 (13) Five the Native corporations of Chugach and Port Graham  
 (14) own and operate seafood processing operations that were  
 (15) impacted by the Exxon Valdez oil spill Exxon paid these  
 (16) processors 9 515 000 in settlement of their claims  
 (17) Six certain commercial fish processors claimed that they  
 (18) were damaged as a result of the Exxon Valdez oil spill Exxon  
 (19) paid these processors 113 500 000 in settlement of their  
 (20) claims  
 (21) The fourth part of this stipulation has to do with the  
 (22) membership of the punitive damages class Each and every  
 (23) claimant entitled to recover damages from defendants for  
 damage  
 (24) resulting from the Exxon Valdez oil spill is a member of the  
 (25) punitive damages class and is a plaintiff in this action for

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(1) purposes of this Phase III No other jury will award punitive  
 (2) damages to these plaintiffs in any other lawsuit  
 (3) The third stipulation has to do with Defendant Hazelwood  
 (4) and his annual income It has been agreed between the parties  
 (5) that in 1987 Defendant Hazelwood had taxable income of  
 70 901  
 (6) that in 1988 Defendant Hazelwood had taxable income of  
 117 375  
 (7) that in 1989 Defendant Hazelwood had gross wages of 37 489  
 and  
 (8) taxable income of 167 298 That last item is footnoted in the  
 (9) case that in 1989 Defendant Hazelwood was required to cash  
 out  
 (10) of a profit sharing plan upon termination by Exxon  
 (11) In 1990 Defendant Hazelwood had no gross wages and  
 taxable  
 (12) income of 43 918 in 1991 Defendant Hazelwood had no taxable  
 (13) income in 1992 Defendant Hazelwood had taxable income of  
 (14) 32 396 in 1993 Defendant Hazelwood had taxable income of  
 (15) 44 177  
 (16) Mr O'Neill you may call your first witness  
 (17) MR O NEILL Thank you Your Honor Before we do  
 (18) that we have a list of exhibits that the parties agree will be  
 (19) preadmitted We offer exhibits Plaintiffs 80 Plaintiffs  
 (20) 105 Plaintiffs 153 Plaintiffs 169 Plaintiffs 174  
 (21) Plaintiffs 211 Plaintiffs 225 Plaintiffs 603 Plaintiffs  
 (22) 797 Plaintiffs 866 Plaintiffs 1709 Plaintiffs 1737  
 (23) Plaintiffs 3387 Plaintiffs 3388 Defendants 3563  
 (24) Defendants 3698 Plaintiffs 6242 Plaintiffs 6254  
 (25) Plaintiffs 6262 Plaintiffs 6338 Defendants 4617-Alpha

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(1) Plaintiffs 605 Plaintiffs 864 Plaintiffs 6252 Plaintiffs  
 (2) 6297 Plaintiffs 6298 Plaintiffs 6300 Plaintiffs  
 (3) 6301-Alpha Plaintiffs 6302-Alpha Plaintiffs 6303  
 (4) Plaintiffs 6304 Plaintiffs 6305 Plaintiffs 6306  
 (5) Plaintiffs 6307 Plaintiffs 6308 Plaintiffs 6309  
 (6) Plaintiffs 6313-Alpha Plaintiffs 6314 Alpha Plaintiffs'  
 (7) 6316 Plaintiffs 6317-B Plaintiffs 863 Plaintiffs 6310  
 (8) Plaintiffs 6311 Plaintiffs 6312 Plaintiffs 862 Plaintiffs  
 (9) 6287 Plaintiffs 6286 Plaintiffs 6331 Plaintiffs 6332  
 (10) Plaintiffs 6333 Plaintiffs 6330 Plaintiffs 6328  
 (11) Plaintiffs 6329 Plaintiffs 6484 Plaintiffs 13 Plaintiffs  
 (12) 175 Plaintiffs 600 Plaintiffs 238-Alpha Plaintiffs 801  
 (13) Plaintiffs 722-Alpha Plaintiffs 6288 Plaintiffs 620 and  
 (14) Plaintiffs 6262  
 (15) (Exhibits Plaintiffs 80 Plaintiffs 105 Plaintiffs 153  
 (16) Plaintiffs 169 Plaintiffs 174 Plaintiffs 211 Plaintiffs  
 (17) 225 Plaintiffs 603 Plaintiffs 797 Plaintiffs' 866  
 (18) Plaintiffs 1709 Plaintiffs 1737 Plaintiffs 3387  
 (19) Plaintiffs 3388 Defendants 3563 Defendants 3698  
 (20) Plaintiffs 6242 Plaintiffs 6254 Plaintiffs 6262  
 (21) Plaintiffs 6338 Defendants 4617-Alpha Plaintiffs 605  
 (22) Plaintiffs 864 Plaintiffs 6252 Plaintiffs 6297  
 (23) Plaintiffs 6298 Plaintiffs 6300 Plaintiffs 6301-Alpha  
 (24) Plaintiffs 6302 Alpha Plaintiffs 6303 Plaintiffs 6304  
 (25) Plaintiffs 6305 Plaintiffs 6306 Plaintiffs 6307

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- (1) Plaintiffs 6308 Plaintiffs 6309 Plaintiffs 6313 Alpha
- (2) Plaintiffs 6314 Alpha Plaintiffs 6316 Plaintiffs 6317 B
- (3) Plaintiffs 863 Plaintiffs 6310 Plaintiffs 6311
- (4) Plaintiffs 6312 Plaintiffs 862 Plaintiffs 6287 Plaintiffs
- (5) 6286 Plaintiffs 6331 Plaintiffs 6332 Plaintiffs 6333
- (6) Plaintiffs 6330 Plaintiffs 6328 Plaintiffs 6329
- (7) Plaintiffs 6484 Plaintiffs 13 Plaintiffs 175 Plaintiffs
- (8) 600 Plaintiffs 238-Alpha Plaintiffs 801 Plaintiffs
- (9) 722-Alpha Plaintiffs 6288 Plaintiffs 620 and Plaintiffs
- (10) 6262 offered)
- (11) MR SELNA No objection
- (12) THE COURT Admitted
- (13) (Exhibits Plaintiffs 80 Plaintiffs 105 Plaintiffs 153
- (14) Plaintiffs 169 Plaintiffs 174 Plaintiffs 211 Plaintiffs
- (15) 225 Plaintiffs 603 Plaintiffs 797 Plaintiffs 866
- (16) Plaintiffs 1709 Plaintiffs 1737 Plaintiffs 3387,
- (17) Plaintiffs 3388, Defendants 3563 Defendants 3698
- (18) Plaintiffs 6242 Plaintiffs 6254 Plaintiffs 6262
- (19) Plaintiffs 6338 Defendants 4617 Alpha Plaintiffs 605
- (20) Plaintiffs 864 Plaintiffs 6252 Plaintiffs 6297
- (21) Plaintiffs 6298 Plaintiffs 6300 Plaintiffs 6301 Alpha
- (22) Plaintiffs 6302 Alpha Plaintiffs 6303 Plaintiffs 6304
- (23) Plaintiffs 6305, Plaintiffs 6306, Plaintiffs 6307
- (24) Plaintiffs 6308, Plaintiffs 6309 Plaintiffs 6313-Alpha
- (25) Plaintiffs 6314 Alpha Plaintiffs 6316, Plaintiffs 6317-B

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- (1) Plaintiffs 863 Plaintiffs 6310 Plaintiffs 6311,
- (2) Plaintiffs 6312 Plaintiffs 862 Plaintiffs 6287 Plaintiffs
- (3) 6286 Plaintiffs 6331, Plaintiffs 6332 Plaintiffs 6333
- (4) Plaintiffs 6330 Plaintiffs 6328 Plaintiffs 6329
- (5) Plaintiffs 6484 Plaintiffs 13 Plaintiffs 175 Plaintiffs
- (6) 600 Plaintiffs 238-Alpha Plaintiffs 801 Plaintiffs
- (7) 722 Alpha Plaintiffs 6288 Plaintiffs 620 and Plaintiffs
- (8) 6262 received)
- (9) MR O NEILL For the Court s information all of the
- (10) exhibits that we will use in our direct case are all
- (11) preadmitted
- (12) THE COURT Thank you
- (13) MR O NEILL Plaintiffs call Sam Rhodes
- (14) (The Witness Is Sworn)
- (15) THE CLERK Sir, for the record would you state your
- (16) name your address and spell your last name please
- (17) THE WITNESS My full name is Samuel Fay Rhodes
- (18) R H O-D-E-S My address - did you say home or business?
- (19) THE CLERK Just an address will be fine
- (20) THE WITNESS 11241 Ferndale Road Dallas Texas
- (21) DIRECT EXAMINATION OF SAMUEL RHODES
- (22) BY MR MONTAGUE
- (23) Q Mr Rhodes can you tell us by whom you re employed?
- (24) A Yes I m a shareholder in the firm of Jackson & Rhodes
- (25) Q And are you the Rhodes of Jackson & Rhodes?

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- (1) A Yes I am
- (2) Q Could you tell us what your educational background is?
- (3) A Yes I graduated from Texas A & M University in 1962 with
- (4) a degree in economics agricultural economics I took
- (5) additional accounting courses after that at Southern Methodist
- (6) University
- (7) Q Do you hold any professional titles or professionals
- (8) designations?
- (9) A Yes sir
- (10) Q Can you tell the jury please what they are?
- (11) A Yes I m a CPA certified public accountant and a
- (12) certified management consultant
- (13) Q When did you become certified as a certified public
- (14) accountant?
- (15) A 1966
- (16) Q And you said you were a certified management consultant?
- (17) A Yes sir
- (18) Q What is that?
- (19) A That is a certification from the Institute of Management
- (20) Consultants You take a test and you become certified
- (21) Q When did that certification take place?
- (22) A It was in the mid- 80s I think it was 86 or 87
- (23) Q Now from the time you became a certified public accountant
- (24) in 1966 to the present could you tell the jury what your work
- (25) history has been?

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- (1) A Yes sir In 1966 I went to work for Arthur Anderson &
- (2) Company in Dallas and I spent five years with them in their
- (3) tax department their audit department and their small business
- (4) department And after five years I left to go to work with one
- (5) of my clients which was a real estate development company
- (6) called Redmond Properties I went there as vice president of
- (7) finance
- (8) After two years Redmond decided they were going to sell
- (9) their company and stop being in that business so I left and
- (10) took a job with American Cyanamid Company on a one-year
- (11) contract to assist them in selling their real estate
- (12) subsidiary That was with the Ervin Company
- (13) After one year after that actual year I went to work for
- (14) Touche Ross Company back in Dallas Texas and spent 18
- (15) years
- (16) with Touche Ross which changed its name to DeLotte Touche
- (17) in
- (18) 1989 and in 1992 I formed my own company along with a friend
- (19) of mine named Dan Jackson for Jackson & Rhodes
- (20) Q Some time earlier in the openings we heard about the big
- (21) six or the big international accounting firms Is Touche Ross
- (22) one of those?
- (23) A Yes as is Arthur Anderson They were considered one of
- (24) the big eight They are - they are called now the Big Six
- (25) Q Did you attain the status of partner in Touche Ross?
- (26) A Yes I did I was a partner In 1978 I was made a partner
- (27) Q And now you re with Jackson & Rhodes?

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- (1) A Yes  
 (2) Q Now since 1966 have you practiced professionally as a certified public accountant?  
 (3) A Yes I have  
 (4) Q And could you tell us - let's take the last 20 years  
 (5) What type of work you have performed as a certified public  
 (6) accountant?  
 (7) A Yes Since 1974 which is when I joined Touche Ross I had  
 (8) done - part - most of my work have been what I would call  
 (9) financial consultant I've done some litigation work we call  
 (10) litigation support services and I've done consulting with  
 (11) private companies and public companies I've also done what  
 (12) we  
 (13) call regulatory consulting also  
 (14) Q And those services do they require you as part of your job  
 (15) performance to analyze financial records of businesses?  
 (16) A Yes they do  
 (17) Q Does that include public corporations?  
 (18) A Yes  
 (19) Q Now does Exxon publish, prepare and publish annual  
 (20) reports?  
 (21) A Yes sir they do  
 (22) Q And I think there is a stack of those before you which  
 (23) are as a group Exhibit 605 Do you recognize those as Exxon  
 (24) annual reports?  
 (25) A Yes they are all Exxon annual reports

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- (1) Q And have you reviewed those reports?  
 (2) A Yes I have  
 (3) Q And for what period of time are they?  
 (4) A 1986 through 1993  
 (5) Q I think so the record is straight the 1993 is Exhibit  
 (6) 684 and 1986 to 1992 is a group exhibit of Plaintiffs Exhibit  
 (7) 605  
 (8) In your review of those reports you found that Exxon sets  
 (9) forth its year end financial statements in those reports?  
 (10) A Yes their financial statements are included in each annual  
 (11) report  
 (12) Q And are you familiar with those financial statements that  
 (13) are set forth in those reports?  
 (14) A Yes sir  
 (15) Q And are you required to understand that type of financial  
 (16) information in performing your everyday duties?  
 (17) A Yes sir That's part of financial analysis financial  
 (18) consulting  
 (19) Q Can you tell us what the purpose is of them issuing a  
 (20) annual report at the end of year which includes financial  
 (21) statements?  
 (22) A I would say the general purpose is to inform the  
 (23) shareholders and investing public and anyone who is an  
 (24) interested party as to this current status of the corporation  
 (25) both financially and operationally

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- (1) Q To whom are the annual reports sent?  
 (2) A Well they are certainly sent to the shareholders and  
 (3) generally I would guess distributed to other parties like  
 (4) investment bankers brokerage houses and anyone who would  
 be  
 (5) interested in investing in stock of Exxon  
 (6) Q In your experience are public corporations generally  
 (7) careful in setting forth accurate information in a fair way in  
 (8) their annual reports?  
 (9) A Yes  
 (10) Q And is it a requirement that the financial data contained  
 (11) in the annual report be filed with the United States Securities  
 (12) and Exchange Commission?  
 (13) A For a public company yes  
 (14) Q Now are the Exxon year end financial statements certified  
 (15) by certified public accountants?  
 (16) A Yes they are  
 (17) Q What does that mean that they are certified?  
 (18) A That means that the an independent third party CPA firm in  
 (19) this case Price Waterhouse has reviewed the financial  
 (20) information and issued an opinion which is called an  
 (21) accountants report that states that the accounting  
 (22) information presents the financial information in a fair and  
 (23) accurate way I don't believe the word accurate is in there  
 (24) Presented in a fair way  
 (25) Q Could you just briefly look through one of those reports

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- (1) and give us in very general terms the type of financial  
 (2) information or the type of financial reports that are contained  
 (3) in an annual report or in Exxon's annual report?  
 (4) A Sure Generally speaking there is a balance sheet an  
 (5) income statement called a consolidated statement of income  
 and  
 (6) consolidated balance sheet a consolidated statement of  
 (7) shareholders equity and a consolidated statement of cash  
 (8) flows Additionally there are summary information schedules  
 (9) that are shown in a section called business profile and  
 (10) financial summary and further there is narrative discussion  
 (11) from both management - or from management as to what the  
 (12) operations are or were in a given year  
 (13) Q And have you reviewed those financial reports?  
 (14) A Yes I have  
 (15) MR MONTAGUE Your Honor I would offer Mr Rhodes as  
 (16) an expert witness to review and comment on the published  
 (17) financial information by Exxon in its annual reports and also  
 (18) in its proxy statements  
 (19) MR LYNCH Your Honor I believe we have an  
 (20) understanding that there is a very narrow scope to Mr Rhodes  
 (21) testimony as defined by Mr Montague's offer I don't have a  
 (22) problem with his qualification to discuss how one reads and  
 (23) understands financial statements but there are restrictions  
 (24) that we may have to approach you about  
 (25) THE COURT Fine I will accept his qualifications to

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- (1) speak to whatever this agreement is you have and if there is a  
 (2) problem you'll let me know  
 (3) BY MR MONTAGUE  
 (4) Q Mr Rhodes after reviewing the financial statements and  
 (5) the annual reports of Exxon's did you prepare some charts to  
 (6) help aid the jury and us?  
 (7) A Yes I have  
 (8) Q I think everybody has seen this before Have you seen that  
 (9) before?  
 (10) A Yes  
 (11) Q Is that a - this is Plaintiffs Exhibit 6302 A and is  
 (12) this a document that you basically prepared from the annual  
 (13) reports and the financial statements in the annual reports of  
 (14) Exxon?  
 (15) A Yes all these numbers there were taken from the annual  
 (16) reports with the exception I believe of two columns The  
 (17) market capitalization column is a calculated number and the  
 (18) stock price column is a number that was taken from  
 CompuServe  
 (19) which uses the Wall Street Journal as the source for its  
 (20) numbers  
 (21) Q And everything else came from the particular annual reports  
 (22) for the particular years indicated?  
 (23) A Yes  
 (24) Q Why did you - what was the purpose of this chart?  
 (25) A The purpose of this chart was to summarize a lot of

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- (1) financial information on one page to look at the financial  
 (2) indicators that we wanted to look at  
 (3) Q And is that over time?  
 (4) A Yes It's over the period of time 1988 through 1993  
 (5) Q Are there other financial indicators which you could have  
 (6) included on this chart?  
 (7) A Yes there are  
 (8) Q Could you name one or two?  
 (9) A Well in Exxon's 1993 annual report they have a page  
 (10) called financial summary and some of the other type items that  
 (11) are observed in there, working capital which is the ratio of  
 (12) current assets to current liability which we don't have up  
 (13) there Exploration expenses include dry holes research and  
 (14) development long term debt fixed charge ratio There are  
 (15) some included that we did not include  
 (16) Q Are any of those indicators inconsistent with anything on  
 (17) this chart?  
 (18) A No I don't believe so I think everything that you will  
 (19) see in the annual report is consistent with these overall  
 (20) measures  
 (21) Q Now I'm going to refer - to make life easy and not read  
 (22) each annual report for each figure I'm going to refer to the  
 (23) 1993 annual report and I'm going to call your attention first  
 (24) to the first - the first column is the year I don't think  
 (25) that needs an explanation The second column is assets and

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- (1) that's in terms of billions of dollars?  
 (2) A Yes sir  
 (3) Q And I'm going to put up the consolidated balance sheet from  
 (4) the 1993 annual report  
 (5) I apologize In order so they will come up better on the  
 (6) screen they were put on in high resolution and it takes a  
 (7) little bit longer for them to come up on the screen if at  
 (8) all Can you see that?  
 (9) A Barely  
 (10) Q Did this asset the number for 1993 come from that page?  
 (11) A Yes it did  
 (12) Q Which is the consolidated - what is the title of that  
 (13) chart?  
 (14) A Title of the chart is consolidated balance sheet  
 (15) Q And that is on page F 8 of the annual report?  
 (16) A Yes  
 (17) Q 1993 annual report?  
 (18) A Yes  
 (19) Q Is it possible - I've given you control of that document  
 (20) Can you blow it up a little so you can - the jury can see  
 (21) where the assets came from?  
 (22) A Yes Total assets are right there 84 145  
 (23) Q And that's rounded off?  
 (24) A To 84 15  
 (25) Q And it gives the number for 1992?

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- (1) A Yes 85 030  
 (2) Q What does that mean assets?  
 (3) A What that means is this is a summation of all of the assets  
 (4) that are included or owned by the Exxon Corporation  
 (5) Q So that in 1988 all of those assets totaled \$74 29 billion?  
 (6) A Yes  
 (7) Q And then they progressed in 1993 They are worth 84  
 (8) billion plus?  
 (9) A Yes That's their historical cost  
 (10) Q Now I would like to turn your attention to the other end of  
 (11) the chart if I may and there is a column called equity also  
 (12) listed in the billions of dollars Do you see that?  
 (13) A Yes  
 (14) Q What does that mean?  
 (15) A Equity is assets minus liability is the equation assets  
 (16) minus liability equals equity Equity represents the book  
 (17) value of the shareholders interest in these assets  
 (18) Q Is equity the same as net worth?  
 (19) A Yes it is  
 (20) Q So that can be - this could just as well be entitled net  
 (21) worth or shareholders equity?  
 (22) A Called shareholders equity in Exxon's balance sheet  
 (23) Q Now what is the relationship between the assets on the one  
 (24) end of the chart and the equity on the other end of the chart?  
 (25) A As I mentioned the equity is - excuse me - is the assets



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- (1) minus liability Trying to get it on here to show you  
 (2) Here are the assets \$84 billion Here are the liabilities  
 (3) of \$49 billion The assets minus the liabilities equals  
 (4) \$34 792 billion  
 (5) Q So in 1989 the shareholders equity was \$34 2 billion?  
 (6) A Yes  
 (7) Q And in 1993 it was worth \$34 79 billion?  
 (8) A Yes it is  
 (9) Q Now you mentioned book value Do you recall that?  
 (10) A Yes  
 (11) Q What is book value?  
 (12) A Book value is what is shown on the books and records of the  
 (13) Exxon Corporation at historical costs using whatever  
 (14) accounting conventions Exxon uses to record its cost or  
 (15) amortize its cost  
 (16) Q How does that relate to how the assets or the net worth of  
 (17) the equity is established?  
 (18) A I don't know what you mean by relate The assets are  
 (19) recorded at original cost and the equity is also an original  
 (20) cost equity It does not have anything to do with value  
 (21) Q So it's a bookkeeping method of keeping value?  
 (22) A It's a bookkeeping method of recording costs  
 (23) Q Does book value at any time reflect an increase in the  
 (24) value of an asset?  
 (25) A Not generally In a situation where a company would buy

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- (1) another company and pay more than its historical cost it could  
 (2) represent something different than historical costs but  
 (3) generally speaking it represents costs and there is no increase  
 (4) in the asset values each year for value  
 (5) Q Is there another way to reflect the value of assets or the  
 (6) net worth of a company other than by using the book value  
 (7) method?  
 (8) A Yes sir  
 (9) Q What is that?  
 (10) A Well one other method we chose to look at was the market  
 (11) capitalization  
 (12) Q Is that represented on this chart?  
 (13) A Yes it is  
 (14) Q That's this column here?  
 (15) A Yes it is  
 (16) Q Can you explain what you mean by that market  
 (17) capitalization and how it was arrived at?  
 (18) A Yes The market capitalization is a calculated number  
 (19) represents the number of shares outstanding times the stock  
 (20) price at any given point in time And what we have done is  
 (21) multiply - for example in 1988 the column called stock price  
 (22) of \$44 times 1 289 000 000 outstanding shares to arrive at the  
 (23) market capitalization of \$56 72 billion That multiplication  
 (24) wouldn't exactly work on a calculator because they are  
 (25) rounding and they are more rounding than 1 289 so it actually won't

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- (1) multiply to that exact number  
 (2) Q This is the number outstanding 1 289 million shares were  
 (3) outstanding in 1988?  
 (4) A Yes sir  
 (5) Q Is that a number that is set forth in the annual reports?  
 (6) A Yes sir  
 (7) Q Could I put up F-9 and the bottom half is an consolidated  
 (8) statement of shareholders equity Could you expand that on  
 (9) the screen at all?  
 (10) Can you just show the jury where you got the number of  
 (11) shares outstanding for 1993?  
 (12) A Yes For 1993 the common shares outstanding are  
 (13) 1 242 000 000 They are shown at the bottom of the page  
 (14) Q Now there is a substantial difference between market  
 (15) capitalization value if you use that for a net worth in 1993  
 (16) that would be \$78 billion versus the book value equity net  
 (17) worth of \$34 billion How do you correlate those two how do  
 (18) you describe that difference?  
 (19) A The book value number of 34 792 is historical cost value  
 (20) and today for example the common stock is selling for around  
 (21) \$60 a share That's more than the book value but the market  
 (22) value would be the share price times the number of outstanding  
 (23) shares and that would be - that's what the general investing  
 (24) public believes that the shares of Exxon are worth  
 (25) Q So can it be said that's sort of a marketplace indication

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- (1) of what the real net worth of the company is?  
 (2) A I would say the marketplace has assessed the value of Exxon  
 (3) at a price higher \$34 and currently it's around \$60 which  
 (4) would make it somewhere around \$75 billion  
 (5) Q Now in 1988 there was a 56 billion market capitalization?  
 (6) A Yes  
 (7) Q And that's the end of the year is that correct?  
 (8) A Those are all as of 12/31 yes sir  
 (9) Q And as of 12/31/89 which was the as we all know the year  
 (10) of the Exxon Valdez oil spill It increased to \$62 5 billion?  
 (11) A Yes  
 (12) Q So that's an increase in the market capitalization during  
 (13) the year of the spill of what?  
 (14) A Approximately \$5 8 billion  
 (15) Q And 12/31/88, which is the end of 1988 to the end of 1993  
 (16) what is the increase in the market capitalization?  
 (17) A It's about \$21 7 billion  
 (18) Q And that would be one way to estimate an increase and the  
 (19) net worth in Exxon Corporation?  
 (20) A That's the increase in the market capitalization which is  
 (21) what the market perceives the value to be  
 (22) Q Let's go to the next column which is revenues Okay?  
 (23) A Yes sir  
 (24) Q And that again is expressed in billions of dollars?  
 (25) A Yes it is

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- (1) Q What does revenues mean?  
 (2) A Revenues are the dollars that are coming in to Exxon Corporation from sales or other operating activities  
 (3) Q Can you tap that?  
 (4) A Yes they do  
 (5) Q Can you show us from the 1993 annual report where that came?  
 (6) A Yes they do  
 (7) Q Can you show us from the 1993 annual report where that came?  
 (8) A Cutting off part of it but the revenues on the consolidated statement of income for 1993 -  
 (9) Q Well first it came from the consolidated statement of net income is that correct?  
 (10) A Yes  
 (11) Q Consolidated statement of income and that's on F 9 of the annual report?  
 (12) A Yes and it shows here \$111 211  
 (13) Q And those are all of the revenues from operations?  
 (14) A Yes sir  
 (15) Q And they were 88 billion in 1988?  
 (16) A Yes  
 (17) Q And 96 billion in 1989?  
 (18) A Yes sir  
 (19) Q And now they are 111 billion?  
 (20) A Yes sir

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- (1) Q For 1993?  
 (2) A Yes sir  
 (3) Q Let's go to the next column which is entitled after tax net income and did those figures come from the annual reports?  
 (4) A Yes sir they did  
 (5) Q What does that figure represent can you just tell us?  
 (6) Just describe what do you mean by after tax net income?  
 (7) A After tax net income is revenues minus all the operating and other expenses other deductions and minus federal income tax to arrive at income after tax  
 (8) Q Is the after tax net income derived from revenues?  
 (9) A Yes it is  
 (10) Q Is that set forth in the consolidated statement of income?  
 (11) A Yes sir  
 (12) Q Can you just sort of quickly show the jury how that occurs how you get from revenue to net income?  
 (13) A Total revenues in 1993 are \$111 billion The expenses are - it's called cost and other deductions there is 103 billion and taxes for 2 772 billion to arrive at the after tax net income of \$5 280 billion  
 (14) Q So this is clear gravy at the end of the year?  
 (15) A I'm sorry?  
 (16) Q This is clear gravy at the end of the year?  
 (17) MR LYNCH Objection Your Honor  
 (18) THE COURT Sustain the objection

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- (1) BY MR MONTAGUE  
 (2) Q Those are retained profits at the end of the year?  
 (3) A Yes That is the amount of net income after paying all operating and other deductions operating expenses and other deductions  
 (4) Q In 1988 it was 5 26 billion?  
 (5) A Yes  
 (6) Q And in 1989 it was 3 51 billion?  
 (7) A Yes  
 (8) Q And in 1990 5 01 billion?  
 (9) A Yes sir  
 (10) Q And in 1993 5 28 billion?  
 (11) A Yes sir  
 (12) Q Let's talk where it develops to \$3 51 billion  
 (13) A Yes sir  
 (14) Q I'm going to put up on the screen Mr Rhodes the consolidated statement of income from the 1989 annual report which is at page 30 of that annual report Could you isolate the statement of income?  
 (15) A Yes sir  
 (16) Q Do you see under - do you see the column cost and deductions?  
 (17) A Yes I do  
 (18) Q One two three four five entries up from the bottom of cost and deductions is an item called Valdez provision Do you

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- (1) see that?  
 (2) A Yes I do  
 (3) Q Have you determined what that is?  
 (4) A Yes That is the provision for potential estimated loss that might be incurred regarding the Valdez Oil Spill as estimated at that point in time  
 (5) Q And can that be treated as a cost and then deducted from revenues?  
 (6) A Yes sir it is it is deducted from revenues in this instance  
 (7) Q What is the number assigned to that?  
 (8) A The number is 2 545 000  
 (9) Q Is that before or after tax number?  
 (10) A That is a before tax number  
 (11) Q Now I'm going to switch to the on the same - in the same 1989 annual report page 24 which is a financial summary Do you see that?  
 (12) A Yes sir  
 (13) Q Do you see - can you isolate the top half of that page down through net income Two lines up two lines up from the line net income there is a reference to a Valdez provision Do you see that?  
 (14) A Yes  
 (15) Q And if you look under 1989 it shows that as \$1 680 000?  
 (16) A Yes

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- (1) Q Is that an after tax number?  
 (2) A Yes it is That s the same 2 545 minus the taxes  
 (3) applicable to that  
 (4) Q Does that basically explain the drop in this net income in  
 (5) 1989?  
 (6) A Basically yes sir  
 (7) Q Can you tell from the 1989 report whether or not there was  
 (8) an effect because of that drop in net income on the investments  
 (9) and the costs and the expenditures for explorations and things  
 (10) of that sort?  
 (11) A Yes you can  
 (12) Q In 1989?  
 (13) A Yes you can  
 (14) Q And what did you find?  
 (15) A There was basically no impact There was substantially  
 (16) more spending in 1989 than there was in 1988  
 (17) Q And are there any - you can pick up the 1988 - 1989  
 (18) report if you want Can you just tell us the pages to which  
 (19) you re referring which support that conclusion?  
 (20) A There are several references but primarily the cash flow  
 (21) statement which is on page 31 would indicate how many  
 (22) dollars  
 (23) were spent one year versus another year And in 1989 for  
 (24) example on capital stock acquisition it s 4 158 000 the  
 (25) prior year was 0 On additions to property 6 313 on previous  
 year 5 9 Those two together show a \$4 billion expenditure

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- (1) from 1989 to 1988  
 (2) Q This column of after-tax net income does that tell you the  
 (3) amount of money that Exxon has to spend in its business after  
 (4) it s paid all operating costs?  
 (5) A No  
 (6) Q Is there something else you look at to find out how much  
 (7) money the company actually has to spend in its business after  
 (8) all its operating costs have been paid?  
 (9) A Yes You have to look at the statement of cash flows  
 (10) Q Is that represented by what you found in the next column?  
 (11) A Yes, it is  
 (12) Q Now is net income a part of cash flow?  
 (13) A Certainly, yes sir  
 (14) Q What is cash flow if you can tell us in sort of layman  
 (15) terms what it is?  
 (16) A Cash flow is all the money that goes into a company and  
 (17) goes out of a company but it s the items in addition to the  
 (18) net income that are not shown in the income statement that are  
 (19) shown on the cash flow statement borrowings, sales of stock  
 (20) sales of assets Things that are not included in the income  
 (21) statement are included in the cash flow statement  
 (22) Q Did that cash flow information come from the annual  
 (23) reports?  
 (24) A Yes it does  
 (25) Q Can you show us from the 1993 annual report cash flow

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- (1) statement how you get from 5 28 billion in after tax net income  
 (2) in 1993 to actually Exxon having 11 5 billion of cash flow to  
 (3) use in its business? Can you show us that?  
 (4) A Yes sir What s on the screen now is the consolidated  
 (5) statement of cash flow I m going to look at 93 The very  
 (6) first number that s shown on that cash flow statement is the  
 (7) net income so the cash flow statement starts with the income  
 (8) and then has other additions and subtractions to it The  
 (9) primary item included which increases the cash flow from  
 (10) operation is the adjustment for non cash transactions of  
 (11) depreciation and depletion If you take all the adjustments  
 (12) together add it to the Exxon net income it shows that they  
 (13) had 11 and a half billion dollars of cash flow in 1993  
 (14) available from operations  
 (15) Q And that s been pretty steady throughout the years other  
 (16) than 1989?  
 (17) A Yeah It s averaged around \$10 billion over the years  
 (18) There is an exception in 89  
 (19) Q Now have you determined how Exxon uses the cash flow?  
 (20) A Yes sir  
 (21) Q Have they pretty much used it in a historical basis over  
 (22) time?  
 (23) A It s been used fairly consistently over the time yes  
 (24) Q And could you tell us what you found?  
 (25) A Yes Basically the cash flow is used to replace assets or

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- (1) expand assets and it s called property plant and equipment  
 (2) and it s used to pay cash dividends Those are the two major  
 (3) uses of cash  
 (4) Q And are those these two columns (indicating)?  
 (5) A Yes they are  
 (6) Q And are they also out of the 1993 annual report for 1993?  
 (7) A Yes they are The \$11 billion shown as the cash flow here  
 (8) and the very next item is additions to property plant and  
 (9) equipment That is the number that we looked at or the  
 (10) number  
 (11) that s shown here and down on the next section of financing  
 (12) activities the payments on dividends \$3 63 billion  
 (13) Q Billions of dollars?  
 (14) A Yes  
 (15) Q And I take it that s the total dividends paid to Exxon  
 (16) shareholders for a particular year?  
 (17) A It s the cash dividends paid to Exxon shareholders yes  
 (18) Q So in 1993 with the 11 500 000 million cash flow  
 (19) 6 960 000 000 was invested in property plants and equipment?  
 (20) A Yes  
 (21) Q And 3 63 billion was distributed to the Exxon shareholders  
 (22) as cash dividends?  
 (23) A Yes sir  
 (24) Q And the same - those numbers reflect how the cash was  
 (25) utilized for those other years?  
 (26) A Yes You can see on the page there are other numbers but

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- (1) when you add and subtract all of them there they are not  
 (2) significant  
 (3) Q Am I correct again that the main flow from net income to  
 (4) cash flow is the depreciation and oil depletion allowance?  
 (5) A Yes The non cash deductions that are in the statement are  
 (6) depreciation and depletion  
 (7) Q That s a deduction for tax purposes but it doesn t take  
 (8) any money out of your pocket?  
 (9) A That s correct  
 (10) Q That s how you get the true amount of dollars that the  
 (11) company gets?  
 (12) A Yes  
 (13) Q I d like to put on top of this for a second a second chart  
 (14) which is PX6317 B Can you see that?  
 (15) A Yes sir  
 (16) Q This is entitled cash flows 1988 to 1993?  
 (17) A Yes sir it is  
 (18) Q And was this an attempt to sort of summarize the source of  
 (19) the cash flow and how it was expended in one easy chart?  
 (20) A Yes I didn t want to have to go through each of the  
 (21) various items This way it summarizes it in one line item  
 (22) called other  
 (23) Q And these numbers coincide with these numbers which  
 (24) coincide with what was in the annual reports?  
 (25) A Yes These are an exact recast of the numbers concluded in

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- (1) the financial statements  
 (2) Q So I d just like to - in 19 - from 1988 to 1989 the net  
 (3) income diminished is that correct?  
 (4) A Yes  
 (5) Q And from 1988 to 1989 the cash flow diminished?  
 (6) A Yes sir  
 (7) Q But the property plant and equipment additions increased  
 (8) from 1988 to 1989?  
 (9) A Yes sir they did  
 (10) Q And the total amount of dividends paid to Exxon  
 (11) shareholders increased from 1988 to 1989?  
 (12) A Yes  
 (13) Q Does that same phenomenon occur in 1992 when there is a  
 (14) lesser amount of net income and a lesser amount of cash flow  
 (15) the expenditures for property plant and equipment basically  
 (16) stay the same as the prior year?  
 (17) A Yes sir there are a few million dollars less  
 (18) Q And the amount of dividends increased?  
 (19) A It went up  
 (20) Q I don t know that I asked you this but is the statement of  
 (21) cash flow is that something that is required to be in the  
 (22) annual statements of corporations?  
 (23) A Yes it is  
 (24) Q And have you found that in addition to the actual cash flow  
 (25) statement that appeared in the 1993 annual report that Exxon

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- (1) actually commented - made a narrative comment on the cash  
 (2) flow?  
 (3) A Yes sir they do on almost every report  
 (4) Q I d like to refer you to page F 6 of the 1993 annual  
 (5) report which is entitled management s discussion and analysis  
 (6) of financial condition and results of operations And do you  
 (7) see the liquidity the section beginning liquidity and capital  
 (8) resources?  
 (9) A Yes  
 (10) Q Could you just bring up that paragraph under that?  
 (11) A Just the one paragraph?  
 (12) Q Yes  
 (13) A Okay  
 (14) Q It says - this is a narrative to the shareholders?  
 (15) A Yes this is right out of the annual report  
 (16) Q They are saying to the shareholders in 1993 cash provided  
 (17) by operating activities totaled 11 5 billion up 1 9 billion  
 (18) from 1992 major sources of the funds were net income rounded  
 (19) off to 5 3 billion and non cash provisions of 4 9 billion for  
 (20) depreciation and depletion  
 (21) Is that in accord with the way you calculated?  
 (22) A Yes sir that s what I said earlier  
 (23) Q The next column Mr Rhodes is the earnings per share Do  
 (24) you see that - I m sorry we have already covered the stock  
 (25) price

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- (1) Earnings per share do you see that?  
 (2) A Yes  
 (3) Q What does that represent?  
 (4) A That represents the amount in dollars of earnings  
 (5) attributable to one share of stock For example in 1988  
 (6) that s \$3 95 per share  
 (7) Q I m going to - and that came out of the annual reports?  
 (8) A Yes sir  
 (9) Q Could you just show us for 1993 where that comes from?  
 (10) A Yes This is on page F 3 It s called financial summary  
 (11) and about the middle of the page here it shows the net income  
 (12) of 5 280 000 and right below it is the amount of earnings per  
 (13) share  
 (14) Q And that s where those figures came from?  
 (15) A Yes sir they did  
 (16) Q They have gone from \$3 95 This isn t in the billions  
 (17) this is dollars?  
 (18) A Right  
 (19) Q To \$4 21 per share?  
 (20) A Yes it is  
 (21) Q Now that s not money that the shareholder sees that s  
 (22) just what the earnings are per share within the corporation?  
 (23) A That s correct  
 (24) Q And that s income not cash flow?  
 (25) A Right

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- (1) Q Does anyone ever look at earnings per share on a cash flow basis?
- (2) A People look at cash flow per share investment advisors do
- (3) Q Have you made those calculations for Exxon?
- (4) A I have not made any detailed schedule of them I have made the calculations
- (5) Q Now how about the dividends per share the next column?
- (6) A That also comes from the same page and it s the line right below net income per share where I have a blue mark on the page
- (7) Q And these numbers also came out of the annual reports?
- (8) A Yes sir
- (9) Q And they are accurate?
- (10) A Yes sir
- (11) Q The only reason I ask is that in 1989 the earnings per share dropped Do you see that?
- (12) A Yes
- (13) Q The dividend increased from 1988?
- (14) A Yes it did
- (15) Q Is that correct?
- (16) A Yes it is
- (17) Q In 1992 the same thing happened earnings per share dropped and the dividend to shareholders increased That s not a mistake?
- (18) A No

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- (1) Q Do you have Exhibit 863 in front of you? That s a March 1994 proxy statement from Exxon?
- (2) A 863?
- (3) Q Yes
- (4) A Yes sir I have it
- (5) Q Have you reviewed this proxy statement?
- (6) A Yes sir I have
- (7) Q And is the information set forth in the proxy statement usually of the same accuracy and given with the same care as an annual report puts forth statements?
- (8) A I don t know if it s given the exact same care but it s generally thought to be very accurate information
- (9) Q Is it the type of information that a certified public accountant relies on for information?
- (10) A Yes sir
- (11) Q Could you look please at page 8 of the 19 - March 1994 proxy statement from Exxon Corporation and that goes to shareholders right?
- (12) A Yes sir
- (13) Q Can you tell me what appears on that page?
- (14) A On page 8 is the executive compensation called a summary compensation table
- (15) Q Can you blow up a part of that just so everybody can get a better look at it? We re not going to spend much time on it
- (16) And that sets forth the salary and the bonuses and stock

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- (1) options and so forth that the particular executive received during a particular year?
- (2) A Yes sir
- (3) Q And it compares it to a couple years earlier?
- (4) A Yes sir it does
- (5) Q Are those salaries and bonuses treated as operating expenses?
- (6) A Yes they are
- (7) Q And would those salaries and bonuses be conducted from revenues in order to reach the after tax income?
- (8) A Yes they are
- (9) Q I think I m going to need the Elmo
- (10) Can you turn to page 14 of that proxy statement please?
- (11) A Yes sir I have it
- (12) Q Can you explain what that page depicts?
- (13) A Yes sir This page primarily emphasizes the value of the shares of Exxon stock over a period of time from in one graph 1988 through 1993 and the other line graph from 1983 to 1993
- (14) Q And this is paid to Exxon shareholders?
- (15) A Yes sir
- (16) Q Now did you prepare a chart to show that in a little different way because of the viewing problems?
- (17) A Yes we did
- (18) Q Can you see that?
- (19) A Yes I can see it

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- (1) Q Plaintiffs Exhibit 862
- (2) Is that a chart that just depicts in a bar graph way rather than a line way the information that s set forth on this second chart?
- (3) A Yes it does
- (4) Q This bottom chart?
- (5) A Yes sir
- (6) Q Now there are two charts on that page correct?
- (7) A Yes sir there are
- (8) Q And you chose to make - that s the best I can do
- (9) You chose to make a graph a bar chart of the ten year cumulative returns?
- (10) A Yes sir
- (11) Q Now could you explain the ten year cumulative increase in value of \$100 invested at year-end 1983?
- (12) A This is a chart to show someone who might have invested \$100 in 1983 in Exxon stock and each year thereafter invested the returns
- (13) Q Does that include the increase in the growth of the stock the stock price increasing over time?
- (14) A Yes sir
- (15) Q So that s both the dividends received plus the growth of the stock?
- (16) A Yes
- (17) Q And what is - the yellow represents Exxon?

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- (1) A The yellow is Exxon the green is the S & P 500 and the  
 (2) blue is an industry group of seven companies that have similar  
 (3) makeup as Exxon  
 (4) Q What does that show if you invested a hundred dollars in  
 (5) Exxon in 1983 versus the Standard and Poor s represented  
 500?  
 (6) A Yes  
 (7) Q And the seven similar oil companies it shows that Exxon  
 (8) outperformed them all?  
 (9) A Yes it shows that  
 (10) Q That in 1983 a hundred dollars in 1983 would be 577 in  
 (11) 1993?  
 (12) A Yes sir  
 (13) Q And this is 400 for the S & P?  
 (14) A Right  
 (15) Q Versus \$516?  
 (16) A For the industry group  
 (17) Q So it outperformed them all?  
 (18) A Yes sir  
 (19) Q Now there is another chart on here correct?  
 (20) A Yes sir there is  
 (21) Q And that s a five year chart?  
 (22) A That s correct it s from 1988 through 1993  
 (23) Q And is there a reason you chose to use the ten year chart  
 (24) rather than the five-year chart?  
 (25) A The primary reason is that I believe and I think most

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- (1) investment of a hundred dollars and the others S & P 500 and  
 (2) the industry group in 1989 substantially outperformed Exxon  
 (3) which kept it lower than the S & P 500 and the industry group  
 (4) for the remainder of the five year period of time  
 (5) Q But it didn t affect any other year?  
 (6) A No  
 (7) Q Lastly I d like to show you Exhibit 6316 Can't seem to  
 (8) get it all on  
 (9) Exxon Corporation stock repurchases?  
 (10) A Yes it is  
 (11) Q Is that a chart that you performed?  
 (12) A Yes it is  
 (13) Q Can you tell us what that shows?  
 (14) A Yes This chart shows that Exxon has invested  
 (15) approximately \$16 977 billion in the acquisition of treasury  
 (16) shares common stock and they have bought back 571 million  
 (17) shares as of the end of 1993  
 (18) Q The chart here shows in 1993 there was 1 242 000 000  
 shares  
 (19) of stock outstanding?  
 (20) A Yes  
 (21) Q Does that include this 571 million?  
 (22) A No Exxon has 1 813 000 shares issued with 1 242 000  
 (23) outstanding The difference is the shares held in treasury  
 (24) Q Now that stock - well does that stock receive cash  
 (25) dividends?

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- (1) investor analysts believe that you need to look at a company  
 (2) over a period of time to see what the trends are The  
 (3) five year period of time shown here is fine and you can look at  
 (4) it I just chose to use the other one  
 (5) Q Well this chart let s be fair shows that from 1988 to  
 (6) 93 Exxon didn t perform as well - the Exxon stock didn t  
 (7) perform as well as the other two groups?  
 (8) A What it says over the period from 88 to 93 and it s the  
 (9) same type of investment in the ten-year with the investment  
 (10) growth of dividends and value that a hundred dollar investment  
 (11) in Exxon grows to 182 versus the Standard & Poor s 197 and the  
 (12) industry group 209  
 (13) Q Did you at my request determine what would happen if you  
 (14) took this chart and either started it in 1987 or started it in  
 (15) 1989 -  
 (16) A Yes  
 (17) Q - and went through 1993?  
 (18) A Yes  
 (19) Q And what would happen?  
 (20) A Under both sets of circumstances that Exxon would  
 (21) outperform the Standard & Poor s 500 and the industry group  
 (22) Q So it would be on top just as it was on the other chart  
 (23) that we saw?  
 (24) A Yes The reason this chart is - coincidentally the year  
 (25) 1989 the year of the Valdez spill is the first year after the

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- (1) A The treasury shares do not receive dividends  
 (2) Q They are just lying in the treasury and they are not  
 (3) included in this outstanding stock number?  
 (4) A No they are not  
 (5) Q And this is stock that is in Exxon s treasury for which  
 (6) they paid 17 billion -  
 (7) A Yes sir  
 (8) Q - is that stock available for sale if Exxon wanted to sell  
 (9) it?  
 (10) A I presume if Exxon wanted to sell it they could sell it in  
 (11) the open market  
 (12) Q Can you tell from the financial reports or from your  
 (13) experience where the \$17 billion came over time to purchase  
 (14) that stock?  
 (15) A Yes sir came from cash flow  
 (16) Q Comes from cash flow?  
 (17) A Yes sir  
 (18) MR MONTAGUE I have no further questions Your  
 (19) Honor  
 (20) THE COURT Take our second recess at this point  
 (21) Ladies and Gentlemen Please don t have any discussions  
 about  
 (22) the case during our recess We will reconvene in 15 minutes  
 (23) (Jury out at 12 00)  
 (24) (Recess from 12 00 to 12 15)  
 (25) (Jury in at 12 15)

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- (1) THE COURT Mr Lynch you may cross examine  
 (2) CROSS EXAMINATION OF SAMUEL RHODES  
 (3) BY MR LYNCH  
 (4) Q Mr Rhodes let me begin by asking you a question about  
 (5) PX6317 B This last column here totals up your cash flow  
 (6) calculations over the entire period is that correct?  
 (7) A Yes  
 (8) Q And do I correctly understand that that indicates that over  
 (9) that five-year period the expenditures made by Exxon exceeded  
 (10) the cash flows?  
 (11) A Yes sir they do  
 (12) Q So Exxon actually paid out more than it took in or that it  
 (13) was entitled to claim as deductions or depreciation?  
 (14) A Yes It s shown on the very bottom line that the cash  
 (15) balance actually declined by that difference That s what that  
 (16) is  
 (17) Q So over that five year period from a cash standpoint it  
 (18) had less cash on hand at the end of five years than when it  
 (19) started?  
 (20) A Yes sir  
 (21) Q Now you mentioned - I think I heard you say that  
 (22) depreciation and depletion are tax things that don t involve  
 (23) laying out money Is that what you said to Mr Montague?  
 (24) A No sir  
 (25) Q It is in fact the case that depreciation and depletion are

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- (1) if I want to keep it running I have to supply myself with oil  
 (2) or I won t have anything to sell at my gas stations?  
 (3) A Sure  
 (4) Q Now with reference to this item what you call market  
 (5) capitalization item this item is simply a matter of  
 (6) calculating the number the total number of shares which I  
 (7) think you had on here?  
 (8) A Right next to it  
 (9) Q Times the price of 63 and what s that 125 right?  
 (10) A Yes sir  
 (11) Q And that was the price on the year end 1992 according to  
 (12) CompuServe?  
 (13) A 1993 yes  
 (14) Q You re in 1993 Did you see how many shares actually  
 (15) traded at that price of 63 125?  
 (16) A No it s immaterial  
 (17) Q Well CompuServe does indicate that doesn't it sir?  
 (18) A Yes they do It s an irrelevant number  
 (19) Q Why do you say it s irrelevant?  
 (20) A The purpose of looking at market capitalization is not to  
 (21) look at it at a point in time or at a share trading It s to  
 (22) look at it as a trend over time and to determine where the  
 (23) company is headed Is it headed up down or sideways  
 (24) Q I thought you told Mr Montague this represented the  
 (25) valuation of the company by billions in the market Is that

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- (1) ways in which you gradually take credit for what you laid out  
 (2) to acquire assets is that correct sir?  
 (3) A I don t use the word credit but we agree  
 (4) Q If I buy a computer for my office this year I can t deduct  
 (5) it all at once?  
 (6) A Right you have to depreciate it every time  
 (7) Q But I ve laid out the money?  
 (8) A Yes sir  
 (9) Q In fact sometimes I laid out a lot of money at the start  
 (10) and I only get it back a little at a time right?  
 (11) A It s true that the concept of depreciation and  
 (12) amortization you layout money on the front end and it comes  
 (13) back over time as to the size it -  
 (14) Q How you choose to finance it?  
 (15) A Yes  
 (16) Q Now if I do in fact get money back that I ve already  
 (17) invested in equipment or oil and gas leases which are running  
 (18) down or whatever and I want to keep my business running I  
 (19) generally have to replace those things do I not?  
 (20) A Yes  
 (21) Q I m not entirely free to take that money and treat it as  
 (22) somebody once suggested pure gravy?  
 (23) A Well you have a discretion as to your overall plan where  
 (24) you invest your money  
 (25) Q And I have the discretion to close down the business but

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- (1) what you said?  
 (2) A That's pretty much what it says in terms of what the market  
 (3) would place on the value of the shares or equity of Exxon  
 (4) Q Would it make a difference whether a thousand shares were  
 (5) offered for sale or a billion?  
 (6) A At any one trade it would  
 (7) Q If someone tried to put a billion shares on the market on  
 (8) December 31st of 1993 that would certainly affect the price?  
 (9) A Probably wouldn t trade  
 (10) Q That means they couldn t sell it?  
 (11) A It means they probably wouldn t trade that day  
 (12) Q And if something of significance happened the day before  
 (13) shares might fall four five six dollars to a price of \$63  
 (14) right?  
 (15) A Yes sir it has happened  
 (16) Q That capitalization could change by billions of dollars in  
 (17) a matter of two or three days?  
 (18) A Which is exactly where you look at it over time and not on  
 (19) that particular day  
 (20) Q Now with reference to market capitalization what you re  
 (21) talking about when you say somebody paid \$63 is that some  
 (22) private owner of Exxon shares sold those shares to somebody  
 (23) else for about \$63 12 right?  
 (24) A There was a trade yes  
 (25) Q But not with Exxon it wasn t a trade with Exxon?

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- (1) **A** No It was an open market trade between one owner and one  
 (2) non owner  
 (3) **Q** That trade didn't put any money in Exxon's pocket?  
 (4) **A** No sir  
 (5) **Q** The balance sheet that you talked about with Mr. Montague  
 (6) at length didn't go there?  
 (7) **A** Correct  
 (8) **Q** In fact every year that you talked about if you look at  
 (9) the shareholders' equity reports in the Exxon financial -  
 (10) year-end financial statements the value to Exxon of the  
 common  
 (11) shares that is outstanding is identical isn't it?  
 (12) **A** That is what went - the stated value is -  
 (13) **Q** The value that went into Exxon's treasury that didn't  
 (14) change did it?  
 (15) **A** They never will  
 (16) **Q** But when Exxon sells the stock the first time, that's all  
 (17) Exxon ever gets for it?  
 (18) **A** That's correct  
 (19) **Q** And the trades that take place in the public market Exxon  
 (20) can't take that money and use it to buy oil wells or gas  
 (21) stations can they?  
 (22) **A** It's not Exxon's money no  
 (23) **Q** Now with reference to treasury shares those shares once  
 (24) they are sold back to the company, they reduce the number of  
 (25) shares in the market?

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- (1) smaller part of Exxon?  
 (2) **A** Probably  
 (3) **Q** And in order to keep shareholders satisfied it would be  
 (4) necessary to pay them higher dividends or show in some other  
 (5) advantage to them to get them to invest in Exxon?  
 (6) **A** I don't know that Each individually makes his own  
 (7) criteria for investments  
 (8) **Q** Now from the standpoint of the accounting profession what  
 (9) you typically look at when you talk about the net worth of the  
 (10) corporation is the shareholders' equity what is inside the  
 (11) corporation not what's outside the corporation?  
 (12) **A** The accounting rules are historical cost oriented and they  
 (13) would be the shareholders' equity  
 (14) **Q** The shareholders' equity and they may or may not be  
 (15) reflective of current market value market value might have  
 (16) gone up or down historically?  
 (17) **A** I would generally say I don't think it would ever probably  
 (18) approximate what the book value is It would be different  
 (19) **Q** Higher or lower?  
 (20) **A** Yes  
 (21) **Q** For example if you owned oil and gas leases in the central  
 (22) valley of California and you paid for them in the early 80s  
 (23) you probably took a substantial loss on them?  
 (24) **A** Yes  
 (25) **Q** And if those were a part of your shareholders' equity your

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- (1) **A** That's correct  
 (2) **Q** Would be like if you owned shares in Jackson & Rhodes and  
 (3) you sold some of your shares to Mr. Jackson you would own a  
 (4) little less and him a little more?  
 (5) **A** Yes  
 (6) **Q** And if the corporation bought it back from you each of  
 (7) your remaining shares would represent a little more of the  
 (8) company?  
 (9) **A** Yes  
 (10) **Q** Accountants don't treat treasury shares as an asset?  
 (11) **A** It's not treated as an asset notwithstanding that it is an  
 (12) asset  
 (13) **Q** Well the corporation can authorize issuance of new shares?  
 (14) **A** Well up to a limit I think Exxon's authorized 2 billion  
 (15) and they have issued 1.8 so within that limit  
 (16) **Q** But the shareholders can authorize more at any minute?  
 (17) **A** Sure  
 (18) **Q** And they can issue new shares as opposed to selling  
 (19) treasury shares?  
 (20) **A** Yes  
 (21) **Q** And it's possible that Exxon could go out to the  
 (22) stockmarket and try to sell stock?  
 (23) **A** That's one possibility  
 (24) **Q** And if they did that then they would go back and the  
 (25) shares of each shareholder would be worth less a little

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- (1) shareholders' equity would look bigger not smaller?  
 (2) **A** Your shareholders' equity would look bigger than the actual  
 (3) value  
 (4) **Q** Now a big factor in the market valuation of stock is the  
 (5) dividend that is paid on a stock is that correct?  
 (6) **A** It is a factor  
 (7) **Q** And there are some stocks which are particularly viewed as  
 (8) representing a return a dividend return to the shareholder, is  
 (9) that correct? In other words, someone like a retired person or  
 (10) a person thinking of financing a college education might look  
 (11) for a stock that pays a steady dividend?  
 (12) **A** They may each have their own criteria  
 (13) **Q** That's a recognized criterion?  
 (14) **A** Sure  
 (15) **Q** And there are certain stocks that are recommended on the  
 (16) basis of having that criterion is that correct?  
 (17) **A** Yes  
 (18) **Q** And a company that takes a very large share of its net  
 (19) income and pays it out as dividends is attractive to people who  
 (20) need a steady income?  
 (21) **A** If it's a yield commensurate with what they need yes  
 (22) **Q** Could you explain what you mean by that?  
 (23) **A** Well they may not be investing in a stock that gives them  
 (24) back - just because you're paying out a hundred percent of  
 (25) what you earn doesn't necessarily mean you're giving them a



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- (1) five percent yield or one percent yield So the issue is  
 (2) whether what s paid back is commensurate to satisfy the  
 (3) investors requirements  
 (4) Q One of my choices for my son s college education would be  
 (5) U S savings bonds?  
 (6) A Yes  
 (7) Q I ll get a yield out of that?  
 (8) A Yes  
 (9) Q Another might be a CD at a savings and loan?  
 (10) A That s correct  
 (11) Q And another might be a corporate stock that pays a steady  
 (12) dividend?  
 (13) A Yes  
 (14) Q And I would look at the market price of that stock and I  
 (15) would n t be interested if its dividend was way below what a  
 (16) U S savings bond was paying?  
 (17) A That s correct if that s all you looked at  
 (18) Q So I would have to show a respectable return on investment  
 (19) in order for my stock to remain attractive to shareholders?  
 (20) A Yes  
 (21) Q Assuming that s the basis on which investors are attracted  
 (22) to my stock?  
 (23) A On that basis yes  
 (24) Q With reference on that subject Exhibit 863 - which was  
 (25) the 1994 proxy statement

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- (1) A Yes sir  
 (2) Q Do you happen to know from your training and experience if  
 (3) it s required that a corporation include this information in  
 (4) its proxy statement?  
 (5) A I don t know whether it s required or not I doubt that  
 (6) that would be required  
 (7) Q Do you happen to know whether the five years return on  
 (8) investment is the one specified by the SEC as the form of the  
 (9) report?  
 (10) A Off the top of my head I don t know Is it 864? I only  
 (11) have 863  
 (12) Q You are correct I just read it wrong no other excuse  
 (13) Now you indicated that the Exxon financial statement  
 (14) contained certain information and that there was a supplement  
 (15) to that statement Is that correct? Are you familiar with  
 (16) those supplements?  
 (17) A I don t recall saying there is a supplement but there is  
 (18) one and I m aware of it  
 (19) MR LYNCH I think you put up DX6334  
 (20) THE WITNESS Yes sir  
 (21) MR LYNCH And DX 6322 And Your Honor I would  
 (22) offer both of those  
 (23) (Exhibits DX6334 and DX6322 offered)  
 (24) THE COURT Numbers again were?  
 (25) MR LYNCH DX6334 and 6322

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- (1) MR MONTAGUE No objection  
 (2) THE COURT They are admitted  
 (3) (Exhibits DX6334 and DX6322 received)  
 (4) BY MR LYNCH  
 (5) Q Now these are regularly issued also glossy printed  
 (6) financial booklets that would have the same general purposes  
 (7) you described for the annual report  
 (8) A Yes It s my understanding and only an understanding  
 (9) that you have to request this document generally  
 (10) Q But that would be - someone who would request it would be  
 (11) someone who would be interested in analyzing the financial  
 (12) performance of Exxon Corporation?  
 (13) A Yes sir  
 (14) Q Such as a shareholder or other interested party?  
 (15) A Yes sir  
 (16) Q And is it possible to ascertain from this information -  
 (17) well first of all it is reported in these documents that  
 (18) Exxon s business is conducted in 80 different countries  
 (19) correct?  
 (20) A I ll accept that number I know it s a substantial number  
 (21) Q Look on the first page of the 93 supplement which I think  
 (22) is 8322 - 6322 Do you see where it says divisions and  
 (23) affiliated companies of Exxon operate in more than 80  
 (24) countries?  
 (25) A Yes sir

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- (1) Q Now if someone wanted to determine how much of the  
 revenue  
 (2) and how much of the income that you were talking about with  
 Mr  
 (3) Montague was attributable to the operations of Exxon  
 (4) Corporation in the United States in their oil and gas field  
 (5) that would be contained in this document correct?  
 (6) A Yes I believe that s also contained in the annual report  
 (7) but I think it s in both places  
 (8) Q So for example in 1989 are you able to tell looking - I  
 (9) think if you look at page 12 of the 6322 could you tell us  
 (10) what the oil and gas income of Exxon Corporation in the United  
 (11) States was?  
 (12) A No I don t think so, because it says return on capital  
 (13) Q I m sorry I ve got the wrong page It s the preceding  
 (14) page 10 It s 1133 and 728 is that correct sir?  
 (15) A You ll have to point me to where you re looking I don t  
 (16) know where to look  
 (17) MR LYNCH Excuse me May I Your Honor?  
 (18) THE COURT Yes  
 (19) BY MR LYNCH  
 (20) Q Okay  
 (21) A Under the heading of functional earnings of petroleum and  
 (22) natural gas it would be the United States 1 133 000  
 (23) Q About that - about how much of Exxon s total income would  
 (24) that represent?  
 (25) A In 89 approximately 28 29 percent 30 percent

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- (1) Q So 70 72 percent came from the operations in these 80  
 (2) other countries and non oil and gas operations?  
 (3) A Yes Actually it s going to be actually a little more than  
 (4) that 32 33 percent  
 (5) Q So it s one-third to two-thirds?  
 (6) A Yes  
 (7) Q And that s in 89?  
 (8) A Yes sir  
 (9) Q If you look at this chart is that generally true from year  
 (10) to year?  
 (11) A I don t think so  
 (12) Q How do you find them?  
 (13) A I find or it appears -  
 (14) Q Does it grow or diminish?  
 (15) A The portion of income - excuse me let s state it  
 (16) clearly The portion of petroleum and natural gas income  
 (17) attributable to the United States versus everything else  
 (18) declines over time  
 (19) Q So a larger share of the total income that you presented on  
 (20) this chart 6302 A in every year after 1989 is attributable to  
 (21) operations that Exxon conducted in 80 other countries share  
 (22) gross I understand you to say?  
 (23) A Can I state it my way?  
 (24) Q Sure  
 (25) A I think what you said was after 1988 the -

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- (1) Q 1989  
 (2) A After 1989 the relative - the amount of income changed to  
 (3) be more towards non U S than U S  
 (4) Q So if we re looking at this column on your chart  
 (5) 6302 Alpha I think it is where you have 5 2 and then 3 1 3 5  
 (6) a greater share of that total income is attributable to income  
 (7) that was earned in England or Bangladesh or Japan than the  
 (8) United States in the successive years?  
 (9) A It changes  
 (10) Q And it changes in the direction of less and less income  
 (11) coming back to Exxon from what it does in the United States?  
 (12) A Yes  
 (13) Q Let s do turn to that next page which is return on capital  
 (14) employed in the business  
 (15) A Yes sir I have it  
 (16) Q Is that - if you look at that that s page 12 of the 1993  
 (17) supplement is it not sir?  
 (18) A Yes sir  
 (19) Q What does that tell you about the kind of return that is  
 (20) realized by Exxon for what it puts into its business in the  
 (21) United States the investment that it makes in the United  
 (22) States?  
 (23) A It says in 1989 - is that the year you re asking about?  
 (24) Q Yeah Well just compare 1989 to U S to non U S as an  
 (25) example?

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- (1) A Well U S is less or it s about half of what non U S is  
 (2) Q So the return on the dollars that Exxon invested in  
 (3) drilling up oil and gas and refining it and selling it in the  
 (4) United States in 1989 was 9 3 percent on its investment?  
 (5) A Yes sir  
 (6) Q And what it was earning in England and other parts of the  
 (7) world was 18 6 percent?  
 (8) A Yes sir  
 (9) Q In 1990 it was 10 percent in the United States?  
 (10) A Yes sir  
 (11) Q And 25 percent in other parts of the world?  
 (12) A Yes sir  
 (13) Q Now is it correct to say that what this chart tells us  
 (14) when we look at the total revenue of 88 - 88 thousand million?  
 (15) A How about 88 billion?  
 (16) Q A billion is a thousand million?  
 (17) A Right  
 (18) Q You agree?  
 (19) A Yes  
 (20) Q Sometimes the English have a different terminology but -  
 (21) 88 thousand million and 5 thousand million of earnings?  
 (22) A Yes  
 (23) Q Something like six seven cents on the dollar at that time  
 (24) came down as net earnings?  
 (25) A Yes sir The numbers are in here I think it s 7 4 but

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- (1) it s about 7 cents  
 (2) Q And then the following year it was down to less than four  
 (3) cents that s 89?  
 (4) A Well the number is in here so I don t know where  
 (5) Q I don t offhand or I would obviously point you right to  
 (6) it  
 (7) A But I can tell you over some time its averaged around a  
 (8) nickel  
 (9) Q A nickel on the dollar?  
 (10) A Yes  
 (11) Q Did you look at how much of that nickel comes from U S  
 (12) operations versus how much comes from overseas operations?  
 (13) A No  
 (14) Q But if we look at the percent of income we would take it  
 (15) would be about a penny?  
 (16) A I don t know  
 (17) Q Well a nickel is five pennies right?  
 (18) A I thought you were asking about the portion between the  
 (19) U S and the outside  
 (20) Q Right Didn t you tell me that the figures that we looked  
 (21) at indicated in the years after 1989 U S income represented  
 (22) about 20 percent of the total?  
 (23) A I didn t say that I don t know what it would represent  
 (24) Q Why don t you go back to page ten Does that indicate to  
 (25) you just looking roughly that the percent of income

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- (1) attributable to oil and gas operations in the United States is  
 (2) about 27 percent in 90?  
 (3) A I don't know I haven't made the calculations  
 (4) Q But you do agree it's a falling number correct?  
 (5) A Yes, it sure is  
 (6) Q And it's less than half in all cases?  
 (7) A On petroleum and natural gas yes  
 (8) Q Just ask a couple more questions  
 (9) You indicated that looking at cash flows it appeared to  
 (10) you that the two major factors on which Exxon expended its  
 (11) money were improvements to property plant and equipment  
 and  
 (12) dividends correct?  
 (13) A Yes sir  
 (14) Q That's the lion's share?  
 (15) A Yes sir  
 (16) Q And dividends if you just related dividends to net  
 (17) earnings are a very high percentage of Exxon's net earnings  
 (18) correct?  
 (19) A I've seen higher and lower  
 (20) Q Well in the period we're talking about was it ever lower  
 (21) than 60 percent of net income?  
 (22) A No I don't think so I think it ranged between 60 and 75  
 (23) or something like that  
 (24) Q Got as high as 85 percent in 89?  
 (25) A Whatever it's disclosed in here so we can look at it

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- (1) Q But that's a high percent of income attributed to  
 (2) shareholder dividends is that correct?  
 (3) A Well it is and the year that it gets high you have a low  
 (4) income so your dividend payout ratio goes up and next year  
 (5) it goes down when you have a different situation  
 (6) Q As a ratio?  
 (7) A Yes  
 (8) Q But in the best year it was 60 percent That's the year  
 (9) that the ratio was the lowest?  
 (10) A I don't know whatever it is  
 (11) Q Well, didn't you just tell me a few minutes ago that you  
 (12) calculated it was between 60 and 75 percent?  
 (13) A That's my recollection it was in that range We can look  
 (14) at the numbers in here and not guess is all I was trying to get  
 (15) at  
 (16) Q Well I'm actually trying to move this along I've got  
 (17) that all - I could tediously take you through that but it's  
 (18) against my nature to be tedious  
 (19) MR O NEILL That's a fair statement  
 (20) MR LYNCH Just a couple more questions  
 (21) BY MR LYNCH  
 (22) Q I just have one more - couple of questions  
 (23) You mentioned that expenditures in 1989 increased  
 (24) substantially?  
 (25) A Cash flow expenditures for PP&E and capital investment

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- (1) yes  
 (2) Q Did you look into the timing of those expenditures?  
 (3) A No I don't know exactly when I know the biggest piece of  
 (4) that was a 4.1 billion dollar expenditure in Canada  
 (5) Q And that was a commitment that was made prior to March 24  
 (6) 1989 wasn't it sir?  
 (7) A Yes I think it was I don't think you'd close a deal that  
 (8) hadn't been thought about before then  
 (9) Q Well the deal had closed before the Exxon Valdez occurred?  
 (10) A I don't know  
 (11) Q Exxon was contractually obligated to pay out that money  
 (12) even though it - these other expenses?  
 (13) A I don't know  
 (14) Q You didn't look into that?  
 (15) A No  
 (16) MR LYNCH I have no other questions Your Honor  
 (17) THE COURT Any redirect?  
 (18) MR MONTAGUE I just have one quick question, Your  
 (19) Honor, just to clear one thing up  
 (20) REDIRECT EXAMINATION OF SAMUEL RHODES  
 (21) BY MR MONTAGUE  
 (22) Q These expenditures the dividends and the profit property  
 (23) and the plants and the equipment they are not like operating  
 (24) costs are they?  
 (25) A No

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- (1) Q And if Exxon - they are like discretionary dispersants by  
 (2) Exxon?  
 (3) A Well they are discretionary to the extent that Exxon  
 (4) determines where it's going to invest its money if it's  
 (5) property plant and equipment or other stocks or whatever  
 (6) Q And if Exxon decides in a particular year to dip into its  
 (7) cash surplus from the year before that doesn't mean it's  
 (8) running at a deficit does it?  
 (9) A No It does mean it's running at a deficit for that year  
 (10) but not for the overall company  
 (11) Q Doesn't it mean that it just wants to use this cash on hand  
 (12) in a different way than just letting it sit there?  
 (13) A That's correct For example in the year 1988 it chose to  
 (14) invest \$2.3 billion in cash on hand In the following year it  
 (15) chose to invest less cash on hand and chose to use some of  
 that  
 (16) in other investments  
 (17) Q And that's all that chart shows?  
 (18) A Yes  
 (19) MR MONTAGUE Thank you sir I have no other  
 (20) questions  
 (21) MR JAMIN Take a moment while we refurbish the  
 (22) courtroom  
 (23) Your Honor plaintiffs next witness by video deposition is  
 (24) Elliot Cattarulla  
 (25) THE COURT The name was?

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- (1) MR JAMIN Cattarulla C A T T - A R U L L A  
 (2) EXAMINATION OF ELLIOTT CATTARULLA (Video)  
 (3) BY VIDEO EXAMINER  
 (4) Q Mr Cattarulla would you please state your full lawful  
 (5) name for the record  
 (6) A Full lawful name is Elliot Reynold Cattarulla  
 (7) Q You please state your current residence address for the  
 (8) record sir  
 (9) A 5825 Overdowns one word Drive Dallas Texas 75230  
 (10) Q Sir are you presently employed by Exxon Corporation?  
 (11) A I am  
 (12) Q How long have you been employed by Exxon Corporation or  
 (13) its subsidiaries or affiliates?  
 (14) A 38 years  
 (15) Q What is your present title the exact title within Exxon  
 (16) Corporation?  
 (17) A I am vice president public affairs  
 (18) Q What was your exact title within Exxon Corporation as of  
 (19) March 24th 1989?  
 (20) A I was vice president and secretary  
 (21) Q When did you relinquish the office of secretary of the  
 (22) corporation?  
 (23) A In July or August of 1990 Maybe it was September about  
 (24) the time we moved out there  
 (25) Q Is Exxon Corporation presently the largest United States

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- (1) based industrial corporation that you know?  
 (2) A Well I think it depends on how you define it Based on  
 (3) some measures it probably is Based on others depending on  
 (4) the year it isn't There are years when General Motors would  
 (5) be so classified and I think IBM has been so classified We  
 (6) are one of the largest clearly  
 (7) Q Do you know if Exxon is one of the three largest oil  
 (8) companies in the world?  
 (9) A Probably yes sir  
 (10) Q How many people are presently employed by Exxon  
 (11) Corporation its subsidiaries and affiliates on a worldwide  
 (12) basis in the aggregate?  
 (13) A Approximately one hundred thousand  
 (14) Q Is it correct that Exxon is a multi national corporation  
 (15) with operations throughout all six of the inhabited continents  
 (16) of the world?  
 (17) A Yes  
 (18) Q How much in net income did Exxon earn last year if you  
 (19) know?  
 (20) A \$5.6 billion I believe  
 (21) Q The next page can you turn to the next page 1991  
 (22) highlights?  
 (23) A Yes  
 (24) Q Would you read those highlights aloud please?  
 (25) A Yes Net income of 5.6 billion best in Exxon's history

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- (1) refining marketing earnings of over 2.5 billion set record  
 (2) earnings per share of \$4.45 highest ever return on  
 (3) shareholders equity was 16.5 percent shareholder dividends  
 (4) increased for the ninth consecutive year total shareholder  
 (5) return for 1991 was 23 percent capital and exploration  
 (6) spending was \$8.8 billion  
 (7) Q Sir as the vice president of public affairs and the person  
 (8) whose department produced this annual report were you -  
 (9) were  
 (9) you proud of those those figures being placed in the forefront  
 (10) of the annual report?  
 (11) A As manager of the department that produced this book I  
 (12) believe it was an accurate representation of the company's  
 (13) performance in the year 1991 and it was appropriate for  
 (14) inclusion in the report because that's what the report is  
 (15) supposed to do convey to the shareholders what happened  
 (16) last  
 (16) year  
 (17) Q Do you know how much crude was spilled from the Exxon  
 (18) Valdez in number of barrels?  
 (19) A No  
 (20) Q Approximately?  
 (21) A 260,000  
 (22) Q That represents - 260,000 barrels represented about one  
 (23) day's production of oil in 1991?  
 (24) A It was 15 percent of one day's production  
 (25) MR MONTAGUE Your Honor we would like to publish

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- (1) certain excerpts from Exhibit 605 which are the annual  
 (2) reports and I would just like to read some excerpts into the  
 (3) record and show the jury  
 (4) From the 1990 Exxon annual report the letter to  
 (5) shareholders the first page I'd like to read the first  
 (6) paragraph This is in the letter to the shareholders in the  
 (7) 1990 Exxon annual report In the life of a company such as  
 (8) Exxon the results of a single year provide only a brief  
 (9) picture The good results we achieved in 1990 flowed from  
 (10) business strategies we have followed over a much longer time  
 (11) In this annual report we have made a special effort to provide  
 (12) a broader view of the strategies that have made Exxon's past  
 (13) results possible and that have positioned us well for continued  
 (14) success in the 90s and beyond  
 (15) And then I would like to publish two pages further from the  
 (16) financial overview contained in the 1990 annual report I'm  
 (17) reading from the top Over time Exxon's consistently strong  
 (18) earnings performance has enabled the company to achieve and  
 (19) maintain a position of extraordinary financial strength and  
 (20) flexibility For example over the past ten years Exxon's  
 (21) internal cash generation from operations amounted to more  
 (22) than  
 (22) one hundred billion dollars This together with a moderate  
 (23) increase in debt leverage permitted the corporation to finance  
 (24) an aggressive capital investment program while continuing a  
 (25) rising flow of dividends per share and purchasing nearly \$16

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- (1) billion worth of Exxon stock In order to preserve the ability  
 (2) to respond to large unexpected developments Exxon retains  
 (3) resilience as well as strength in its financial structure A  
 (4) measurement of company s success in this process is a triple A  
 (5) rating Exxon has retained through the years  
 (6) This is continuing on the top of the next page We are one  
 (7) of a very small number of publicly traded companies that have  
 (8) this highest of financial ratings As a consequence we  
 (9) continue to have the capability to borrow large sums on short  
 (10) notice at the lowest cost and on the best terms and conditions  
 (11) available in the marketplace  
 (12) I d like to skip down a little bit beginning in the decade  
 (13) of the 80s shareholders realized an-18 percent total return  
 (14) on their Exxon stock which compares favorably with the 13  
 (15) percent return on stock for all the other major oil companies  
 (16) and the 14 percent for Standard & Poor s 500 stock index  
 (17) average  
 (18) MR LYNCH Excuse me Your Honor I haven t been  
 (19) apprised that counsel plan to publish from these documents I  
 (20) don t know whether we should read our Rule 106 counters now  
 (21) or  
 (22) make them part of our case  
 (23) MR O NEILL We had given notice of our intention to  
 (24) read these documents and received no Rule 106 counters In  
 (25) fact in the notice we sent last Friday we said that we were  
 going to publish portions of the exhibits

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- (1) MR LYNCH We didn t know what portions at least I  
 (2) didn t  
 (3) THE COURT Let us complete the presentation of these  
 (4) particular items and then we ll take yours that come from  
 (5) the - immediately after that from the - that come from the  
 (6) same documents  
 (7) MR LYNCH They came from the same letter to the  
 (8) shareholder Which one now?  
 (9) MR MONTAGUE I m on the 1991 annual report page 4  
 (10) entitled finance Exxon s business activities are supported by  
 (11) a long tradition of financial strength, by a highly flexible  
 (12) centrally coordinated financial system that permits prompt  
 (13) response to rapid change and by strong financial and business  
 (14) controls that promote effective, efficient and proper  
 (15) utilization of resources Exxon s worldwide array of  
 (16) large scale low cost operations provides it with a broad  
 (17) earnings base and a stable source of cash flow The  
 (18) company s  
 (19) global operating activities have provided cash flows of about  
 (20) 10 to 12 billion dollars annually in recent years Cash flow  
 (21) is centrally coordinated in order to efficiently move funds  
 (22) from units generating cash to units where funds are needed to  
 (23) finance new investments or meet operating requirements  
 (24) These  
 (25) internally generated funds are supplemented by appropriate  
 changes in debt and equity Because of Exxon s triple A credit  
 rating it is able to borrow on short notice at low cost This

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- (1) financial strength provides Exxon with the flexibility to  
 (2) undertake major new business opportunities without  
 (3) interrupting  
 (4) operation plans or the dividends to shareholders In fact  
 (5) Exxon has increased its dividends per share through long  
 (6) periods of volatile industry conditions  
 (7) And last is a short excerpt from the 1992 annual report  
 (8) the second page of the letter to the shareholder The  
 (9) company s strong financial position provides a competitive  
 (10) advantage Exxon has a triple A credit rating a strong stable  
 (11) cash flow and a conservative debt to capital ratio of 27  
 (12) percent This provides financial flexibility allowing the  
 (13) corporation to sustain large-scale capital investment programs  
 (14) raise money at reasonable rates when needed and still respond  
 (15) promptly to attractive opportunities  
 (16) And that s a document that is signed by the then chairman  
 (17) of the board and the then president of Exxon  
 (18) That s it for these documents Thank you  
 (19) THE COURT Mr Lynch were there portions of those  
 (20) same three documents that you wanted in?  
 (21) MR LYNCH Yes there are There are portions of all  
 (22) three reports that relate to environmental matters directly  
 (23) but I m only going to read those portions of the 1990 report  
 (24) which are directly germane to the issues opened by Mr  
 (25) Montague s reading as I interpret them  
 Also on the first page of the letter to shareholders in the

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- (1) 1990 annual report is the following Several events most  
 (2) notably the Alaska oil spill of 1989 have detracted from the  
 (3) long time favorable record and public perception of our  
 (4) operations We have responded in several ways In Alaska we  
 (5) managed a large and comprehensive clean up operation and  
 (6) there  
 (7) is strong evidence that Prince William Sound has essentially  
 (8) recovered Marine biologists who visited the area in last  
 (9) April and again in September found plant and animal life  
 (10) thriving and Prince William Sound experienced an excellent  
 (11) herring catch and record pink salmon catch in 1990 During the  
 (12) past year we have intensified operational safety and  
 (13) environmental reviews we have long carried out within our  
 (14) operating units These indepth reviews found that existing  
 (15) programs are sound yet further improvements can be made  
 (16) many  
 (17) of which are underway  
 (18) Exxon has been spending at more than a billion dollars a  
 (19) year on enviromental measures aside from the Alaska clean up  
 (20) costs Exxon has continued to develop superior environmental  
 (21) technology to introduce new and cleaner products and focus  
 (22) on  
 (23) achieving outstanding environmental results Exxon has  
 (24) thereby  
 (25) created a competitive advantage which will be important in  
 restoring fully the favorable public perception we earned over  
 the years  
 In the final overview document the following appears  
 Dividend income is particularly important to many Exxon

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- (1) shareholders so the company preserves a healthy dividend  
 (2) component in its return to shareholders  
 (3) That s the additional reading Your Honor  
 (4) MR JAMIN Ladies and Gentlemen by agreement we re  
 (5) now going to publish two additional documents portions of  
 (6) which I m going to read to you This is a memorandum dated  
 (7) March 19 1990 It s from Michael Stalzer to Dwight Koops and  
 (8) the subject is fleet licensed officer analysis work hours  
 (9) As background Mr Stalzer s writes There are safety  
 (10) concerns about the numbers of hours individuals have been  
 (11) working in the fleet These concerns arose in the 80s when  
 (12) manning reductions were occurring and additional  
 (13) responsibilities were being shifted to the fleet officers with  
 (14) no accounting for the additional time required to do these  
 (15) tasks  
 (16) Later in the background section he indicates Recently the  
 (17) fleeted officers have documented their work hours for January  
 (18) 1990 and added suggestions for reducing the workload  
 (19) In the section that Mr Stalzer describes as analysis he  
 (20) indicates The data received confirms management s own  
 (21) observations and the feedback which the fleet has provided to  
 (22) management concerning the number of hours work The work  
 (23) rule  
 (24) guidelines were violated 74 out of the 94 positions or 78 7  
 (25) percent of the time The data indicates that the workload is  
 (26) heaviest in the deck department when compared to the engine

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- (1) department The deck department had 123 incidents of 15  
 (2) hours  
 (3) or more per day versus 47 for the engine department The deck  
 (4) department had 32 incidents of 340 work hours or more per  
 (5) month  
 (6) versus 24 for the engine department The data indicates that  
 (7) the workload is heaviest for the senior officers in each  
 (8) department and of the 20 positions which did comply with the  
 (9) guidelines seven of these or 35 percent were concentrated on  
 (10) the Exxon Baytown and the Exxon Galveston which have four  
 (11) mates  
 (12) On page 2 of the document in the section entitled  
 (13) recommendation Mr Stalzer writes In the interest of safety  
 (14) it is management s responsibility to insure that the guidelines  
 (15) are followed  
 (16) And on the fourth page of the document PL 13 Mr Stalzer  
 (17) sets out two charts one with the number of incidents 15 hours  
 (18) or more worked per day in January 1990 and then down at the  
 (19) bottom half of page 5 of PL-13 sets out the actual reported  
 (20) work hours in January of 1990  
 (21) I call your attention to the basically what s a notice  
 (22) down at the bottom The work guidelines limit the maximum  
 (23) number of work hours per month to 340 and we have  
 (24) highlighted  
 (25) but I will not read those lines for the Benicia the North  
 (26) Slope the Long Beach the San Francisco and the Baton  
 (27) Rouge  
 (28) and note that there is a line summarizing the data where more  
 (29) than 340 hours per month are determined the incident line

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- (1) Exhibit 13 will be available for you in the jury room  
 (2) The next exhibit which I would like to publish is available  
 (3) in a board format and I ll set up on a second easel Ladies  
 (4) and Gentlemen which is Plaintiffs Exhibit Number 175 It is  
 (5) a memorandum from Mr Frank Iarossi to Mr Dwight Koops  
 (6) dated  
 (7) September 5 1989 and I want to call your attention at the  
 (8) outset to the beginning of the third paragraph on another  
 (9) subject Mr Iarossi writes On another subject I am growing  
 (10) a little impatient with our slowness in coming to grips with  
 (11) other operational issues highlighted by the grounding of the  
 (12) Exxon Valdez Someone in operations needs to take some  
 (13) initiative fast Areas which need to be addressed very soon  
 (14) and action steps proposed include very clear instruction to our  
 (15) masters regarding operations in PWS during ice season  
 (16) In parens Mr Iarossi writes It s incredible that  
 (17) September is here and we have still not addressed this issue  
 (18) Number two very clear instruction regarding vessel speed  
 (19) in PWS and other areas such as SF Bay  
 (20) Item three very clear prohibition against leaving the  
 (21) traffic lanes in PWS unless emergency conditions exist and  
 (22) then only with the express permission of the MSO Valdez  
 (23) Number four some fail safe method of ensuring that  
 (24) watchstanders clearly know when the autopilot is engaged  
 (25) Number five a very clear directive on maintaining a  
 (26) lookout at all appropriate times In parens the idea of

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- (1) allowing a coffee break is just unbelievable  
 (2) Number six a very clear statement that the Navigation and  
 (3) Bridge Organization Manual is not a guide It establishes how  
 (4) our vessels must be operated and that it is the master s  
 (5) responsibility to ensure it is followed at all times as  
 (6) appropriate  
 (7) From the second page I call your attention to the second  
 (8) paragraph Last week during a hearing before the Alaska Oil  
 (9) Spill Commission Jerry Aspland of ARCO Marine publicly and  
 (10) for  
 (11) the record stated that in the aftermath of the Valdez  
 (12) grounding ARCO Marine has established the following  
 (13) policies  
 (14) One all vessels will remain a minimum of a hundred miles  
 (15) offshore except during direct approach to and from port two  
 (16) restricted speed in PWS and Puget Sound number three no  
 (17) deviation from the traffic lanes in PWS number four  
 (18) breathalyzer tests for masters before leaving any dock number  
 (19) five autoalarm on all steering gear autopilots number six  
 (20) master s judgment as to whether he leaves Valdez at night  
 (21) during ice season  
 (22) These steps clearly establish a standard of care in our  
 (23) industry and I hope we all have come to understand what that  
 (24) means to us We could not defend having a lesser standard It  
 (25) is more than a little disturbing that ARCO has come to grips  
 (26) with the Valdez grounding while we over five months later  
 (27) have not

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- (1) The memorandum is copied to Mr Paul and Mr Tompkins  
 (2) Your Honor plaintiffs next witness which will be by  
 (3) deposition Mr Frank Iarossi and Ladies and Gentlemen  
 (4) anticipate about 15 minutes for this deposition  
 (5) EXAMINATION OF FRANK IAROSSO (Video)  
 (6) BY VIDEO EXAMINER  
 (7) Q Now Exxon is in the business of transporting crude oil by  
 (8) sea right?  
 (9) A Crude oil yes  
 (10) Q And other substances?  
 (11) A Yes  
 (12) Q Substances which Exxon Shipping and Exxon USA were  
 (13) aware  
 (14) created a danger to the environment if released?  
 (15) A We understood the nature of crude oil yes  
 (16) Q Exxon shipping and Exxon USA were aware that a master of  
 (17) a  
 (18) tanker where the master had an alcohol abuse problem was a  
 (19) potential for a disaster to the environment?  
 (20) A We understood the risks in the business yes We  
 (21) understood the responsibilities yes  
 (22) Q As of March 26th 1989 other than attorneys for Exxon had  
 (23) you talked to anyone concerning the cause of the grounding of  
 (24) the Exxon Valdez on March 24th?  
 (25) A No  
 (26) Q Did you as of March 26th 1989 had you instructed anyone  
 (27) either within Exxon Shipping or within Exxon USA or Exxon

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- (1) Corporation to make - to interview the persons on the - that  
 (2) were present on the Exxon Valdez at the time of the grounding?  
 (3) A When I arrived in Valdez on March still the 24th -  
 (4) Friday I can remember the days better it was Friday evening  
 (5) one of the five people that came up with me was our Exxon  
 (6) Shipping Company generally counsel and his instructions were  
 (7) to initiate the investigation to determine exactly what had  
 (8) transpired  
 (9) Q I m sorry who was it that was with you?  
 (10) A Bob Nicholas who is the Exxon Shipping Company general  
 (11) counsel and his role was to initiate an investigation to  
 (12) determine what had transpired  
 (13) Q Are you aware that the investigation was in fact conducted?  
 (14) A There was, I m sure a whole series of investigations  
 (15) Q Have you since the spill gleaned any knowledge relating to  
 (16) the condition of Captain Hazelwood at the time of the grounding  
 (17) through your own personal investigation or conversations or  
 (18) discussions with persons other than counsel?  
 (19) A The answer is no with the exception of the NTSB published  
 (20) reports  
 (21) Q I d like to mark as the next exhibit 26794 a two-page  
 (22) document our number 21 for Mr Iarossi to Mr Koops dated  
 (23) September 5 1989  
 (24) You had a chance to review 26794?  
 (25) A Yes

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- (1) Q Is that a document that was prepared by you?  
 (2) A Yes  
 (3) Q Now on the second page you list six new policies  
 (4) established by ARCO Marine?  
 (5) A Yes as I understood them from their presence  
 (6) Q And you characterized those six new policies as clearly  
 (7) establishing a new standard of care in our industry is that  
 (8) correct?  
 (9) A Well that was a phrase that we had used subsequent to the  
 (10) grounding to - that s what I said yes  
 (11) Q Was anyone else terminated from Exxon Shipping Company  
 (12) as a  
 (13) result of the Exxon Valdez incident?  
 (14) A No  
 (15) Q Was anyone s position affected as a result of the Exxon  
 (16) Valdez incident were they demoted transferred?  
 (17) A I think the mate on watch was demoted to an able seaman  
 (18) my  
 (19) recollection  
 (20) Q Was anybody - were any officers at Exxon Shipping  
 (21) Company  
 (22) transferred demoted or had any other personnel actions taken  
 (23) as a result of the Exxon Valdez incident?  
 (24) A No  
 (25) Q Was anybody at Exxon USA subject to adverse personnel  
 (26) action as a result of the Exxon Valdez incident to your  
 (27) knowledge?  
 (28) A Not to my knowledge no

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- (1) Q With the exception of Captain Hazelwood and the mate on  
 (2) board who was demoted to an able bodied seaman were there  
 (3) any  
 (4) adverse comments placed in the personnel file of anybody at  
 (5) Exxon Shipping Company as a result of the Exxon Valdez  
 (6) incident?  
 (7) A Not to my knowledge no  
 (8) Q How about at Exxon Corporation to your knowledge?  
 (9) A Not to my knowledge  
 (10) Q Prior to the grounding of the Exxon Valdez in March of 89  
 (11) was there a loading mate assigned to the Exxon Valdez?  
 (12) A You mean in addition to the regular crew?  
 (13) Q Yes  
 (14) A No  
 (15) Q Was that ever discussed to your knowledge within Exxon  
 (16) shipping prior to the grounding that is having a loading  
 (17) mate?  
 (18) A Not at my level  
 (19) Q You never were privy to any discussions?  
 (20) A No not that I recall  
 (21) Q Do you recall that after the grounding a loading mate was  
 (22) assigned to the Exxon Valdez at the Port of Valdez?  
 (23) A It was one of the changes made in response to the incident  
 (24) itself and all of the aftermath of the incident  
 (25) Q Were you a party to that decision?  
 (26) A Yes

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- (1) Q I'll show you the transcript. We have a transcript that  
 (2) was produced by Exxon and I'm interested - and I'll tell you  
 (3) ahead of time. I'm interested in the entire page 19. Will you  
 (4) read the entire page 19 and then tell me if that's what you  
 (5) said? Will you read it out loud?  
 (6) A Okay. Could I read the question from 18 so I understand  
 (7) it?  
 (8) Q You can read all you want to read.  
 (9) A The speaker who is not identified says what does the crew  
 (10) tell you about what went wrong? Mr. Larossi's answer: our  
 (11) people are asking questions and making an investigation. We  
 (12) are doing that right now.  
 (13) The speaker said: are you deliberately shielding yourself  
 (14) from orders so you don't have to tell us?  
 (15) Mr. Larossi's answer: we intend to tell you everything we  
 (16) know. There would be no reason to shield it. It's going to be  
 (17) out from the NTSB study and the Coast Guard hearing so there  
 (18) is no way I could shield. What I'm going to do is to make sure I  
 (19) tell you before anybody else does.  
 (20) The speaker says: sir, my answer is you can take that as a  
 (21) fact. It will be my job to tell you first before they tell  
 (22) you. Bill Peters.  
 (23) Q I'm interested: did you commit publicly at the press  
 (24) conference to be the one to first tell the public what went  
 (25) wrong?

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- (1) A To the extent we found out: yes.  
 (2) Q At page 79 of the same book you were quoted as saying  
 (3) there is no doubt that all of these contingency plans and all  
 (4) of this planning and everything did not anticipate ever having  
 (5) to respond to a spill this big. Larossi said: I do not know  
 (6) why it didn't. I wasn't involved in the plan, but clearly no  
 (7) one ever anticipated trying to handle 250,000 barrels of oil on  
 (8) the water. This spill just overwhelmed everybody. No one was  
 (9) organized to control a spill of this magnitude. Did you ever  
 (10) make that statement?  
 (11) A Yes, that's probably my characterization.  
 (12) Q At page 31 of the same book you were quoted as saying  
 (13) upon being informed of the fact that the vessel had lost an  
 (14) estimated 138,000 barrels by one George Nelson, you're  
 (15) quoted as saying we had an unbelievable problem on our hands. Did  
 (16) you ever make that statement?  
 (17) A Yes.  
 (18) Q At page 34 of the same book you're quoted as saying with  
 (19) regard to the mobilization we started from ground zero,  
 (20) Larossi said: There was no logistic system in place. Did you  
 (21) ever make that statement?  
 (22) A In a certain context, yes, probably.  
 (23) Q Was the statement made in the context of the Exxon Valdez  
 (24) oil spill?  
 (25) A Yes. I don't recall what I was referring to as far as

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- (1) logistic system, but I'd have to go back and look at what the  
 (2) exact question was.  
 (3) Q Page 297 of the same book you're quoted with regard to the  
 (4) response to the oil spill as saying: quote, it's just that it  
 (5) was totally inadequate relative to the magnitude of the spill.  
 (6) Did you ever make that statement?  
 (7) A I wouldn't say that there weren't details that couldn't  
 (8) have been done better, but I've seen EPA and Coast Guard  
 (9) reports that basically give us a B-plus or better on most of  
 (10) the response work. It's just that it was totally inadequate  
 (11) relative to the magnitude of the spill. I'd say a lesson to  
 (12) society is that a spill like this can happen no matter how low  
 (13) the probability, the potential is still there for it to happen  
 (14) and another lesson is in the inadequacy of current technology  
 (15) what we have is just not good enough, no matter how fine-tuned  
 (16) an organization you have. unquote.  
 (17) Q Did you make those statements?  
 (18) A I would say that's my statement. I recall that.  
 (19) Q Did you mean it to be truthful at the time you made it?  
 (20) A Yes.  
 (21) Q Let's talk about Exxon senior management for a minute. At  
 (22) any time after the spill were you ever called to account either  
 (23) orally or in writing for what happened with regard to the  
 (24) spill?  
 (25) A What part, you mean the cleanup?

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- (1) Q With regard to the accident.  
 (2) A No.  
 (3) Q So nobody from the date the vessel ran aground to today has  
 (4) ever called on you to account for the accident?  
 (5) A No.  
 (6) Q Now -  
 (7) A Within Exxon, I've been asked questions by a lot of other  
 (8) people, but not Exxon.  
 (9) Q From the date of the accident to today, have you had to  
 (10) submit any reports to Exxon USA or Exxon Corporation with  
 (11) regard to what happened about the accident?  
 (12) A No.  
 (13) Q From the date of the accident until today, have you  
 (14) yourself conducted an investigation with regard to what  
 (15) happened as to the accident?  
 (16) A Friday night I asked the general counsel of Exxon Shipping  
 (17) Company that's March 24th to initiate an investigation  
 (18) Saturday that became an Exxon USA investigation and I was out  
 (19) of the loop after that.  
 (20) Q Did Exxon USA ever report back to you the results of their  
 (21) investigation?  
 (22) A No.  
 (23) Q Did anybody else to your recollection provide you any  
 (24) information in this 15-day period of time as to the cause of  
 (25) the grounding?



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- (1) A No  
 (2) Q Did you ask?  
 (3) A I stopped asking after Saturday morning  
 (4) Q Can you tell me why?  
 (5) A Because the investigation of that was taken over by Exxon  
 (6) USA Company and to the extent I needed to know anything to  
 run  
 (7) my business from there on in I would be told  
 (8) MR JAMIN Your Honor our next bit of evidence is a  
 (9) videotape compilation of statements by Exxon persons  
 (10) (Videotape PX600 Played)  
 (11) MR JAMIN Your Honor plaintiffs next exhibit is  
 (12) 238-A and it s a very short video -  
 (13) (Videotape 238-A Played)  
 (14) MR JAMIN Your Honor our next bit of evidence is  
 (15) the video deposition of Mr Cornett We re going to go it s  
 (16) slightly out of order so we can fill up the day without  
 (17) breaking anything Mr Don Cornett about three and a half  
 (18) minutes  
 (19) EXAMINATION OF DONALD CORNETT (Video)  
 (20) BY VIDEO EXAMINER  
 (21) Q Would you please state your full lawful name for the  
 (22) record please sir?  
 (23) A Donald Edwin Cornett  
 (24) Q With whom you employed?  
 (25) A Exxon

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- (1) Q In what capacity?  
 (2) A I m the public relations manager for Exxon Company USA  
 (3) Q How long have you held that position sir?  
 (4) A Seven days  
 (5) Q How long -  
 (6) A Actually a month and seven days It was very recent  
 (7) Q Were you employed within the Exxon family as of March  
 23rd  
 (8) 1989?  
 (9) A I was in Alaska  
 (10) Q In what position?  
 (11) A I was the Alaska coordinator  
 (12) Q Can you describe your functions as the Alaska coordinator  
 (13) on that date?  
 (14) A I managed Exxon s Alaska office which is part of the  
 (15) production department Our office was concerned with the  
 (16) production of oil from the North Slope  
 (17) Q Where was that office located sir?  
 (18) A Anchorage  
 (19) Q Did you ever have any function job description that  
 (20) included public affairs prior to your tenure in Anchorage?  
 (21) A Yes  
 (22) Q Can you tell me what job functions you had that included  
 (23) public affairs in the job description?  
 (24) A I was first assigned public affairs in 1977 in Houston  
 (25) Texas in the state government relations and in 79 in

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- (1) Washington D C in federal government relations After the  
 (2) Valdez spill I was assigned - at the time of the spill I was  
 (3) assigned to work community and media relations in Valdez for  
 (4) about six months and then I was transferred to Houston and  
 (5) worked in a group that was working on Valdez public affairs  
 (6) And I became the Valdez public affairs manager in early 1990  
 (7) and I served in that position until July the 1st when I began  
 (8) this assignment  
 (9) Q So when you assumed the function of dealing with  
 community  
 (10) relations and media relations after the Exxon Valdez spill was  
 (11) one of your functions to speak on behalf of Exxon Corporation  
 (12) and its subsidiaries and affiliates?  
 (13) A Yes  
 (14) Q So in effect you were the person who embodied the  
 (15) statements of the corporation to the media and to the  
 (16) community is that correct sir?  
 (17) A I was one of the people who spoke for the company  
 (18) MR JAMIN Your Honor plaintiffs next exhibit is  
 (19) PX722-A This is a transcript of portions of phone calls  
 (20) maintained on tape at the Alyeska Emergency Room Center in  
 the  
 (21) first week after the spill  
 (22) (Videotape PX722-A Played)  
 (23) MR JAMIN Your Honor this may be as close as I can  
 (24) get to the end of the day  
 (25) THE COURT Ladies and Gentlemen we re going to

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- (1) adjourn court for the day at this time If you would please go  
 (2) to the jury room at this time and standby for a few minutes we  
 (3) will set up the little safety program that we re going to have  
 (4) before our tour of Prince William Sound assuming that the  
 (5) weather cooperates with us So if you would adjourn to the  
 (6) jury room we will give everyone a chance to clear the  
 (7) courtroom and then we will have that  
 (8) (Jury out at 2 00)  
 (9) (Proceedings recessed at 2 00 p m )

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|--|--|
| (1) STATE OF ALASKA )  |  |
| (2) Reporter s Certificate   |  |
| (3) DISTRICT OF ALASKA )   |  |
| (6) I Leonard J DiPaolo 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) LEONARD J DiPAOLO RPR   |  |
| Notary Public for Alaska   |  |
| (22) My Commission Expires 2 3-96                                  |  |

**Look-See Concordance Report**

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 UNIQUE WORDS 3,010  
 TOTAL OCCURRENCES  
 12,468  
 NOISE WORDS 385  
 TOTAL WORDS IN FILE  
 35,173

**SINGLE FILE CONCORDANCE****CASE SENSITIVE****NOISE WORD LIST(S)  
NOISE NOI****INCLUDES ALL TEXT  
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(1) IN THE UNITED STATES DISTRICT COURT  
 (2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No A89 0095 CIV (HRH)  
 (5) ) Anchorage Alaska  
 The EXXON VALDEZ ) Wednesday August 24 1994  
 (6) ) 8 00 a m  
 TRANSCRIPT OF PROCEEDINGS  
 (9) TRIAL BY JURY 68 DAY  
 (10) BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE  
 VOLUME 41 Pages 7160 7353  
 Realtime Transcription

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(1) PROCEEDINGS  
 (2) (Jury in at 8 02)  
 (3) THE CLERK. All rise  
 (4) (Call to Order of the Court)  
 (5) THE COURT Good morning Ladies and Gentlemen  
 (6) MR O NEILL Good morning Judge  
 (7) THE COURT This is continuation of trial in case  
 (8) A89-0095 in re the Exxon Valdez Mr Jamin  
 (9) MR JAMIN Thank you Ladies and Gentlemen we will  
 (10) next be presenting a very brief videotape which is PX6288  
 (11) (Videotape PX6288 Played)  
 (12) MR JAMIN Your Honor, next we have for about 15  
 (13) minutes the testimony of Lawrence Rawl by video deposition  
 (14) EXAMINATION OF LAWRENCE RAWL (Video)  
 (15) BY VIDEO EXAMINER  
 (16) Q Are there risks in the production and transportation of  
 (17) oil?  
 (18) A There are risks in everything but yes there are  
 (19) Q I m going to hand you a document the reporter has marked  
 as  
 (20) 33100  
 (21) A Are we through with this?  
 (22) Q Yes Have you ever seen 33100 before?  
 (23) A Yes, I have  
 (24) Q What is it?  
 (25) A It s called an open letter to the public dated April 3rd,

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(1) 1989  
 (2) Q And -  
 (3) A It was a newspaper ad as I recall  
 (4) Q Who paid for the newspaper ad?  
 (5) A I presume Exxon did I assume they did  
 (6) Q Is that your signature on the bottom?  
 (7) A Yes  
 (8) Q Did you participate at all in the drafting of the document?  
 (9) A I don't recall participating in the drafting It s  
 (10) possible I might have edited it or something, I don t recall  
 (11) Q Did you approve it?  
 (12) A I signed it, which would indicate I approved it I m sure  
 (13) Q What was Exxon's purpose in running this advertisement?  
 (14) A Well, I recall not really thinking that it was necessary to  
 (15) have such an advertisement but certain people and I don't  
 (16) remember which advisors felt like it would be useful There  
 (17) was concern that the public didn't understand this and that it  
 (18) would be good to put it in a newspaper  
 (19) Q In the second paragraph of the open letter to the public  
 (20) the last sentence it reads We also will meet our obligations  
 (21) to all those who have suffered damage from the spill Do you  
 (22) see that?  
 (23) A Yes  
 (24) Q At the time you signed the document and had it published,  
 (25) was that your intention?

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- (1) A It was our intention to meet our legal obligations and  
 (2) certainty to those people that had demonstrable damage to  
 pay  
 (3) the claims which we've paid a substantial number of claims  
 (4) Q Let me ask you a question Was anyone other than Captain  
 (5) Hazelwood at Exxon Corporation, Exxon Shipping Company  
 Exxon  
 (6) USA, anyone terminated, demoted or showed some kind of  
 adverse  
 (7) personnel action taken with regard to the Valdez incident?  
 (8) VIDEO ATTORNEY Your question compounds any Exxon  
 (9) affiliate or division?  
 (10) VIDEO ATTORNEY I want to know if he knows of anybody  
 (11) in the world other than Captain Hazelwood who had an adverse  
 (12) personnel action taken against them as a result of the Exxon  
 (13) Valdez incident.  
 (14) THE WITNESS I can't really respond I don't recall  
 (15) precisely anyone  
 (16) BY VIDEO EXAMINER  
 (17) Q Do you have any knowledge as you sit here today of anyone?  
 (18) A No, I don't.  
 (19) Q Did you, as the chairman of the board of Exxon Corporation,  
 (20) call in anyone and ask them to be accountable as a result of  
 (21) the Exxon Valdez incident? Did you call anybody on the  
 carpet?  
 (22) A We discussed a number of times how this thing might have  
 (23) occurred and occurred and so forth, but I didn't feel the need  
 (24) to call anybody in to reiterate their responsibilities in  
 (25) running various parts of this organizations operations They

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- (1) knew their responsibility and so forth, and I don't have to  
 (2) call somebody up and tell them this is your job, they are aware  
 (3) of that.  
 (4) Q Are you aware of anybody in Exxon Corporation Exxon USA  
 or  
 (5) Exxon Shipping Company that was called on the carpet by a  
 (6) supervisor or somebody higher than them in the chain of  
 command  
 (7) to account for the incident?  
 (8) A I don't know what "called on the carpet" means to you I m  
 (9) sure there were lots of questions asked up and down the chain  
 (10) of command Certainly I asked a lot of questions, other people  
 (11) who report to me asked a lot of questions, there are still  
 (12) questions being asked Called on the carpet connotes  
 something  
 (13) that I can't really define for my use  
 (14) Q As you sit here today, you don't know what the expression  
 (15) called on the carpet means?  
 (16) A I've heard it all my life, I know what it means to me It  
 (17) means I would call somebody in and get quite specific about  
 (18) performance, whether - probably in a negative fashion and of  
 (19) course I obviously indicated in some of the prior testimony  
 (20) that I wasn't very pleased with what happened and I m sure  
 (21) other people up and down the line were not pleased with what  
 (22) happened But whether or not we could identify specific  
 (23) individuals other than people that were on the ship since the  
 (24) ship was - our oil in it obviously people on the ship were  
 (25) responsible for transiting that area

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- (1) Q Is there - does Exxon Corporation Exxon USA or Exxon  
 (2) Shipping any of the three separately or together, have an  
 (3) intention to make public the results of any of its ongoing  
 (4) investigations as to the causes of the incident?  
 (5) A I thought we've made a lot of reports public Now I can't  
 (6) really get specific as to - in fact I know we ve made a lot  
 (7) of reports public but we've provided information to the  
 (8) National Transportation Safety Board, I think there was some  
 (9) testimony made that were related to that I don't know what  
 (10) the report said but they were related to that There were  
 (11) other hearings, other than the ones you referred to that I  
 (12) testified at in the Congress where some kind of reports were  
 (13) made or questions answered under oath So I don't understand  
 (14) the question actually I think we've been doing - there are  
 (15) some things I m sure that have not been reported but are still  
 (16) under investigation  
 (17) Q Do you know if - well, have you come to a conclusion as to  
 (18) why the incident happened?  
 (19) A No, I haven't I think I've testified on that  
 (20) Q Now, was it your understanding that this plan did recognize  
 (21) that if there was a catastrophic spill, large volumes would  
 (22) reach shore?  
 (23) A My understanding that was somewhere in that plan I read  
 (24) the large oil spill part of that plan Of course it covered a  
 (25) lot of other things, and I'm not sure these words are

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- (1) sufficiently precise, but a large spill it was recognized some  
 (2) would probably reach shore  
 (3) Q As a result of your experience, would you agree with the  
 (4) proposition that a risk of running oil out of the Port of  
 (5) Valdez is that there will be a large spill and that as a result  
 (6) of that large spill large volumes would reach shore?  
 (7) A There is always a risk in transporting anything This was  
 (8) a contingency, and the word contingency means if you have  
 such -  
 (9) a spill I don't think this plan, when they wrote it they  
 (10) felt like this was a predetermined, going-to-happen kind of  
 (11) thing If I answered your question  
 (12) Q Now, was it true that Exxon had a good year in 1988?  
 (13) A Yes  
 (14) Q And at the time of this annual meeting in May 18th 1989  
 (15) the Valdez spill had occurred?  
 (16) A Yes  
 (17) Q And in the bottom right hand corner of the first page it  
 (18) appears that you expressed the opinion that Exxon s overall  
 (19) financial health remains sound and its operations are well  
 (20) positioned for the future Do you see that?  
 (21) A Yes I see that  
 (22) Q And was that your view as to the health of the corporation  
 (23) at the time?  
 (24) A Yes  
 (25) Q Now on the second page in the middle of the paragraph



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- (1) there is the statement "The accident itself cannot be undone  
 (2) We recognize and accept our responsibility to clean up the  
 (3) spill and to meet our obligations to those who were adversely  
 (4) affected by it " Do you see that?  
 (5) A Yes  
 (6) Q At that time was it your corporate policy to meet your  
 (7) obligations to those who were adversely affected by the spill?  
 (8) A Our corporate policy is to meet our legal obligations to  
 (9) those who were adversely affected by the spill  
 (10) Q Now, this statement doesn't say meet our legal obligation,  
 (11) does it?  
 (12) A No, it doesn't but it's implied  
 (13) Q Why did you add that just now?  
 (14) A Well, because it makes it clearer as to what we intended  
 (15) Q In your testimony to the House, to the Senate and at the  
 (16) stockholders' meeting I did not see in any of those portrayals  
 (17) of testimony the qualification that you were going to meet your  
 (18) legal obligation with the qualification being legal Do you  
 (19) recall qualifying it at that point in time like that?  
 (20) A I think you should understand that I'm one shareholder but  
 (21) I don't own this company and I'm not in a position to commit  
 (22) the company to go beyond its legal obligations  
 (23) Q In appearing before the shareholders and commenting upon  
 (24) your responsibility to meet your obligations to those who were  
 (25) adversely affected by it there was a public relations benefit

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- (1) to that, wasn't there?  
 (2) A I don't know  
 (3) Q Let's go back to Exhibit 33107 and if we could go to the  
 (4) third page of the exhibit which has the circled four in the  
 (5) bottom right hand corner the first paragraph on that page  
 (6) concludes with the sentence "However, I am confident that  
 (7) Exxon's traditional financial strength will not be impaired by  
 (8) this major accident Do you see that?  
 (9) A Yes  
 (10) Q Was that your view at the end - 1989 annual shareholders  
 (11) meeting which took place in May of 1989?  
 (12) A It apparently was yes  
 (13) Q Is that your view today?  
 (14) A Well we haven't in fact not been able to perform We've  
 (15) lost a lot of financial opportunities as a result of the spill,  
 (16) but we're still a large viable company  
 (17) Q Have you reported to the Securities and Exchange  
 (18) Commission to the public in a press release to the investment  
 (19) community that any of the financial impacts of this incident  
 (20) are going to have a major impact upon your financial stability?  
 (21) A Not in terms of the definition of financial stability  
 (22) which is credit ratings and things of that nature, yes  
 (23) Q Is the business of finding producing transporting and  
 (24) marketing petroleum and chemicals high risk?  
 (25) A Yes

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- (1) Q Sir, I'm going to hand you a document, 33018 What is it?  
 (2) My question - you can take a look at it. My question deals  
 (3) with page 8 of the document.  
 (4) A Page 8?  
 (5) Q But my first question is what is the document?  
 (6) A Well it says remarks by me and L.R. Raymond, Exxon  
 (7) Corporation annual meeting of shareholders 4/25/1990 So I  
 (8) guess that's what it refers to Page 8? Page numbers on  
 (9) here?  
 (10) Q Page numbers are on the top of the page  
 (11) A I see, okay So small you can't see them Page 8 Okay  
 (12) Q I'm interested in the middle paragraph, the sentence  
 (13) beginning "Over the past five years, including 1989 and the  
 (14) adverse effects of the cost associated with Alaska, total  
 (15) shareholder return has averaged 23 percent compared to 20  
 (16) percent of all S & P 500 companies Exxon has remained  
 (17) financially strong, one of only 14 U.S. based industrial  
 (18) companies to merit a triple A credit rating Do you see that  
 (19) statement?  
 (20) A Yes  
 (21) Q Was that statement true at the time - did you ever make  
 (22) the statement?  
 (23) A Well, it's been made a number of times It was true Now  
 (24) whether I made it or Raymond made it, I'm not sure  
 (25) Q Now, in the statement, there is the parenthetical,

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- (1) including 1989 with the adverse effects of the costs associated  
 (2) with Alaska?  
 (3) A That's true  
 (4) Q Does that refer to the Valdez spill?  
 (5) A Yes I'm sure it does Didn't say that but it would have  
 (6) to be what it referred to  
 (7) Q Are you familiar with any corporate policies conveyed to  
 (8) either Exxon USA or to Exxon Shipping relating to the cutting  
 (9) of costs and the operation of vessels for the purpose of making  
 (10) yourselves either more profitable or more competitive with  
 (11) other companies?  
 (12) A I was aware, and as always is the case, that there is  
 (13) always an effort to be competitive, whether it's in shipping or  
 (14) any other functions that we have  
 (15) MR JAMIN Ladies and Gentlemen, I will next be ...  
 (16) publishing a very short exhibit. May I have the Elmo?  
 (17) This is fairly difficult to read but I'm going to read it  
 (18) to you The structure of the exhibit is that the bottom part  
 (19) comes first and the top comes later This is a memorandum  
 (20) from  
 (21) Les Rogers to Robert Weatherford  
 (22) THE COURT What exhibit is this please?  
 (23) MR JAMIN Your Honor, this is Exhibit Number 801  
 (24) THE COURT Plaintiffs' 801?  
 (25) MR JAMIN Plaintiffs' 801  
 (26) Charlie Hosch who identifies himself as a retired Exxon

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- (1) captain reports he has had call from TV stations for  
 (2) interviews and - very difficult to read - and wants guidance  
 (3) on whether to grant them Someone from Shipping probably  
 (4) personnel, should provide him whatever guidance is given I  
 (5) have no authority to advise him one way or the other My  
 (6) advice would be to find some way to keep him off the air  
 (7) without his telling the reporters that Exxon told him not to  
 (8) talk In the absence of an overall plan for this contingency  
 (9) I can't advise otherwise He might tell the reporters that,  
 (10) due to litigation, et cetera, it would not be prudent for him  
 (11) to speak, but if the reporters have questions about Exxon  
 (12) Shipping Company operations, policies and practices, they  
 (13) should contact the press office  
 (14) And a number is written, and Mr Weatherford writes back  
 (15) Tim Litzell will call him, they know each other  
 (16) Next, Your Honor, I would like to publish PX620 This is  
 (17) from President Stevens of Exxon USA My own view is that that  
 (18) occurrence, 200,000 barrels in Prince William Sound, was  
 (19) viewed, quote, so highly unlikely that the consequences of it  
 (20) which have occurred pretty well as much as envisioned were  
 (21) viewed as acceptable By today's retrospective view, that is  
 (22) not the case That may be incomprehensible, Mr Chairman  
 (23) Your Honor, next plaintiffs offer the testimony of Ulysses  
 (24) LeGrange, a videotape deposition of about six-and-a half  
 (25) minutes

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- (1) EXAMINATION OF ULYSSE LeGRANGE (Video)  
 (2) BY VIDEO EXAMINER  
 (3) Q Were you involved at any time in your capacity as  
 (4) shareholder representative in evaluating the performance of  
 (5) Larossi?  
 (6) A Yes  
 (7) Q Did you evaluate Larossi's performance at any time after  
 (8) the Exxon Valdez oil spill?  
 (9) A Yes  
 (10) Q What evaluation did you give?  
 (11) A Essentially the same evaluation I had given the prior year  
 (12) Q Which was what?  
 (13) A I considered Frank to be one of our more capable managers  
 (14) Q I'm handing you an document for your counsel review if he  
 (15) chooses, a document that was marked at Mr Fitzgerald's  
 (16) deposition at Exhibit 26823 First of all have you ever seen  
 (17) it before?  
 (18) A I don't recall having seen it  
 (19) Q Have you seen documents like this before, that is, analyses  
 (20) of cumulative and expected expenditures relating to the Exxon  
 (21) Valdez Incident?  
 (22) A I have seen documents which included parts of these costs  
 (23) on here, yes  
 (24) Q It seems to indicate there that it was anticipated that  
 (25) there would be tax deductibility aggregating \$709 million is

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- (1) that correct?  
 (2) A That's what that shows  
 (3) Q So far as you know were oil spill claims and clean up  
 (4) costs deductible and in fact deducted by Exxon?  
 (5) A As far as I know, yes  
 (6) Q What this would appear to show then that on total  
 (7) expenditures of 2 721 000,000 that Exxon's actual after  
 (8) federal income tax cost was 1 306,000,000 Did I read that  
 (9) correctly?  
 (10) A That's what this indicates  
 (11) Q Was Exxon sorry for this spill?  
 (12) A The Exxon chairman made a public apology, as I recall  
 (13) Q That's a slightly different answer from what I questioned  
 (14) Was Exxon as a corporation, in your opinion, responsible for  
 (15) apologies?  
 (16) A The Exxon chairman Larry Rawl, as chairman of the Exxon  
 (17) Corporation apologized for the incident.  
 (18) Q Did the board ever approve a resolution to that effect, to  
 (19) your knowledge?  
 (20) A I've never seen one  
 (21) Q Did the Exxon USA management committee ever consider a  
 (22) resolution to that effect?  
 (23) A No  
 (24) MR JAMIN Ladies and Gentlemen Your Honor, we next  
 (25) have by video deposition the testimony of Mr Jack Clarke

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- (1) about nine minutes  
 (2) EXAMINATION OF JACK CLARKE (Video)  
 (3) BY VIDEO EXAMINER  
 (4) Q Mr Clarke, you are a lawyer, correct sir?  
 (5) A Lawyer by training yes  
 (6) Q Are you licensed in any states right now?  
 (7) A Yes  
 (8) Q What states are you licensed in?  
 (9) A New York  
 (10) Q What is your present title, sir?  
 (11) A I'm a director and senior vice-president of Exxon  
 (12) Corporation  
 (13) Q How long have you held that title, sir?  
 (14) A 16-plus years  
 (15) Q That's same title, is that correct?  
 (16) A Yes  
 (17) Q What is your current residential address?  
 (18) A 3831 Turtle Creek Boulevard, Dallas, Texas  
 (19) Q Who do you report to within Exxon Corporation sir?  
 (20) A I report to the chairman  
 (21) Q How long have you reported to the chairman, sir?  
 (22) A Since I became the director and senior vice-president.  
 (23) Q Well sir, has the spill to your knowledge had any material  
 (24) adverse effect on the business operations of Exxon  
 (25) Corporation?  
 (25) A Material adverse effects on its operations, is that the

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- (1) question?  
 (2) Q Yes  
 (3) A No I'd say not  
 (4) Q Has the spill and the cost incurred by Exxon in responding  
 (5) to the spill had any material adverse effect on the financial  
 (6) condition of Exxon?  
 (7) A I think that the expenditures that we made were very  
 (8) substantial and I think that the - they did not affect our  
 (9) triple A rating which as I recall we were one of 11  
 (10) corporations in the United States with a triple A rating  
 (11) Q Sir were you the member of the board of directors of Exxon  
 (12) that supervised the company's public affairs activities that  
 (13) were taken in response to the oil spill of the Valdez and the  
 (14) subsequent contamination of the Alaska shoreline?  
 (15) A I think that a fairer way to put it is that it was in terms  
 (16) of people on the board of directors that the chairman and the  
 (17) president and I tried to work together on those issues  
 (18) Q Sir did you consider the Exxon Valdez oil spill and the  
 (19) subsequent contamination of the Alaska shoreline with oil that  
 (20) ran aground from the spill to have a catastrophic impact on the  
 (21) coastal habitat of Alaska?  
 (22) A Well obviously I'm not an expert on impacts on the coastal  
 (23) habitat but my belief is that it was not a catastrophic  
 (24) impact  
 (25) Q Do you think it had serious effect on the Alaska

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- (1) environment?  
 (2) A I think that there were serious impacts of some kinds for a  
 (3) period of time yes  
 (4) Q Sir do you consider the grounding of the Exxon Valdez and  
 (5) the subsequent discharge of oil from the Valdez to have caused  
 (6) any catastrophic effects on the economy of the shoreline  
 (7) regions of Alaska?  
 (8) A No  
 (9) Q No?  
 (10) A No  
 (11) Q Can you tell me why you hold that opinion?  
 (12) A I haven't seen any evidence to support that  
 (13) Q Have you looked for any evidence to support whether or not  
 (14) the oil spill had a catastrophic effect on the coastline  
 (15) economy of the state of Alaska?  
 (16) A I'm aware generally of ports of impact yes  
 (17) Q Do you know if the oil spill and the subsequent  
 (18) contamination of the Alaska shoreline had any serious effect on  
 (19) the local economy of the coastal regions of Alaska?  
 (20) A My perception is that in an economic sense the amount of  
 (21) money that was spent in respect to the cleanup significantly  
 (22) contributed to the economy in terms of reducing unemployment  
 (23) in  
 (24) the state and providing income to a lot of people  
 (25) Q Do you consider the oil spill to have been beneficial to  
 the state economy?

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- (1) A I'm just saying that I understand that a lot of employment  
 (2) was provided as a result of the money that was spent on the  
 (3) spill I'm not going to make a judgment as to whether on a net  
 (4) basis they came out ahead or not I'm just reporting what I  
 (5) understand to be the facts  
 (6) Q As of March 1989 is it correct to state that Exxon was the  
 (7) largest U S based petroleum company in terms of both sales  
 and  
 (8) earnings?  
 (9) A You're talking worldwide revenue now?  
 (10) Q Yes  
 (11) A And worldwide earnings? Yes  
 (12) Q You gave some testimony before the break about Exxon  
 being  
 (13) a triple A rated company Was it a triple A rated company in  
 (14) 1989 sir?  
 (15) A Yes  
 (16) Q And that rating was given by Standard & Poor's, is that  
 (17) correct, sir?  
 (18) A And by Moody's as well  
 (19) Q And can you briefly describe what that triple A rating  
 (20) represents in your own words?  
 (21) A Well to me it represents a financially strong company  
 (22) that - that represents top quality investment that can be  
 (23) made  
 (24) Q Sir is Exxon, to the best of your knowledge, still a  
 (25) financially strong company?

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- (1) A Yes  
 (2) Q Is Exxon still within the top five largest industrial  
 (3) corporations in the world in terms of revenues?  
 (4) A I believe it is, but I'm not certain  
 (5) Q Is Exxon still within the top five industrial corporations  
 (6) in the world in terms of earnings?  
 (7) A Yes  
 (8) Q Did Exxon's net income after taxes increase from 1989  
 (9) levels in the calendar year ending December 31, 1990?  
 (10) A Income did increase in 1990 as compared to 89  
 (11) Q Did income increase again in 1991?  
 (12) A Yes  
 (13) MR JAMIN Your Honor, we next offer what's been  
 (14) preadmitted PX6262, which is a very brief videotape taken after  
 (15) the spill  
 (16) (Videotape PX6262 Played)  
 (17) MR O NEILL Your Honor, on the basis of - pursuant  
 (18) to Federal Rule of Evidence 103(a)(2), plaintiffs offer an  
 (19) offer of proof for Court Exhibit No 3 for the purposes and  
 (20) only the purposes in that rule  
 (21) (Exhibit Court 3 offered)  
 (22) THE COURT Court Exhibit No 3 will be received It  
 (23) will not go to the jury, but will be lodged with the clerk as  
 (24) was done with the previous two exhibits  
 (25) (Exhibit Court 3 received)

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- (1) MR O NEILL. We renew our offers of proof in Phases I  
 (2) and II  
 (3) MR LYNCH No objection as offers of proof Your  
 (4) Honor May be some other objections to the admissibility of  
 (5) some of those matters and when offered in Phase III we reserve  
 (6) any such objections  
 (7) MR O'NEILL So understood  
 (8) THE COURT Fine Thank you  
 (9) MR O NEILL On the basis of the evidence adduced in  
 (10) Phases I and II and the answers to the special verdict forms in  
 (11) Phases I and II and the evidence we've adduced here plaintiffs  
 (12) rest.  
 (13) THE COURT Thank you, sir Mr Lynch  
 (14) MR LYNCH Brief side bar before we begin  
 (15) (At side bar off the Record)  
 (16) THE COURT Ladies and Gentlemen, we have gotten a  
 (17) couple of administrative matters taken care of at this point,  
 (18) but there are a few more things that will necessarily have to  
 (19) be done in order for the defendants to go forward with their  
 (20) evidence, so we're going to take a 15-minute break now and  
 (21) we'll call you back at that time to go forward with the defense  
 (22) case  
 (23) (Jury out at 8 45)  
 (24) (Recess from 8 45 to 5 57)  
 (25) (Jury in at 8 57)

- (22) DX6340 DX6343 DX6344, DX6349, DX6371 DX8299-A  
 DX8300-A  
 (23) DX8319-A, DX8368-A DX3450 DX3555, DX3562 DX3563  
 DX3564,  
 (24) DX3565 DX3698 DX9419, DX9420 DX9421, DX9422 DX9423  
 DX9424  
 (25) DX9425-A DX9426 DX9427 DX9437, DX9438 DX9439,  
 DX9440

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- (1) THE CLERK. All rise  
 (2) MR SELNA Good morning Your Honor, Jim Selna for  
 (3) the Exxon defendants Your Honor, at this time we would like  
 (4) to offer a number of exhibits if I may  
 (5) THE COURT Go ahead  
 (6) MR SELNA DX8373 DX8375 DX8379, DX8381, DX8383  
 (7) DX8388 DX8389 DX8403 DX3928, DX3958, DX8030 DX8214,  
 DX2290  
 (8) DX2291, DX2294 DX2296 DX2297, DX2299, DX2304, DX2324  
 DX2325,  
 (9) DX2327, DX2331, DX2332 DX2333 DX2337 DX3929, DX3934  
 DX3936,  
 (10) DX3941, DX3942, DX3943 DX3946 DX3947, DX3948 DX3954,  
 DX3955,  
 (11) DX8339, DX6340, DX6343 DX6344 DX6349, DX6371,  
 DX8299-A  
 (12) DX8300-A DX8319-A DX8368-A, DX3450, DX3555 DX3562  
 DX3563,  
 (13) DX3564 DX3565, DX3698, DX9419, DX9420 DX9421, DX9422  
 DX9423,  
 (14) DX9424 DX9425-A DX9426, DX9427, DX9437, DX9438,  
 DX9439  
 (15) DX9440 DX9442, DX9444, DX3385, DX6317, DX6346 DX6347,  
 and  
 (16) finally DX8399-A.  
 (17) (Exhibits DX8373, DX8375, DX8379, DX8381, DX8383, DX8388  
 (18) DX8389 DX8403, DX3928 DX3958 DX8030, DX8214, DX2290  
 DX2291  
 (19) DX2294 DX2296, DX2297, DX2299, DX2304, DX2324, DX2325,  
 DX2327  
 (20) DX2331 DX2332, DX2333 DX2337, DX3929 DX3934, DX3936  
 DX3941  
 (21) DX3942 DX3943 DX3946 DX3947 DX3948 DX3954 DX3955  
 DX6339

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- (1) DX9442 DX9444, DX3385 DX6317 DX6346, DX6347  
DX6399-A  
(2) offered)  
(3) MR O NEILL We have no objection Your Honor  
(4) THE COURT The exhibits announced are admitted  
(5) (Exhibits DX8373 DX8375 DX8379 DX8381, DX8383 DX8388  
(6) DX8389 DX8403 DX3928 DX3958 DX8030 DX8214 DX2290  
DX2291,  
(7) DX2294, DX2296, DX2297 DX2299, DX2304 DX2324, DX2325,  
DX2327  
(8) DX2331, DX2332, DX2333 DX2337 DX3929, DX3934 DX3938  
DX3941  
(9) DX3942, DX3943 DX3946 DX3947 DX3948, DX3954, DX3955  
DX6339,  
(10) DX6340 DX6343 DX6344, DX6349 DX6371 DX8299-A  
DX8300-A  
(11) DX8319-A DX8368-A DX3450 DX3555 DX3562 DX3563,  
DX3564,  
(12) DX3565, DX3698 DX9419 DX9420 DX9421 DX9422, DX9423,  
DX9424  
(13) DX9425-A, DX9426 DX9427 DX9437, DX9438 DX9439  
DX9440,  
(14) DX9442 DX9444 DX3385 DX6317, DX6346 DX6347, DX6399-A  
(15) received)  
(16) MR SELNA Thank you, Your Honor  
(17) MR SANDERS May it please the Court, we call Connie  
Buhl  
(18) THE CLERK. Please raise your right hand  
(19) (The Witness Is Sworn)  
(20) THE CLERK. For the record please state your full  
(21) name your address and spell your last name  
(22) THE WITNESS My name is Constance Leslie Buhl,  
(23) B-U H-L, and I reside in Seattle, Washington  
(24) DIRECT EXAMINATION OF CONSTANCE BUHL  
(25)

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- (1) BY MR SANDERS  
(2) Q Ms Buhl, by whom are you employed?  
(3) A SeaRiver Maritime  
(4) Q And that s formerly Exxon Shipping Company?  
(5) A Yes, sir  
(6) Q When did you join Exxon Shipping Company?  
(7) A 1981, in August  
(8) Q And prior to that what were you doing?  
(9) A I was a midshipman at the United States Merchant Marine  
(10) Academy at King Point.  
(11) Q Did you graduate there?  
(12) A Yes sir  
(13) Q In 1981?  
(14) A I did  
(15) Q And worked continuously since 1981 for the Exxon Shipping  
(16) Company or SeaRiver Maritime?  
(17) A Yes sir, I have 13 years  
(18) Q And when you graduated from the merchant marine  
academy  
(19) you had a degree in what?  
(20) A I have a bachelor of science degree in marine engineering  
(21) and as a part of the commitment I had at the time, a U S Coast  
(22) Guard third engineer s license  
(23) Q Did you sail as a third engineer?  
(24) A Yes, sir I did  
(25) Q Did you sail as a second engineer?

- (1) A I did  
(2) Q And did you sail as a first assistant engineer?  
(3) A I have  
(4) Q At some point in time did you become a chief engineer?  
(5) A I am I am a U S Coast Guard licensed chief engineer of  
(6) steam and motor  
(7) Q How many women in the United States have that license in  
(8) the United States?  
(9) A I m the first and as far as I know the only  
(10) Q Now, Ms Buhl, let me ask you to go to the morning of March  
(11) the 24th 1989, which was Good Friday Where were you?  
(12) A Good Friday was a holiday, company holiday, and I was  
(13) working ashore on a temporary shore assignment I was  
removed  
(14) from the fleet on a temporary basis to work in Houston on an  
(15) inventory maintenance commuter system that we had on our  
(16) vessel, but - Friday morning was a holiday, but I had some  
(17) work to catch up on  
(18) Q What time were you in the office on Good Friday morning?  
(19) A About 6 30  
(20) Q And at the office at 6 30 that morning did you come to find  
(21) out about the Exxon's oil spill?  
(22) A Yes, I did  
(23) Q From who?  
(24) A Mr Tom Gillette  
(25) Q And he was at the office that morning?

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- (1) A Yes, sir  
(2) Q What was his position that morning, 1989?  
(3) A He was, to my knowledge - I do not recall what the  
(4) company s definition of his job was but I would refer to him  
(5) as an assistant to Mr Iarossi  
(6) Q Mr Iarossi was president of Exxon Shipping?  
(7) A Yes, sir  
(8) Q What did he tell you?  
(9) A I encountered Mr Gillette in the hall and he informed me  
(10) that the vessel was aground in Prince William Sound and that  
(11) she was spilling some of her cargo, she had spilled some oil  
(12) Q Did he ask you to assist in responding to that?  
(13) A Yes sir, he did He indicated to me when I saw him in the  
(14) hall to accompany him to the, what we called in the company  
the  
(15) large conference room to begin addressing spill response  
(16) Q And did you begin that work that morning?  
(17) A Yes sir, immediately  
(18) Q What did you do?  
(19) A Well, probably the easiest thing for me to do is describe  
(20) the events We went to the large conference room There was a  
(21) small room off the large conference room that contained books  
(22) relating to oil spill response Mr Gillette went and got  
(23) those books  
(24) Q Hold on Were those manuals?  
(25) A Yes sir, the company manuals

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- (1) Q And what was in those manuals what do they provide?  
 (2) A They are guidance as to how to respond to an oil spill  
 (3) They contain names, phone numbers organizations They take  
 (4) you through spill response  
 (5) Q And did you thereafter and the other people that you're  
 (6) going to tell us about, did you use those manuals to do the  
 (7) work that you were doing?  
 (8) A Yes, sir  
 (9) Q In these next weeks?  
 (10) A Absolutely That was the first thing that we did, was get  
 (11) those manuals  
 (12) Q Now, in terms of - let's go away from the manuals a  
 (13) second And after consulting the manuals or starting to  
 (14) consult the manuals, what steps did you take to do work that  
 (15) morning?  
 (16) A The first thing that I did was get on the phone We had  
 (17) to - we knew we had to get more phones and communication  
 (18) equipment in the room, so the first thing I did was called what  
 (19) we called building services to get phones and faxes and all the  
 (20) things we were going to need to pursue spill response, and  
 then  
 (21) I was on the phone to other shipping company employees to tell  
 (22) them about the spill, it was still very early in the morning,  
 (23) and get them to the company, to the conference room, to help  
 (24) Q Then having called up people from Exxon Shipping  
 Company,  
 (25) consulted the manuals, called the building services, did you

- (1) have located to Alaska?  
 (2) A Exactly  
 (3) Q Now, in getting equipment to Alaska were there certain  
 (4) limitations on you?  
 (5) A In getting equipment to Alaska, the limitation I most  
 (6) recall was the size of the Valdez airport And we were  
 (7) chartering very large planes as well as some smaller planes  
 (8) and probably the most glaring limitation was the size of the  
 (9) Valdez airport so our smaller planes were able to go directly  
 (10) to Valdez with equipment. Larger planes had to be routed,  
 (11) typically panned out to be Elmendorf, and they were  
 transported  
 (12) from there to the spill area.  
 (13) Q And you had to arrange that second stage transport from a  
 (14) larger airport down to the Valdez area either by another set of  
 (15) planes or other types of transport?  
 (16) A Yes  
 (17) Q Now I'm still on the first day Did you divide up - well,  
 (18) strike that  
 (19) This conference room I gather from what you've just said,  
 (20) became the spill response center?  
 (21) A Yes, it did  
 (22) Q Quickly and automatically?  
 (23) A Yes it was somewhat set-up  
 (24) Q As the day progressed, did it come to be divided into  
 (25) divisions?

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- (1) then get into actually doing something to respond to the spill?  
 (2) A Yes, sir absolutely  
 (3) Q About what time did you get started on that?  
 (4) A Before 8 00  
 (5) Q This is 8 00 the morning of Good Friday?  
 (6) A Yes, sir  
 (7) Q Now, what - tell the ladies and gentlemen of the jury  
 (8) briefly what kinds of things you did in those first few hours  
 (9) to work on the spill response  
 (10) A In the first few hours, I was on the phone, and  
 (11) subsequently, as other people came in, we were on the phone  
 (12) calling around the country and ultimately around the world  
 (13) There are organizations all over the country that stockpile oil  
 (14) response equipment, and these organizations are laid out in  
 (15) this manual with their phone numbers and contacts so we  
 spent  
 (16) the morning and the subsequent time in the spill response  
 (17) center calling organizations procuring equipment, calling  
 (18) expeditors airplane brokers arrangement - basically we  
 (19) procured and arranged for the transportation of spill response  
 (20) equipment  
 (21) Q Let's break that down just a little bit First you're  
 (22) locating equipment correct?  
 (23) A That's correct  
 (24) Q And because the equipment is around the country and  
 around  
 (25) the world you have to arrange to get that equipment that you

- (1) A What happened was on Friday there were two actual  
 (2) problems One was of course the oil that had escaped the  
 (3) vessel, and then on top of that we had a ship stranded with a  
 (4) million barrels remaining on board And what happened was the  
 (5) room took kind of a natural division to it It became sort of  
 (6) split of half resources being some tables, and the naval  
 (7) architects and marine engineers took over half the room and  
 (8) they had vessels' plans and whatnot out, and they were  
 (9) addressing vessel stability, figuring out about getting the  
 (10) remaining barrels off the vessel and just the whole viability  
 (11) of the vessel as she sat there on Bligh Reef  
 (12) We were on the other half of the room and we were  
 (13) addressing the oil that was on the water and how to clean it up  
 (14) and getting gear up there as fast as possible  
 (15) Q And I think you've made it clear, you were on the side of  
 (16) the room that had to do with locating equipment, getting it  
 (17) transported there?  
 (18) A Yes, sir, I was  
 (19) Q Now, that first day let's say by about noon or whatever  
 (20) time is right, about how many people did you have working if  
 (21) you can recall?  
 (22) A Many In addition to the people that I called as the day  
 (23) progressed and the news media was reporting the incident,  
 (24) people from the company were coming in on their own  
 (25) volunteering their help, and I would say at any one time

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- (1) responding to the spill there was probably ten of us on the  
 (2) phones and another ten that were assisting us  
 (3) Q Now that first day if you remember how many hours did  
 (4) you work?  
 (5) A I remember 24 almost 24 hours  
 (6) Q And was this continuously on the phone calling getting  
 (7) equipment?  
 (8) A Yes sir  
 (9) Q Arranging to get it there?  
 (10) A Absolutely, yes sir  
 (11) Q Now after that first day, did you divide up into shifts?  
 (12) A We did We organized into three eight hour shifts  
 (13) Q Did you take one of those shifts? -  
 (14) A Yes I did I was relieved of any other duties within the  
 (15) organization, so I dedicated one hundred percent of my time to  
 (16) spill response And I was assigned to a watch, but I basically  
 (17) stood two  
 (18) Q So how many hours a day were you averaging working?  
 (19) A Over 16  
 (20) Q 16 And the other people that were working with you, was  
 (21) that - was your time commitment extraordinary, or was that  
 (22) generally what people were doing?  
 (23) A To my recollection, I may have been the only one  
 (24) dedicated - no, I wasn't the only one There were a couple of  
 (25) us that were dedicated to the spill, that our position in the

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- (1) company didn't require our attendance The people who were  
 (2) also on watch on spill response many of them had positions in  
 (3) the company that couldn't be ignored, so those people would  
 (4) go  
 (5) and work their normal job get off that job after their  
 (6) eight-hour duty or whatever and come work spill response for  
 (7) eight hours nine hours, ten hours, go home, sleep and then  
 (8) come back  
 (9) Q Did this - you mentioned that you had volunteers the first  
 (10) day Did this volunteering keep up in these first weeks?  
 (11) A Yes, sir everyone volunteered to work wherever they could  
 (12) work  
 (13) Q Now in these first weeks you said you worked basically 16  
 (14) hours a day Were you busy this entire 16 hours or were you  
 (15) just on standby?  
 (16) A No, sir, we were busy Suffice it to say, we were  
 (17) extremely busy  
 (18) Q Now were you required to work 16 hours a day?  
 (19) A No, sir  
 (20) Q Why did you work like that?  
 (21) A It was our ship Excuse me  
 (22) Q That's all right Do you want some water?  
 (23) A Yeah I'm an engineer Pardon me it was very emotional  
 (24) and it is now  
 (25) It was our ship and we were going to do whatever it took to  
 clean up what we did Excuse me

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- (1) MR SANDERS That's all right I have no further  
 (2) questions Your Honor  
 (3) CROSS EXAMINATION OF CONSTANCE BUHL  
 (4) BY MR O NEILL  
 (5) Q Do you want to take a break for a second?  
 (6) A I think I'm going to be okay but thank you for offering  
 (7) Go ahead  
 (8) Q Thank you for your work on the spill And I have a few  
 (9) questions  
 (10) A You bet  
 (11) Q Normally I come up here with a transcript and a big stack  
 (12) of papers but I have a couple questions  
 (13) As a result of your experience in those days and pulling  
 (14) the equipment together and searching for equipment, you  
 (15) searched for the equipment in United States and Europe?  
 (16) A All over even Russia  
 (17) Q I think it's fair to say, and it's relatively obvious, that  
 (18) there was not equipment anywhere in Alaska to deal with the  
 (19) spill?  
 (20) A I agree  
 (21) Q And again I think it's fair to say and it's obvious, but  
 (22) with a spill of this magnitude in excess of 200 000 barrels,  
 (23) oil is going to reach the shore?  
 (24) A That's probably fair to say In hindsight, that proved to  
 (25) be the case

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- (1) Q Did you know in the contingency plan, that was also  
 (2) envisioned? Did you know that or not?  
 (3) A I have never read the contingency plan  
 (4) Q Save yourself the time to read the contingency plan  
 (5) A And I think that the objective of the contingency plan was  
 (6) not to address a spill of this magnitude, that a spill of this  
 (7) magnitude was considered to be a very remote possibility, and I  
 (8) think that it was remote enough that whom the powers to be that  
 (9) were involved in developing that plan, which were the shipping  
 (10) companies and EPA and the State of Alaska and the Coast  
 Guard,  
 (11) all concurred that the remoteness of that possibility precluded  
 (12) them from having that itemized in their spill response  
 (13) Q And it wasn't -  
 (14) A Again I haven't read the spill response, but that is my  
 (15) understanding  
 (16) Q Because if we have a spill of this magnitude, and the  
 (17) terrible things that result from a spill of this magnitude, the  
 (18) best way to attack it is by not allowing it ever to happen,  
 (19) prevention common sense, isn't it?  
 (20) A Prevention is, for any accident, is truly the best  
 (21) approach yes  
 (22) Q And I was interested - I've got one or two more questions  
 (23) and then I'll sit down  
 (24) You made the comment that there was still a million barrels  
 (25) on the vessel after it ran aground and it had discharged

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- (1) 260 000 barrels?  
 (2) A Yes sir  
 (3) Q And that million barrels on the ship which Captain Deppe  
 (4) is going to come and testify about but that million barrels  
 (5) the reasons that we lighted it was because that million  
 (6) barrels also presented a threat to Prince William Sound and the  
 (7) communities around the Sound ship was stranded it had an  
 (8) additional million barrels and that additional million barrels  
 (9) was also a threat?  
 (10) A I concur  
 (11) MR O NEILL Thank you, Ma'am  
 (12) THE COURT Anything further?  
 (13) MR SANDERS No further questions, Your Honor  
 (14) THE COURT Thank you You may step down  
 (15) MR SANDERS Call Captain Deppe  
 (16) THE CLERK Please raise your right hand  
 (17) (The Witness is Sworn)  
 (18) THE CLERK Please be seated For the record, sir,  
 (19) state your full name, your address and spell your last name,  
 (20) please  
 (21) THE WITNESS My name is William James Deppe Last  
 (22) named is D-E-P-P-E I live in Valdez Alaska  
 (23) THE CLERK Thank you, sir  
 (24) DIRECT EXAMINATION OF WILLIAM DEPPE  
 (25) BY MR SANDERS

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- (1) Q Good morning, Captain  
 (2) A Good morning  
 (3) Q By whom are you employed?  
 (4) A SeaRiver Maritime  
 (5) Q And how long have you been employed by SeaRiver, Exxon  
 (6) Shipping Company?  
 (7) A 22 years  
 (8) Q And did you graduate from one of the marine academies?  
 (9) A State University of New York Maritime College in New York  
 (10) Q What year?  
 (11) A In 1972.  
 (12) Q And in '72 did you begin working for Exxon Shipping  
 (13) Company?  
 (14) A Yes, sir I did  
 (15) Q And you worked continuously for Exxon as an officer, deck  
 (16) officer, since 19 -  
 (17) A '72  
 (18) Q '72 Now, you mentioned that you now live in - well,  
 (19) strike that.  
 (20) You became a captain when?  
 (21) A In 1982  
 (22) Q And did you sail as a captain?  
 (23) A Yes  
 (24) Q What are some of the ships that you were the captain,  
 (25) master of?

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- (1) A The Exxon Huntington, Gettysburg Lexington Washington  
 (2) Baytown, Long Beach  
 (3) Q Is Long Beach the same size as the Exxon Valdez now the  
 (4) Mediterranean?  
 (5) A Yes The Long Beach is a sister ship to the Exxon Valdez  
 (6) Q I think the jury will recall from some of the testimony in  
 (7) Phase I there came a time when you came ashore and became  
 a  
 (8) port captain, is that correct?  
 (9) A Yes  
 (10) Q And then later you became a ship group coordinator?  
 (11) A Yes  
 (12) Q And you served as a ship group - tell the jury again, just  
 (13) in case they have forgotten, a ship group coordinator did what  
 (14) in the years that you served as a ship group coordinator?  
 (15) A It was a line manager between the fleet manager and the  
 (16) captain and the chief engineer on the vessel, and he was  
 (17) responsible for the operations of the vessel and monitoring  
 (18) different aspects of the operations of the ship of the vessel,  
 (19) and the personnel matters and repairs, items like that  
 (20) Q And as ship group coordinator, you had more than one ship,  
 (21) correct?  
 (22) A That's correct.  
 (23) Q Typically how many ships did you have?  
 (24) A Three or four  
 (25) Q So you served as an Exxon captain and I guess as captain

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- (1) of its biggest tankers correct?  
 (2) A That's correct  
 (3) Q And you served as port captain and then as ship group  
 (4) coordinator?  
 (5) A That's correct  
 (6) Q What is your job now?  
 (7) A I m the Valdez port operations coordinator  
 (8) Q And as Valdez port operations - when did you take over  
 (9) that job?  
 (10) A That was last September  
 (11) Q And before you took that job, did that job exist anywhere  
 (12) in the Exxon empire?  
 (13) A No, it did not.  
 (14) Q And what is that job?  
 (15) A Up in Valdez there is a tremendous amount of activity in  
 (16) the marine industry Alyeska is located there, SERVS is  
 (17) located there  
 (18) Q Excuse me Nobody knows what SERVS is  
 (19) A SERVS is a ship escort and response vessel service They  
 (20) have got their main offices or the - ADEC has got some  
 (21) offices, the Coast Guard has got a station there, some oil  
 (22) companies are located there  
 (23) There is a tremendous amount of activity in the marine  
 (24) industry, and what I did do is just stay involved in a lot of  
 (25) that activity to keep abreast of the latest developments in



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- (1) Alaska for Exxon, for SeaRiver  
 (2) Q In addition to doing those things do you have any  
 (3) oversight or watchdog function?  
 (4) A I also go down to every vessel when it's in port, when I'm  
 (5) in town and visit the vessel talk with the captains and the  
 (6) officers on board and the crew to just give them the latest  
 (7) information about things I've learned about what Alaskan  
 (8) activities are and monitor the activities on board and make  
 (9) sure we don't have any problems  
 (10) Q Now in that latter function is it your job to insure that  
 (11) company policies and federal and state regulations are being  
 (12) complied with?  
 (13) A That's part of my function correct One other activity is  
 (14) to be available in case we ever do have an emergency  
 (15) situation I'll be a person on scene to respond to it as  
 (16) quickly as I can  
 (17) Q Captain, I want to go now away from that job to 1989 When  
 (18) did you first hear about the oil spill from the Exxon Valdez?  
 (19) A Early Friday morning It was a holiday for Exxon that day  
 (20) and I was sleeping I got a phone call from Paul Myers, and he  
 (21) informed me about the spill at that point  
 (22) Q Now, eventually where did you end up that day?  
 (23) A Eventually I ended up in Valdez and ultimately on board the  
 (24) Exxon Valdez  
 (25) Q Before going to the - after you arrived at Valdez and

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- (1) before going to the Exxon Valdez did you receive instructions  
 (2) from Mr. Larossi?  
 (3) A When Mr. Larossi arrived in Valdez I was already there  
 (4) and Mr. Larossi asked me to go on board the Valdez and relieve  
 (5) Captain Hazelwood  
 (6) Q Did you do that?  
 (7) A Yes I did  
 (8) Q And when you went up to relieve Captain Hazelwood, did you  
 (9) have any discussion with him concerning what had happened  
 (10) or  
 (11) anything like that?  
 (12) A No  
 (13) Q You simply relieved him?  
 (14) A Yes  
 (15) Q And after you relieved him, what did you do?  
 (16) A Well, the first thing I did was got together with some of  
 (17) the senior officers and try to assess what the situation on the  
 (18) vessel was  
 (19) Q For what purpose?  
 (20) A Well it was - what I found out shortly after arriving was  
 (21) a very precarious situation from what I could tell  
 (22) Three-quarters of the bottom of the vessel had been ripped  
 (23) open  
 (24) by rocks we had lost a tremendous amount of oil from the  
 (25) vessel The vessel was aground we didn't know how much of it  
 (26) was aground We didn't know really the stability of the  
 (27) vessel If anything occurred at that moment if it somehow

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- (1) refloated, whether it would stay afloat or not  
 (2) There was the possibility that because of the damage on the  
 (3) bottom, that with the tide action and the motion of the vessel  
 (4) on the rock where it was, it could create some stresses on the  
 (5) ship that could break it in half, and it was - I was trying to  
 (6) gather as much information as I could in a short period to find  
 (7) out what our next step should be  
 (8) Q And was there an ultimate aim to all this? Had lightering  
 (9) been mentioned at this point?  
 (10) A Yes lightering was something that was mentioned before I  
 (11) even went out there We were going to try to lighten the ship,  
 (12) if we could to get as much oil off as we could before anything  
 (13) worse happened out there  
 (14) Q And you were to be the captain of the vessel that was to be  
 (15) lightered, correct?  
 (16) A I was the captain for about three days after Captain  
 (17) Hazelwood left, the official captain on board  
 (18) Q We'll get into how you changed jobs but on Friday, the  
 (19) 24th of March when you arrived and relieved Captain  
 (20) Hazelwood,  
 (21) you were to determine whether lightering could be done in  
 (22) terms  
 (23) of the safety of that ship, correct?  
 (24) A That was the major function We were going to attempt  
 (25) lightering My job was to figure out how we could do it.  
 (26) Q And the first step you took was to determine how dangerous  
 (27) the situation was correct?

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- (1) A That's correct  
 (2) Q And you talked with the people on board, correct?  
 (3) A Correct  
 (4) Q And you made your assessment?  
 (5) A We had some divers that came alongside also, and they gave  
 (6) us some information early on, too  
 (7) Q And as I understand it, the two principal dangers that  
 (8) concerned you were, one whether the ship could break apart,  
 (9) given the rising falling tides and the damage that had been  
 (10) done that was the first; the second was if it floated off the  
 (11) rock on which it had grounded, what would happen to it, would  
 (12) it sink?  
 (13) A Yeah And the third one was blowing up  
 (14) Q And what was your assessment after you went out there,  
 (15) looked at the situation talked to those people, what did you  
 (16) think?  
 (17) A Well, we had really scanty information Our initial  
 (18) assessment was we thought we could stay there and start the  
 (19) lightering operation It was real important, talking to our  
 (20) naval architects that we keep the vessel aground, that we  
 (21) didn't refloat in any way So all the plans had to be  
 (22) developed around keeping the vessel on the rocks and not  
 (23) letting it get off the rocks I was told if we did refloat  
 (24) that we would probably capsize and sink, although all those  
 (25) determinations weren't totally made at that point by the naval

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- (1) architects  
 (2) Q Let me stop you a second How did you talk to the naval  
 (3) architects, where were they?  
 (4) A They were in Houston and I talked to them via satellite  
 (5) telephone  
 (6) Q Is that the group Ms Buhl was talking about just a second  
 (7) ago?  
 (8) A I believe so  
 (9) Q So you consulted with them after you had seen the ship and  
 (10) after you had talked to the officers on board?  
 (11) A That s correct  
 (12) Q Now, as a result of your assessment, did you give the crew  
 (13) a choice of staying on board?  
 (14) A Well the next morning before we started lightering  
 (15) operations we met with the whole crew and we discussed what  
 (16) we were going to do the dangers and the way I thought they were  
 (17) developing for us and we tried to go over all kinds of safety  
 (18) aspects before we did anything and try to guarantee personal  
 (19) safety  
 (20) One of the options we gave everyone was that if they  
 (21) thought they weren't able to continue on board, after what they  
 (22) have been through that they can leave the vessel and we'll try  
 (23) to find a replacement No one decided to leave everyone  
 (24) decided to stay  
 (25) Q And in making that decision, you had already gone over the

- (1) A Right.  
 (2) Q And just so there is no question about it tell them what  
 (3) lightering is  
 (4) A Lightering is just taking the oil that s on board the Exxon  
 (5) Valdez and transferring it to another vessel  
 (6) Q Now, that sounds simple but I think we need to explain how  
 (7) difficult that is in the situation you had out there First  
 (8) can you describe to the jury the particular problem caused by  
 (9) having no bottom in many of the tanks and how would you  
 (10) possibly be able to take fuel out under those circumstances?  
 (11) And since you and I have done this, I know you need a little -  
 (12) A Probably be best to draw a picture than try to explain it  
 (13) I m not that good an explainer and it would probably be easier  
 (14) to draw a picture  
 (15) Q Well the problem was you were explaining it to me -  
 (16) MR NEAL. That s a real chore, Captain I ve worked  
 (17) with him a long time, haven't been able to explain anything to  
 (18) him  
 (19) MR SANDERS I object to Mr Neal's interruptions  
 (20) BY MR SANDERS  
 (21) Q Will this be all right?  
 (22) A I guess  
 (23) Q I ll get you a pen  
 (24) A Well, the cargo tank is similar to a big milk carton, I  
 (25) guess you could say It looks something like that and there

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- (1) dangers as you saw it?  
 (2) A Well, that was the first thing we did the next morning was  
 (3) try to get everyone prepared for the worst case scenario If  
 (4) we did break in half if we did have refloat inadvertently for  
 (5) some reason and the vessel got into an emergency situation, we  
 (6) wanted to guarantee that the people were taken care of first as  
 (7) best we could under the circumstances So we went over all  
 (8) those plans before we did anything, to make sure that everyone  
 (9) was prepared to get off the ship as rapidly as we could if  
 (10) something bad happened during that time  
 (11) Q Then following that and other discussion you actually gave  
 (12) them the option of whether they stayed or not?  
 (13) A That's correct.  
 (14) Q And they all stayed?  
 (15) A Yes  
 (16) Q And I believe you said this but I want to make sure it s  
 (17) clear, that at the time it was your assessment that there was  
 (18) approximately a million barrels of oil still on the ship,  
 (19) correct?  
 (20) A We thought we had a little over a million barrels left on  
 (21) board that s correct.  
 (22) Q And when did the lightering actually start?  
 (23) A I got on board Friday night and the lightering started  
 (24) Saturday afternoon  
 (25) Q So the very next day?

- (1) is - there might be 15 cargo tanks on board the Exxon Valdez  
 (2) full of oil A normal tank would have a pipeline in the bottom  
 (3) of it here and there might be oil up to this level, and when  
 (4) you pump out the cargo this oil would just come out down here  
 (5) and up through this suction valve and out into the cargo pumps  
 (6) and over the side of the ship And that s how we would  
 (7) normally do it If the bottom was intact the oil would feed out  
 (8) through gravity and go out  
 (9) On the Exxon Valdez there is a hole in the bottom of each  
 (10) tank, so you had this suction valve down here Oil floats on  
 (11) top of water, so when you try to - what happened initially,  
 (12) the oil might have been there high in the tanks and the water  
 (13) outside was at that level (indicating) The oil immediately  
 (14) went down to that level and that's where we got the initial  
 (15) 280 000 barrels of oil that came out of the ship right there  
 (16) But at this point the oil was stabilized equal with the  
 (17) water outside so water could come in and out of here easily  
 (18) without any oil coming out for the most part And if we tried  
 (19) to start a pump up right now and pump out oil we would get  
 (20) water coming in and not any oil coming out, so the dilemma was  
 (21) how to get the oil out of the ship  
 (22) What was decided on was to - and the only way we figured  
 (23) we could do it was to put pumps in from the top of the tank,  
 (24) and there is little pumps that are manufactured that can fit  
 (25) through about a 12 inch hole and it s on the deck of each ship

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- (1) that you can take a plate off of and slip these pumps and they  
 (2) can be driven by hydraulic oil and they can pump maybe a  
 (3) thousand barrels an hour if you're lucky  
 (4) But anyway what we did was we got a bunch of these pumps  
 (5) and flew them out to the ship. We inserted them in the tanks  
 (6) and just put them in the oil right there and we pumped the oil  
 (7) out from the top. As we pumped the oil out from the top  
 (8) because oil floats on water, water would - oil would flow to  
 (9) the bottom and as we kept pumping it would fill up with water  
 (10) from the bottom and the oil would go out the top  
 (11) So that's how we lightered the majority of the oil  
 (12) Q Thank you, Captain. You can sit down now.  
 (13) Now, you mentioned the prospect for explosion, danger. Was  
 (14) there a particular area in which that danger was the greatest?  
 (15) A Well, when we were pumping the oil from the top like that  
 (16) oxygen could come in through the openings that we had  
 (17) opened up  
 (18) and we would create an explosive atmosphere between the void  
 (19) space, the deck and the oil. By putting the tools and lines  
 (20) and equipment down there, we could get a spark, and if we had  
 (21) an explosive atmosphere, you could blow up the ship. We ran  
 (22) the inert gas system as soon as we started getting close, which  
 (23) generates gases that don't have enough oxygen to allow an  
 (24) explosion, and that just - that system ran the whole time to  
 (25) get that atmosphere from being an explosive atmosphere  
 (26) Q How do you get that atmosphere?

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- (1) A We have meters that can check that  
 (2) Q Now let's explain - if you explain how you could not use  
 (3) the regular pumping system to pump the oil out of the tanks  
 (4) because that's where the water - in some of the tanks at  
 (5) least?  
 (6) A Sure  
 (7) Q So you're pumping from the top, correct? Would that mean  
 (8) that you had to redo the entire system above the deck in order  
 (9) to get the oil up to pump it off to another ship?  
 (10) A Yeah. Once we got the oil to the deck, we had to do  
 (11) something with it.  
 (12) Q I think I've got some pictures to help us out a little  
 (13) here, but first I've got a blow up before - I have to play  
 (14) with this machine over here.  
 (15) This is Exhibit DX8375, which is a blow-up, and could you  
 (16) tell the ladies and gentlemen of the jury what this is and why  
 (17) we have it up here?  
 (18) A That's - I don't know which one of those ships, it's  
 (19) either the Baton Rouge or the San Francisco, but it's one of  
 (20) the ships we used to lighten and it's tied up along the  
 (21) Valdez. The smaller ship is the ship we used to lighten  
 (22) Q This is the Valdez and that's a cloud that's blanketing that  
 (23) off?  
 (24) A Yeah, that's a shadow. Can I stand up?  
 (25) Q With the Court's permission

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- (1) A What we did here, all those individual pumps we had in  
 (2) different tanks were just put down through these little holes  
 (3) You can see there is a little pump there, there is a pump over  
 (4) here, and we got these hoses that were strung all the way down  
 (5) the deck. You can see how they - we pump the oil up from the  
 (6) tank to the main deck and then we had to do something with it.  
 (7) So what we did, we took all this oil and ran hoses from the  
 (8) individual tanks and ran them over to this manifold right  
 (9) here  
 (10) This is where we normally discharge oil if we're at a dock,  
 (11) or unload oil, so we ran these different tanks and hoses to  
 (12) this manifold, and over on this side we pumped it right across  
 (13) the ship, and over on this side we connected hoses to the  
 (14) lightering ship and pumped the oil into the lightering ship  
 (15) just like we normally load oil onto a ship, onto this one  
 (16) The reason we did that was we felt if we ran individual  
 (17) hoses across from each tank this way, that we would stand a  
 (18) chance of spilling some oil. These hoses were a little more  
 (19) flimsy than what you would normally use to go across water  
 (20) with, and we thought it would be a safer and easier operation  
 (21) to just go across on several hoses here rather than run maybe  
 (22) 15 hoses in different places that way  
 (23) Q Thank you  
 (24) I want to briefly go through some more detail about how  
 (25) this was done, and we've got some pictures here to help with

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- (1) that.  
 (2) Now, this is another picture of the Valdez with another  
 (3) ship lightering. Can you describe what we see there?  
 (4) A It looks like it's similar to the picture we just saw where  
 (5) we were - where we just had tied up the ship there and were  
 (6) getting ready to lighten it. One thing you can see on this  
 (7) picture is that the Valdez has got a - the ship is listing to  
 (8) starboard or leaning over to the right side of the vessel, and  
 (9) that was something that was occurring twice a day on us,  
 (10) because the right side of the ship and the center line of the  
 (11) ship was - all those tanks were holed. That's where the  
 (12) vessel was aground, on that side of the vessel. The port side  
 (13) was afloat. And as the tide came up, the port side would float  
 (14) and the starboard side would stay on the rock, and twice a day  
 (15) we would get about a five or six degree list to starboard, and  
 (16) then we would go back down to port again and we would get  
 (17) even  
 (18) keel or get a little bit of a port list.  
 (19) And you can see right there the vessel is listing a little  
 (20) bit to starboard. That's where we were just sitting on the  
 (21) rock, right there on that starboard side.  
 (22) Q Captain, particularly when the tide would go up and down  
 (23) like that, did you hear any noise from below in the Valdez?  
 (24) A There was some real scary noises that were generated once  
 (25) in a while down there. People working down there on the  
 pumps  
 (26) would tell us about tremendous cracking and banging noises  
 that

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- (1) were occurring and a few times when I was walking out there I  
 (2) heard them also The whole ship would vibrate as a piece of  
 (3) metal let go or something would crack down there that hadn't  
 (4) previously cracked down there and it got your attention when  
 (5) it happened  
 (6) Q Let me show you Exhibit DX8379 in evidence, and if you can,  
 (7) use that light pen up there  
 (8) A Is this it right here?  
 (9) Q Yes We can see it.  
 (10) A What we're seeing here is just the - as I showed you  
 (11) earlier, the cargo hoses that went across from one vessel to  
 (12) the other, and I'm just going across it really slowly here we  
 (13) connected these cargo hoses up and just left them there and  
 (14) that was just a permanent connection so we wouldn't have to  
 (15) keep moving those smaller, less adequate hoses back and  
 (16) forth,  
 (17) so we could - we would stand less of a chance of spilling oil  
 (18) that way  
 (19) Q Are you ready to go to the next picture?  
 (20) A Yes please  
 (21) Q DX8388 in evidence, what is this?  
 (22) A That's - this is the collection side of the Valdez That  
 (23) was the starboard side of the Valdez, the manifold on the  
 (24) opposite side of the lightering ship That's where all the  
 (25) hoses came together and that's where we collected the oil on  
 the vessel

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- (1) Most of those manifolds there the chief engineer and the  
 (2) engineering staff put together for us on an emergency basis so  
 (3) we could collect the oil and connect those hoses in a mass like  
 (4) that That big one on the end is something we had ordered  
 (5) especially, and it flew around the Sound about a week before  
 (6) we  
 (7) got it And it weighed about a thousand pounds, but we did use  
 (8) it eventually  
 (9) Q Do I understand that all of this business up here was  
 (10) rigged by the crew after the grounding in order to make this  
 (11) system that you described to the jury possible?  
 (12) A The crew put that together in order to make this possible,  
 (13) that's correct  
 (14) Q Now let me move to DX8383 in evidence  
 (15) A That's just another view of the same thing, the manifold  
 (16) there with those different connections that the crew would put  
 (17) together  
 (18) Q And the purpose of that is to get the oil from these  
 (19) different kinds of pumps into the manifold so that it can go  
 (20) across to the lightering ship in the normal - using normal  
 (21) hoses, correct?  
 (22) A That's correct  
 (23) Q The next one is 83 - DX8389 in evidence What's this?  
 (24) A That's an example of a - we call that a prime mover That  
 (25) was one of the - there is a diesel motor that's connected to a  
 hydraulic unit that would power the pumps in each tank, and

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- (1) that was - each pump had to have its own prime mover  
 (2) The Coast Guard had several units That's one of the Coast  
 (3) Guard's units out there and that was what powered the pumps  
 (4) we  
 (5) were using to pump out each tank  
 (6) Q I'm glad you raised that. I gather that you were not alone  
 (7) in working on this lightering project?  
 (8) A No I was not alone There was lots of help out there  
 (9) Q And that help included the Coast Guard?  
 (10) A The Coast Guard were the first people on scene with their  
 (11) Pacific Strike Team  
 (12) Q Was the coordination good and the cooperation good  
 (13) between  
 (14) you and the Coast Guard and the other agencies that helped?  
 (15) A The Coast Guard were quite heroic in this thing They  
 (16) worked around the clock and never asked for a thing never  
 (17) took  
 (18) a break They did a great job  
 (19) Q And they are the ones that brought in these prime movers?  
 (20) A They brought in three pumps, and then we, through our own  
 (21) resources, brought in - eventually I think we had close to 20  
 (22) pumps, maybe 17 18 I think we may have had 11 in operation  
 (23) maximum at any time  
 (24) Q Let me show you, this is the final picture, DX8381 in  
 (25) evidence  
 (26) A That's just one of the tripods that were rigged up that  
 (27) would hold the pump in the tank One of the challenges the  
 (28) people operating each pump was, especially when the oil  
 (29) started

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- (1) getting pretty close to maximum oil out of the tank, was as the  
 (2) tide came in and out the oil would rise 12, 15 feet in the  
 (3) tank or go down, and to try to keep the pump in the oil was  
 (4) difficult So the people were having to adjust the pumps to  
 (5) keep the pump near to surface and not get it in the water  
 (6) Sometimes we pumped water, but they worked hard to try to  
 (7) keep  
 (8) them adjusted properly so we would get mostly oil  
 (9) Q I guess it's obvious, but I think we ought to make the  
 (10) point Is it true that the pumping in every step in this  
 (11) operation, unlike a normal operation, was a hands-on, 60  
 (12) seconds out of every minute operation?  
 (13) A There were people at each pump site, and watching the  
 (14) prime  
 (15) movers, keeping those going there were diesel motors that had  
 (16) to be taken care of There were hydraulic units that had to be  
 (17) monitored and the pumps had to be adjusted and there were  
 (18) people constantly doing that We had up to 70 people on board  
 (19) the vessel during the maximum activity there trying to get all  
 (20) this done  
 (21) Q Now, as the time went on did you become more comfortable  
 (22) with the seaworthiness of the vessel or did the fear of those  
 (23) two or three things happening stay with you during the entire  
 (24) time?  
 (25) A I think we all learned to live with the uneasiness that we  
 (26) had about something going wrong The longer we stayed there  
 (27) it  
 (28) became less likely that it would occur because it hadn't

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- (1) occurred but I never felt totally comfortable that I was going  
 (2) to be safe at all moments there  
 (3) Q Did there come kind of a humorous incident when that was  
 (4) brought home to you?  
 (5) A Well after about a week on board we had gone through and  
 (6) drilled safety into everyone constantly every day at our  
 (7) meetings in the mornings and just walking about making sure  
 (8) that everyone was prepared to get off if anything bad  
 (9) happened One morning at about 5 00 in the morning I was  
 (10) sleeping in my room and a fire alarm went off and then the  
 (11) general alarm went off which is the reaction to the fire alarm  
 (12) usually going off, and everyone just scurried about trying to  
 (13) get to their stations, get to the lifeboats, get their survival  
 (14) suits on  
 (15) Q Get ready to abandon ship?  
 (16) A Yes And it turns out, which is good for us anyway that  
 (17) the cause of the whole thing was someone who didn't know how  
 (18) to  
 (19) use one of our \$500 toasters down in the galley burned the  
 (20) toast  
 (21) Q Now you mentioned that you were captain of the Valdez for  
 (22) three days only What was the job change?  
 (23) A We brought another captain out to help out with a lot of  
 (24) the administrative work out there and assist me so we would  
 (25) have double coverage I became primarily involved in  
 (26) lightering operations, so I was in charge of the lightering

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- (1) after that point  
 (2) Q So the lightering became your job after the third day?  
 (3) A That s correct  
 (4) Q Who took your place?  
 (5) A Bill Wallace  
 (6) Q Now how long did it take to lighter the oil that could be  
 (7) taken off the vessel?  
 (8) A I think it took us around ten days ten or 11 days  
 (9) Q How many lightering ships did you need?  
 (10) A We used three  
 (11) Q Which were the?  
 (12) A Baton Rouge the San Francisco and the Baytown  
 (13) Q And after the ten days, I gather - well did you find that  
 (14) you had lost more oil than you started out thinking you had  
 (15) lost?  
 (16) A Shortly after we - I got on board we thought we had lost  
 (17) 240 000 barrels of oil and that's what we were reporting for  
 (18) the first several days After we had gotten into the forepeak  
 (19) tank which we thought contained 20 000 barrels of oil we found  
 (20) later that tank was mostly water and what we thought was  
 (21) 20 000 barrels of oil was oil in the sounding tube because the  
 (22) sounding tube showed a reading of oil there Although when  
 (23) we  
 (24) got in the tank itself it was mostly water So that brought  
 (25) the estimate up to 260 000 barrels at that point instead of  
 (26) 240

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- (1) Q So you originally thought you spilled 240,000 barrels of  
 (2) oil and then subsequent investigation of the forepeak tanks  
 (3) showed that you lost even more?  
 (4) A Yeah, we thought there was oil that somehow gotten into the  
 (5) forepeak which really wasn't there  
 (6) Q So if 260 000 barrels was spilled, how much did you end up  
 (7) lightering at the end of those ten days, how much did you save  
 (8) from going in the water?  
 (9) A We lightered almost a million barrels  
 (10) Q After the ship was lightered was it then floated?  
 (11) A Yes I think the day after the Baytown was gone, I believe  
 (12) we refloated it the next day or a day-and-a-half later  
 (13) Q And where was it taken?  
 (14) A To Outside Bay  
 (15) Q And that is located on Naked Island?  
 (16) A On Naked Island, yes  
 (17) Q And were repairs done thereafter and then it was moved  
 (18) down  
 (19) to San Diego to the shipyard?  
 (20) A I left the vessel in Outside Bay after several days there  
 (21) But we continued to skim oil get as much oil as we could in  
 (22) Outside Bay, and I think there was a little bit more that was  
 (23) taken out there, and the vessel was prepared for the trip to  
 (24) San Diego from there  
 (25) Q One question I guess, this is more curiosity than  
 (26) anything We have heard testimony that on Sunday the 26th of

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- (1) March 1989 you had a storm?  
 (2) A Yes  
 (3) Q Did that storm - how did that affect your assessment of  
 (4) the stability of the ship and the safety of being on board?  
 (5) A Well, it happened pretty late at night, a little after  
 (6) midnight and the wind was picking up considerably at that  
 (7) point. We continued lightering although even though the spray  
 (8) from the waves was freezing on deck and a lot of the people on  
 (9) the starboard side of the ship who were in the way of that just  
 (10) were getting pretty icy and it was pretty wet, but as the wind  
 (11) picked up the vessel started to pivot on the rocky ledge that  
 (12) it was on, and it caused a lot of concern for me It was only  
 (13) myself and Captain Wallace on the bridge at that time, but we  
 (14) were up there by ourselves and we were watching the ship  
 (15) slowly  
 (16) pivot, and I didn't want that to happen  
 (17) We let it go for a few minutes and thought it would  
 (18) stabilize, and we asked one of the tug boats to start pushing  
 (19) on us and hold us in position By doing that it helped us stay  
 (20) in position but it wasn't comfortable having that wind press  
 (21) against the hull of the vessel and moving it on the reef that  
 (22) night  
 (23) MR SANDERS I have no further questions of Captain  
 (24) Deppe  
 (25) THE COURT Cross exam  
 (26) MR O NEILL. Thank you judge

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- (1) CROSS EXAMINATION OF WILLIAM DEPPE  
 (2) BY MR O NEILL  
 (3) Q Captain, I just want to talk for a minute about your  
 (4) assignment as Valdez port operations coordinator. You were  
 (5) assigned there in September of 1993?  
 (6) A That's correct.  
 (7) Q Which was about four-and-a-half years after the spill?  
 (8) A Yes.  
 (9) Q Was there a Valdez port operations coordinator between the  
 (10) spill and the time you were assigned there four-and-a-half  
 (11) years after the spill?  
 (12) A No.  
 (13) Q As Valdez port operations coordinator, do you do what  
 (14) Alamar does too, or Alamar used to do?  
 (15) A No.  
 (16) Q You don't?  
 (17) A I do some of the things Alamar - Alamar was an agent. The  
 (18) agent functions are being done by the vessel now, by  
 (19) themselves. If anything unusual comes up -  
 (20) Q Then you handle it?  
 (21) A If there was a serious injury or something out of the  
 (22) ordinary I would get involved in it.  
 (23) Q Was Alamar the agent from the time of the spill through  
 (24) September of 1993?  
 (25) A They were the agent until, I believe it was either December

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- (1) 93 or January '94, I'm not sure  
 (2) Q So for four, four-and-a-half five years Alamar continued  
 (3) to be the agent?  
 (4) A That's correct.  
 (5) Q And you came on duty about four-and-a-half years after the  
 (6) spill?  
 (7) A That's correct.  
 (8) Q Now I want to move to the lightering, and I'm confused, and  
 (9) how can I be confused? I'm confused because there has been  
 (10) prior testimony in this case in Phase I about how the vessel  
 (11) was stable up against the rock and everything was fine and in  
 (12) listening to your testimony you were concerned about the  
 (13) vessel  
 (14) breaking in half?  
 (15) A Do you want an answer?  
 (16) Q Yes.  
 (17) A I don't know whether it would break in half or not. That  
 (18) was a possibility.  
 (19) Q You were scared?  
 (20) A There was a possibility.  
 (21) Q I'm not impugning your bravery. Most brave men are scared  
 (22) but there were times when you were on that vessel when you  
 (23) were  
 (24) scared?  
 (25) A It was an unpleasant situation the whole time we were  
 there. I wouldn't say there was a moment that we weren't  
 afraid than another moment.

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- (1) Q It's even worse isn't it but there was a possibility that  
 (2) the vessel would break in half. That's a correct statement?  
 (3) A That was a possibility.  
 (4) Q There was a possibility that if certain things were done  
 (5) the vessel would capsize?  
 (6) A That's right.  
 (7) Q There was a possibility that the vessel would blow up?  
 (8) A Right.  
 (9) Q And then there was one other danger that presented I  
 (10) think you said there were four?  
 (11) A I think I said there were three.  
 (12) Q Those three. And those weren't remote possibilities, those  
 (13) were things you were concerned about?  
 (14) A I think they were - the chances were better than  
 (15) average - than normal, let me put it that way.  
 (16) Q And the spill could have been much bigger than it was. We  
 (17) had another million barrels on board isn't that right?  
 (18) A If we didn't get the oil off the vessel there could have  
 (19) been another million barrels spilled in Prince William Sound.  
 (20) Q So we could have had a spill that was five times as big as  
 (21) the spill that we had?  
 (22) A Correct.  
 (23) Q And in hearing your testimony - I had a different  
 (24) cross-examination than this one, but in listening to your  
 (25) testimony, it became apparent to me that you were concerned

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- (1) about people's lives being in danger?  
 (2) A In the worst case scenarios there. If the vessel had one of  
 (3) those three things happen to it people's lives would have been  
 (4) in danger.  
 (5) Q And that included your own?  
 (6) A Correct.  
 (7) Q Now, was there any possibility with regard to the vessel  
 (8) next door - do you call it lightering because it makes one  
 (9) vessel lighter, do you know?  
 (10) A I don't know.  
 (11) Q Well, I was wondering about that, but with regard to this  
 (12) sister vessel and I don't know whether it's technically called  
 (13) a sister vessel, but the other vessel, that was at risk too to  
 (14) some extent, wasn't it?  
 (15) A I'd say lesser risk but there was risk.  
 (16) Q And with regard to the Coast Guard officers on board or who  
 (17) came up who bravely stood by you they were at risk too  
 (18) weren't they?  
 (19) A There was risk.  
 (20) Q So this grounding not only resulted in a 260,000 barrel  
 (21) spill, but it placed at risk another million barrels in the  
 (22) Sound that was at risk?  
 (23) A Yes.  
 (24) Q Didn't turn out that way, but it was at risk?  
 (25) A Yes.

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- (1) Q And it placed at risk the vessel that is while the vessel  
 (2) has been put back together again if the vessel would have  
 been  
 (3) broken in half or capsized the vessel was placed at risk?  
 (4) A That's correct  
 (5) Q And indeed this grounding placed at risk people's lives  
 (6) didn't it including your own?  
 (7) A People's lives were more at risk lightering than they would  
 (8) have normally been  
 (9) Q And because of the risks of oil spills the risk to vessels  
 (10) and indeed the risk to people's lives it's incumbent upon all  
 (11) of us to be exceedingly careful in the transportation of crude  
 (12) oil by tanker isn't it?  
 (13) A I'd say that's a correct statement  
 (14) Q Now I have two minor questions that are nits and I'll  
 (15) admit they are nits, but I'm going to ask them anyway The oil  
 (16) that was lightered was sold?  
 (17) A I'll assume it was  
 (18) Q That's my first nit And my second nit is, I have heard,  
 (19) and this is again out of curiosity but lightering is a very  
 (20) difficult thing to do and I have heard during the lightering  
 (21) there was more oil spilled maybe as much as 10 000 barrels  
 (22) more because of some goof up where people throughout the  
 oil  
 (23) was or wasn't Are you aware at all what I'm talking about?  
 (24) A No  
 (25) MR O NEILL Thank you

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- (1) THE WITNESS Okay  
 (2) REDIRECT EXAMINATION OF WILLIAM DEPPE  
 (3) BY MR SANDERS  
 (4) Q Insofar as you're aware Captain you didn't spill any more  
 (5) oil you took precautions to make sure that didn't happen?  
 (6) A We try to not spill any more oil than was already spilled  
 (7) and none spilled of that I know of  
 (8) MR SANDERS Excuse me just a minute  
 (9) That's all the questions I have You can come down  
 (10) THE COURT Thank you sir You may come down  
 (11) MR SANDERS Your Honor I've lost track of your  
 (12) recess schedule  
 (13) THE COURT Well we're kind of off schedule Why  
 (14) don't we take a quick break Let's try and make it ten minutes  
 (15) or something like that  
 (16) (Jury out at 10 12)  
 (17) (Recess from 10 12 to 10 20)  
 (18) (Jury in at 10 20)  
 (19) THE CLERK All rise  
 (20) MR SANDERS I think we need a little roll call  
 (21) I'll call the witness and he can be going up  
 (22) THE CLERK Please raise your right hand  
 (23) (The Witness is Sworn)  
 (24) THE CLERK Please be seated For the record state  
 (25) your full name your address and spell your last name please

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- (1) THE WITNESS James, middle name Loren, O'Brien,  
 (2) Capital, O-apostrophe-B-R-I-E-N, New Orleans, Louisiana  
 (3) MR O NEILL Sorry God, I'm in trouble now  
 (4) DIRECT EXAMINATION OF JAMES O BRIEN  
 (5) BY MR SANDERS  
 (6) Q Mr O'Brien do you know why Mr O'Neill was late?  
 (7) A No I do not  
 (8) Q Mr O'Brien, what is your employment?  
 (9) A I am the CEO and owner of a company called O'Brien's Oil  
 (10) Pollution Service Incorporated  
 (11) Q And I think that has the acronym of OOPS?  
 (12) A That's correct, sir  
 (13) Q Mr O'Brien what is your background?  
 (14) A I'm a retired lieutenant commander O-4 from the U S Coast  
 (15) Guard  
 (16) Q How long did you serve in the United States Coast Guard?  
 (17) A From 1963 to 1983, 20 years  
 (18) Q And I believe Mr O'Brien, you're one of those officers  
 (19) that came in as an enlisted man and went into officer  
 (20) commandant school and became an officer?  
 (21) A That's correct.  
 (22) Q How long did you serve in the Coast Guard as an enlisted  
 (23) person?  
 (24) A From 1963 to January of 1969  
 (25) Q And you became an officer in 1969?

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- (1) A That's correct.  
 (2) Q As an officer in the United States Coast Guard, did you  
 (3) have a specialty?  
 (4) A Yes, I did  
 (5) Q What was that specialty?  
 (6) A My specialty was marine environmental protection and port  
 (7) safety  
 (8) Q And as a person having that specialty, did you have special  
 (9) or specific duties as a Coast Guard officer after 1969?  
 (10) A Yes, I did  
 (11) Q What were those?  
 (12) A I served as the operation and pollution control officer  
 (13) with the port of Houston I was the first executive officer of  
 (14) the Pacific Strike Team of the national strike force in San  
 (15) Francisco  
 (16) Q Let me stop you for a second What was the national strike  
 (17) force and what caused it to be set up?  
 (18) A The Federal Water Pollution Control Act of 1972 obligated  
 (19) the Coast Guard to designate or establish a national strike  
 (20) force made up of three teams one on the West Coast one on the  
 (21) Gulf and one on the East Coast of the United States and their  
 (22) purpose was to be available and serve and assist any federal  
 (23) on scene coordinator for any on oil spills and chemical spills,  
 (24) both on the - inland means you work for the Environmental  
 (25) Protection Agency as well the Coast Guard

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- (1) Q You were then the first executive officer of the Pacific  
 (2) Strike Team Is that correct?  
 (3) A That s correct  
 (4) Q What was the coverage of the Pacific Strike Team and tell  
 (5) us the years?  
 (6) A In the years that I was on board and I think even until  
 (7) today, the Pacific Strike Team was responsible for federal  
 (8) administrative regions eight nine and ten which encompasses  
 (9) most of the western United States west of the Mississippi  
 (10) includes Alaska, Hawaii and the trust territories  
 (11) Q Well, in terms of geography, you had by far the biggest  
 (12) region, didn't you?  
 (13) A That s correct.  
 (14) Q And now did you later become the commanding officer of the  
 (15) Pacific Strike Team for the United States? Correct?  
 (16) A Yes I returned to the Pacific Strike Team in 1979 and  
 (17) served as the commanding officer or leader of that team from  
 (18) then until my retirement of that in 1983  
 (19) Q Now, when you retired in 1983 did you go into private  
 (20) business?  
 (21) A Yes, I did  
 (22) Q And is that the business that you described - that you  
 (23) named for the jury just a moment ago?  
 (24) A Yes, it is  
 (25) Q Well, tell them basically what that business is

- (1) clientele?  
 (2) A That s correct  
 (3) Q And I gather, given the requirements you were talking  
 (4) about you are on retainer to a number of companies Correct?  
 (5) A That is correct  
 (6) Q And do you have contracts to this day with Exxon entities?  
 (7) A Yes I do  
 (8) Q How many, do you remember?  
 (9) A I have contracts with Exxon USA, SeaRiver Maritime, and I  
 (10) also have a contract with the Exxon exploration and product  
 (11) group  
 (12) Q In your business and a member of the Pacific Strike Team  
 (13) either as XO or CO, did you have occasion - have you had  
 (14) occasion to review contingency plans, oil contingency plans?  
 (15) A During my tenure on the Pacific Strike Team, we reviewed  
 (16) several  
 (17) Q In terms of your - is there a difference between  
 (18) contingency plans that you dealt with as a Coast Guard officer  
 (19) and those that you have dealt with in private business?  
 (20) A I think there has been particularly after 1990, after the  
 (21) passage of the Oil Pollution Act of 1990  
 (22) Q What is the essential difference between those two periods  
 (23) of time?  
 (24) A I think after 1990 -  
 (25) MR O'NEILL Objection, unqualified expert testimony

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- (1) A My business is one that provides technical advice to  
 (2) companies that have spills or have the potential to have  
 (3) spills It also provides management expertise on occasions to  
 (4) those that have spills, and in today's world in the 1990s it  
 (5) also provides qualified individual services, which is a person  
 (6) that's available for the foreign tankers Under the new Oil  
 (7) Pollution Act, each one is to have someone resident in the  
 (8) United States on a 24-hour basis that speaks English, speaks  
 (9) fluent, but I'm not so sure I qualify  
 (10) Q I was going to ask you about that Where are you from?  
 (11) MR O NEILL Your Honor, could we approach? I have a  
 (12) real concern I would like to address about your not speaking  
 (13) English  
 (14) (At side bar off the Record)  
 (15) BY MR SANDERS  
 (16) Q It wasn't about your English  
 (17) Let me ask you, since you raised that point about your  
 (18) English Where did you grow up and where do you live now?  
 (19) A I was born and raised in east Texas about a hundred miles  
 (20) north of Houston I presently live in New Orleans, Louisiana  
 (21) Q I think before I interrupted you we were talking about what  
 (22) you did as a private business And I want to ask you, your  
 (23) clients according to the description of your business, I  
 (24) gather then, are companies that are oil companies or  
 (25) transportation companies, or clients like that that s your

- (1) MR SANDERS Not offered as expert testimony, simply  
 (2) an explanation of the differences in the way things were  
 (3) operated  
 (4) MR O'NEILL It s an opinion as to the differences  
 (5) THE COURT It gets close to the line but I ll allow  
 (6) this one  
 (7) THE WITNESS I think the primary difference is after  
 (8) 1990 or after the passage of the Oil Pollution Act of 1990,  
 (9) most of the plans are scenario driven whereas previous to 1990  
 (10) that was not always the occasion  
 (11) BY MR SANDERS  
 (12) Q Now let me take you to a little bit of your experience as a  
 (13) member of the Pacific Strike Team Could you tell the ladies  
 (14) and gentlemen of the jury some of the spills or events like a  
 (15) spill that you handled as a member of the Pacific Strike Team?  
 (16) A The Pacific Strike Team is involved with both national and  
 (17) international events Some of the international events that we  
 (18) participated in was the -  
 (19) Q Now let me make sure I m clear on the questions I want to  
 (20) know the ones you were involved in  
 (21) A I was involved with the tank ship Independente, which was  
 (22) involved in Istanbul Turkey I was involved in Ixtoc 1 blowout  
 (23) in the Gulf of Mexico, or in the Bay of Campeche, Gulf of  
 (24) Mexico  
 (25) Q When was that?



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- (1) A That was in 1979  
 (2) Q What was the magnitude of that spill?  
 (3) A That spill was estimated to have lost as much as 10 million  
 (4) barrels The range is from 3 to 10 million barrels that had  
 (5) been lost  
 (6) Q How did that occur?  
 (7) A This was a well blowout that occurred subsurface at about  
 (8) 167 feet The well blew out in June of 1979 and remained out  
 (9) of control until March of the following year  
 (10) THE COURT What s a blowout?  
 (11) THE WITNESS A blowout is when they have lost control  
 (12) on the well and the gas and the crude oil are allowed to  
 (13) escaped unimpeded to the surface  
 (14) BY MR SANDERS  
 (15) Q Is it that this loss of control just blew out the wellhead  
 (16) under the sea and kept on spewing oil for months?  
 (17) A Correct  
 (18) Q And you were involved in that is that correct?  
 (19) A That is correct  
 (20) Q Now, what others?  
 (21) A I was involved with the Burma Agate which was a tanker  
 (22) that was on fire off of Galveston I was involved in several  
 (23) smaller events in the Alaska the Lee Wang Zin in Ketchikan, the  
 (24) Ryo Maru out in the Aleutian chain during that period I  
 (25) responded to a ship that was lost a tanker that was lost off

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- (1) of Colombia, the country of Colombia  
 (2) Q Since going into private business what events or spills  
 (3) have you participated in?  
 (4) A Well I was involved with the Exxon Valdez I was involved  
 (5) with the American trader off of Long Beach, I was involved with  
 (6) a Mega Borg which exploded in the Gulf of Mexico I was also  
 (7) involved with what we call the Desert Storm Spill Project  
 (8) during the Gulf of Arabia War  
 (9) Q That was cleaning up the mess during the war but the  
 (10) cleanup was after the war?  
 (11) A Actually it was before during and after  
 (12) Q Now were you called on - you mentioned being involved in  
 (13) the Exxon Valdez oil spill When were you called?  
 (14) A I was called around 6 or 7 00 eastern time in Jacksonville  
 (15) Florida I was there on another job by Craig Rassinier of  
 (16) Exxon Shipping  
 (17) Q I think it s clear but you didn t tell us What day was  
 (18) this?  
 (19) A Friday Good Friday the 24th of 1989  
 (20) Q And you were called by Mr Rassinier of Exxon and after  
 (21) that call what did you do?  
 (22) A Well after that call of course we made the arrangements  
 (23) travel arrangements to begin the journey to Valdez  
 (24) Q And on the way did you do anything in connection - were  
 (25) you hired to take over this or to participate in this clean up?

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- (1) A Yes I was under contract to Exxon Shipping and had been  
 (2) since 1987 Craig asked me that on my way out - we had a  
 (3) brief discussion, or a discussion about which amounts of  
 (4) equipment and what equipment had been committed to the  
 spill  
 (5) At that point in time he was estimating about 8 million gallons  
 (6) had probably been lost and one of my tasks or one of the  
 (7) things I undertook to do was on the way out -  
 (8) Q Excuse me Did you say 8 million gallons?  
 (9) A Yes  
 (10) Q Can you convert that into barrels?  
 (11) A There's 42 gallons to a barrel, so you'd have to divide it  
 (12) out.  
 (13) Q Okay I ll do it later  
 (14) A On the way out at each stop we were - and as you're flying  
 (15) in an emergency like this you have a tendency to play the  
 (16) what-if game what if this, what if that, what if they haven't  
 (17) done this, what if they have done that, and you're mentally  
 (18) preparing yourself for the response  
 (19) In addition to that at each stop and I had one in Dallas  
 (20) and one in Seattle, I was checking with Clean Bay,  
 (21) Incorporated, which is a West Coast spill cooperative that  
 (22) Exxon Shipping had asked for some equipment earlier that day,  
 (23) that Friday, and I was having conversations with the manager  
 (24) there to be sure that was being packaged and getting some  
 sense  
 (25) when that might arrive in Valdez

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- (1) Q Now, at the time that you were called, Good Friday, 1989,  
 (2) you had been in this business for how many years?  
 (3) A At that point in time I had been in business approximately  
 (4) six years  
 (5) Q And in this business or profession, a person who responds  
 (6) to spill disasters like this how many people in the world were  
 (7) in your profession?  
 (8) A There were very few I don't think that there was probably  
 (9) more than four or five that were in the business dedicated,  
 (10) meaning that s what they did, they responded to spill events  
 (11) Q And you were one of those four or five people in the whole  
 (12) word that did this kind of thing?  
 (13) A Yes  
 (14) Q And you were called at around 6 00 Eastern Daylight Time?  
 (15) A That s correct.  
 (16) Q Now when you got to Valdez, tell us basically what you  
 (17) did, and I ultimately want to get the point what your first  
 (18) take on this was and what your strategy was  
 (19) A Well, myself and others from Exxon had conversation, and as  
 (20) the plane was progressing towards Alaska of course we were  
 (21) unloading more people and some of them happened to be  
 Exxon  
 (22) Shipping people as well as Exxon USA people  
 (23) When we arrived in Anchorage, we had telephone conversation  
 (24) with Valdez to get a sense of where they were status wise in  
 (25) the spill response This was on Friday night. I also met with

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- (1) the international bird rescue people that were en route to  
 (2) Valdez also But when I arrived in Valdez I proceeded to what  
 (3) had been designated as the operations command center at the  
 (4) Westmark Hotel and began to be briefed by Craig Rassinier and  
 (5) Mr Iarossi about what had been committed to the spill by  
 (6) Alyeska and others And immediately after that briefing I  
 (7) departed and made an aerial overflight.  
 (8) Q And on the basis of that overflight and the information you  
 (9) had obtained since the moment you had been called by Mr  
 (10) Rassinier, what was your take on the situation what was going  
 (11) to have to be done?  
 (12) A I think my initial reaction - not many in our business get  
 (13) the opportunity to see, you know, 15, 20 square miles of oil on  
 (14) the water, was the fact that there was a significant amount of  
 (15) oil there And I sometimes have reflected back on it and think  
 (16) it's sort of like you want a verification I think Mr Iarossi  
 (17) and the staff wanted a verification on how bad is bad  
 (18) It's a lot like when I tell my wife, when you have a car  
 (19) accident I want to know what happened to you the next thing I  
 (20) want know is what happened to the car And I'm not always  
 (21) able  
 (22) to do that to myself but I think it was a confirmation  
 (23) And one of the questions was, where did I think the oil was  
 (24) going to go, and the simplest answer I could give, I didn't  
 (25) understand what the wind conditions were I said almost  
 anywhere where you put your hand on the chart the oil might  
 go

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- (1) and this was a chart of Prince William Sound  
 (2) And I think Exxon already had a sense of the magnitude and  
 (3) I think that's been demonstrated by the testimony of Ms Buhl  
 (4) by the commitment of equipment that had been done, we need  
 (5) to explore more conventional equipment of high capacity we  
 (6) need  
 (7) more containment equipment we needed to mitigate to impact  
 (8) and we needed to explore getting resources from the agencies,  
 (9) federal and state, and begin to look at the non-conventional  
 (10) things like dredges that might be able to do this high volume  
 (11) high capacity work  
 (12) Q Mr O'Brien were all those things done?  
 (13) A If they weren't done they had been initiated I think  
 (14) what I brought to it would be a sense of where else might we  
 (15) go is there some places they have not been It was my  
 (16) impression from the briefing that I received that Alyeska, in  
 (17) the initial part of the event had activated other resources  
 (18) within the state of Alaska meaning those that they could get  
 (19) from the other oil spill cooperatives or from the other oil  
 (20) spill contractors and I think that would be the norm  
 (21) Under our system in the United States, the response in  
 (22) those days was, and still is, conducted by the commercial  
 (23) enterprises not necessarily by the governments as it is in a  
 (24) lot of other places  
 (25) Q In your recommendations of things that needed to be done  
 eventually were all of those general things that you

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- (1) recommended to be done?  
 (2) A Yes I think they were In an oil spill usually there is  
 (3) only three or four things that you can do One is mechanical  
 (4) recovery the second might be chemical dispersants, the third  
 (5) might be in situ burning and the fourth might be nothing I  
 (6) think Exxon was exploring every one of those options at its  
 (7) fullest to try to bring every one of the tools to bear on the  
 (8) spill  
 (9) Q Did you ever get any restrictions from Exxon in terms of  
 (10) what you wanted to obtain or the cost of that?  
 (11) A No, we did not. In fact, we used an AFE number and I  
 (12) probably will never forget the number, 97002 It was posted on  
 (13) the wall and that's what we basically got equipment  
 (14) commitments under You were asked for a commitment from  
 (15) suppliers, and you say do you have a purchase order number,  
 (16) we  
 (17) would reflect it, here is the mailing address and the AFE is  
 (18) 97002  
 (19) And at no time during or after the spill event was I ever  
 (20) questioned about the commitment I made with the 97002  
 (21) number  
 (22) Q Now, in getting - let's focus on the mechanical What is  
 (23) the nature of getting mechanical equipment to pick up oil on  
 (24) the water, what do you have to do in order to bring equipment  
 (25) to bear on that problem?  
 (26) A I think we most reflect that when you're going to do a  
 (27) mechanical removal effort what you're really looking for is a

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- (1) systems approach It takes containment recovery and some  
 (2) kind  
 (3) of holdings capacity to be successful  
 (4) In the case of Valdez the fact, it's been mentioned  
 (5) previously, that the airport size was one limiting factor, so  
 (6) in most cases when we have to respond, one of the limitations  
 (7) or one of the problems that we have to overcome is the  
 (8) logistical support how do we get it there And some  
 (9) instances or most instances getting it to the port is the  
 (10) easiest of the logistics element, if you will  
 (11) Getting it from the port to the site, putting it on the  
 (12) right work platform, having qualified operators to run the  
 (13) equipment is required, so it's a combination of logistical  
 (14) impediments that you have to overcome and I think most  
 (15) successes on the spill that we enjoyed is based on the fact how  
 (16) well did we do logistically  
 (17) Q The first problem is getting it to the airport you're  
 (18) saying, and the next problem is trying to get it out on the  
 (19) water working right?  
 (20) A That's correct  
 (21) Q Now in terms of - I want to ask you a couple questions  
 (22) about skimmers Obviously there weren't enough skimmers  
 (23) on hand to deal with a two hundred fifty or sixty thousand  
 (24) barrel spill of oil in the water?  
 (25) A That's correct  
 (26) Q And you had to get skimmers from other places?

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- (1) A That s correct  
 (2) Q And in doing that is the operator of the skimmer  
 (3) important?  
 (4) A I think he s very important initially I think you can  
 (5) train others to operate it in a very short period of time but  
 (6) I think it needs to come with a technically qualified person to  
 (7) make sure we assemble it properly and have a sense of how it  
 (8) operates And in this particular event in almost every  
 (9) instance when we ordered equipment, or Exxon ordered  
 equipment  
 (10) there was always a call for would they provide a technician  
 (11) and/or operators to allow us to make sure that we operated it  
 (12) properly  
 (13) Q Now, a skimmer - are skimmers like roses a rose is a  
 (14) rose, a skimmer is a skimmer?  
 (15) A No, that s not the case Skimmers are designed to operate  
 (16) in a scope or in a band of oil If you will They may - some  
 (17) are meant to operate only in lighter products others are meant  
 (18) to operate in viscous products You re trying to get a device  
 (19) that goes from one spectrum to the next because in my opinion  
 (20) when you have a spill the oil is changing It comes out as  
 (21) North Slope crude oil whatever the case might have been, but  
 (22) the aromatics have evaporated on, it takes on water and picks  
 (23) up debris and becomes something different than what you  
 might  
 (24) have initially been handling  
 (25) Q Do different skimmers handle a different states of the oil

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- (1) differently?  
 (2) A Definitely I mean you will have some skimmers that are  
 (3) as an example, are Archimedes screw pumps that will work very  
 (4) well in viscous oil and accept a lot of debris You have  
 (5) others that might be simplistic weir devices or a disc skimmer  
 (6) that will foul with debris  
 (7) But the key to success or the key that I hope I bring to  
 (8) the spill is when to shift devices when to not spend a lot of  
 (9) time on a piece of equipment that won't do something because  
 (10) every device has a limitation and you get yourself to a  
 (11) situation where the skimmer will not function  
 (12) Q Did you bring that expertise to bear in this situation?  
 (13) A I think we did  
 (14) Q Do you have a lot of different kind of skimmers that you  
 (15) brought to Alaska and used in Prince William Sound?  
 (16) A I'd have to say it was like going to the college of  
 (17) pollution Every kind of device that you could possibly have  
 (18) thought about was probably exercised or actually employed on  
 (19) the Exxon Valdez spill  
 (20) Q But I gather that at any given time you couldn't be using  
 (21) all of them all at the same time?  
 (22) A No Like I say, I think you have to remember that they  
 (23) work in frameworks of oil, that some will handle debris better  
 (24) than others When you re not in the debris this device might  
 (25) be more appropriate When you re in the debris this might

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- (1) have worked better  
 (2) I think the other thing the crews are very innovative As  
 (3) an example in the Exxon Valdez, they would shift skimmers  
 (4) because a hose was plugged and put another skimmer on line  
 but  
 (5) rather than lose the time the oil was present to them, they  
 (6) would put it on deck and put another one in So most of the  
 (7) time when we had the capability we put more than one skimmer  
 (8) on the vessel because of that to try to facilitate staying in  
 (9) contact with the oil  
 (10) Q I have one other question I want you to listen to it  
 (11) carefully because it comes as a result of this conference we  
 (12) had over there a while ago  
 (13) in terms of comparing this spill response to others that  
 (14) you described to the jury was there an approach to it that was  
 (15) different than in other spills?  
 (16) A I think so yes  
 (17) Q And I'm asking - basically I m asking about the  
 (18) engineering approach  
 (19) A Yes I would say in this particular spill, the management  
 (20) concepts the project management concepts was really brought  
 to  
 (21) bear We had a situation that was large and required good  
 (22) management skills and expertise and I think Exxon brought  
 (23) that. I think they made it into an engineering project and  
 (24) brought engineering expertise to bear on it.  
 (25) Q Do you have an example of that project approach to it?

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- (1) A Well, they are numerous, but I think two that come to mind,  
 (2) one may be more potent than the other one Potent I guess is  
 (3) the right word  
 (4) They brought in a group of computer operators and  
 (5) schedulers And we really didn't have the office space for  
 (6) them and they set them up in the passage ways and they began  
 to  
 (7) tell me we re going to take these people and they are going to  
 (8) forecast what it would take for us to do this job  
 (9) Q What did you say to that?  
 (10) A I can't repeat it, but they were going to tell us the  
 (11) numbers of bodies that we might need, the numbers of pieces  
 of  
 (12) equipment that we might need and target dates for us to reach  
 (13) those And I remember telling several inside the Exxon  
 (14) organization that there is no way, you can't do that an oil  
 (15) spill is too dynamic, there is too many changes there is too  
 (16) many changing oversight priorities by the agencies for that to  
 (17) be used by us but I was way, way wrong  
 (18) Q Did it work?  
 (19) A It definitely did and I think it led to a lot better  
 (20) productivity than we would have ever hoped to enjoy, and I  
 (21) think it has set a standard in our industry, the response  
 (22) industry that is there today and will stay there today I  
 (23) think it forced us to look at other electronic tools in 1989  
 (24) and 1990 that we hadn't considered as much as maybe we  
 should  
 (25) have beforehand

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- (1) Q Do you have computers now?
- (2) A I do
- (3) MR SANDERS I have no further questions You may
- (4) ask
- (5) THE COURT Do you want to cross-examine?
- (6) CROSS EXAMINATION OF JAMES O BRIEN
- (7) BY MR O NEILL
- (8) Q With regard to the Valdez spill, would it be a correct
- (9) statement to say that people must realize in planning for a
- (10) spill of the Valdez spill size no amount of equipment will
- (11) clean it all up even if they give you a month s notice to get
- (12) ready?
- (13) A Yes, I believe that
- (14) Q You started off your testimony by talking about a number of
- (15) spills that you have worked on right at the beginning with Mr
- (16) Sanders?
- (17) A Yes
- (18) Q Could you go over those spills again for me?
- (19) A I was involved with the tank ship Independente in Istanbul
- (20) Turkey Itox 1 well blowout in the Bay of Campeche I was
- (21) involved with the Burma Agate a ship that was on fire off of
- (22) Galveston and I was involved with a ship that was lost off of
- (23) Colombia, and I had some involvement with the Lee Wang Zin
- (24) in Ketchikan and the Ryo Maru out in the Aleutian Chain
- (25) Q And these were all oil spills?

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- (1) because of the proposition that we started with the
- (2) proposition is obvious, but in the extraction and
- (3) transportation of crude oil, because of the consequences that
- (4) you've seen you got to be careful?
- (5) A Correct
- (6) MR O NEILL Thank you sir
- (7) MR SANDERS No further questions Your Honor
- (8) THE COURT Thank you, sir You may stand down
- (9) MR NEAL Call Mr Otto Harrison
- (10) THE CLERK Raise your right hand, please, sir
- (11) (The Witness Is Sworn)
- (12) THE CLERK Please be seated For the record sir,
- (13) please state your full name your address and spell your last
- (14) name
- (15) THE WITNESS My name is Otto R Harrison spelled
- (16) H-A-R-R-I S-O N I live in Houston, Texas
- (17) THE CLERK Thank you, sir
- (18) DIRECT EXAMINATION OF OTTO R HARRISON
- (19) BY MR NEAL
- (20) Q Mr Harrison, how are you employed?
- (21) A By Exxon Corporation
- (22) Q How long have you been employed by Exxon Corporation or
- (23) one of its affiliates?
- (24) A 35 years
- (25) Q What's your formal education Mr Harrison?

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- (1) A Yes
- (2) Q And they were either from the wellheads where the oil is
- (3) being extracted from the ocean floor, or with vessels?
- (4) A Correct
- (5) Q And with regard to the Valdez spill there is an apocryphal
- (6) story about a fisherman Tom Copeland who with two other
- (7) fishermen, using two rubber rafts, buckets and floor scoops,
- (8) picked up 1500 gallons in a day Have you ever heard that
- (9) story?
- (10) A Yes
- (11) Q And the 1500 gallons in a day that - they used two rubber
- (12) rafts, buckets and floor scoops, compared at that time to an
- (13) average of 2,175 gallons per Exxon skimmer are you aware of
- (14) that?
- (15) A I'm not aware of the figures no, sir
- (16) Q In 1989, with regard to this spill, there was not a lot of
- (17) oil spill equipment in the United States that was not involved
- (18) with cooperatives isn't that right?
- (19) A That is correct
- (20) Q And the amount of equipment a cooperative could provide at
- (21) that point in time was limited?
- (22) A That s correct
- (23) Q It was tough to find oil spill equipment?
- (24) A That is correct
- (25) Q And because it was tough to find oil spill equipment and

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- (1) A I have a BS in petroleum engineering from the University of
- (2) Texas in Austin, Texas
- (3) Q Now, Mr Harrison I've examined a number of people who
- (4) have worked for Exxon a long time and I started out asking them
- (5) all the jobs they had and I thought we would never get through
- (6) them so let me start you at a point in time where we don't
- (7) have to go through with all that All right?
- (8) A Yes, sir
- (9) Q Let's take 1980 Tell us, beginning in 1980 the various
- (10) jobs or positions you've had with Exxon Corporation up until
- (11) the moment you're sitting in that chair
- (12) A In 1980 I was working at Mar-El-Brega in Libya for Esso
- (13) Libya which is an affiliate of Exxon Corporation and I was
- (14) there until Christmas of 1981, when I was one of the last three
- (15) people out of Libya as we closed down that operation
- (16) In early 1982 I went to EssoAustralia which is an
- (17) affiliate of Exxon Corporation, as general manager of
- (18) production in Sidney Australia, for our Australian
- (19) operations
- (20) In April 1989 I went to Valdez as general manager of
- (21) operations for the clean up operation and in September of
- (22) 1992
- (23) I became president of Exxon Pipeline Company which is an
- (24) affiliate of Exxon Corporation
- (25) Q Mr Harrison, when did you first hear of the Exxon Valdez
- grounding and spill?

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- (1) A It was a number of days after the spill occurred Probably  
 (2) four or five days  
 (3) Q The spill occurred in the early minutes of March 24th,  
 (4) 1989 and you heard of it when?  
 (5) A Probably four or five days after the spill  
 (6) Q Almost the end of March?  
 (7) A Almost the end of March, yes sir  
 (8) Q Why?  
 (9) A In Australia the Easter holiday is a very big school  
 (10) holiday and it's at the end of summertime in Australia, because  
 (11) the seasons are inverted and my wife and I went to a church  
 (12) camp for children and we taught waterskiing each Easter  
 (13) holiday We had for a number of years And at the location  
 (14) that we were at there were no radios or TV or newspapers at  
 (15) those locations It's in what they describe as the outback in  
 (16) Australia So we weren't in contact with the news media at  
 (17) that time  
 (18) Q You got on waterskis?  
 (19) A I drove the boat  
 (20) Q I know I've been with you two or three days and I noticed  
 (21) your size and I was just wondering what kind of waterskie they  
 (22) would be Might be as big as the Valdez or something  
 (23) Now you heard about the spill, you came then to Valdez,  
 (24) Alaska, to become - to head the clean up operation is that  
 (25) correct?

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- (1) A Yes sir  
 (2) Q How did that come about?  
 (3) A Early one morning about 5 or 5:30 I received a call from  
 (4) Mr Sid Reso Mr Reso was the chief executive officer of  
 (5) Exxon Company International And Mr Reso described to me  
 (6) what  
 (7) was going on on the spill, that it was a big operation, it was  
 (8) going to take considerable effort to get the job done, that it  
 (9) was very important to the company that we get the job done  
 (10) right And he asked me if I would come over and take that job  
 (11) and assured me that in taking that job, that they wanted  
 (12) everything done that could be done to get that job done in the  
 (13) best way possible and I accepted  
 (14) Q Mr Harrison who was the chief executive officer of Exxon  
 (15) at the time you came to Alaska?  
 (16) A Mr Larry Rawl  
 (17) Q Did you have a conversation with Mr Rawl about your power  
 (18) duties responsibilities with respect to the cleanup?  
 (19) A Yes sir  
 (20) Q Would you tell the ladies and gentlemen of the jury the  
 (21) substance of that conversation?  
 (22) A A few days after arriving in Valdez I had a telephone  
 (23) conversation with Larry Rawl and he wanted me to be sure that I  
 (24) understood how important this was to the company the  
 (25) responsibility of getting the job done right He told me that  
 I had all the authority that he could give me from his position

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- (1) as chairman of Exxon Corporation that I had unlimited  
 monetary  
 (2) authority, and that if anybody in Exxon got in the way of doing  
 (3) the job right I just needed to let him know  
 (4) Q Now, when did you arrive - you came to Valdez then?  
 (5) A Yes sir  
 (6) Q When did you arrive in Valdez in 1989?  
 (7) A April the 5th  
 (8) Q What did you find going on here when you arrived, in  
 (9) respect of the spill?  
 (10) A I found the lightering operation going on there was a  
 (11) skimming operation going on and there was booming of critical  
 (12) resources  
 (13) Q Did you have any goals when you arrived at Valdez?  
 (14) A Very quickly established a set of goals We wanted to  
 (15) finish the lightering and movement of the ship, we wanted to  
 (16) get free oil off the water, wanted to get oil off the  
 (17) shoreline wanted to protect critical resources wanted to do  
 (18) what we could to take care of fishermen, the communities and  
 (19) the villages, and we wanted to conduct a safe operation  
 (20) Q Now, when you got here, what kind of organizations did you  
 (21) find involved? Let's take those organizations, non-Exxon  
 (22) organizations, first  
 (23) A On my arrival, the federal on-scene coordinator was in  
 (24) charge and the federal on scene coordinator for this spill was  
 (25) the U S Coast Guard, and Admiral Robbins was the primary

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- (1) person in charge in 1989 during the clean up season He  
 (2) coordinated a number of federal agencies that had major input  
 (3) into the spill  
 (4) The state agencies were coordinated by the state on scene  
 (5) coordinator, who was the commissioner of the Department of  
 (6) Environmental Conservation Dennis Kelso and there were a  
 (7) number of state organizations that had very inordinate direct  
 (8) input into the spill  
 (9) Q Now, a time saving device Defense Exhibit 8343, which  
 (10) lists some of the major organizations involved, is that  
 (11) correct?  
 (12) A Yes sir  
 (13) Q And the federal on-scene coordinator - sometimes when I'm  
 (14) talking about - you call that the FOSC?  
 (15) A Yes  
 (16) Q If you refer to the FOSC now, you're talking about the  
 (17) federal on-scene coordinator?  
 (18) A Correct  
 (19) Q And under him the Coast Guard, the NOAA, National  
 (20) Maritime  
 (21) Fisheries National Parks U S Fish & Wildlife, Forest  
 (22) Service, Department of Labor, did you have to deal with all  
 (23) those agencies?  
 (24) A We dealt with all those agencies on a regular basis  
 (25) Q And then the state organizations I think it's referred to  
 as ADEC the Department of Manager Services Fish & Game,

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- (1) Natural Resources, Department of Labor and State Historic
- (2) Preservation Society did you have to deal or did you deal with
- (3) all those agencies?
- (4) A Yes, sir
- (5) Q Now then, how was Exxon organized?
- (6) A Exxon was organized basically with an operations group to
- (7) conduct the clean-up operations with a number of support
- (8) groups
- (9) to help that operation move along and with some externally
- (10) focused claims, such as claims, community liaison and public
- (11) affairs
- (12) Q At my request, and again as a time saving device, did you
- (13) prepare a chart of the Exxon organization?
- (14) A Yes, sir
- (15) Q And, now, is this your organization that you headed up
- (16) there in regard to the cleanup?
- (17) A Yes, sir And it also shows the person who was in charge
- (18) of that specific operation for each one of those noted
- (19) Q So marine, basically to the lightering and the removal of
- (20) the vessel?
- (21) A Yes, sir
- (22) Q And logistics, operations planning, technical,
- (23) telecommunicating community liaison, claims and public
- (24) affairs
- (25) by a man named Don Cornett. Let me put something at rest
- (26) here right now Do you know Don Cornett?
- (27) A Yes, sir

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- (1) Q Did you see a tape played here?
- (2) A Yes
- (3) Q Did Don Cornett have anything to do whatsoever with the
- (4) clean-up operations in Alaska?
- (5) A Absolutely not
- (6) Q We can take that off
- (7) Now you got the external or the federal state
- (8) organizations you've got Exxon organized Did you have to get
- (9) people and equipment to Valdez, Prince William Sound, Kodiak,
- (10) Kenai, et cetera?
- (11) A Yes sir
- (12) Q Let's talk about the people first, and let's talk about the
- (13) Exxon people first How did you get the Exxon people there,
- (14) including specialists?
- (15) A We brought in about 800 different Exxon people here in
- (16) 1989 and we had to call on people from all over the world
- (17) Although most of our people came from the United States we
- (18) did
- (19) have people that were there from Australia, Malaysia
- (20) Singapore Germany Norway, Canada, England, wherever we
- (21) needed
- (22) to call on the expertise and within any part of the company
- (23) that we needed to call on the expertise
- (24) We brought in Exxon people to serve and I would say about
- (25) these people, as you've heard earlier, they all worked harder
- (26) than I could have asked any of them to do They all came in
- (27) committed to do a good job and just absolutely did an

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- (1) outstanding job
- (2) Q Now while we're on that I'm going to ask you in a minute
- (3) about non Exxon people but did not Exxon people work
- (4) basically
- (5) the same way did they work hard?
- (6) A Non-Exxon people including a large number of Alaskans
- (7) that
- (8) we had on payroll, just did a phenomenal job in dedication to
- (9) the job and the skills that they brought to the job
- (10) Q Now, did you have to bring in specialists?
- (11) A Yes, sir
- (12) Q Both those employed by Exxon and those outside of Exxon?
- (13) A Yes, sir
- (14) Q Just list two or three or four of the idea of the - the
- (15) kind of specialists that you brought in?
- (16) A The specialists we brought in are people that you've heard
- (17) from, like Mr O'Brien, but we needed archaeologists and we
- (18) needed geomorphologists and we needed marine biologists,
- (19) we
- (20) needed a large number of specialties that we didn't have an
- (21) abundance of in our organization And again we looked around
- (22) the world to find the best that we could to help us in this
- (23) job
- (24) Q Now at the height of the cleanup, how many Exxon people
- (25) would you say were in Alaska working on the various aspects of
- (26) the cleanup?
- (27) A Of the 800 people Exxon people we brought in, probably
- (28) there would be about 600 on location at any one time

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- (1) Q Now did you retain hire obtain non-Exxon people?
- (2) A Yes, sir, we did
- (3) Q How did you go about that?
- (4) A We basically used a general contractor, although we used a
- (5) number of contractors Primarily we used a general contractor
- (6) here in Alaska
- (7) Q When you went to him, then, to hire the non-Exxon people -
- (8) A Yes sir
- (9) Q - did you give your contractor or contractors any
- (10) guidelines to go by in hiring those people for the cleanup?
- (11) A Yes, sir
- (12) Q Tell us some of those guidelines you gave them
- (13) A For the people that we were hiring in Alaska, we gave
- (14) several guidelines Primarily we said we want to hire Alaskan,
- (15) secondly we wanted to distribute the hiring in and among those
- (16) communities that were most impacted where they could be
- (17) done
- (18) We also wanted to have a fair representation of all sorts of
- (19) the Alaskan population About 20 or 25 percent of our work
- (20) force were women in that operation We did a union/non union
- (21) split About half of our people that worked were union and
- (22) about half were non union
- (23) So we tried to do the best job we could in distributing
- (24) that hiring operation
- (25) Q Now, at the height of the operation including the 600
- (26) Exxon people, how many people were working for Exxon on the

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- (1) cleanup?  
 (2) A A little over 11 000  
 (3) Q 11 000?  
 (4) A Yes sir  
 (5) Q Did you have to give these people safety training because  
 (6) is it fair to say - now the jury has been out to some of the  
 (7) areas in Prince William Sound now and did you need to give  
 (8) these people any kind of safety training before they were sent  
 (9) out to the beaches to work?  
 (10) A Yes sir  
 (11) Q The weather is not always in Prince William Sound like I  
 (12) understand it was yesterday, is that correct?  
 (13) A That is correct  
 (14) Q 11,000 people working in Prince William Sound peninsula  
 (15) et cetera, did you have to house these people?  
 (16) A Yes, sir  
 (17) Q How did you do that?  
 (18) A At a maximum on the water we had as many as 7 000 on the  
 (19) water, and of course in the areas -  
 (20) Q What do you mean on the water? You mean living on the  
 (21) water?  
 (22) A Yes, sir And as you saw in your trip to Prince William  
 (23) Sound there are not roads or accommodations in that area so  
 (24) we had to build hotel ships so that we could actually house  
 (25) people out at the work locations And we built housing ships

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- (1) and brought in berthing ships and used some navy ships for  
 (2) berthing operations so we could house people offshore  
 (3) We also did some special housing considerations,  
 (4) recognizing that we had a major impact on a small community  
 (5) such as Valdez, and they were worried about their 1989 tourist  
 (6) season and really wanted us out of the hotels so to take care  
 (7) of that we brought in a large number of trailers out of  
 (8) Anchorage and expanded a trailer facility within Valdez so we  
 (9) could house some of our people  
 (10) In addition, we built a large bunkhouse to house and feed  
 (11) about 800 people in Valdez, again to relieve some of their  
 (12) facilities  
 (13) Q Did you have to bring in protective clothing for people  
 (14) working on the spill?  
 (15) A Yes sir  
 (16) Q Or in the cleanup?  
 (17) A Yes sir  
 (18) Q Give us some idea of the type of protective clothing that  
 (19) you brought in and something about the quantities  
 (20) A We brought in to take care of the crews here in 1989,  
 (21) about 300,000 pairs of cotton gloves, 300 000 rubber gloves,  
 (22) 70 000 slicker suits, 125 000 overalls 54 000 or so life  
 (23) vests 31 000 hard hats about 70,000 pairs of rubber boots and  
 (24) over a hundred thousand pairs of socks to take care of folks  
 (25) Q How about food for these people?

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- (1) A We brought - in 1989 we brought in over 12 million pounds  
 (2) of food not counting soft drinks, for feeding our folks  
 (3) Q Not counting soft drinks?  
 (4) A No, not counting soft drinks  
 (5) Q What about equipment to do the cleanup Mr Harrison, tell  
 (6) us something about the type of equipment and the - something  
 (7) about the quantity of the equipment  
 (8) A We had to bring in equipment of course to build the hotel  
 (9) ships that I mentioned we had to bring in equipment to build  
 (10) the wash barges we had to bring in equipment for the landing  
 (11) craft to move people back and forth We had about a hundred  
 (12) barges we had about a hundred landing craft we had about 84  
 (13) tugs, we had 14 berthing vessels We operated in a total fleet  
 (14) of about 1400 boats  
 (15) To take care of the boats and the boom we had, we had about  
 (16) 775 000 feet of anchor chain for example We brought in  
 (17) 500 000 foot of boom for taking care of critical resources  
 (18) 500 000 feet of boom is like going from Knik Arm around Fire  
 (19) Island and up Turnagain Arm or around Manhattan Island three  
 (20) times We brought in 300 000 feet of sorbent boom  
 (21) Q Now I want to show you Defense Exhibit 8030 and ask you to  
 (22) explain to the ladies and gentlemen may he come down Your  
 (23) Honor, what they are seeing now Maybe you ought to come  
 (24) over  
 (25) A This is the city dock at Valdez Valdez has an excellent

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- (1) floating dock facility that handled the tides, which gives them  
 (2) an all weather facility here And all of this equipment that  
 (3) you see back here on this dock is equipment we brought in to  
 (4) either build the necessary equipment or to supply the task  
 (5) forces that were operating offshore You can see on here some  
 (6) of the mobile housing units we had you can see piping, you  
 (7) can  
 (8) see sorbent boom, just an array of equipment we had  
 (9) You can also see at the very end of the dock we're building  
 (10) what we call a max barge, a hot water washing barge We  
 (11) brought in bare barges and we -  
 (12) Q Wait a minute I apologize, I didn't know - all the  
 (13) jurors can't see that. Now what do I do?  
 (14) MR SANDERS Do you want me to help you?  
 (15) MR NEAL. No, thank you Now we got somebody that  
 (16) knows what they are doing, Jimmy  
 (17) BY MR NEAL  
 (18) Q Now, quickly run through that again because I m not sure  
 (19) everyone could see  
 (20) A Starting here at the bottom of the dock, we have some  
 (21) housing units, you can see some of the piping we had here, you  
 (22) can see in spots over here where we have some of the sorbent  
 (23) boom that s located here All of this equipment that s on this  
 (24) dock is equipment we brought in for equipping things  
 (25) This is a max barge that we were building That was the  
 name for a kind of hot water barge in which we had to have

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- (1) pumps and heaters and hoses and equipment.
- (2) Q Are we going to see one of those later?
- (3) A You re going to eye an omni barge This is the hotel ship
- (4) we re building We re stacking these portable housing units on
- (5) this barge so we can house and feed the people with a hotel
- (6) ship that we can take out into Prince William Sound
- (7) Q Now let me ask you a question on that. The jury has been
- (8) to some of these beaches and there's not much ground on
- (9) some of
- (10) these beaches Would you station a hotel vessel out there off
- (11) the beach and then run the workers back and forth onto the
- (12) beach?
- (13) A We would anchor the barge out in deeper water and then we
- (14) would move people back and forth, primarily by landing craft,
- (15) people and equipment to get out to shore You needed a
- (16) shallow-draft work vessel to get people to the shoreline and
- (17) we did that primarily with landing craft. We did some with bow
- (18) pickers
- (19) Q With what?
- (20) A That's a type of boat, a bow picker
- (21) Q I'm glad that you told me that.
- (22) A Over here we have, on this side, two omni barges that are
- (23) being built. That's another form of a hot water washing barge,
- (24) which I will show you in a moment, named that because they
- (25) have
- (26) an arm that you see in construction that pumps cement for
- (27) building, and we used that arm to increase the capacity of the

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- (1) wash barge
- (2) This is about a 20-acre site that you see on the city dock
- (3) that's full of equipment, and we had another small dock that
- (4) was up above that that we also used for various shipping
- (5) equipment.
- (6) Q Thank you You may resume your seat.
- (7) I want to go back to the goals you said you had when you
- (8) got to Valdez The first goal you said you had was to get the
- (9) oil off the vessel, correct?
- (10) A Yes, sir
- (11) Q Now, we have heard Captain Deppe talk about that, and I'm
- (12) going to skip right over that.
- (13) The second goal you said you had was to get the oil off the
- (14) water Tell us about that.
- (15) A The first thing in getting the oil off the water was to
- (16) find where the oil was After the storm, the oil was scattered
- (17) out over many, many square miles and throughout Prince
- (18) William
- (19) Sound and so we had daily, when we could fly, overflights that
- (20) were done by us, by NOAA, by the state, locating where the oil
- (21) was and we used remote sensing devices because there are a
- (22) lot
- (23) of things that visually from an airplane looked like oil
- (24) But we wanted to be sure we were chasing oil so we could
- (25) send our skimmers to the right place so that we could maximize
- (26) the effectiveness in picking up oil
- (27) Q And the skimmer would pick it up, and then after it picked

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- (1) it up what does it do with it?
- (2) A Well most of the skimmers and particularly you heard Mr
- (3) O'Brien describe some of this they actually have some sort of
- (4) container or capacity with them, and they pick up some volume
- (5) and then we move that volume over to a barge or container that
- (6) collects oil and whatever - and whatever is picked up from a
- (7) number of skimmers as a collection device
- (8) Q Now we're talking about getting oil off the water not the
- (9) shoreline?
- (10) A Yes skimmers or devices which pick free oil up off the top
- (11) of the water
- (12) Q How long did this skimming operation, getting oil off the
- (13) water, last?
- (14) A The primary operation occurred during April and May,
- (15) although there was some continued skimming operation that
- (16) went
- (17) on through June and July
- (18) Q Was the skimming, getting the oil off the water, then
- (19) pretty much over in July of '89?
- (20) A It was over in July of '89 except that directly associated
- (21) with the shoreline cleanup
- (22) Q Now then, did you get a lot of oil off the water?
- (23) A We picked up something less than ten percent.
- (24) Q Of the spill?
- (25) A Yes sir
- (26) Q But did you get what was there?

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- (1) A I think that the operation got everything that we could
- (2) expect to get You need to remember the oil is moving with the
- (3) tides it's moving with the wind it's in different states of
- (4) weathering And I think we got all that we could and we
- (5) deployed - actually acquired more than 260 different kind of
- (6) skimmers
- (7) Q 260 different kind?
- (8) A Ranging from a very large ration vessel to very small units
- (9) that you put over the side of a boat.
- (10) Q Now you said your third goal was to get the oil off the
- (11) shoreline How did you go about this goal?
- (12) A The first part of getting the oil off the shoreline is to
- (13) submit a general plan to the federal on-scene coordinator
- (14) Admiral Robbins so we prepared a general plan for his
- (15) approval
- (16) and for him to acquire input from the other state and federal
- (17) organizations
- (18) Q Now a general plan, you re talking about a general plan as
- (19) contrasts with what a specific plan?
- (20) A With a specific shoreline segment plan yes sir
- (21) Q What were the considerations in developing this general
- (22) plan? And by that I mean - I guess that means you would
- (23) generally apply that to wherever in the shoreline you were
- (24) operating, is that correct?
- (25) A Yes sir
- (26) Q What were the considerations in developing this general



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- (1) plan?
- (2) A Well we had to take into account obviously weather and we
- (3) had to take into account environmental factors, including
- (4) archaeological factors, and we had to take into account the
- (5) type of equipment and manpower that were necessary to get that
- (6) overall job done
- (7) Q And what about - was there any fishermen concerns that you
- (8) wanted to consider?
- (9) A I might mention on the fishermen the fishermen were
- (10) extremely important to our operation They gave us a lot of
- (11) good advice on weather and currents Over a thousand of the
- (12) vessels of the 1400 vessels that we used were fishing vessels,
- (13) so they were very critical to the operation And in fact the
- (14) very early stages of the spill, before I arrived on the scene,
- (15) Frank Iarossi was meeting at a remote location with one of the
- (16) fishermen who said he needed a million dollars to handle some
- (17) things that they wanted to do to protect their assets, and
- (18) Mr Iarossi authorized the million dollars on the back of his
- (19) business card, and that was honored for payment
- (20) So the fishermen were very, very important to us in this
- (21) operation
- (22) Q And you tried to be important to them and respond to their
- (23) demand or concerns?
- (24) A Of course we were very interested in their concerns about
- (25) booming off critical resources such as fish hatcheries and

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- (1) streams that they were concerned with, along with the Alaska
- (2) Department of Fish & Game
- (3) We set up claims operations at an early stage so we could
- (4) get money quickly into their hands We knew the spill
- (5) interrupted fishing seasons
- (6) Q Let s hold on and stick with this general plan Once you
- (7) developed this general plan, who has to approve it?
- (8) A The federal on-scene coordinator has to approve it with
- (9) input from all these state and federal bodies that he
- (10) coordinated as well as he took input from the communities and
- (11) villages and interested parties
- (12) Q And did he sometimes direct you to make changes in what
- (13) you submitted to him?
- (14) A Yes sir
- (15) Q Did you make those changes?
- (16) A We also made those changes
- (17) Q Now then, after you had gotten the general plan approved,
- (18) can you at that point start the cleanup?
- (19) A No sir
- (20) Q What do you have to do then?
- (21) A After the general plan is approved, we have to come back
- (22) with a work plan on a segment-by-segment basis on the beach
- (23) and to generate a work plan, you just first have people
- (24) investigate the beach section, and these included
- (25) archaeologists and geomorphologists and marine biologists who

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- (1) looked at the specific oiling at the beach They looked at the
- (2) environmental concerns such as was there a stream or was
- (3) there
- (4) an eagle nest or was there a bird nesting area
- (5) The archeologist looked at did you need special protection
- (6) for archaeologists and the geomorphologists looked at what
- (7) the
- (8) specific oiling was And from there that plan was submitted to
- (9) a federal on-scene coordinator which he would then consult his
- (10) normal group and when they approved that then we could go
- (11) work on it.
- (12) Q Now, you said segment by segment. Give the members of
- (13) the
- (14) jury and the Court some idea of how large or how small these
- (15) segment by segment, each of which you had to have a plan
- (16) A Well, a segment was peculiar to the shape of the
- (17) shoreline In some cases it might be tens of yards and in some
- (18) cases it might be more than a mile We had substantially more
- (19) than a thousand segments for which we developed specific
- (20) work
- (21) plans
- (22) Q Now then when you got a segment plan approved you
- (23) could
- (24) then go to work on the cleanup, is that correct?
- (25) A Yes, sir
- (1) Q Now when did you actually then start the shoreline
- (2) cleanup?
- (3) A We actually started that major operation in late April
- (4) Q What were the techniques used in the shoreline cleanup?
- (5) A We used cold water washing, we used what we call a hot

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- (1) water wash we used bioremediation, we used some
- (2) mechanical
- (3) removal, and most of the shoreline was treated by manual
- (4) pick-up We used all of those techniques
- (5) Q All those four techniques Let's talk about cold water
- (6) treatment for a moment. Explain that to us
- (7) A Cold water treatment is really picking up water out of
- (8) Prince William Sound with a set of pumps and hoses and
- (9) putting
- (10) it up so that it - either in a deluge system, which is a water
- (11) sprinkler system, or hoses, actually sprays the rocks so that
- (12) you dislodge or remove the oil from the rocks
- (13) We then wash it down to the edge of the water, where we
- (14) trap it inside of a boom, and then we pick up that oil, that
- (15) dislodged oil, with a skimmer from inside of that boom and
- (16) remove it in that way
- (17) Q So you wash it off, skim it up and take it away?
- (18) A Yes sir
- (19) Q What about the hot water, is that basically the same thing
- (20) except using hot water?
- (21) A Yes, sir except after you pick up the water, you've got to
- (22) heat it before you run it out and spray it on the shoreline
- (23) Q Who made the decision? I gather it was a decision made to
- (24) change from a cold water treatment to hot water treatment, is
- (25) that correct?
- (1) A Yes sir
- (2) Q Who made that decision?

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- (1) A The federal on-scene coordinator Admiral Robbins made  
 (2) that decision  
 (3) Q From what understanding - well from your knowledge of the  
 (4) event why was that decision made to change from cold water  
 (5) to  
 (6) hot water?  
 (7) A In the early stages of when the oil was on the shoreline  
 (8) it was possible to remove the oil with cold water As the oil  
 (9) weathered and it tended to lose more of its lighter component  
 (10) and picked up more emulsion or debris cold water would no  
 (11) longer remove it, and we found if you could heat the oil to  
 (12) above 120 degrees -  
 (13) Q Heat the oil or water?  
 (14) A Heat the water It was kind of like melting butter So at  
 (15) about 120 degrees we could then loosen that weathered oil  
 (16) from  
 (17) the rocks and we would repeat the same process Once it's  
 (18) loose from the rock, we wash it down off the rock and into the  
 (19) water and pick it up with a skimmer  
 (20) Q Now, I understand 120 degrees is like about a good hot  
 (21) shower?  
 (22) A When you're in the 120 to 140 degree range It's like a hot  
 (23) shower, yes  
 (24) Q Do you have a picture of this use of the hot water  
 (25) treatment of some shoreline on Prince William Sound?  
 (26) A Yes, sir  
 (27) Q Let me show you Defendants 8214 and ask if you recognize

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- (1) somewhere else in Prince William Sound  
 (2) On one of these beaches what we would do is, we would tend  
 (3) to wash that beach through tidal cycles, and we might have to  
 (4) be there through a large number of tidal cycles until the  
 (5) representative of the federal on-scene coordinator which was a  
 (6) Coast Guard person, and a representative of the state on scene  
 (7) coordinator which was normally a person from ADEC or would  
 (8) agree that it was complete and then we would disassembly this  
 (9) equipment, move down the beach and start the process all over  
 (10) again  
 (11) Q Before you go what are these people doing over here?  
 (12) A You see some people at the top of the beach People here  
 (13) as I said worked hard They were working 12, 14 16 hours  
 (14) days on these beaches handling hoses and equipment through  
 (15) all  
 (16) kinds of weather, and that's hard work, so we did have some  
 (17) facilities where you could stop, go get a cold drink or a hot  
 (18) drink, as the occasion may call for, and rotate people through  
 (19) that operation  
 (20) Q Thank you sir  
 (21) By the way this right here there is stuff out at Prince  
 (22) William Sound that's called lichen?  
 (23) A Lichen  
 (24) Q And that's really animal life and plant life?  
 (25) A Yes  
 (26) Q And it's black but this is actually oil here, is that

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- (1) that?  
 (2) A Yes, sir  
 (3) Q Maybe it would be - with the Court's permission, come down  
 (4) and show the Court and the ladies and gentlemen of the jury  
 (5) what they are seeing I think it's pretty obvious, but there  
 (6) may be some parts that aren't so obvious  
 (7) A Thank you  
 (8) This is Green Island, this is a segment of Green Island, a  
 (9) heavily oiled segment. This dark colored area along in here is  
 (10) a heavily oiled area. What we have in here are two omni barges  
 (11) such as you saw being constructed at the Valdez city dock  
 (12) Again, they have the name omni barge because of this long  
 (13) arm and allows us to spray the beach and we could pump an  
 (14) average of 500 gallons of water a minute heat it as much to  
 (15) 140 degrees Fahrenheit as a spray device, and these barges  
 (16) are  
 (17) equipped with generators and pumps and heaters that allow us  
 (18) to  
 (19) pump the water this way  
 (20) In addition, what you see along the beach are a number of  
 (21) people, and what they are doing is taking that loosened oil and  
 (22) washing it on off the shoreline to be caught into this boom  
 (23) This is a primary boom system right here, and from inside this  
 (24) boom we would skim up that oil as it gets down there  
 (25) Now, because we have a lot of tidal variation or storms  
 (26) there is a secondary boom, so if any oil got outside of this  
 (27) boom we had a second chance to trap that oil before it got

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- (1) right?  
 (2) A Yes, sir, that's heavy oil  
 (3) Q Thank you  
 (4) Now then, Mr Harrison you said you use bioremediation  
 (5) Very quickly - that's another way to clean beaches Very  
 (6) quickly explain to us the concept of bioremediation I don't  
 (7) think we've had that before this in case, bioremediation as a  
 (8) method of cleaning oil off beaches  
 (9) A In the waters of Prince William Sound there are natural  
 (10) microbes that eat hydrocarbons those that naturally occur from  
 (11) spruce needles and popweed and naturally occurring  
 (12) substances  
 (13) They tend to be a small percentage of the total microbe  
 (14) population that's there And we found that in Prince William  
 (15) Sound that we had inadvertently given them a large food supply  
 (16) with oil on the shoreline, and we found by adding nutrients,  
 (17) and nutrients in this case I'm talking something about very  
 (18) similar to fertilizer, that we could increase their population  
 (19) by a hundred-fold so they could grow from a tenth of a percent  
 (20) of the population to ten percent of the population and they  
 (21) would eat oil  
 (22) In the middle of a crisis and cleaning up this oil spill,  
 (23) and this was a crisis type of operation, is a terrible time to  
 (24) do research, but we did in 1989 conduct a joint research  
 (25) project that involved the EPA to test out in test plots  
 (26) bioremediation and it turned out as a result of that we found

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- (1) out it would work and it would work in the waters of Prince  
 (2) William Sound And as a result of that, we were able to do our  
 (3) first bioremediation application in August of 1989  
 (4) Q So you put little critters in there to eat up the oil,  
 (5) that's the bottom line of that hu?  
 (6) A No sir  
 (7) Q It's not?  
 (8) A We did not add any critters The microorganisms were  
 (9) already there We fed them and we helped them grow a little  
 (10) faster and in that process of growing faster they eat oil  
 (11) Q In order to tell part of the clean up story, do you have  
 (12) some photographs couple of areas that were before the  
 cleanup  
 (13) and after the cleanup?  
 (14) A Yes sir  
 (15) Q But first I want to give you something Before we get to  
 (16) the specific areas or beaches I want to put something up here  
 (17) and leave it up here which is an overview of Prince William  
 (18) Sound so that - you know the overview, don't you there?  
 (19) You've seen this?  
 (20) MR JAMIN (indicating)  
 (21) BY MR NEAL  
 (22) Q Do you have one, let's say, for Green Island?  
 (23) A Yes sir  
 (24) Q Was Green Island a heavily oiled area?  
 (25) A Yes, sir

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- (1) Q Or at least a portion of Green Island? All right Now,  
 (2) with the Court's permission - well, I'll help you out with  
 (3) this you can stay over here  
 (4) Green Island am I correct that Green Island is right here  
 (5) where I'm pointing on Exhibit 8987?  
 (6) A Yes, sir  
 (7) Q It's in what they call Montague Pass?  
 (8) A Yes sir  
 (9) Q And am I pointing to the top area of that? It was heavily  
 (10) oiled around there?  
 (11) A It was heavily oiled primarily on that northwest side  
 (12) Q Here (indicating)?  
 (13) A All the way from one end to the other  
 (14) Q Now I show you Defense Exhibit - what is it?  
 (15) MR SELNA 8368-A  
 (16) BY MR NEAL  
 (17) Q 8368-A, and explain to the ladies and gentlemen of the jury  
 (18) what that is  
 (19) A This is a heavily oiled shoreline on a segment of Green  
 (20) Island that's near - it's on the northern side but down to  
 (21) the south and on the western side of Green Island and this all  
 (22) was heavily oiled this area was heavily oiled You can see  
 (23) the oil on the surface and it actually penetrated probably  
 (24) several feet into the rock matrix that was along here  
 (25) Q Do you have another picture now of Green Island taken after

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- (1) the wash?  
 (2) A Yes sir  
 (3) Q Let me see if I can put this right on top of that and ask  
 (4) if you recognize this For the record this is Defense Exhibit  
 (5) 8339  
 (6) Now would you explain to the members of the jury and the  
 (7) Court what that is?  
 (8) A We're looking at the same segment of beach right here, and  
 (9) what we have done with a washing operation, we have removed  
 the  
 (10) gross contamination the heavy oil that would get on birds and  
 (11) otters But it's like washing off your driveway, we only had  
 (12) cold or warm water to wash with, and you will not remove all  
 (13) the stain from the rock  
 (14) So what you're looking at is after the washing operation is  
 (15) complete you still have oil-stained rock on the surface, so  
 (16) you're looking at a segment of beach that's been washed with  
 (17) hot water and this is what it looks like after that is  
 (18) complete And this is a shot taken at the first of August in  
 (19) 1989 This is also the same location, the first location on  
 (20) which we tried bioremediation and we had just completed this  
 (21) site This was the first place we went out to try  
 (22) bioremediation outside of the test plots where did our research  
 (23) project. So our first broad scale of bioremediation went on  
 (24) this segment of Green Island with the segment of the shore  
 (25) looking just like this

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- (1) Q Do you have a picture of this Green Island, same area as  
 (2) here after bioremediation?  
 (3) A Yes sir  
 (4) Q Let's look at that.  
 (5) A We're looking at the same segment of shoreline, this is  
 (6) about three weeks later, and what you've had now happen is an  
 (7) opportunity for the microorganisms or the bugs if you will, to  
 (8) be worked, plus the natural forces, the natural tide and the  
 (9) sunshine effects that are going on right here While you can  
 (10) still see oil staining as you look along the rocks, you can see  
 (11) there has been a substantial amount of the oil cover removed as  
 (12) a result of the bioremediation process  
 (13) Q Now this was done in late '89, right?  
 (14) A Yes sir  
 (15) Q Do you have a picture of the same beach taken in 1992?  
 (16) A Yes sir  
 (17) MR NEAL. Would you read the exhibit off there, Mr  
 (18) Selna - I'll get it  
 (19) BY MR NEAL  
 (20) Q I show you 8319-A and ask you is that another picture of  
 (21) the same area we've been seeing on Green Island?  
 (22) A Yes sir that's the same location The difference is here  
 (23) you've had a couple of more seasons for Mother Nature to  
 (24) continue to work on the cleanup right here and so that you have  
 (25) a good clean shoreline

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- (1) Q Now I want to show you one more of Green Island then we'll  
 (2) move to the next and last one  
 (3) Do you have an overview of the entire part of Green Island  
 (4) taken of this year?  
 (5) A Yes  
 (6) Q I'm showing you Defense Exhibit 6349 and ask you then and  
 (7) maybe I can - this starts now up in here and goes almost the  
 (8) whole length of that?  
 (9) A No sir May I show him where that is?  
 (10) Q I am right this is Green Island?  
 (11) A This is Green Island  
 (12) Q I got that part right?  
 (13) A We're really talking about this end of Green Island that's  
 (14) right down here at the southern tip Green Island, like most  
 (15) of these locations with oil, the oil moved down, had oil on  
 (16) this side of the island, none on the other side, (indicating),  
 (17) and what we're looking at is this same southern tip that you  
 (18) see there And this should have been where you landed in your  
 (19) helicopter, at this segment  
 (20) The segment that I have been showing you there was an  
 (21) outcrop at the end of that segment, by the way, and that's how  
 (22) we defined a segment. That section of beach was a segment  
 (23) and  
 (24) the one I've been showing you is this next segment The one  
 (25) you walked on had a lot of fine grain material as well as some  
 (26) cobble You can see here on the beach the heavier cobble that

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- (1) that is a before - or actually during the cleanup of the north  
 (2) side of Smith Island?  
 (3) A Yes sir There are several unique features about this  
 (4) site First of all it shows you the phenomena the uplift  
 (5) that occurred in the 1964 earthquake All of those materials  
 (6) that you see standing up in the air is an old Coast Guard pier  
 (7) that used to be down in the water before the earthquake so  
 (8) that's uplifted So that becomes an archaeological site by  
 (9) definition of the State and has to be treated differently  
 (10) This is also a location known as Quayle Beach The  
 (11) vice-president visited this location in about - the then  
 (12) vice-president visited this location in about the middle of  
 (13) April in 1989, when we were in the early stages of - middle to  
 (14) late April of this, and this photograph was taken in early  
 (15) May We were still on this location washing on that site We  
 (16) worked on this site for a number of weeks repeatedly washing  
 (17) this site  
 (18) Q And with this mainly - I guess this is mainly cold water  
 (19) treatment here now?  
 (20) A At that phase we were early in the operation and that was  
 (21) primarily a cold water wash  
 (22) Q Now I'm going to show you one more picture here of Smith  
 (23) Island, and I have a note somewhere when that was taken  
 (24) Let's  
 (25) see  
 (26) 1994 - well, let me show you one first of 1990 - leave

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- (1) you saw in the photographs This section of beach just  
 (2) happens  
 (3) to have more cobble in it and this is at low enough tide  
 (4) All of this right here is not oil That's all marine  
 (5) growth, as it is off this tip  
 (6) Q Is any of that oil that they see dark here?  
 (7) A No You have some rock outcrop This rock outcrop crop is  
 (8) primarily shale You have some dark rock that is an outcrop in  
 (9) this area  
 (10) Q And this is life here, right?  
 (11) A Yes sir  
 (12) Q Now, at my request did you make a before picture - or a  
 (13) during picture, maybe I should say, of one more spot?  
 (14) A Yes, sir  
 (15) Q And that spot was Smith Island?  
 (16) A Yes sir  
 (17) Q Now am I correct that Smith Island is what I'm pointing to  
 (18) on 8987 that's north and slightly west of Green Island?  
 (19) A Yes sir And the spot we're going to be looking at is  
 (20) just about in the middle of the north side of Smith Island  
 (21) Q Was that a heavily oiled area?  
 (22) A It was a heavily oiled area Again, the north side of  
 (23) Smith Island was heavily oiled as the oil moved down pushed  
 (24) by  
 (25) storm and currents but the backside of the island received  
 (26) virtually no oil  
 (27) Q Now I'm showing you Defense Exhibit 8299-A and ask you if

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- (1) out the 1990, let's get the 1984  
 (2) All right Now, tell the members of the jury what they are  
 (3) seeing now  
 (4) A This is the same location You can see that the old Coast  
 (5) Guard station is weathered a little bit since then, because  
 (6) their - the old piers that were sticking up out of the water,  
 (7) we have lost some of those members at this time But as you  
 (8) look along the shoreline, you can see that the forces of  
 (9) nature combined with the washing operation, have resulted in a  
 (10) good looking shoreline and I don't think you would find any  
 (11) oil on this segment  
 (12) Q And this is - I'm pointing now to - geez, I can no longer  
 (13) see 6371 is the same beach as 8299-A?  
 (14) A These shorelines that we've looked at, at Green and at  
 (15) Smith here are some of the worst of the worst. They have very  
 (16) deep penetration of oil they were hit early they were hit  
 (17) hard out of the initial storms A lot of oil on these  
 (18) shorelines  
 (19) Q And I gather this is the fellow who drives the boat not  
 (20) the waterskier?  
 (21) A This is the fella who drives the ski boat.  
 (22) Q There was some sort of question yesterday - let's talk  
 (23) about Rua Cove for a minute Were you allowed to finish the  
 (24) cleanup of Rua Cove?  
 (25) A Rua Cove which is on the west side of Knight Island is a

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- (1) small cove had a couple special issues about the work at Rua  
 (2) Cove One you noticed by landing it s a relatively small  
 (3) beach area It does have a salmon stream and is an active  
 (4) salmon stream Under the auspices of the Alaska Department  
 of  
 (5) Fish & Game we were not allowed to work within certain  
 (6) distances of a salmon stream and if you take a hundred meters  
 (7) on each side of the salmon stream, you used up most of that  
 (8) beach  
 (9) Another phenomena that you might have noticed was their  
 (10) eagle nests there and we were not allowed to work around  
 given  
 (11) sites during eagle nesting season  
 (12) And there may have been a third phenomena that you may  
 have  
 (13) noticed there was a mining camp which was an archaeological  
 (14) site which had special archaeological preservations, so when  
 we  
 (15) were around that site we were not allowed to do any heavy  
 (16) washing We were allowed to do some light picking up, which  
 is  
 (17) what we were allowed to do by the authority, and they  
 (18) determined, because of the stream and the other issues and the  
 (19) nature of the oiling that we were better off to leave that  
 (20) alone  
 (21) So as you looked up behind that rock outcrop you did see  
 (22) some oil on the backside of a little rock face there, and under  
 (23) some of the larger boulders is - that may or may not have been  
 (24) turned over for you there was some residual weathered oil in  
 (25) those cases

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- (1) But NOAA, who was the technical advisor for the federal  
 (2) on scene coordinator, determined that was non toxic, it wasn t  
 (3) harming anything and there would be more harm to bringing in  
 (4) heavy equipment and people removing that than there would  
 be to  
 (5) leaving it right there  
 (6) Q Mr Harrison is that a long answer to my question were  
 (7) you allowed to complete the cleanup?  
 (8) A The answer is we were not allowed to do any heavy washing  
 (9) and clean up in there  
 (10) Q Thank you sir  
 (11) Now then, outside of Prince William Sound in a one liner,  
 (12) did you clean-up beaches there?  
 (13) A Yes sir  
 (14) Q How did you do that?  
 (15) A Primarily by manual pick-up although we did do a little  
 (16) bit of washing and we did do some bioremediation  
 (17) Q Now Mr Harrison, did there come a time in 1989 when you  
 (18) suspended your clean-up operation?  
 (19) A Yes sir  
 (20) Q Why? Yes, briefly put why?  
 (21) A We suspended on September 15th 1989 as was approved  
 by  
 (22) the FOSC the federal on scene coordinator The federal  
 (23) on scene coordinator approved that for safety consideration  
 (24) We were using shallow draft, flat bottom vessels landing  
 (25) craft shallow draft fishing boats because we were getting up

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- (1) to shorelines, and after September 15th the local fishermen had  
 (2) told us, and the weather data looking at the weather patterns  
 (3) sustained that - that we shouldn't have those kind of vessels  
 (4) out on the water anymore So that was the reason for the  
 (5) shutdown  
 (6) Q Was your shutdown approved by the Coast Guard and the  
 FOSC?  
 (7) A Yes sir it was directed by him  
 (8) Q Now, did you work over the winter of 89 and 90?  
 (9) A Yes, sir  
 (10) Q And what did you do there?  
 (11) A We obviously weren't doing shoreline cleanup because we  
 had  
 (12) quit all of that, but we did have a number of other programs  
 (13) We had several, four or five large vessels that were capable of  
 (14) staying out in the water here in the wintertime that we had out  
 (15) and with equipment in the event they found any emergency  
 We  
 (16) had to equip all of those vessels with enough baseball bats so  
 (17) that they could keep the ice off the top of the vessels,  
 (18) because, as you know, those vessels can get top heavy with ice  
 (19) during the wintertime  
 (20) We also, in each village and town, equipped them with  
 (21) emergency response equipment, that we put containers at  
 those  
 (22) locations with emergency response equipment so that they  
 would  
 (23) be able to do what they needed to during the wintertime We  
 (24) overflow the areas looking for any sheens or signs of problems  
 (25) that we might be watching and obviously limited somewhat by

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- (1) daylight hours in the wintertime, but to observe what we  
 (2) could  
 (3) We had a winter program that we engaged the 16 villages in  
 (4) the areas and the communities where they looked at  
 monitored  
 (5) for us, if you will, certain sections of shoreline that were of  
 (6) high interest to them and we provided equipment in case they  
 (7) wanted to do some manual pick-up in the event of a weather  
 (8) break  
 (9) We also did a number of scientific studies, which were -  
 (10) monitoring transects to see how the nature of the oil and the  
 (11) quantity of oil was changing over the wintertime and we  
 (12) conducted wildlife surveys over that winter  
 (13) Q Now did the cleanup continue in 1990?  
 (14) A Yes, sir  
 (15) Q Did the concept of the cleanup change, or the philosophy of  
 (16) the cleanup change any in 1990?  
 (17) A The federal on-scene coordinator, with the advice of NOAA,  
 (18) changed the philosophy of the cleanup to one of net  
 (19) environmental benefit In 1989 we were doing everything we  
 (20) could to remove gross contamination off the shoreline In 1990  
 (21) and in subsequent years the decision was that - was whatever  
 (22) we did would have more benefit to the environment than harm  
 (23) that would be caused by putting people and equipment there in  
 (24) the first place So on every shoreline, shoreline by  
 (25) shoreline, there was a net environmental benefit decision made

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- (1) by the FOSC  
 (2) Q Now did the cleanup continue in 1991 and 1992?  
 (3) A Yes sir  
 (4) Q Did there come a time when the cleanup was declared  
 (5) complete?  
 (6) A Yes sir  
 (7) Q Who declared that?  
 (8) A The federal on-scene coordinator at that time, who was  
 (9) Admiral Ciancaglini for the Coast Guard, and the state  
 (10) commissioner for environmental conservation who was John  
 (11) Sandor  
 (12) Q Did you receive communications to that effect?  
 (13) A We received letters yes sir  
 (14) Q Could we put the federal communication up first very  
 (15) quickly? Let me see if I can find it  
 (16) In any event this document up there says As far as the  
 (17) federal coordinator is concerned, the clean up is over?  
 (18) A He said, his words were, that clean-up operation should be  
 (19) concluded He determined that  
 (20) Q Okay That s too much I'm going to have to get little  
 (21) Jimmy Sanders up here to do that If anybody wants to look at  
 (22) this, this is Defense Exhibit 3928 Is that correct?  
 (23) A I don't know  
 (24) Q Well, Defense Exhibit 3928 - let s put up a statement.  
 (25) Did you get an equivalent message from the State?

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- (1) A Yes, sir From John Sandor yes, sir  
 (2) Q And that basically says the same thing, this phase of the  
 (3) response activity should be concluded?  
 (4) A Found to be completed to both State of Alaska and federal  
 (5) standards and that it should be completed  
 (6) Q And I believe it also says If I read this correctly, I  
 (7) believe everyone associated with the clean-up operations did a  
 (8) truly remarkable job under very difficult circumstances?  
 (9) A Yes sir  
 (10) Q Do you agree with that?  
 (11) A I agree with that  
 (12) MR NEAL. Your Honor, I have five minutes, ten  
 (13) minutes maximum depends on how long his answers are  
 (14) Sometimes he has rather long yeses  
 (15) THE COURT Without suggesting anything about that  
 (16) let's take our second recess Actually I think it s the  
 (17) third We ll be in recess for 15 minutes  
 (18) (Jury out at 12 00)  
 (19) (Recess from 12 00 to 12 15)  
 (20) (Jury in at 12 15)  
 (21) THE CLERK. All rise  
 (22) MR NEAL. May I continue Your Honor?  
 (23) THE COURT You may  
 (24) BY MR NEAL  
 (25) Q Mr Harrison you've talked about now the cleanup having

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- (1) been complete And by the way maybe I ought to tell the  
 (2) ladies and gentlemen the number of the last exhibit, which was  
 (3) from the State authority saying the cleanup was complete and  
 (4) that is Defense Exhibit 3958  
 (5) After the cleanup was declared complete was there any  
 (6) remaining oil?  
 (7) A Yes sir  
 (8) Q Then why not get that off too?  
 (9) A The FOSC with the input from NOAA determined that there  
 (10) were places that remained oil, but it was not bothering the  
 (11) environment and the damage to go in and recover it was more  
 (12) than the benefit of removing it and we were better off to leave  
 (13) that alone That was an FOSC decision  
 (14) Q Now, you said, in talking about your last goal and the  
 (15) goals when you arrived at Valdez was to assist fishermen,  
 (16) communities and villages, is that correct?  
 (17) A Yes sir  
 (18) Q Let s talk about communities and villages first What did  
 (19) you do to assist the communities and villages?  
 (20) A We recognize that to a large extent that we had strained  
 (21) some of their community service capability and certainly placed  
 (22) an additional administrative burden in some of these  
 (23) locations So what we did was set up a reimbursement program  
 (24) so we would pay any of their costs that were incurred due to  
 (25) the result or are peculiar due to this oil spill, and we

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- (1) reimbursed cities, villages, state government federal  
 (2) government Native corporations, whoever was involved in that  
 (3) kind of operation  
 (4) We In addition, in - we took a special look at problems,  
 (5) for instance - as we went in and hired people at \$16 89 an  
 (6) hour we dried up the labor market and therefore there was not  
 (7) people to work in the fish plants in some of these communities,  
 (8) restaurant or service stations or these sort of things, so we  
 (9) developed what we called a jobs program, which we subsidized  
 (10) and brought in people to Cordova and Kenai and Seward and  
 (11) Valdez and housed those people so that they could fill in the  
 (12) routine jobs that normally need to be handled in the summer in  
 (13) those communities  
 (14) We put community liaison people in each one of these towns  
 (15) and villages so that we would have some feedback as to what  
 (16) their problems were and what we could do to respond to those  
 (17) problems where that was appropriate  
 (18) Q Now you said to assist fishermen and others in regard to  
 (19) claims programs How did you do that?  
 (20) A To handle claims from fishermen and other people that had  
 (21) claims, we set up claims offices in seven Alaskan cities and  
 (22) towns and one down in Seattle A number of fish processors  
 (23) and  
 (24) fishermen worked out of Seattle We ran those six days a week  
 (25) and 12 hours or longer and we set those up and ran them early  
 because we knew as we were doing that and as fishing  
 seasons

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- (1) were closed that people were going to worry about paying their  
 (2) boat note or paying for their house mortgage or whatever that  
 (3) was and we wanted to get the money back into their hands  
 (4) quickly  
 (5) So we also set up services administrative and legal  
 (6) services to assist those fishermen in being able to process  
 (7) those claims on a speedy manner  
 (8) Q It wasn't just fishermen was it?  
 (9) A No sir It was fishermen - for instance there were  
 (10) special things - like in the city of Cordova we had a special  
 (11) program for businesses that were in Cordova and we  
 subsidized  
 (12) them back to the level of their forecast for any month they  
 (13) didn't meet their forecast  
 (14) Q How about processors and cannery workers?  
 (15) A We - processors, tenderers, people that worked in  
 (16) processing plants we had all of those, as well as a number of  
 (17) other miscellaneous claims  
 (18) Q Now, we'll have a chart later on tomorrow with the  
 (19) after-tax cost of the spill cleanup so forth so I don't want  
 (20) to go into detail but just briefly how much did Exxon spend  
 (21) on the cleanup in this case?  
 (22) A We spent a little over \$2 billion  
 (23) Q That's billions of dollars?  
 (24) A That's a two with nine zeros behind it, yes sir  
 (25) Q How much did you spend on the claims program?

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- (1) A More than 300 million  
 (2) Q Mr Harrison how much of your life did you spend on the  
 (3) cleanup and the other programs you've discussed for the ladies  
 (4) and gentlemen of the jury?  
 (5) A I was directly involved with the cleanup from April of  
 (6) 1989 -  
 (7) Q April 5th?  
 (8) A Yes sir  
 (9) Q April 5th, '89?  
 (10) A On through the summer of 1992  
 (11) Q Something over three-plus years?  
 (12) A Yes sir  
 (13) Q After the cleanup was completed what did you do next?  
 (14) A During 1992 we felt that it was important that we do our  
 (15) best job to share lessons learned out of it. We felt we  
 (16) learned a lot of things that we felt could be a benefit to  
 (17) other companies others within our company and other  
 (18) governments and so I put together a program of lessons  
 (19) learned, and then over a period of several months visited 13  
 (20) different countries gave about 65 or 70 presentations other  
 (21) companies people within our company and to government  
 bodies  
 (22) on the key lessons learned out of this oil spill that would  
 (23) have them - that we thought would help them in their programs  
 (24) MR NEAL I understand Mr Jamin has some questions  
 (25) to ask you and I'll leave you to his tender mercy Thank you

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- (1) Excuse me I've been told that the overview - I  
 (2) thought that was in, the overview of Prince William Sound  
 (3) 8987 has not been moved into evidence May I move that into  
 (4) evidence?  
 (5) (Exhibit 8987 offered)  
 (6) MR JAMIN You certainly may  
 (7) THE COURT Defendants' 8987  
 (8) MR JAMIN No objection  
 (9) THE COURT It is admitted without objection  
 (10) (Exhibit 8987 received)  
 (11) CROSS EXAMINATION OF OTTO R HARRISON  
 (12) BY MR JAMIN  
 (13) Q Mr Harrison by your right shoulder there there are some  
 (14) folders One of them has some exhibits and one of them has  
 (15) your deposition, we may reference to one of or -  
 (16) MR JAMIN Your Honor before I start, I'd like to  
 (17) pre-admit these are PX 6468 6430, 6469 6472 and 6480  
 (18) (Exhibits PX 6468 6430, 6469, 6472, and 6480 offered)  
 (19) THE COURT Are they admitted without objection?  
 (20) MR NEAL No objection, Your Honor  
 (21) THE COURT They are admitted  
 (22) (Exhibits 6468 6430 6469, 6472 and 6480 received)  
 (23) BY MR JAMIN  
 (24) Q Mr Harrison, I was interested in one of the thoughts you  
 (25) shared with us near the end of your examination that there is

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- (1) some oil out there that - a judgment has been made it's better  
 (2) to leave it out there than to mess with it any more, than to  
 (3) try to clean it up any more Is that right sir?  
 (4) A Yes sir  
 (5) Q Now Mr Jahns testified for us - you know Mr Jahns?  
 (6) A Yes sir, I do  
 (7) Q And he testified for us in Phase II, and he gave us an  
 (8) estimate that there might be one percent of the oil out there  
 (9) is - that isn't with your own thinking sir?  
 (10) A I have not made a calculation I think his indication was  
 (11) probably less than one percent  
 (12) Q You haven't made the independent calculation?  
 (13) A No sir I have not.  
 (14) Q Have you tried at all, sir, to do what Mr Jahns did, try  
 (15) to figure out where the oil went and how much percent was  
 (16) picked up and how much wasn't picked up and how much hit  
 (17) beaches and how much didn't hit the beaches?  
 (18) A I did not  
 (19) Q Would you trust his judgment in that regard?  
 (20) A I have a great deal of confidence in Dr Jahns  
 (21) Q Now, Mr Harrison, who created the situation where there is  
 (22) still some oil out there who is responsible for that?  
 (23) A I'm afraid I'm -  
 (24) Q What company is responsible for the fact that there is  
 (25) still some oil on the beaches?

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- (1) A Are you talking about the decision for the net
- (2) environmental benefit decision?
- (3) Q Is it Exxon sir?
- (4) A Or are you talking about who spilled - I m not sure what
- (5) your question is
- (6) Q I m asking whose spill is it sir?
- (7) A We ve spilled it and we have taken that responsibility
- (8) Q Now when you gave this lessons learned talk that you did
- (9) around the world was it?
- (10) A Yes sir
- (11) Q Was one of the lessons that you learned that you talked
- (12) about Exxon s recklessness in causing the spill?
- (13) A No, sir
- (14) Q Mr Harrison a couple other small things before I really
- (15) dig into where I wanted to be with the outline you mentioned
- (16) there was a million dollars that Mr larossi authorized to a
- (17) fisherman?
- (18) A To a fish co-op out of Cordova
- (19) Q That was to the Prince William Sound Aquaculture
- (20) Corporation?
- (21) A As I understand it
- (22) Q And it was for boom?
- (23) A Yes, sir
- (24) Q And it was for boom that Exxon could not otherwise provide,
- (25) but the aquaculture association could to boom its own

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- (1) facility wasn't it?
- (2) A I don't know the specifics of that I was not at that
- (3) meeting, I just know of the event
- (4) Q Is that your generally understanding, sir?
- (5) A I don't know the specifics Mr Jamin
- (6) Q Now you talked with us a little bit about Rua Cove today,
- (7) is that right?
- (8) A Yes sir
- (9) Q Mr Harrison, do you know that when the treatment
- (10) recommendations were made in 1991, that the Exxon person
- (11) who was in the group said that there is an anadromous stream
- (12) present? You mentioned that, right?
- (13) A Yes, sir
- (14) Q And there is some subsurface oil however the subsurface
- (15) oil that is there appears to be in pockets and not uniform
- (16) across the stream bed, there appears to be no sheens present
- (17) the cover is clean and creating no apparent problems the
- (18) beach
- (19) life for a high energy beach is abundant and healthy the biota
- (20) in and around the stream are alive and doing well, and that the
- (21) Exxon member of the TAG group said don't treat it. Do you
- (22) know that, sir?
- (23) A I'm not familiar with who did or didn't say that Of
- (24) course the Exxon representative on the TAG group didn't make
- (25) the decisions
- (26) Q They were joint decisions weren't they, that was part of

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- (1) what the TAG group was ADF&G federal governments the
- (2) United
- (3) States Coast Guard NOAA if there was a local land manager
- (4) they run the group is that right?
- (5) A Yes sir
- (6) Q Do you know Exxon made the recommendation don't treat
- (7) it?
- (8) A I did not know specifically that Exxon made that
- (9) recommendation I know that Exxon did not make the final
- (10) decision
- (11) Q Now I want to take a moment, sir to put some of these
- (12) ideas in perspective Exhibit 3, which has been preadmitted
- (13) from almost the very beginning of our case, and I know you
- (14) haven't been with us, was the Alyeska Oil Spill Contingency
- (15) Plan, and I want to show you - may I have the Elmo?
- (16) This is from the 200 000 gallon scenario that we talked
- (17) about a little bit already Are you with me?
- (18) A The discussion that I've heard today on that?
- (19) Q Yes
- (20) A All right
- (21) Q Now, you re president of Exxon Pipeline now, is that
- (22) correct?
- (23) A That's correct
- (24) Q And Exxon Pipeline was one of Alyeska's partners when this
- (25) contingency plan was put together, was it not?
- (26) A Yes sir
- (27) Q And both the Exxon Pipeline and Alyeska knew that if there

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- (1) was a spill of this magnitude, over 200 000 barrels, in fact
- (2) 260 000 barrels, we had it clarified today, that there would be
- (3) oil on the beaches that would have to be cleaned up?
- (4) A I wasn't there at that time I can't testify to what
- (5) people did or did not know at that time
- (6) Q Sir will you agree with me that the plan provided It s
- (7) estimated that approximately 50 percent of the oil will be
- (8) recovered at sea either directly after the spill or at a later
- (9) time by being washed off rocks contained and skimmed off of
- (10) the
- (11) water?
- (12) A I assume this is out of the contingency plan It s been
- (13) approved by the federal government and all the parties that
- (14) were involved
- (15) Q Yes sir So there is a recognition going in upfront that
- (16) if there is a spill of this magnitude, there is going to be oil
- (17) on the beaches Isn't there sir?
- (18) A I can only attest to what I'm reading here sir
- (19) Q Would you agree with Mr Jahns that 40 percent of the oil
- (20) from the Exxon Valdez hit the Prince William Sound beaches?
- (21) A Dr Jahns made that calculation and I have no reason to
- (22) doubt his calculations
- (23) Q And from your own experience you know that an additional
- (24) amount of oil hit the beaches down along the Kenai Peninsula,
- (25) on Kodiak Island the entire Kodiak archipelago and along the
- (26) Alaska Peninsula because you ve seen some of it haven't you?



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- (1) A I've been to a number of those locations  
 (2) Q And sir you told us that you thought you got ten percent  
 (3) of the oil by skimming it is that right?  
 (4) A Yes sir I think I said less than ten percent.  
 (5) Q Do you have any better estimate of that?  
 (6) A I think Dr Jahns made an estimate that was probably the  
 (7) most detailed estimate that was made  
 (8) Q And he said a total of about 13 didn't he?  
 (9) A I thought he said from the skimming operation remember  
 (10) there are two phases one that goes with the shoreline work and  
 (11) one from the free oil  
 (12) Q And it was a total of 13 percent that Dr Jahns told us  
 (13) about in this courtroom here?  
 (14) A I think that's right and I'm not sure what the combination  
 (15) was  
 (16) Q If something like ten percent or nine percent or eight  
 (17) percent got picked up from skimming 13 minus nine or 13  
 (18) minus  
 (19) eight got picked up from the beaches is that right?  
 (20) A You know you're quoting his numbers I assume that's  
 (21) right  
 (22) Q Well I'm trying to integrate your numbers you're telling  
 (23) me because Mr Jahns did not tell us how much was skimmed  
 (24) here You're telling me something a little less than ten and I  
 (25) want to have you make your best estimate  
 (26) If 13 is right, all right how much - what percentage of

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- (1) oil was cleaned off the beaches?  
 (2) A As we started off saying I do not - did not ever make  
 (3) that calculation don't have that estimate  
 (4) Q But you'll give me will you, that if Mr Jahns is right at  
 (5) 13 and you're right at eight or nine or something less than  
 (6) ten that it's 13 minus that number?  
 (7) A I assume that's right, Mr Jamin As I said I have not  
 (8) made that calculation  
 (9) Q And sir, we spent - "we" because Exxon spent the money,  
 (10) but the United States spent the money, I mean this tax  
 (11) deduction that affects all of us doesn't it? We spent over  
 (12) \$2 billion on it?  
 (13) A We spent over \$2 billion  
 (14) Q And if Mr Jahns is right that 13 percent was picked up,  
 (15) that's about a quarter of what was suggested could be cleaned  
 (16) up in the contingency plan because it estimates 50 percent,  
 (17) doesn't it?  
 (18) A I would assume Mr Jamin, if it's a normal contingency  
 (19) plan, there are a large number of assumptions probably  
 (20) involving weather and a number of other factors in that  
 (21) contingency plan I'm not familiar with it but I would assume  
 (22) that would be the case  
 (23) Q Is one of those assumptions sir the one I put in brackets  
 (24) down here that there would of course be long-term cleanup of  
 (25) the spill on the various beaches of Prince William Sound?

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- (1) A That's what I read there  
 (2) Q So on a going-in basis before the spill there is an  
 (3) awareness of the part of Alyeska and one of its partners  
 (4) Exxon, on a going-in basis that if there is a spill of this  
 (5) magnitude that beaches are going to be hit?  
 (6) A I take it that's a statement not a question?  
 (7) Q Well, do you agree with that statement, sir?  
 (8) A Well, I already told you I was not a participant in that.  
 (9) I cannot tell you what the state of awareness was, I can only  
 (10) read with you what you have here  
 (11) Q Fair enough, sir  
 (12) Now let me show you a couple of publications Ms Buhl  
 (13) talked to us this morning about some manuals that were  
 (14) available when she set up the shop Do you remember that?  
 (15) A Yes sir  
 (16) Q Now was there - or maybe you don't know, in which case  
 (17) just tell me Was there a manual that Exxon had put together  
 (18) for oil spill response?  
 (19) A Are you asking Exxon Shipping or are you asking Exxon  
 (20) general  
 (21) Q Exxon Shipping or Exxon general  
 (22) A Everywhere that I have operated we have manuals that we  
 (23) use  
 (24) for emergency response including oil spills  
 (25) Q Now, were you familiar, sir or are you familiar, sir, with  
 (26) a document from - published before the spill by Exxon called

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- (1) the Oil Spill Response Manual, which breaks out different parts  
 (2) of the world and has a section dealing with Alaska?  
 (3) A Is that the document that's put out by Exxon Production  
 (4) Research?  
 (5) Q Let me ask you to take a look at 6480, which is right by  
 (6) you  
 (7) MR NEAL Excuse me  
 (8) THE COURT Mr Jamin you didn't hear his inquiry,  
 (9) which might have solved this problem  
 (10) MR NEAL I wanted to say let him finish what he was  
 (11) saying  
 (12) THE WITNESS Was that the document put out by Exxon  
 (13) Production Research?  
 (14) BY MR JAMIN  
 (15) Q If you turn -  
 (16) THE COURT You didn't let him finish his answer  
 (17) again Please don't talk at the same time  
 (18) THE WITNESS I just asked if that was the document  
 (19) published by Exxon Production Research  
 (20) BY MR JAMIN  
 (21) Q Sir, I don't think it is Would you take a look at 6480,  
 (22) and I apologize for cutting you off They are in sequence,  
 (23) maybe I can help you speed things along  
 (24) Sir is that a document that you recognize?  
 (25) A I don't specifically recognize - I don't specifically

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- (1) recognize this document, no, sir  
 (2) Q All right. Let me ask you to look at the second page at  
 (3) the top where it says oil spill response manual section six  
 (4) Alaska. Does that help at all?  
 (5) A No, sir  
 (6) Q Let me ask you to look sir, at 6468 which is the one that  
 (7) you mentioned the Exxon Production Research Company  
 document.  
 (8) A 6468 yes sir  
 (9) Q Now, is that a document with which you are familiar?  
 (10) A Yes, sir, I believe I'm familiar with this document.  
 (11) Q Now, sir, what I've got, so we'll be in sequence here,  
 (12) 6468, 6469 and 6472 are all related, so if you can get all  
 (13) three of them out we will go through them together  
 (14) A I have all three of them  
 (15) Q All right Now, 6468 is Field Manual for Oil Spill  
 (16) Response?  
 (17) A I believe that's what it's titled  
 (18) Q And does it on its third page, sir, have a table of  
 (19) contents which includes a section three for shoreline  
 (20) protection?  
 (21) A It has shoreline protection, yes, sir  
 (22) Q And if you go to 6472, that is section three?  
 (23) A 6472?  
 (24) Q It's up on the screen if that's any easier for you, but  
 (25) what I wanted to do - you have seen this document before?

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- (1) A You know, I think I've seen this EPR document before is  
 (2) this part of the EPR document?  
 (3) Q Yes, sir And we're talking about Exxon Production  
 (4) Research?  
 (5) A Yes sir  
 (6) Q And it provides every attempt should be made if at all  
 (7) possible to keep oil from impacting a shoreline area does it  
 (8) not?  
 (9) A Yes sir  
 (10) Q And was this, sir, one of the documents that would have  
 (11) been available to Ms Buhl then, that first day?  
 (12) A I would assume so, but I'm not the right person to ask what  
 (13) would have been in the Exxon Shipping office  
 (14) Q I'll take your assumptions sir Let's take a look at the  
 (15) second page, which is up on the screen now  
 (16) Is this table a summary of generalized shoreline  
 (17) classification in order of increasing sensitivity to oil spill  
 (18) damage?  
 (19) A Oh well can I read the heading? Summary of generalized  
 (20) shoreline cleanup  
 (21) Q Did it provide for coarse-grained sand beaches that oil  
 (22) may penetrate or be buried rapidly making cleanup difficult,  
 (23) uncleaned most oil will be naturally removed within several  
 (24) months  
 (25) For gravel beaches, oil will undergo deep penetration

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- (1) rapid burial and be difficult to clean Cleanup should  
 (2) concentrate on high tide swash area If uncleaned and  
 (3) sheltered oil may persist for years  
 (4) A You've read it correctly And sheltered rocky coasts the  
 (5) Exxon Production Research manual provide that moderate  
 biomass  
 (6) areas of reduced wave action heavy oil and accumulation in  
 (7) cracks and pools oil may persist for many years removal of  
 (8) heavy oil concentration necessary  
 (9) Q Sir when you came on the scene, were you aware of the  
 (10) information that we've just reviewed?  
 (11) A If you're asking me if I'm aware of those specific words,  
 (12) I'm not sure about that, but I've been through lots of oil  
 (13) spill contingency plans and looked at manuals and options,  
 and  
 (14) would be generally aware of that information  
 (15) Q So again, sir, you knew, and I assume others in Exxon knew  
 (16) that if there was an oil spill of this magnitude and it hit the  
 (17) beaches and it ran into these sorts of beaches that there was  
 (18) going to be penetration of that oil down into the beach?  
 (19) A I think that's a logical assumption, yes sir  
 (20) Q Sir, let me switch gears just a little bit When you were  
 (21) working, after you came up on April 5, and working with the  
 (22) federal on-scene coordinator, was it your understanding that if  
 (23) Exxon didn't do what the federal on scene coordinator asked  
 (24) through this plan and modification process that you've  
 (25) described, that the federal on-scene coordinator could either

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- (1) federalize the spill, hire someone else and eventually present  
 (2) the bill to Exxon?  
 (3) A I don't know the details of what - that was a general  
 (4) understanding that I had, but, on the other hand there was  
 (5) absolutely no question at any time that what we were going to  
 (6) give them was our absolute total cooperation  
 (7) Q And this absolute cooperation following what the FOSC  
 asked  
 (8) you to do you would have done that sir, whether or not the  
 (9) spill was reckless or negligent or you just caused it, its  
 (10) something that you had to do isn't it?  
 (11) A It's the approach that we take in working with the  
 (12) authorities at all times to see if we can't have maximum  
 (13) cooperation yes sir  
 (14) Q Fair enough And sir, did you know yourself that the law  
 (15) required Exxon to clean up the mess?  
 (16) A I'm not a lawyer nor an expert on the details of the law,  
 (17) Mr Jamin  
 (18) Q Fair enough And it wasn't something that ever attracted  
 (19) your particular attention, you just did the job?  
 (20) A I did the job and we did our very best to do everything  
 (21) that we were requested to do by the federal on scene  
 (22) coordinator  
 (23) Q Now Mr Harrison listening to you tell us about the  
 (24) effectiveness, the efficiency of the operation that Exxon  
 (25) undertook, do I assume correctly, sir that you think that

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- (1) Exxon did a better job or a more efficient job than would have  
 (2) been done by say the United States Government?  
 (3) A This is an opinion and it's a what if speculative  
 (4) question you understand that but in my opinion yes  
 (5) Q So if Exxon has an obligation to clean up and it can do it  
 (6) more efficiently than can the federal government then it is  
 (7) to - your interest is to clean up isn't it because it's  
 (8) ultimately going to save a few bucks?  
 (9) A There was never a question of whether we saved a few bucks  
 (10) or not The issue at all times was to do the very best job we  
 (11) know how, to see that we did the things that allowed Prince  
 (12) William Sound the shores of the Kenai Peninsula Katmai and  
 (13) Kodiak to restore as rapidly as possible  
 (14) Q Sir I'm going to let you answer questions fully because  
 (15) the judge told me not to cut you off but that was not  
 (16) responsive to my question I asked you if Exxon can do it  
 (17) more efficiently than the federal government, isn't it in  
 (18) Exxon's business interested to clean up the spill if someone  
 (19) has got to clean it up?  
 (20) A I don't know how to answer that speculative question I'm  
 (21) just saying it was never an issue Mr Jamin  
 (22) Q All right, Mr Harrison Let's take a few moments sir, to  
 (23) get an idea of how long it took to put together the plan you  
 (24) talked about with Mr Neal You got there on April 5th?  
 (25) A Yes, sir

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- (1) Q And when you got up to Alaska there was not a functional  
 (2) approved clean-up plan in effect, was there?  
 (3) A There was not a shoreline clean up plan approved and in  
 (4) effect at that time correct  
 (5) Q And was it April 15th, sir, when you first presented the  
 (6) clean up plan to the federal on scene coordinator?  
 (7) A The first general plan was submitted to the federal  
 (8) on scene coordinator on April 15th yes  
 (9) Q And I'm just going to show the ladies and gentlemen of the  
 (10) jury DX2290 Get the Elmo on again  
 (11) Do you remember this as the cover sheet for the shoreline  
 (12) clean-up execution plan sir?  
 (13) A Well I don't remember the artwork I do know that we  
 (14) submitted a plan on April 15th  
 (15) Q April 15th, which is the number down in the corner, do you  
 (16) see that there, sir?  
 (17) A Yes sir  
 (18) Q Now, do you remember, sir, characterizing your April 15th  
 (19) plan as a scoping plan and that later on you would turn it into  
 (20) a detailed shoreline execution plan?  
 (21) A Yes sir  
 (22) Q So that was the April 15th plan we've talked about was  
 (23) sort of a first shot there?  
 (24) A Well, if you will allow me to answer that, Mr Jamin, I  
 (25) think I described that the first plan the general plans if

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- (1) you will or scoping plans were that they were the general  
 (2) nature, because we had to come back and do a specific  
 (3) segment by segment plan  
 (4) Q Fair enough In connection with the initial plan on April  
 (5) 15th, 1990 do you remember providing some estimates of the  
 (6) amount of oil that had been picked up or was on the shoreline  
 (7) sir?  
 (8) A I think that we probably had data that we were reporting  
 (9) that Dr Goodman was working on that.  
 (10) Q Now do you want, independently with reference to the  
 (11) exhibit, to make sure it comes from that, because I want to go  
 (12) through this? I'm happy to let you do that  
 (13) A No, I'm comfortable that you have it  
 (14) Q So the estimates that you provided to the Coast Guard at  
 (15) this time were that 15 percent - excuse me 35 percent had  
 (16) evaporated?  
 (17) A This was a model that Dr Goodman put together, and this  
 (18) was data directly out of his model If will note that was  
 (19) directly before the time we had a final number what came out of  
 (20) the Exxon Valdez and we were using 240,000 barrels, and it was  
 (21) very early, early in these calculations, but as I understand  
 (22) it these are the numbers that Dr Goodman provided and we  
 (23) had  
 (24) Q And at the time, the numbers that Dr Goodman provided and  
 (25) that you ultimately provided to the Coast Guard were about 12

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- (1) percent in the open water of Prince William Sound and about 12  
 (2) percent on the shoreline?  
 (3) A That's what this says, yes, sir  
 (4) Q Well, now this one is a little different, this is one that  
 (5) I submitted, isn't it?  
 (6) A This is in the plan that we submitted as a result of Dr  
 (7) Goodman's model, yes, sir  
 (8) Q But by submitting it, you were telling the government this  
 (9) was what the situation was?  
 (10) A We were telling them this was the best information we had  
 (11) available and this information happened to match the NOAA  
 (12) data  
 (13) Q This information which was presented significantly  
 (14) understated the amount that was on the beaches, didn't it sir?  
 (15) A Yeah, I think it is certainly a model that results in a  
 (16) different number than Dr Jahns did  
 (17) Q Sir I would like to call your attention to DX2291, which  
 (18) was - it's preadmitted and it's -  
 (19) A It's one that I have here  
 (20) Q I don't think that you have it there, sir It's  
 (21) preadmitted and it was admitted by the defendants this  
 (22) morning  
 (23) and this is a letter from Mr Robbins I guess Admiral Robbins,  
 (24) to you dated April 17th, 1989 Do you see it, sir?  
 (25) A Yes, sir  
 (26) Q Now in the letter Admiral Robbins says, I have serious

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- (1) reservations about your ability to mobilize resources as  
 (2) quickly as you describe in your plan and to maintain that  
 (3) level  
 (4) A Yes  
 (5) Q Do you remember seeing this?  
 (6) A Yes  
 (7) Q I must note that this as a clean-up plan - or probably  
 (8) should be is a clean-up plan for Prince William Sound only, you  
 (9) must provide an additional plan to address the impacted areas  
 (10) of potential impact - potential impact areas on the Kenal  
 (11) Peninsula, in Cook Inlet and the Kodiak archipelago, does he  
 (12) not?  
 (13) A Yes, sir  
 (14) Q Now, do you remember, Mr Harrison, when you actually  
 (15) submitted a plan that covered those areas?  
 (16) A I believe those areas were included in the May 1st plan  
 (17) Q Was the May 1st plan subsequently modified around May  
 (18) 24th?  
 (19) A Yes, sir  
 (20) Q And after the May 24th plan was submitted, did you get a  
 (21) letter back from Vice-Admiral Robbins, which is 2304, in which  
 (22) he expressed his concerns about your May 24th plan?  
 (23) A On every plan that we submitted, the Coast Guard gave us  
 (24) back their comments or input or request for changes  
 (25) Q Fair enough And did Admiral Robbins indicate, I'm not  
 (26) convinced that the number of people is adequate especially in

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- (1) Q And later on in the letter, in the next paragraph, does he  
 (2) say, for the most part I expect even very lightly oiled  
 (3) shoreline to be treated I anticipate that some cleanup will  
 (4) be necessary next spring Any other goal or philosophy is  
 (5) unacceptable?  
 (6) A Yes sir  
 (7) Q And you were aware of those criticisms from the admiral?  
 (8) A I m aware of those criticisms and we exceeded everything we  
 (9) had in the plan and we complied with all of his requirements  
 (10) Q Fair enough, sir Let s go on now to June 7 of 1991 I  
 (11) want to take another look at some of your correspondence with  
 (12) the Coast Guard  
 (13) A This is a letter from Admiral Ciancaglioni to you Do you  
 (14) remember receiving it sir?  
 (15) A Yes, sir  
 (16) Q And do you remember Admiral Ciancaglioni indicating that  
 (17) many of the descriptions of prevailing conditions in Prince  
 (18) William Sound that you had provided in your 1991 general  
 (19) operations plan he viewed as overly optimistic?  
 (20) A I was really surprised to see those comments  
 (21) Q Well let s take a look at those In section two, the  
 (22) admiral says, you state that the biological communities in  
 (23) Prince William Sound and the Gulf of Alaska are healthy, robust  
 (24) and functioning normally  
 (25) And he says furthermore in section three, in your

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- (1) the western sectors?  
 (2) A Yes, sir And the next sentence goes on to read, I  
 (3) understand that additional people will be added as more  
 (4) methods  
 (5) of cleanup are applied  
 (6) Q And when he's talking about western sectors, he s talking  
 (7) about the western sectors in Prince William Sound?  
 (8) A In my understand being of where he's talking about out  
 (9) there, he's talking about Kodiak Cook Inlet and the Kenal  
 (10) Peninsula  
 (11) Q All right sir Later on does he say another continuing  
 (12) concern is skimming capability?  
 (13) A Yes, sir  
 (14) Q And as I've written and discussed before, allowing oil to  
 (15) remain uncaptured when it drifts from shore, either from  
 (16) clean-up operations or from tidal hydraulic action is  
 (17) unacceptable?  
 (18) A Yes sir  
 (19) Q Did he also say that your aerial coverage was inadequate?  
 (20) A Yes  
 (21) Q Did he say that possibly the number of skimmers is  
 (22) inadequate as well?  
 (23) A Yes sir  
 (24) Q And was the admiral continuing to get reports of inadequate  
 (25) facilities for off loading oily debris?  
 (26) A Yes sir

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- (1) discussion of the shoreline treatment decision process you  
 (2) represent that remaining subsurface oil is both weathered and  
 (3) not biologically exposed and therefore not harmful to the  
 (4) environment. And he says, my approval of this plan does not  
 (5) constitute concurrence with your characterization of the  
 (6) prevailing conditions  
 (7) Did he say that?  
 (8) A He did say that but those were not my characterizations,  
 (9) Mr Jamin, those were characterizations that came directly out  
 (10) of the joint survey that was taken that spring and that survey  
 (11) was participated in by the federal government, the state  
 (12) government as well as ourselves  
 (13) Q So as far as you're concerned, the admiral has it wrong?  
 (14) A As far as I'm concerned, it's his choice as to whether he  
 (15) agrees with those characterizations or not Those were not my  
 (16) characterizations, those were technical characterizations that  
 (17) came directly out of those reports  
 (18) Q Sir, I d like to show you now because the jury yesterday  
 (19) got a chance to look at two of the sites that Exxon had  
 (20) designated for the jury view and one that the plaintiffs had  
 (21) designated, Rua Cove some pictures that Exxon  
 (22) geomorphologists  
 (23) took in 1993, and those are Exhibit 8537 Just didn't get to  
 (24) Disk Island yesterday because of the tides  
 (25) A Do I have 85 -  
 (26) Q Well you may have a black and white copy, but we only

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- (1) received one xerox color copy  
 (2) A Mine goes from 36 to 43 Mr Jamin I'm sorry I don't  
 (3) have that  
 (4) Q Do you want to take a look at them before I put them on the  
 (5) screen?  
 (6) A No that's fine If they are black and white I m not  
 (7) going to see much out of them  
 (8) Q We only got one copy and it doesn't work well when you only  
 (9) have one  
 (10) Are you familiar with these pictures?  
 (11) A No I did not participate in that survey  
 (12) Q Have you ever looked at them before?  
 (13) A Only in preparation for this testimony I took a quick  
 (14) look  
 (15) Q Do you know who Mr Trimm was?  
 (16) A I think I'm acquainted with him but I have not worked  
 (17) directly with Mr Trimm  
 (18) Q Let s see if I can do a little better with the focus job on  
 (19) this  
 (20) Are you familiar with the notations at the bottom of the  
 (21) screen, sir, to describe the kind of oiling that we find in a  
 (22) particular beach?  
 (23) A I m having trouble reading that Maybe you can read it off  
 (24) of it  
 (25) Q Tell you what I m going to do, I'm going to take you

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- (1) through these pictures because the xeroxes don t work very  
 (2) well and let s go through them together All right?  
 (3) Are we seeing - and these are from Disc Island Why don t  
 (4) you take a look at the whole bunch  
 (5) A Well, that s what this says This says it s from Disc  
 (6) Island  
 (7) Q Do you want to take a look at the whole bunch and that will  
 (8) avoid the need to do it all the way through?  
 (9) A Is it all Disc Island?  
 (10) Q Yes  
 (11) A I believe you I have never doubted your word Mr Jamin  
 (12) Q In the first one that I m showing you, is that an upper  
 (13) intertidal zone pit with surface asphalt and no subsurface  
 (14) oiling?  
 (15) A As I understand their nomenclature, that s what it is  
 (16) UITZ is upper intertidal zone, and it says pit with asphalt and  
 (17) no subsurface oiling  
 (18) Q And is the second one an upper intertidal zone pit with  
 (19) light oil residue?  
 (20) A With light oil residue and it says surface sediments with  
 (21) coats stains  
 (22) Q And is the third one a middle intertidal zone pit and if  
 (23) you could describe what you see there?  
 (24) A What it says here is It s discontinuous HOR from four to  
 (25) six centimeters, something less than an inch thick

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- (1) Q And HOR is heavy residue oil?  
 (2) A Yes  
 (3) Q And the next?  
 (4) A You can't see that.  
 (5) Q I agree, the photographs are not good when they are xerox  
 (6) copies  
 (7) A The next one which is - It s an upper intertidal zone  
 (8) with discontinuous MOR, that s medium from three to four  
 (9) centimeters less than half an inch  
 (10) Q And the next?  
 (11) A This says we re in the middle intertidal zone pit in a  
 (12) boulder rubble from a discontinuous HOR from three to five  
 (13) centimeters  
 (14) Q And the HOR is heavy oil residue?  
 (15) A Yes sir  
 (16) Q Okay  
 (17) A This is another pit that says middle intertidal zone with  
 (18) HOR, brown mousse from five to nine centimeters,  
 (19) inch and-a half - excuse me, I m sorry  
 (20) This says upper intertidal and middle intertidal pit, I m  
 (21) not sure how you do that with the small pit HOR, equivalent  
 (22) to surface asphalt and brown mousse from two to five  
 (23) centimeters Surface asphalt adjacent to pit, and that says  
 (24) that's something about an inch  
 (25) This says upper intertidal zone pit with HOR from 18 to 22

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- (1) centimeters inch-and-a-half, I can't tell from the  
 (2) photograph  
 (3) This says oil film, films, which is the OF, from 20 to 40  
 (4) centimeters  
 (5) Q And the last one is -  
 (6) A The last one looks pretty good, upper intertidal with HOR  
 (7) from 30 to 33 centimeters It s a dark layer, but you can't  
 (8) really see in here  
 (9) Q And HOR is heavy oil residue?  
 (10) A Yes, sir  
 (11) Q Now, you're aware that these pictures were taken in '93,  
 (12) sir?  
 (13) A That s what you've described to me  
 (14) Q Mr Harrison, you talked at some length with Mr Neal about  
 (15) the maxi barges or the omni barges, did you not?  
 (16) A Yes, sir  
 (17) Q Were you aware, sir, of criticism of the hot water washing  
 (18) process because it was interfering with some of the biota, with  
 (19) some of the critters that were on the beaches?  
 (20) A My recollection, Mr Jamin, is there was no criticism at  
 (21) the time the decision was made There was criticism  
 (22) substantially after the fact that I'm aware of  
 (23) Q Well Mr Harrison, are you aware of some persons who were  
 (24) hired by Exxon and did some work in June and July in 1989  
 (25) MR NEAL. Your Honor, can we approach the bench? Got

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- (1) a problem  
 (2) (At side bar off the Record)  
 (3) BY MR JAMIN  
 (4) Q Mr Harrison, we re back together again In June and July  
 (5) of 1989 there were some tests done at Exxon s request were  
 (6) there not, about the effectiveness viability of this hot water  
 (7) washing process?  
 (8) A I'm not aware of those Pardon me let me say this Since  
 (9) preparing for this trial I've become aware of those I was not  
 (10) aware of that part of that science program at the time that was  
 (11) being conducted  
 (12) Q Well, let's do this, Mr Harrison Can you pull out 6546?  
 (13) A Yes, sir  
 (14) Q You do know, sir, of a gentleman whose name is Mr Sam  
 (15) Stoker who was hired by Exxon?  
 (16) A Yes, sir  
 (17) Q And that Mr Stoker wrote a letter to you in 1990, March  
 (18) 12, 1990?  
 (19) A Yes, sir  
 (20) Q Now, was Mr Stoker - he's from the University of Alaska  
 (21) Fairbanks?  
 (22) A Yes, sir  
 (23) Q Was he hired by you, among other things, to give you an  
 (24) assessment of how things were going?  
 (25) A Mr Stoker worked as one of the biologists on the shoreline

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- (1) assessment teams  
 (2) Q But he was hired as a biologist by Exxon?  
 (3) A He was - we paid for Mr Stoker's services, yes, sir  
 (4) Q All right, Mr Harrison He was hired by Exxon?  
 (5) A He was hired by Exxon - you have to recognize that the  
 (6) surveys that we were running were joint surveys, and we hired  
 (7) him to work on these joint surveys, Mr Jamin  
 (8) Q Fair enough Sir, was it Mr Stoker's view that the  
 (9) early - and I'm looking at the third paragraph the early and  
 (10) most obviously damaging effects of the spill were to marine  
 (11) mammals, particularly sea otters and marine birds of the  
 (12) region?  
 (13) A Yes sir  
 (14) Q And he believed that a thousand sea otter carcasses had  
 (15) been retrieved?  
 (16) A Yes sir  
 (17) Q And that that could equate with considerably higher total  
 (18) mortality possibly as much as two or 3 000 sea otters?  
 (19) A Yes sir  
 (20) Q Are those numbers consistent with your understanding sir?  
 (21) A Mr Jamin, I m not a biologist. I do know how many otter  
 (22) carcasses we recovered but I m not capable of making a  
 (23) judgment past that point  
 (24) Q Fair enough How many otter carcasses did you recover?  
 (25) A As I recall, it was about 1 015

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- (1) Q Now going back to this hot water washing for a moment -  
 (2) A Are we through with this?  
 (3) Q We re through with Mr Stoker now for a moment, thanks  
 (4) You re not aware then of studies that were done by Exxon  
 (5) scientists analyzing hot water washing in June and July of  
 (6) 1989?  
 (7) A I was not a participant nor aware of those studies  
 (8) Q But you were doing the hot water washing?  
 (9) A At the request of the federal on-scene coordinator  
 (10) Q Were you aware of NOAA studies on hot water washing, sir?  
 (11) A As I recall Mr Jamin there were some NOAA studies that  
 (12) came forth after the clean-up season was over and we had  
 some  
 (13) discussion following that but during the - when the decision  
 (14) was made to use hot water washing, NOAA supported the  
 FOSC and  
 (15) the State strongly supported it, and those were the people  
 (16) calling the shots  
 (17) Q But subsequent to the use of the hot water washing, you  
 (18) found out about the NOAA studies?  
 (19) A I heard about the NOAA studies Again, I m not a  
 (20) biologist, I can't comment on the content of those studies,  
 (21) only the general subject  
 (22) Q Well, Mr Harrison, let me ask you to take a look at 6448,  
 (23) which is a speech you gave entitled Two Years After the Spill?  
 (24) A 6448?  
 (25) Q 6448, sir

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- (1) A Got it  
 (2) Q Go over to page 6 This document sir, is the transcript  
 (3) of a speech that you gave to the Offshore Technology  
 Conference  
 (4) in May of 1991 At the technology conference did you  
 announce  
 (5) to the people that were at least gathered in Houston a  
 (6) description of the hot water washing and you may have heard  
 (7) some controversy regarding a NOAA report as to whether these  
 (8) warm water washing techniques should be used in the cleanup?  
 (9) A Yes, sir  
 (10) Q And you did give that speech?  
 (11) A I did give that speech in 1991  
 (12) Q Let me just ask this, sir In giving that speech and  
 (13) talking about the controversy had you reviewed the NOAA  
 report  
 (14) before you did that?  
 (15) A I had participated in some of the discussions that were  
 (16) going on  
 (17) Q Let me ask you to take a look at 6494, which is the NOAA  
 (18) report Is that part of what you participated in before you  
 (19) commented to the assembled people at the technology  
 conference?  
 (20) A 64 - excuse me Would you tell me the number again?  
 (21) Q 6494  
 (22) A 6494 I don t remember seeing this report no sir The  
 (23) report that I remember were information presented by Dave  
 Kende  
 (24) and Jackie Michelle in meetings we had in Anchorage or  
 Valdez  
 (25) Q And you're not aware of 6494 then, the NOAA report?

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- (1) A No sir  
 (2) Q Let me ask you sir whether Ms Michelle - and who was  
 (3) the other person Mr Kende?  
 (4) A I believe it was Dave Kende Those were key people that we  
 (5) talked to on a regular basis  
 (6) Q Were they telling you that the NOAA conclusions were that  
 (7) the sand and gravel beaches were severely affected by the high  
 (8) pressure treatments and that biota critters were severely  
 (9) affected as well?  
 (10) A May I tell you what I understood what they were telling  
 (11) me?  
 (12) Q Well If you d answer my question first, then I will ask  
 (13) you that question  
 (14) A My problem is I don t think you properly qualified biota  
 (15) I think I need to expand my answer to answer your question  
 (16) Q What don't you understand about biota?  
 (17) A Well, for instance the study that NOAA did, as I  
 (18) understand it and recognize I'm not a biologist focused  
 (19) primarily on the small organisms that grow on rocks, on the  
 (20) beaches and on the shoreline and was not concerned with  
 (21) otters  
 (22) and eagles and birds So they weren't striking a balance  
 (23) They were only looking at one section of the wildlife and not  
 (24) the full range and so therefore in our discussions we tried to  
 (25) talk about what is the right balance between those things  
 (26) My understanding of NOAA s report is we did not attempt to

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- (1) make that balance It only addressed that one segment of the  
 (2) biota  
 (3) Q Let me see if I understand what you're saying You thought  
 (4) that the NOAA report in emphasizing death to the little  
 (5) critters was not giving a balanced view because it didn't  
 (6) explain how getting oil off the beaches would help the big  
 (7) critters?  
 (8) A That s my layman s opinion as a non-biologist.  
 (9) Q So you will acknowledge for me sir from your layman's  
 (10) opinion but also being the person that used that fathered  
 (11) this hot water treatment program that if we use it and if  
 (12) there are benefits cleaning the beaches there are also  
 (13) detriments to some of the critters that are on the beach?  
 (14) A Your question, which had your fathering comment you need  
 (15) to recognize, sir, this technique was supported, endorsed and  
 (16) approved by the federal on-scene coordinator, their technical  
 (17) advisor and the state technical authorities at the time that it  
 (18) was approved and there are net benefit decisions to anything  
 (19) you do on the shorelines  
 (20) Q Let s talk about that just for a moment So not just hot  
 (21) water washing, but all the different treatment methods have  
 (22) benefits and detriments do they not?  
 (23) A Basically anything you do on a shoreline, when we have to  
 (24) put people on shorelines, people are put on shorelines that  
 (25) normally don t have people that are put on them there are

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- (1) benefits to be balanced against what you're doing versus what  
 (2) is there And we need to rationally make that decision in  
 (3) every case  
 (4) Q Part of the risk to the oil spill part of it is on the  
 (5) fishing community, part of it, as Mr O Neill suggested, the  
 (6) people on the vessel but part of it is that the clean-up  
 (7) process has some detriments to it To get the oil cleaned up,  
 (8) you have to impact the environment you have to be there don't  
 (9) you?  
 (10) A Yes, sir  
 (11) Q And you were there in 1989 and 1990 and 1991 and then  
 (12) isn't it true that you were there as well in 1992 for a little  
 (13) bit at the request of the federal authorities?  
 (14) A Federal and state authorities  
 (15) Q So there was cleanup in all those years?  
 (16) A That is correct.  
 (17) Q Mr Harrison let me talk with you just a little bit about  
 (18) the claims function, and I'm coming to the end so we can both  
 (19) relax You were responsible for heading up the Alaska  
 (20) operation, were you not?  
 (21) A Yes sir  
 (22) Q And underneath you there were people who worked on  
 (23) claims?  
 (24) A Yes, sir  
 (25) Q And who were they?  
 (26) A Dick Harvin headed that.

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- (1) Q Mr Harvin was - I m sorry, he headed it up?  
 (2) A Yes sir  
 (3) Q All right.  
 (4) A And I believe his name was on the organization chart we  
 (5) showed to you earlier  
 (6) Q And when you - when we had your deposition taken, you  
 (7) had  
 (8) indicated then that it was your view you had paid full  
 (9) compensation is that right?  
 (10) A To the best of my knowledge, and what we understood  
 (11) people  
 (12) were asking for that's what we had done, yes sir  
 (13) Q Let s take a - do you have the speech document that s  
 (14) still with you there from Houston in 1991?  
 (15) A Yes, sir  
 (16) Q Let s take a look at page 4 of that together Did you say  
 (17) as part of your speech - actually it s - I ll point it out to  
 (18) you It s about the third paragraph down, the heart of my  
 (19) message to you today is that the waters of Alaska are sparkling  
 (20) and clean very little oil remains on the shorelines, wildlife  
 (21) is diverse abundant and thriving, and there is no impediment  
 (22) to normal activities in the area due to the spill?  
 (23) A Yes, sir  
 (24) Q And on the previous page did you say as part of your talk  
 (25) misconception continued to exist about the Alaska spill These  
 (26) ongoing misperceptions are perpetuated by the release of  
 (27) government reports of largely speculative and preliminary

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- (1) results Examples of these myths are that wildlife is still  
 (2) being killed and commercial fishing will recover slowly?  
 (3) A Yes sir  
 (4) Q Now Mr Harrison do you consider the losses that the  
 (5) Prince William Sound fishermen sustained in 1992 and which  
 have  
 (6) been valued in this courtroom that total over \$11 million are  
 (7) substantial?  
 (8) A I am not familiar with 1992 or 1993 fishing seasons  
 (9) Q I understand that, sir Do you consider those losses to be  
 (10) substantial? Because I m trying to find out what you meant by  
 (11) substantial  
 (12) MR NEAL Well Your Honor this is a '91 document on  
 (13) its face It's supposed to be a speech some time in 1991  
 (14) He s asking about 1992 and 1993  
 (15) MR JAMIN And I think that s a fair examination,  
 (16) Your Honor, to decide what Mr Harrison meant by  
 (17) substantiality  
 (18) THE COURT I think you can explore it, but we're  
 (19) getting perilously close to something that may be  
 argumentative  
 (20) If you go much further  
 (21) BY MR JAMIN  
 (22) Q Did you consider the losses that the Prince William Sound  
 (23) fishermen sustained in 1992, in which has been valued here at  
 (24) over \$11 million, are substantial?  
 (25) A Yeah, I don't have the data to comment on that At the

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- (1) time this was given there had been two record catches of pink  
 (2) salmon in Prince William Sound, and you know, with this year s  
 (3) results since the spill, there are three years of record salmon  
 (4) catches  
 (5) Q I don't think that was responsive Are you saying no, it s  
 (6) not substantial?  
 (7) A I m just saying - I think I said I m not capable of  
 (8) commenting on that because I don't know that your assumption  
 is  
 (9) correct, so I can't comment on your premise or your conclusion  
 (10) Q Just for my benefit Mr Harrison what premise are you  
 (11) having trouble with?  
 (12) A I take it that you're saying there is a loss related to the  
 (13) oil spill and I m not saying that I know enough to agree with  
 (14) that  
 (15) Q The loss I was referring to sir was the part of the loss  
 (16) that was found by the jury here in this courtroom Are you  
 (17) familiar with that?  
 (18) A I'm not familiar with the jury output nor am I familiar  
 (19) with the discussion that went on and involved that  
 (20) MR JAMIN Mr Harrison I have nothing further  
 (21) Thank you, sir  
 (22) THE COURT Redirect  
 (23) MR NEAL I just have one I think maximum two  
 (24) REDIRECT EXAMINATION OF OTTO R HARRISON  
 (25) BY MR NEAL

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- (1) Q Mr Jamin asked you a lot about hot water treatment and I  
 (2) just want to be sure that we understand who directed that Exxon  
 (3) apply hot water treatment  
 (4) A The federal on-scene coordinator Admiral Robbins  
 (5) Q And who was the technical advisor to the federal on scene  
 (6) coordinator?  
 (7) A NOAA was their technical advisor and supported that  
 (8) decision  
 (9) Q And supported that decision and then later on like  
 (10) government agencies will do, criticize it?  
 (11) A The reports that criticized it from NOAA were later on  
 (12) MR NEAL Thank you  
 (13) MS STEWART Your Honor defendants call -  
 (14) MR NEAL Thank you, Mr Harrison  
 (15) MS STEWART Defendants call Admiral Clyde Robbins by  
 (16) video deposition  
 (17) DIRECT EXAMINATION OF CLYDE ROBBINS (Video)  
 (18) BY VIDEO EXAMINER  
 (19) Q Would you state your full name for the record please?  
 (20) A I m Clyde E Robbins  
 (21) Q And by whom are you currently employed?  
 (22) A I m employed by - I'm an active duty Coast Guard officer  
 (23) assigned to the Department of Transportation  
 (24) Q What is your position within the Department of  
 (25) Transportation?

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- (1) A I m the director of intelligence and security  
 (2) Q As the Pacific area commander from 1988 to 1990 you  
 (3) supervised a number of districts in the west?  
 (4) A That's correct  
 (5) Q And part of your command encompassed the 17th district  
 (6) in -  
 (7) A That s correct.  
 (8) Q - Alaska?  
 (9) How many personnel did you have under your authority as the  
 (10) area commander in the Pacific, approximately?  
 (11) A I think around 10 000  
 (12) Q And how did it come about that you returned to Valdez?  
 (13) A Well, the commandant called me and said that he wanted me  
 (14) to go to Valdez to take over the spill  
 (15) Q So on approximately April 9th you took over from Admiral  
 (16) Nelson as the federal on-scene coordinator?  
 (17) A No not really I arrived on the 9th and then I was there  
 (18) and I helped with some reorganization and understudied what  
 (19) Admiral Nelson was doing And the commandant and I spent a  
 lot  
 (20) of time traveling around to the spill seeing what the problems  
 (21) were there And I actually relieved Admiral Nelson on the 15th  
 (22) or 16th I believe the 16th was my full - first full day on  
 (23) the job as the federal on-scene coordinator  
 (24) Q Well, in general taking over that position what did you  
 (25) understand the duties of a federal on-scene coordinator to be



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- (1) in a spill?
- (2) A First of all, did we have a national contingency plan which
- (3) sets forth the duties of the federal on scene coordinator
- (4) That became my Bible but to put it in layman s terms what I
- (5) felt my duty was was to take charge of the spill make sure
- (6) that the cleanup the control of the spill was in the best
- (7) interest of the federal government and the people that lived in
- (8) Alaska
- (9) Q Now, you've retained the assignment of the federal on-scene
- (10) coordinator through roughly mid September 1989?
- (11) A Yeah until the end of September I think September 30th
- (12) was my last day
- (13) Q Having spent the summer of 1989 there and having seen the
- (14) oil firsthand uncleaned, when it hit the beach in '89 what was
- (15) your reaction to the beaches that you saw when you went back
- (16) in
- (17) 1991?
- (18) A I m not a biologist or anything like that but certainly
- (19) from appearances and from what little I was able to look at,
- (20) it s a lot better than I thought it would be
- (21) Q Did you actually take a look at some of the tide pools or
- (22) elements of the intertidal zone?
- (23) A Uh huh
- (24) Q Yes?
- (25) A Yes Excuse me
- (26) Q And what did you see? Did you see little critters down

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- (1) there?
- (2) A Saw little critters that was alive and well There was
- (3) only one area that I was - I think was of continuing concern
- (4) and that was a very small swampy area that was probably the
- (5) size of this room, you know, a couple hundred square feet that
- (6) had been a swampy wetland type area that was of concern
- (7) We - the general feeling was we could go in and ruin it by
- (8) removing the oil or we could leave it alone and see how it
- (9) did And while there was still oil in that little swampy area
- (10) there was green grass growing right up through it so it wasn t
- (11) as bad as I thought it would be What the long term effect
- (12) will be there I m not sure
- (13) Q That swampy area was a low energy area -
- (14) A Yes
- (15) Q - in terms of wave exposure?
- (16) A Well and it was behind the beach area It was in a lagoon
- (17) and then it was behind that and it was relatively small And
- (18) we elected at the time - the recommendations were don t go in
- (19) and clean it up because you'll ruin it so it s - it didn t
- (20) look all that bad Still had oil on it though
- (21) Q During that week that you and Admiral Yost were both in
- (22) Alaska in early April, was there any discussion of federalizing
- (23) the spill at that point?
- (24) A There was talk of federalization right from the beginning
- (25) and was - it came up repeatedly through the summer that we

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- (1) should have federalized it. It was not a subject that went
- (2) away easily
- (3) Q Did you in fact discuss with Admiral Yost however, during
- (4) that week when you both went around together whether the spill
- (5) should be federalized?
- (6) A I'm sure we did
- (7) Q Did you have any -
- (8) A I certainly knew what the discussion was on that, and it
- (9) was mine as well as his that we would never have tried to
- (10) federalize it as long as Exxon was responsive
- (11) Q And why did you reach that decision?
- (12) A Well for a number of reasons One is if I federalized it,
- (13) then I had to do all the contracting I had to go through all
- (14) the government rules to get equipment. I had a lot lesser
- (15) capability than Exxon did
- (16) Q So as the -
- (17) A If I had federalized it I would have had to go to VECO or
- (18) somebody like that and hired them to do the same thing Exxon
- (19) was doing, and I would have had to put out a competitive bid
- (20) and a number of other things to make it work. There are
- (21) emergency ways you can sign contracts pretty quickly, but you
- (22) have to do it with a great deal of care
- (23) Finally, I had five or \$8 million in the 311K fund and that
- (24) wouldn't have lasted us a day So Congress would have had to
- (25) appropriate a bundle of money, and it was, I feel, being

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- (1) handled responsibly by Exxon in the best way that anybody
- (2) could
- (3) handle it and it didn't make any sense to put that on the
- (4) taxpayer s back
- (5) Q Let's mark as 46473 predesignated Exhibit 46, which is a
- (6) letter from Otto Harrison to Admiral Robbins dated May 21,
- (7) 1989 In paragraph four he responds to paragraph four of your
- (8) approval letter Exhibit 46472 concerning review of the
- (9) adequacy of cleanup and renewed clean-up efforts
- (10) Mr Harrison states in part, as per our earlier verbal
- (11) commitment to you we will return to the area in the spring of
- (12) 1992 to assure that the job has been properly done
- (13) Did you take that as Exxon s commitment to do whatever
- (14) would be needed in 1990?
- (15) A Yes, I did And of course I had an informal agreement with
- (16) Otto Harrison that they were going to return, and I considered
- (17) his word as bond
- (18) MS STEWART That concluded defendants' examination
- (19) MR JAMIN Your Honor, we have a short cross
- (20) CROSS EXAMINATION OF CLYDE ROBBINS (video)
- (21) BY VIDEO EXAMINER
- (22) Q Let me show you next predesignated Exhibit 58, which is a
- (23) letter or memorandum from federal on scene coordinator to
- (24) shoreline committee dated May 21 1989
- (25) Admiral, did you prepare this memorandum entitled Shoreline

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- (1) **A** Yes  
 (2) **Q** And in paragraph three you state, I have directed the Coast  
 (3) Guard monitor on scene to ask Exxon to start moving the crews  
 (4) down the beach as soon as he feels we have stabilized the oil  
 (5) on the beach  
 (6) Was stabilization the test that you adopted as to when the  
 (7) crews should move on?  
 (8) **A** Yes It was obvious to me as we went through the cleanup  
 (9) in that summer of '89 that we weren't going to get all the oil  
 (10) and all the black off the shoreline It was just an impossible  
 (11) task It's very tenacious, and the way of getting that off to  
 (12) this point hasn't been devised yet in that short of space of  
 (13) time So I felt what we needed to, if anything else  
 (14) accomplish during the summer was to get as much of the loose  
 (15) oil off as we could so that it wouldn't pollute further beaches  
 (16) and cause more destruction in the ensuing months during the  
 (17) winter  
 (18) So our aim was to get as much as we could off and move on  
 (19) as rapidly as possible and then take whatever measures are  
 (20) necessary if we didn't quite get it all off, all of the  
 (21) floatable oil off so that it would be contained and not move  
 (22) onto other areas  
 (23) **Q** How did you come to the view that the goal for that summer  
 (24) should be stabilization?  
 (25) **A** Well, it didn't take a mental giant to figure it out that

- (1) other words, were you in a plane were you actually on the  
 (2) shore?  
 (3) **A** No we went ashore and walked those shorelines  
 (4) **Q** And was your observation as to the condition of the  
 (5) shorelines based on any scientific tests for the presence of  
 (6) oil?  
 (7) **A** No  
 (8) **MR JAMIN** That concludes the cross Your Honor  
 (9) **MR SANDERS** May it please the Court we call Mr Gus  
 (10) Elmer  
 (11) **THE CLERK.** Raise your right hand, please  
 (12) (The Witness is Sworn)  
 (13) **THE CLERK.** Please be seated For the record sir  
 (14) please state your full name your address and spell your last  
 (15) name please  
 (16) **THE WITNESS** Gustas Elmer III, E-L-M-E-R, and I live  
 (17) in Houston, Texas  
 (18) **DIRECT EXAMINATION OF GUSTAS ELMER**  
 (19) **BY MR SANDERS**  
 (20) **Q** Mr Elmer, what is your job?  
 (21) **A** I'm president of SeaRiver Maritime  
 (22) **Q** And when did you take over that job?  
 (23) **A** I took it over on April 1st, 1990  
 (24) **Q** Quite a plumb at the time, wasn't it?  
 (25) **A** Oh, yeah Oh, yeah Talk to my wife But in all

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- (1) you weren't going to get all the oil off those rocks during the  
 (2) summer of '89 There needed to be some - you needed to do  
 (3) things you could accomplish, and that's what drove me to that  
 (4) decision  
 (5) **Q** Did you have any expectation that it was realistic to  
 (6) expect you could do any more the first summer than stabilize  
 (7) it?  
 (8) **A** No  
 (9) **Q** Did anyone at the State at any time take issue with your  
 (10) statement that that ought to be the goal, to environmentally  
 (11) stabilize the beaches?  
 (12) **A** Well they surely didn't like my words There were those  
 (13) around that thought that that had no technical meaning  
 (14) whatsoever To me it meant what I have described There was  
 (15) I think this constant concern that Exxon might not come back  
 (16) and therefore they would like to have gone beyond that In  
 (17) other words, they wanted all the oil off the beach before we  
 (18) moved on  
 (19) **Q** Good morning Admiral, my name the Betty Konopko and I  
 (20) represent private plaintiffs Do you recall yesterday  
 (21) testifying on the subject of your return to Prince William  
 (22) Sound in the fall of '91 and your observation of the shorelines  
 (23) at Smith Naked and Knight Island?  
 (24) **A** Yes  
 (25) **Q** Where were you when you observed those shorelines? In

- (1) sincerity, I'm proud to be president of SeaRiver I like the  
 (2) industry, I like the people I like the challenges I like the  
 (3) work I love my job on most days  
 (4) **Q** Maybe not today?  
 (5) **A** Today is okay  
 (6) **MR O'NEILL.** Tomorrow is the day  
 (7) **THE WITNESS** Tomorrow will be better  
 (8) **MR SANDERS** Very good, Mr O'Neill  
 (9) **BY MR SANDERS**  
 (10) **Q** Mr Elmer as president of Exxon Shipping Company - it was  
 (11) Exxon Shipping Company in 1990, correct?  
 (12) **A** Yes, sir  
 (13) **Q** And as president of that company and now called SeaRiver  
 (14) are you familiar with the changes that have been made in  
 (15) operations, equipment, procedures of this company since the  
 (16) Exxon Valdez oil spill?  
 (17) **A** Yes, sir I am  
 (18) **Q** What I'd like to do with you sir is to start - maybe  
 (19) let's call it a hypothetical voyage today We'll leave San  
 (20) Francisco Bay and we'll head towards Valdez and we'll use that  
 (21) as kind of a way to talk about various changes so let's sail  
 (22) on beyond the Golden Gate get out into the Pacific Ocean  
 (23) outside San Francisco, and the first thing I want to ask you  
 (24) about is do you have more people, more deck officers on that  
 (25) ship, let's say it's the Long Beach, size of the Valdez do you

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- (1) have more deck officers on that ship today than there were in  
 (2) 1989?  
 (3) A Yes sir we do  
 (4) Q Early part of 1989?  
 (5) A Yes sir we do  
 (6) Q And what has been added?  
 (7) A We have a second third mate so we now carry a captain and  
 (8) four mates instead of a captain and three mates  
 (9) Q Now, in addition to that, and I kind of skipped over this,  
 (10) is there an extra mate added to the operations in San  
 (11) Francisco?  
 (12) A Yes sir, we do We have a mate a second mate or a third  
 (13) mate permanently stationed in San Francisco to facilitate the  
 (14) operations there, so that effectively when we re in the  
 (15) lightering operation in the bay we have a captain and five  
 (16) mates  
 (17) Q Now that mate is that called a lightering mate?  
 (18) A Yes sir he is  
 (19) Q Now, why did you add a lightering mate in San Francisco and  
 (20) an extra third mate on the ships?  
 (21) A Well, the decision to do that was reflective of the overall  
 (22) process whereas when this what I call an alarm went off March  
 (23) 24th, 1989 like a fire alarm, we were going to look at  
 (24) everything and continue today and will into the future, look  
 (25) at everything people procedures and equipment. When we

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- (1) looked at people and looked at the procedures we had we  
 (2) decided that it was best to improve our operations by adding  
 (3) another mate on the ships permanently and to add the  
 (4) lightering mate to facilitate the operations that we were  
 (5) carrying out in San Francisco Bay  
 (6) Q Were you concerned about fatigue?  
 (7) A Well, fatigue is also something that came up as a result of  
 (8) the accident Many people talked about fatigue many people  
 (9) postulated what part fatigue might have played in this  
 (10) accident We obviously are always worried about our people  
 and  
 (11) their workload We don't believe fatigue had a role in this  
 (12) particular accident and so stated  
 (13) Q But you changed it anyway?  
 (14) A And we changed it anyway because we wanted to be sure  
 that  
 (15) fatigue was never an issue on our ships  
 (16) Q Does the lightening mate act under the guidance of the  
 (17) master?  
 (18) A Yes He joins the ship and acts under the guidance of the  
 (19) masters  
 (20) Q And the added third mate, is that the same idea?  
 (21) A Yes  
 (22) Q First was adding a lightering mate was that required by  
 (23) some - is it now required by some federal/state regulation?  
 (24) A The third mate?  
 (25) Q No the lightering mate

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- (1) A No sir In fact to my knowledge, we're the only ones  
 (2) that have such an operation  
 (3) Q What about the extra third mate?  
 (4) A No sir The regulations neither state nor federal require  
 (5) that and many ships today sail with only three mates and the  
 (6) master  
 (7) Q But not Exxon ships?  
 (8) A Not Exxon or SeaRiver Maritime no, sir, they do not.  
 (9) Q Now, after you made those additions, did you look at your  
 (10) operation and find out whether or not that was sufficient?  
 (11) A Well, we had -  
 (12) Q In terms of just manning and fatigue  
 (13) A Right The initial changes we made in mid- 89 were done  
 (14) so to address a problem We also at that particular time were  
 (15) looking very carefully at work hours, and that was an issue  
 (16) that we spent a great deal of effort on during the course of  
 (17) the second half of 89 and early 1990  
 (18) Q Did you change them?  
 (19) A Yes, we absolutely did A number of things were going on,  
 (20) including the studies - the management of Exxon Shipping  
 (21) Company had commissioned among its officers to look at the  
 (22) process of work hours There is also - not many people  
 (23) realize that this was an OPA 89 law that was being developed  
 (24) in the Congress of the United States and in fact passed the  
 (25) House of Representatives and it addressed work hours So

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- (1) toward the end of 89 we instituted guideline work hours for  
 (2) our officers  
 (3) We then took cognizance of the study that our officers were  
 (4) underway in taking and doing and giving us advice We were  
 (5) cognizant about what the federal government was about to do,  
 (6) and therefore we took steps to introduce guidelines for our  
 (7) officers We then promptly started negotiated with the union  
 (8) We had reached an agreement and instituted those guidelines  
 in  
 (9) early 1990 for the entire crew  
 (10) Q These are work hour guidelines?  
 (11) A That s correct.  
 (12) Q At the time you put them in part of the Congress had  
 (13) passed a law but it hasn't become law because the Senate  
 (14) hadn't passed it?  
 (15) A That s correct.  
 (16) Q And you had been developing even in advance of that your  
 (17) own work hour rules?  
 (18) A That s correct  
 (19) Q So did you put in in 1990, January or whatever the date  
 (20) was did you put in work hour restrictions?  
 (21) A Yes We put in that 12 and 24 should be the maximum hours  
 (22) normally worked in the day 15 and 24 could be worked in the  
 (23) case of an emergency 36 and 72 was put in so you still again  
 (24) averaged 12 hours a day over the three days and yes, those  
 (25) guidelines were put in for the entire crew officers and

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- (1) unlicensed in early 1990  
 (2) Q Now did there come a time when Congress did pass work hour  
 hour  
 (3) rules that were similar to what you already had in place?  
 (4) A Yes, sir, OPA '90, August of 1990  
 (5) Q And when that law was passed when it was enacted, did you  
 (6) then conform your work hour rules to those - to that law?  
 (7) A We already had  
 (8) Q Now, what was the change one hour in the middle?  
 (9) A Well we had started off with 16 in 24, but we changed that  
 (10) to 15 in 24 when we knew the House of Representatives was  
 (11) taking place, but by the time Congress came, we were there  
 (12) Q Now, in the course of - strike that  
 (13) Having added a lightering mate and a third mate having put  
 (14) in work hour restrictions, what did you do?  
 (15) A Well one of the things you have to be very careful of is  
 (16) you can't just institute guidelines like that without some way  
 (17) of monitoring let's be sure that the work hours are being  
 (18) adhered to Two things were done in that regard the first  
 (19) thing, we made it very clear that all supervisors on board the  
 (20) ships, in most cases those would be your mates and engineers  
 (21) would keep careful records of the work hours that their people  
 (22) are working or they are spending, and that they would be  
 (23) responsible for reviewing those work hours with each individual  
 (24) to make sure that we did not violate the company guidelines or  
 (25) the law

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- (1) The second thing we did was make it a compulsory that every  
 (2) mate and every engineer, in other words over officer had to  
 (3) keep a log of his work hours We made it absolutely clear that  
 (4) the captain had to be sure that everybody on the vessel was in  
 (5) compliance with the law, and yes who is checking on the  
 (6) captain the ship group coordinator, his boss when he comes  
 on  
 (7) board he checks and discusses it with the captain Captain  
 (8) are you in conformance So compliance was followed up with  
 (9) monitoring, what we might call auditing  
 (10) Q Okay, now let me catch up with us a little bit here Do  
 (11) you have a document that puts in the supplemental - that kind  
 (12) of is the document by which you establish this lightering mate  
 (13) in San Francisco?  
 (14) A Yes sir there is a document that was issued  
 (15) Q Is that DX9420 in evidence?  
 (16) A Is it in here sir?  
 (17) Q I think it is That's the plan?  
 (18) A You're going to have to help me find it.  
 (19) Q 9420?  
 (20) A 9420  
 (21) Q They are in numerical order I'm told  
 (22) A Got it, I'm from Louisiana I'm a little slow  
 (23) Q Is that the document that establishes this lighter mate?  
 (24) A Yes, October 20th 1989  
 (25) Q Don't want to read it, just want to put the document in

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- (1) A Yes sir  
 (2) Q Now the log business the keeping up with the work hours  
 (3) did that require a log?  
 (4) A Yes  
 (5) Q Were the officers required to keep a log?  
 (6) A Yes  
 (7) Q In the past had they been required to keep a log?  
 (8) A No, sir, they had not  
 (9) Q And is there a document in that stack putting that  
 (10) requirement in writing?  
 (11) A Yes, sir, there is  
 (12) Q And is it DX3563 in evidence? Is that it?  
 (13) A Yes, sir  
 (14) Q What's the date on it?  
 (15) A Well, these are the ocean fleet regulations and this  
 (16) particular work hours and rest periods is February, 1992  
 (17) There had been previous issues prior to this one I'm sure, but  
 (18) the guidelines went in  
 (19) Q In any event these two changes that you made that we've  
 (20) talked about they were put in writing Now let me ask you  
 (21) about the third mate business Was that put down as a formal  
 (22) written document, or is that simply a practice that you  
 (23) established in '89 and have continued?  
 (24) A It's essentially a practice and shows up in our complement  
 (25) sheets

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- (1) Q Now let's go back to this idea of checking on or monitoring  
 (2) a program that you put in Did you make any request of people  
 (3) to check on how you were doing with compliance with your new  
 (4) work hour rules that you put in at the first of 1990?  
 (5) A Yes sir, we did  
 (6) Q And you were in court the other day yesterday, day before  
 (7) yesterday, when I think it's Plaintiffs' Exhibit No 13 was  
 (8) read the Stalzer group's memo?  
 (9) A Yes sir  
 (10) Q Is that what that was?  
 (11) A Well, there were two memos, but Stalzer group was one I  
 (12) remember that, yes  
 (13) Q What was that, that was something saying we want you to  
 (14) look at this and see how we're doing, right?  
 (15) A That was from Captain Stalzer at the request of management  
 (16) Q And as a result of Captain Stalzer's group work and other  
 (17) work, did you find that you needed to make further refinements  
 (18) to your procedures and your policies with respect to work  
 (19) hours?  
 (20) A Yes sir absolutely  
 (21) Q As a matter of fact have you reviewed recently Captain  
 (22) Stalzer's memo? There was a list read in there about  
 (23) suggestions?  
 (24) A Yes, sir I have  
 (25) Q What percentage of those suggestions made by his group in

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- (1) 1990 have actually been done or followed?  
 (2) A I think a conservative estimate would be over 90 percent of  
 (3) the recommendation made by the senior officers have been  
 (4) incorporated into our procedures or changes have been made  
 to  
 (5) accommodate the suggestion  
 (6) Q Now so changes were made in response to these studies that  
 (7) were done at management's request?  
 (8) A Absolutely  
 (9) Q Now you talked about officers reviewing the work hours of  
 (10) other officers Are officers specifically required to keep  
 (11) records of non-officers or unlicensed personnel?  
 (12) A The ones that they supervise yes -  
 (13) Q And I think that's in the same document I had you pull up  
 (14) awhile ago DX3563 that was put in writing?  
 (15) A Yes sir  
 (16) Q And that's a computer record isn't it?  
 (17) A For the unlicensed?  
 (18) Q Yes  
 (19) A Yes that is  
 (20) Q That's based on pay regular hours, work hours and over  
 (21) time hours?  
 (22) A Yes sir, that's correct  
 (23) Q Now is there also a requirement for the officers' hours and  
 (24) logs to be reviewed by somebody over and above the officers?  
 (25) A Yes sir, the master reviews all of the officers on the

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- (1) ship and as I stated, his boss reviews to make sure that he's  
 (2) in compliance with the rules  
 (3) Q And his boss is a ship group coordinator?  
 (4) A That's correct  
 (5) Q Is that requirement likewise in writing?  
 (6) A Yes  
 (7) Q Is that in DX3565 in evidence?  
 (8) A Yes, sir  
 (9) Q Mr Elmer, let me ask you after the grounding of the Exxon  
 (10) Valdez and the oil spill, was there a need perceived to have an  
 (11) extra level of auditing in the fleet?  
 (12) A I think the issue of auditing was very clearly one of the  
 (13) ones we had to address, yes  
 (14) Q What was done about it?  
 (15) A Well there were really about five different types of  
 (16) auditing that we do today, but let's start off with the first  
 (17) group was that we hired the chief inspector who had retired  
 (18) from the United States Coast Guard who was the chief  
 inspector  
 (19) for the Pacific area His name is Captain Hickey and he  
 (20) remains as a contractor so he has an independent position in  
 (21) our company He's not an employee but he rides the ships and  
 (22) what he does is he observes everything that's going on while  
 (23) he's riding  
 (24) Q First let's be specific from where we've been Does he  
 (25) likewise check these logged hours by the officers as against

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- (1) the work hour rules?  
 (2) A Yes sir, he does  
 (3) Q Does he check the computer records of work hours for  
 (4) unlicensed people against the work hour rules of the company  
 (5) and the Congress?  
 (6) A To my knowledge he does  
 (7) Q And does he check to see if the checkers are being checked  
 (8) upon?  
 (9) A Yes sir he does  
 (10) Q Now in addition to that sort of regulatory compliance  
 (11) does he audit other types of regulations and compliance  
 (12) therewith?  
 (13) A And company policy His job is to observe the entire  
 (14) operation on the ship while he rides His checklist today  
 (15) extends to over 900 items that he must check He checks  
 (16) against federal regulations, he checks against state  
 (17) regulations or port regulations and he checks against SeaRiver  
 (18) Maritime policy to be sure that we are in full conformance with  
 (19) our policies and all the regulations at all levels in the  
 (20) company  
 (21) Q To whom does - is it Captain Hickey?  
 (22) A Yes, sir, it is  
 (23) Q To whom does Captain Hickey report?  
 (24) A He currently reports organizationally to Captain Bono  
 (25) Q Who is Captain Bono?

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- (1) A He's our senior maritime advisor and supervisor that we  
 (2) have in Houston Captain Hickey also which I think is very  
 (3) important before he leaves the ship reviews the entire audit  
 (4) that he's carried out with the captain, and he will also review  
 (5) it with the ship group coordinator so they know what his  
 (6) feedback is going to be but then organizationally he reports  
 (7) to Captain Bono orally and in writing with his checklist.  
 (8) Q Who does Captain Bono report to?  
 (9) A Captain Bono reports to Mr Paul, who is his safety and  
 (10) regulatory manager, and Mr Paul reports directly to me  
 (11) Q Do you ever talk directly with Captain Hickey yourself?  
 (12) A Absolutely Captain Hickey has an open door with me at all  
 (13) times  
 (14) Q In addition to compliance with regulation does Captain  
 (15) Hickey and his 980 some item checklist, does he have any other  
 (16) duties that have been assigned by you or Captain Bono?  
 (17) A Yes in fact what we have learned over the five-plus  
 (18) years or five years let's round it off, that he's been  
 (19) employed, that Captain Hickey in his auditing can provide a  
 (20) special service to us in helping us in our training, and he's  
 (21) now given specific guidance and has developed for us at least  
 (22) what I consider very important training modules for emergency  
 (23) response and he trains and trains and trains and therefore  
 (24) while he's training he is able to observe the competency  
 (25) the skill levels and the performance of our seafarers at the

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- (1) same time
- (2) Q In addition to observing them does he makes reports back
- (3) to Captain Bono or to you concerning competency and how people
- (4) are doing?
- (5) A Absolutely, yes sir
- (6) Q Now and I think this will probably do it for the day
- (7) there are other audits that have always been in the system,
- (8) correct?
- (9) A Oh yes
- (10) Q And those remain in the system is that correct?
- (11) A Yes, they remain and have been added to at some levels, but
- (12) basically you're right
- (13) Q Now, would you just briefly list - well, just list them,
- (14) don't tell me anything about them
- (15) A We have financial and control audits that are done, and
- (16) this is done by Exxon Corporation, Exxon USA people not
- (17) SeaRiver people We also have audits that we carry out of our
- (18) operations with our own staff, including myself I try to get
- (19) on every ship I can or every tug barge, and I carry out
- (20) observations of how we re doing and discussing it with the
- (21) captains, I believe we start at the top
- (22) A very important audit is that we join with our
- (23) international colleagues Exxon Internationals, they will send
- (24) some of their mariners to join with us and ride our ship and
- (25) audit Then we will take our mariners and ride one of their

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- (1) ships and audit one of their ships We do one of those about
- (2) once a year
- (3) Q Do you have government audits?
- (4) A Yes, and there is where the growth is American Bureau of
- (5) Shipping comes and audits, the United States Coast Guard
- (6) comes
- (7) on and audits FCC they come on and audit the state of
- (8) Washington, MSO office they audit us The Fish & Game
- (9) organization and the department of the state of California
- (10) audits us the Bay Area Services in the city of San Francisco,
- (11) they audit us, and right here in Alaska ADEC, the Alaska
- (12) Department of Environmental Conservation they come on
- (13) board
- (14) and audit us, we are continually audited We are a highly
- (15) regulated organization
- (16) MR SANDERS Your Honor, this would be a good time
- (17) THE COURT Ladies and Gentlemen we'll adjourn for
- (18) the day today Please remember my instructions about not
- (19) listening to or reading anything about the case We will
- (20) reconvene at 8 00 tomorrow morning
- (21) (Jury out at 2 05)
- (22) THE COURT Mr O'Neill
- (23) MR O NEILL We're on schedule
- (24) THE COURT For planning purposes, I think in terms of
- (25) our meeting sometime tomorrow to review proposed jury
- (26) instructions When we do that will depend on when we finish
- (27) up, but we will be doing that tomorrow afternoon

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- (1) MR O NEILL We ll have our people on call
- (2) THE COURT Anything else?
- (3) MR NEAL Mr Daum would be available we will finish
- (4) up tomorrow unless Mr O'Neill goes crazy He wants to blunt
- (5) his sword, but I hope he doesn't take all day blunting
- (6) MR O NEILL. I won't without meaning to impose the
- (7) scope or the structure of the arguments, to a great extent as
- (8) to do with Your Honor s decisions on the jury instructions
- (9) More so than in any of the other phases so I'm just
- (10) respectfully expressing a concern
- (11) MR NEAL. What he's saying is respectfully you re not
- (12) working hard enough, Judge I wouldn't have said that at all,
- (13) but I m just clarifying for you what he means
- (14) THE COURT I got his message, but I had to take a
- (15) tour yesterday, so you got to work and I got to sightsee I
- (16) understand your concern
- (17) MR O'NEILL. Thank you Judge
- (18) THE COURT We will be in recess until 8 00 tomorrow
- (19) morning
- (20) (Proceedings recessed at 2 06 p m )

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 (6) DX2294, DX2296 DX2297, DX2299 DX2304 DX2324, DX2325  
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 (15) 8987 offered 7288  
 (16) PX 6468, 6430 6469 6472 and 6460 offered 7288

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- (1) Court 3 received 7179  
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 (3) DX8403 DX3928 DX3958 DX8030 DX8214 DX2290 DX2291  
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 (12) DX3385 DX6317 DX6346, DX6347, DX6399-A received  
 7182  
 (13) 8987 received 7288  
 (14) 6468, 6430 6469 6472 and 6460 received 7288

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- (1) STATE OF ALASKA )  
 (2) Reporter's Certificate  
 (3) DISTRICT OF ALASKA )  
 (5) I Leonard J DiPaolo 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) LEONARD J DIPAOLO, RPR  
 Notary Public for Alaska  
 (22) My Commission Expires 2 3-96

**Look-See Concordance Report**

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 UNIQUE WORDS 3,330  
 TOTAL OCCURRENCES 13,695  
 NOISE WORDS 385  
 TOTAL WORDS IN FILE 41,342

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**SINGLE FILE CONCORDANCE**

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**CASE SENSITIVE**

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**NOISE WORD LIST(S)  
 NOISE NOI**

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**INCLUDES ALL TEXT  
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(1) IN THE UNITED STATES DISTRICT COURT  
 (2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No A89 0095 CIV (HRH)  
 (5) ) Anchorage Alaska  
 The EXXON VALDEZ ) Thursday August 25 1994  
 (6) ) 8 00 a m  
 TRANSCRIPT OF PROCEEDINGS  
 (9) TRIAL BY JURY 69TH DAY  
 (10) BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE  
 VOLUME 42 Pages 7354 7552  
 Realtime Transcription

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(1) PROCEEDINGS  
 (2) (Jury In at 8 02)  
 (3) THE CLERK. All rise  
 (4) (Call to Order of the Court)  
 (5) THE COURT Good morning Ladies and Gentlemen  
 (6) MR O NEILL Good morning  
 (7) MR SANDERS Good morning  
 (8) THE COURT This is continuation of trial in case  
 (9) A89-0095 civil in re the Exxon Valdez  
 (10) Mr Elmer, if you would rejoin us please  
 (11) You understand you re still under oath?  
 (12) THE WITNESS Yes sir Mr Sanders  
 (13) MR SANDERS May I proceed Your Honor?  
 (14) THE COURT You may  
 (15) CONTINUED DIRECT EXAMINATION OF GUSTAS ELMER  
 (16) BY MR SANDERS  
 (17) Q Good morning  
 (18) A Good morning  
 (19) Q Mr Elmer, I wanted to go back and ask one more question  
 (20) concerning a document that I referred to yesterday, which was  
 (21) Plaintiffs Exhibit Number 13 which was the memo that Captain  
 (22) Stalzer did speaking for his group concerning the work hours  
 (23) and whatnot Do you remember that?  
 (24) A Yes sir I do  
 (25) Q Now as pointed out on the first day of the plaintiffs'

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(1) proof that memo referred to violations At the time of the  
 (2) memo were there any work hour regulations imposed by  
 statute  
 (3) or regulation by the federal or state governments?  
 (4) A No sir I don t think there were  
 (5) Q So the violations referred to what, violations of what?  
 (6) A To company guidelines that have been established  
 (7) Q Now, we re still on our hypothetical voyage and you re  
 (8) outside of San Francisco Bay and you re in the Pacific Ocean  
 (9) And another thing that s different as the plaintiffs video  
 (10) points out Is that you re SeaRiver Maritime now and not Exxon  
 (11) Shipping Company?  
 (12) A Yes sir, we are  
 (13) Q Whose idea was it to change the name?  
 (14) A It was my idea Mr Sanders  
 (15) Q And who picked the name?  
 (16) A I picked the name yes  
 (17) Q Why did you change the name of your company?  
 (18) A Well the marine industry in the United States is going  
 (19) through very many changes and the fundamental reasons for  
 make  
 (20) the change was to increase our efficiency and productivity and  
 (21) make ours much more attractive for other third parties other  
 (22) customers The name change is only a small part to a major  
 (23) reorganization  
 (24) Q I was going to ask you how the name changed increased the  
 (25) efficiency

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- (1) A It's one element in many elements that we changed in order  
 (2) to increase our efficiency and be able to respond to the  
 (3) potential third parties, additional customers that we think we  
 (4) need to sustain us for the future  
 (5) Q Now I want to go to a second thing that's different is  
 (6) the crew on your ship, on this voyage today is it trained  
 (7) differently than it was in March of 1989?  
 (8) A Yes, sir, it is  
 (9) Q Now, some of the differences in training are required by  
 (10) law, is that correct?  
 (11) A Oh yes absolutely  
 (12) Q And have you gotten a breakdown of how much of this  
 (13) training you're going to talk about is required by law that is  
 (14) mandatory, and how much of it is voluntary by your company?  
 (15) A Yeah The estimate I would say is about a third, 35  
 (16) percent is required by regulations, and the balance is what we  
 (17) call discretionary or training that we wish to do  
 (18) Q Would you give the jury a general overview of the types of  
 (19) changes in your training that have been made since the  
 (20) grounding of the Valdez?  
 (21) A Well I think the best way would be to describe some of the  
 (22) changes that were made in some of the courses We have  
 (23) started  
 (24) the bridge team simulation training -  
 (25) Q Well, I want to get to that, but I want to ask you first,  
 is there more training?

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- (1) A Yes sir, there is significantly more training  
 (2) Q And is the way that the training is logged and kept up with  
 (3) different than it was in 1989?  
 (4) A Oh yes One of the major changes that my company felt  
 (5) they ought to make was the organizations of the training So  
 (6) there is a significant increase in the structure of how we  
 (7) monitor the training that we're doing, identify the training  
 (8) that we think we should do, seek the input from the people  
 (9) being trained, and that is much more organized so that we can  
 (10) be sure that everybody that should receive the training does  
 (11) receive the training and everybody that needs, for example a  
 (12) refresher training they can't fall through the cracks  
 (13) So it's much better organized and it's significantly larger  
 (14) in size in the amount of training that we're doing  
 (15) Q Now let me just, as a couple of for instances, let me ask  
 (16) you, with respect to a third mate today as opposed to a third  
 (17) mate in 1989 what kind of a training does that person, be it a  
 (18) he or she receive today that they didn't receive back in '89?  
 (19) A Okay The best example that we can have is the use of the  
 (20) simulators in Newport for two very important -  
 (21) Q Newport where?  
 (22) A Rhode Island We have a bridge team simulation there  
 (23) Now, bridge team means that it's the mock-up, it's a  
 (24) simulation You may be more familiar with the simulators they  
 (25) use in airlines, but it's a mock-up of the bridge of the ship

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- (1) and the entire crew go and spend a week there and they  
 simulate  
 (2) situations on board the ship normal simulations a nice easy  
 (3) passage and then emergency situations, things that happen  
 (4) And they practice and they practice and they practice  
 (5) Q Does this simulator - or simulation use actual ports in  
 (6) the United States?  
 (7) A Yeah the ports that we use are primarily for the West  
 (8) Coast fleet, would be San Francisco Bay, Puget Sound and a  
 (9) great deal of training using Prince William Sound as the actual  
 (10) voyages that they practice on  
 (11) Q And for example like the Port of San Francisco could be  
 (12) put up on the screen for this mock-up and you simulate what  
 (13) this port looks like in a passage?  
 (14) A Right, just like you were there, and the same for Prince  
 (15) William Sound  
 (16) Q You have one for Prince William Sound?  
 (17) A Yes sir, we do  
 (18) Q As a matter of fact does the bridge team simulation that  
 (19) all of them go through, does it include the voyage of the Exxon  
 (20) Valdez on the night in question?  
 (21) A Very definitely and all of the mates practice or simulate  
 (22) that very voyage  
 (23) Q Is it told to them this is the track of the Exxon Valdez on  
 (24) the night of the 23rd, 24th of March, 1989?  
 (25) A Yes, it is

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- (1) Q Now, in addition to the team concept with the training of  
 (2) the simulator is there additional training with the simulator  
 (3) that a third mate today gets?  
 (4) A Yes Again using simulators, in this case it would be  
 (5) simulators of radar units they actually have what we call a  
 (6) one week skill training observed by the trainer where they  
 (7) will actually practice using the new radars, the new collision  
 (8) avoidance systems, and they would be under the guidance of  
 (9) very  
 (10) skilled trainers and they will practice and practice And  
 (11) that's about another week, so both courses are about two  
 weeks  
 (12) for this  
 (13) Q Does management or the bosses of the people being trained,  
 (14) do they get a - some feedback from the training sessions on  
 (15) how these people did in terms of the team training and the  
 (16) skill training?  
 (17) A Yes, they do  
 (18) Q Is that a regular process or is that just hit and miss?  
 (19) A No that's part of the program that we have with Marine  
 (20) Safety Inc which are the owners of the simulator and who run  
 (21) the course  
 (22) Q Now, how much training is being done today, how much is  
 (23) how  
 (24) much?  
 (25) A Yeah, let me use a couple parameters If we look at it  
 just in terms of dollars the cost of the course and the travel  
 is about \$2 million - one-and-a half to \$2 million a year

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- (1) That doesn't count the salaries of the individuals being  
 (2) trained If you add that on somewhere between 3 to  
 (3) three-and a half million dollars a year every year for  
 (4) training  
 (5) Probably a better way of looking at it is we effectively  
 (6) have one crew in training at all times  
 (7) Q Now the bridge team simulation training that you've talked  
 (8) about and the ship handling simulation training those are  
 (9) required by law?  
 (10) A No sir they are not  
 (11) Q Now I want to move to another area As the ship moves out  
 (12) of San Francisco Bay and out into the Pacific Ocean is the way  
 (13) that ship is navigated and the tools that it has to navigate  
 (14) different today than it was in 1989?  
 (15) A Yes it is  
 (16) Q Now this is a change that is due not so much to what  
 (17) happened in 1989 as to technology is that right?  
 (18) A Yeah Technology is advancing very rapidly yes, it is  
 (19) Q Now, would you tell the ladies and gentlemen of the jury  
 (20) how navigation is different today than it was in 1989 and if  
 (21) you would If you'll start with the way that you can tell where  
 (22) you are on the globe?  
 (23) A Okay The - back in the late 80s the basic form of  
 (24) navigation was either using Loran, if you were close enough to  
 (25) a shoreline where you could get a signal from the Loran units

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- (1) which are along the shorelines or satellite navigation and  
 (2) that depended upon periodically a satellite going over your  
 (3) ship as you went around the earth and you would take a fix  
 (4) from that satellite  
 (5) Since the very late 80s 89 90 we now have what is  
 (6) called GPS global positioning system which is a dramatic  
 (7) increase and improvement in navigation And the reason for  
 (8) that is that the satellites now are positioned stationary over  
 (9) the earth At some time in the near future we will have at  
 (10) least 25 satellites up that will allow you to constantly let  
 (11) you take a fix off that satellite and let you know where you  
 (12) are  
 (13) Q Now these aren't satellites that SeaRiver put up?  
 (14) A No The satellites originally were put up by the  
 (15) Department of Defense of the United States for military  
 (16) purposes but now, as you suggested, technology is improving  
 (17) and it's becoming available to the commercial people  
 (18) In the old days Loran could be within 2 000 3 000 feet of  
 (19) what the signal said With GPS global positioning system  
 (20) we're down to less than a hundred feet of variance so a  
 (21) dramatic improvement  
 (22) Q Now is there a further dramatic improvement literally on  
 (23) our doorstep in this positioning system?  
 (24) A Yeah There is a new advanced form of GPS or in  
 (25) addition, DGPS D standing for differential, that is being

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- (1) introduced around the country A couple ports have it  
 (2) already We're going to have it in Prince William Sound very  
 (3) soon We think we're going to have it here in 1994 And the  
 (4) accuracy that is improved there you're down to about less than  
 (5) 20-foot variance from the center line And this is the new  
 (6) technology that you have and it's coming very rapidly  
 (7) Q Have there been improvements in 1989 since radar?  
 (8) A Oh yeah The vendors there, Sperry and Raytheon are  
 (9) making significant improvements in the quality of their radars  
 (10) in terms of the clarity, the strength again technology, and  
 (11) they are also starting to introduce onto the base radar the  
 (12) ability to include a collision avoidance system  
 (13) In the old days - these gray hairs mean something In the  
 (14) old days like in the late 80s you had two units and now this  
 (15) technology is allowing it to come onto one unit, so it's a  
 (16) better readout It's more user friendly is the way I look at  
 (17) it  
 (18) Q Now I assume these two that you have just mentioned these  
 (19) are available to other shipping companies in the industry also,  
 (20) this is not just Exxon that has this?  
 (21) A Absolutely right yes, sir  
 (22) Q Now is there a third improvement in navigation that your  
 (23) company has kind of pioneered that kind of brings all this  
 (24) together?  
 (25) A Yeah It's called Ex-bridge

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- (1) Q And "ex" stands for Exxon?  
 (2) A Yes  
 (3) Q Okay  
 (4) A And bridge stands for bridge of a ship, so Ex-bridge We  
 (5) have retrofitted Ex bridge on all of our vessels and we think  
 (6) it is - it's something that has made a significant improvement  
 (7) to our bridge team and to our navigation  
 (8) Q Now I want you to use the little video you had made up to  
 (9) explain this system in a second to the jury, but first just  
 (10) kind of refresh everybody, I know you've probably heard all  
 (11) this before in Phase I, but the old way of finding out where  
 (12) you required what just very briefly?  
 (13) A Well, it required taking fixes from markings, landmarks  
 (14) It required taking those sightings use compasses bearings,  
 (15) distances off of radar, and then effectively going to a paper  
 (16) chart and plotting it  
 (17) Q In other words the person the mate or the captain, who  
 (18) was wanting to take a fix, he would go from the bridge out on  
 (19) the bridge wing, look at the azimuth, spot a landmark,  
 (20) hopefully he'd spot the right landmark, he would get a fix,  
 (21) come back to the radar, get a range, take the fix and the range  
 (22) back to the chart room plot it out on a chart and that's the  
 (23) way you would find out where you were?  
 (24) A That's correct where you had been  
 (25) Q Exactly right you found out where you had been Now with



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- (1) the court's permission and using Defendants Exhibit 9419  
 (2) which is in evidence could you come down and kind of walk us  
 (3) through what Ex bridge is?  
 (4) A Sure  
 (5) Q And if our operator will bear with us we may need to stop  
 (6) a little bit here and there  
 (7) A I may - excuse my back  
 (8) Q You can come up here?  
 (9) A I think I'll start off if I might by explaining that the  
 (10) size of a bridge a third the size of this courtroom would not  
 (11) be unreasonable for a bridge and that doesn't include the  
 (12) wings that you have out on each side the port wing and the  
 (13) starboard wing In fact, on our larger ship the distance from  
 (14) one end of the wing to the end of the other wing is about 170  
 (15) feet fairly large distance and the equipment is spread around  
 (16) the bridge in a sense  
 (17) You'll have a radar on the port side, a radar on the  
 (18) starboard side, a chart room in the back and you have to go off  
 (19) the wing to take your fixes So you're moving around quite a  
 (20) bit and gathering this information to put it on this chart to  
 (21) tell you where you've been  
 (22) This particular still that we have here we have two of our  
 (23) officers and this is the port radar unit that they are looking  
 (24) at This is the Ex bridge system, and there are two screens on  
 (25) the bridge, there is one here on the port, again next to the

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- (1) radar, but we want to be sure that everybody sees what the  
 (2) Ex bridge is telling them, and we'll show you that in a  
 (3) minute  
 (4) So we have another screen on the right side of the ship on  
 (5) the starboard Here is the other radar and the helm the  
 (6) wheel is going to be just a little bit to the outside of the  
 (7) picture So, in other words, we have the ability for the crew  
 (8) that are on the bridge all crew not just the captain all  
 (9) crew, to see what the Ex-bridge is telling us  
 (10) This is a picture of San Francisco Bay  
 (11) Q Now, where does that picture come up, is that on the  
 (12) Ex bridge screen?  
 (13) A Yes What we're going to use is the San Francisco Bay and  
 (14) the SeaRiver Galveston, and we have chosen San Francisco  
 (15) Bay  
 (16) The brown that you're looking at is land, the light blue is  
 (17) very shallow water, and you want to know that Again if you  
 (18) view - excuse me You can see this looks like a port this is  
 (19) San Francisco and these are the docks If you've been there  
 (20) you know the docks down towards the entrance to the Golden  
 (21) Gate  
 (22) Q What are the white numbers?  
 (23) A These are the depths That's how deep the water is there  
 (24) Here is a shallow point. That's sort of a visual that you  
 (25) have This is our ship and there is the bridge And you see a  
 (26) little white circle around the bridge, that's the accuracy of

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- (1) DGPS In other words, we think we are right there with that  
 (2) little black dot we are highly confident with this system that  
 (3) we're within that circle  
 (4) Q What's the white line within the purple line?  
 (5) A This white line is how far you're going to travel in six  
 (6) minutes going the speed that the ship is going at that time  
 (7) and this bluish line that you see - it's not a purple line  
 (8) Q Looks purple to me  
 (9) A I've half color blind is it purple?  
 (10) Q Purple  
 (11) A That's the track that the captain and the mates have laid  
 (12) out. That's the track that we want to follow as they are  
 (13) transiting from one part of the San Francisco Bay to the  
 (14) other  
 (15) I would like to take the opportunity to say - to put this  
 (16) together If you remember, you have a mate taking sightings  
 (17) and bearings on a plotter It's not unreasonable that's going  
 (18) to take three, four minutes, maybe six In other words, when  
 (19) he plots this position here, this ship could be here, could be  
 (20) here, I shouldn't touch the screen depending upon where the  
 (21) rudder is but this system tells him where he is now And that  
 (22) radar Ex-bridge system, is going to give him that dot three  
 (23) times a second  
 (24) Q All right. Let's move on  
 (25) A A good example, same ship, same location you'll recognize

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- (1) that shallow point - by the way, there is 40 feet of water  
 (2) This ship draws 27 feet of water, so don't get worried  
 (3) What this is telling you, this is not a rudder angle  
 (4) indicator but it indicates the way he has the rudder currently  
 (5) set If he doesn't make a change he's going to start moving  
 (6) off of his track plan so he's got to do something And in the  
 (7) video which this still is taken you'll see that he slowly  
 (8) brings that rudder back to make sure he stays on track  
 (9) Q Let me ask you a question If he ignores that white line  
 (10) up there that shows him that he's getting ready to depart his  
 (11) planned track If he ignores that for some reason or another  
 (12) and the heading goes off of that purple track what happens?  
 (13) A Okay, thank you He will have laid down errors that he's  
 (14) willing to accept in his navigation plan may be a hundred feet  
 (15) on each side or 200 feet, depending upon his conditions around  
 (16) this plan If this ship deviates and crosses one of those  
 (17) boundaries that he's laid down a plan he's got alarms that are  
 (18) going off all over the bridge So everybody hears the alarms  
 (19) he knows the helmsman knows, hey, guys, we got to look at  
 (20) this  
 (21) Q What do we have here?  
 (22) A I've tried to explain basic planning when everything is  
 (23) okay and you're on a plan and there have been no surprises  
 (24) What we're going to do here, again San Francisco, here is  
 (25) everything I've described, and here is our ship and here is a

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- (1) light purple line but that's the track that we're on. What  
 (2) we're trying to demonstrate here is the powers of Ex-bridge  
 (3) what happens if something isn't as what you thought it would  
 (4) be a surprise or a change of the situation and I'm going to  
 (5) demonstrate that for you with a ship  
 (6) And there is a ship anchored at this point in time here  
 (7) and what we have learned is that the pilot and the captain have  
 (8) indicated they are going to lift the anchor and start to move  
 (9) When they laid out this track plan they didn't know that was  
 (10) his intention because he hadn't told anybody so they thought  
 (11) they were going to pass safely by that ship that was going to  
 (12) be anchored. The ship said I'm getting ready to get underway  
 (13) folks  
 (14) Q Let's see what happens  
 (15) A We're satisfied with our plan and they make a change  
 (16) Here is the captain and here is the ship he's worried about  
 (17) this ship the situation has changed. The mate presses the  
 (18) screen and says I would like to think about an alternative  
 (19) track so he presses the screen. He then is going to go and  
 (20) press right on the track line the plan track line, and watch  
 (21) what happens. That acknowledges that he's thinking about  
 (22) making a change, then he's going to say I need more sea room,  
 (23) I want to get away from that ship some more. I want to give some  
 (24) more safety  
 (25) So he presses over here if you can stop that Irene for

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- (1) me  
 (2) Thanks. See he's put that point there and the Ex-bridge  
 (3) is drawing him a new track line hasn't accepted it, it's just  
 (4) saying this is what you want me to consider  
 (5) Q Does he decide where he wants to go back on his original  
 (6) track?  
 (7) A You put it across there and the system draws a voyage back  
 (8) to the system  
 (9) Q And that allows him to see what his projected change is  
 (10) going to look like?  
 (11) A Right. And he says am I satisfied with that am I happy,  
 (12) does that make it safer does that introduce any other problems  
 (13) over here that he didn't think about. No he says I'm happy  
 (14) with that change tracked and then he accepts it into the  
 (15) system  
 (16) Press the button and now the ship is going to move away on  
 (17) to the new track. It's left the old plan and now it's going to  
 (18) come up this track and give himself some more safety  
 (19) Now, we've use this as a ship. Maybe a better example, I  
 (20) don't have one available he comes up and finds a fishing fleet  
 (21) here that are fishing and that he didn't know was there, and he  
 (22) can get away. May be some ice he decides he wants to  
 (23) change  
 (24) his plan he can get away  
 (25) Q Now as you're going back to the chair, is this system  
 capable of being used for training if you're out at sea?

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- (1) A One of the benefits that we've achieved from Ex-bridge  
 (2) which really was not the original intention was that as we  
 (3) have used it and gotten comfortable with it it turns out to be  
 (4) a tremendously effective training tool. We had not budgeted or  
 (5) justified it on that basis. And if I might explain how it can  
 (6) be a training tool?  
 (7) Q Very briefly  
 (8) A Basically you can be out at sea say, in the Pacific Ocean  
 (9) and you can load into the machine a port.  
 (10) Q Like San Francisco?  
 (11) A Right. And then you can practice. You can practice what  
 (12) would happen in this emergency what would happen in that  
 (13) emergency while we're out in the middle of the Pacific. With  
 (14) the real ship you're going to have, with the port demonstrated  
 (15) as we have here and you can practice and practice and  
 (16) practice  
 (17) In other words what we're trying to do is anticipate every  
 (18) potential problem. That's a tall order but we're trying to  
 (19) anticipate every problem and what would you do if this  
 (20) happened  
 (21) or that happened, and practiced. Sunday, by the way, is  
 (22) training day on our ships and that's when they do that, but  
 (23) it's also a very effective way of practicing before you go into  
 (24) a port  
 (25) Q Now let me ask you one final question about training and  
 the Ex-bridge. Is the Ex-bridge a replacement for the old

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- (1) tried and true plot and fix?  
 (2) A No sir it's not  
 (3) Q Still do that?  
 (4) A We have to  
 (5) Q So you do both?  
 (6) A We have to  
 (7) Q We have gotten our ship all the way up in the North Pacific  
 (8) and into Prince William Sound and we're getting ready to stay  
 (9) right in Hinchinbrook. What's the difference when you go into  
 (10) Hinchinbrook now than 1989?  
 (11) First I want to ask you about your policy about who is  
 (12) going to be on the bridge as you go into Hinchinbrook.  
 (13) A Our policy is very clear. The company policy is that when  
 (14) you're in port you have to have at least two officers on the  
 (15) bridge at least two and one of the officers must be the  
 (16) master. And as we pass the light at Hinchinbrook that  
 (17) effectively brings us into port. It ends our sea passage,  
 (18) again marine terminology and starts our in-port passage  
 (19) Q That was in your bridge and organizational manual in 1989?  
 (20) A Yes it was  
 (21) Q Did you change that or what did you do?  
 (22) A The policy of the company has always been that when you're  
 (23) in port from sea buoy to sea buoy you have to have two  
 (24) officers on the bridge and one has to be the captain. We have  
 (25) continued to do everything we can to make sure that it's

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- (1) understood by everybody, and we've taken steps to reconfirm we
- (2) thought it was clear before but continuing to reconfirm and
- (3) make sure everybody understands once you pass the sea buoy
- (4) going in two officers minimum one must be the captain
- (5) Q How did you reconfirm that?
- (6) A We've had officer conferences in which that was very
- (7) specifically discussed with each officer individually We
- (8) discussed earlier the bridge team simulation in Newport Rhode
- (9) Island That is made absolutely clear to each officer and each
- (10) officer has to go to that conference
- (11) Captain Hickey, which we mentioned yesterday, one of his
- (12) on-board audits is to make sure that every member of the
- (13) bridge team understands what that manual means and how they are to use
- (14) it. We continue to look for ways to make sure
- (15) Q Okay Now, is there - in traveling through, are there
- (16) steps that have been taken since 1989 to ensure that you don't
- (17) have a problem with a crack in the hull or some failure in the
- (18) ship or the cargo tanks that would result in some sort of a
- (19) leakage?
- (20) A Yes
- (21) Q Are there changes in that area?
- (22) A Yes, there are
- (23) Q Can you tell us what those are, please? What system do you
- (24) have in place now?
- (25) A Every - all but two of our ships have to be brought out of

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- (1) sea every six months emptied, cleaned And we go in and
- (2) inspect the tanks using experts with the help of the Coast
- (3) Guard ABS, a lot of outside experts steel experts, and we
- (4) inspect the tanks every six months to make sure we can do
- (5) everything to avoid a physical problem with our equipment
- (6) Q Let me go back Maybe I didn't make this clear Your rule
- (7) is when you're entering and leaving port, you have to have two
- (8) people on the bridge, correct?
- (9) A One of which has to be the captain
- (10) Q Now, for Prince William Sound, where is that point where
- (11) you enter port and leave and start your sea passage?
- (12) A Hinchinbrook light
- (13) Q That's where the sea buoy is?
- (14) A That's where the light is There is no actual sea buoy
- (15) because of weather That's the entrance to the port
- (16) Q That's what you made clear when you had these
- (17) conferences?
- (18) A Yes sir
- (19) Q Now, one other point about going in your inward passage
- (20) The pilot is picked up at a different point now is that
- (21) correct?
- (22) A The pilot yes he's picked up south of Bligh Reef
- (23) Q And that change I think is a State or Coast Guard change,
- (24) correct?
- (25) A As I recall it came out of the State of Alaska Department of Environmental Conservation

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- (1) Q Now let's go to the terminal Valdez In addition and I
- (2) think we've kind of already mentioned this but you have extra
- (3) help now as far as the loading process in Valdez is that
- (4) right?
- (5) A Yes, we do
- (6) Q And that is a loading mate?
- (7) A A chief mate
- (8) Q But he is a loading mate?
- (9) A Yes
- (10) Q And do you have - in that package in front of you do you
- (11) have Defendants' Exhibit 3698 that put that guy in?
- (12) A If I do better than I did yesterday
- (13) Q 3698 in evidence?
- (14) A Yes, we do
- (15) Q Now, in addition to that do you have a new set up in
- (16) Valdez as far as the senior man?
- (17) A Yes, we do
- (18) Q And that's Captain Deppe?
- (19) A Yes
- (20) Q Now, that wasn't done until last year, correct?
- (21) A That's correct
- (22) Q Now, do you also have another person in Valdez that wasn't
- (23) there in 1989?
- (24) A Yeah We have a radio - a senior radio electronic officer
- (25) stationed at Valdez as well

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- (1) Q Now when a ship docks at Valdez, can all of the crew
- (2) other than those working on loading, go into town?
- (3) A No We have established a minimum crewing that must remain
- (4) on the ship at all times when she is at the dock
- (5) Q And is Defendants' Exhibit 9439 the implementation of that
- (6) change?
- (7) A Yes, it is
- (8) Q Did you have some delay in getting that change made as a
- (9) result of the union?
- (10) A Well, we had - it's a change in work practice, so what
- (11) we've had to do is agree with the union for our unlicensed
- (12) seafarers that this would be an adhered to policy by the
- (13) company, but that's been achieved and is working very well
- (14) Q Now, when the crew comes back it has to go through how
- (15) many steps before it gets to on-duty status, comes back from
- (16) the city or the town of Valdez?
- (17) A The first step that the crew has to do is they have to go
- (18) through the security gate at the Alyeska terminal And when
- (19) they come back there are security guards there that check not
- (20) only the individuals by requiring them to pass through a metal
- (21) detector and observing their behavior, but also the vehicles
- (22) that they are traveling in will be searched as well
- (23) Q Now, when they get to the ship do they have another
- (24) check-in?
- (25) A Yes The standard company policy is that when you come

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- (1) back from town or come back from being off the ship you have  
 (2) to go to the mate on watch and that's a predetermined location  
 (3) on the ship and you have to check-in and say to the mate I m  
 (4) back He had to tell the mate he was going to port when he  
 (5) left and then the mate will observe him make sure everything  
 (6) is okay and check him back onto the ship  
 (7) Q Is Defendants Exhibit 9440 is that the implementation of  
 (8) that requirement, which is in evidence?  
 (9) A Yes Yes it is  
 (10) Q And is that mate on duty checking those people in is he  
 (11) given any specific role with respect to the alcohol policy?  
 (12) A Yes he is  
 (13) Q What s he supposed to do?  
 (14) A He s supposed to pay first of all a lot of attention and  
 (15) watch the individuals and do everything to observe them to be  
 (16) sure that there is no form of intoxication or impairment of any  
 (17) kind as they check back on board  
 (18) Q Has he been trained to recognize that kind of thing?  
 (19) A Yeah As part of our occupational health course that every  
 (20) officer must take they are taught by outside experts about how  
 (21) to identify someone who has been impaired  
 (22) Q Now, the rule as far as alcohol consumption established by  
 (23) the Coast Guard is still the same is it not? Is that correct?  
 (24) A Yes Mr Sanders it is  
 (25) Q That's the four hour rule no intoxicating beverages within

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- (1) four hours of assuming duty correct?  
 (2) A Yes  
 (3) Q And blood alcohol level of below .04?  
 (4) A That s right  
 (5) Q Now, in addition to that rule, does the Coast Guard do more  
 (6) than it used to do in 1989 as far as checking officers for  
 (7) background check alcohol problems and those kind of things  
 (8) is  
 (9) it stronger and better now than it used to be?  
 (10) A I think it is yes  
 (11) Q And let me ask you about SeaRiver Is SeaRiver s checking  
 (12) of officers and records and those kinds of things, is that  
 (13) better than it used to be?  
 (14) A Yes I think it is, yes  
 (15) Q Now let s talk about - you mentioned the four hour rule  
 (16) and the .04 blood alcohol level Let s say you got a captain  
 (17) that comes back from the town of Valdez and he's got a blood  
 (18) alcohol level of .03 your captain What happens?  
 (19) A We got a big problem  
 (20) Q Why is that?  
 (21) A The reason is that SeaRiver Maritime s alcohol guidelines  
 (22) are that during their tour whether they are on the ship on  
 (23) duty or at port captain and chief engineer are not allowed to  
 (24) drink at all for the 60 days - their tour is normally 60 days  
 (25) on and 60 days off For the time they are assigned to the ship  
 they cannot drink at all

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- (1) So what happens is Captain Deppe gets an immediate call  
 (2) from the independent testing company that have taken that  
 (3) read  
 (4) and Captain Deppe is on the ship very fast.  
 (5) Q Now there is a read isn't there?  
 (6) A Yes  
 (7) Q There is a breathalyzer required, that s required by the  
 (8) State of Alaska for every captain going on board that vessel?  
 (9) A Within one hour of sailing every captain has to be  
 (10) breathalyzed in Valdez  
 (11) Q Yes And that s a state law?  
 (12) A Yes, that's a state law  
 (13) Q Now, the rule as far as no drinking by a captain or chief  
 (14) engineer on a tour of duty, that s your rule, that s not  
 (15) required by law?  
 (16) A That s correct yes  
 (17) Q Have the extra people in Valdez as well as the people on  
 (18) the ship have they been given training and instruction with  
 (19) respect to these alcohol rules?  
 (20) A Yes, they have  
 (21) Q And have they been given specific instruction with respect  
 (22) to reporting things?  
 (23) A Yes The company guidelines call for that, that s correct.  
 (24) Q Now before - now there also has been a change in the  
 (25) overall corporate alcohol policy regarding people in safety  
 sensitive positions and Mr Raymond is going to talk about

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- (1) that so I'm not going to ask you about that and duplicate but  
 (2) that is so obvious  
 (3) A That s another foundation point of our alcohol policy yes  
 (4) it is  
 (5) Q Now let s go to the situation where the loading has been  
 (6) virtually completed and we re preparing for departure out into  
 (7) Valdez going out into Prince William Sound and out in the Gulf  
 (8) of Alaska What is done now as far as getting ready to go that  
 (9) wasn't done in 1989?  
 (10) A Okay As we're finishing off the loading our chief mate  
 (11) Phil Eikenberger he will be departing as he finishes off  
 (12) helping the captain and the chief mate buttons up the ship,  
 (13) Captain Deppe will have made his final checks with the captain  
 (14) to make sure everything is okay, and the radio electronics  
 (15) officer will have made his final checks with the engine room to  
 (16) make sure everything is okay  
 (17) Q Let me kind of interrupt you and I apologize for it but  
 (18) we need to kind of move along Let me ask you some specific  
 (19) questions  
 (20) Is the captain required to come up with a plan for the  
 (21) voyage?  
 (22) A That s the next step He will put into the Ex bridge and  
 (23) onto the chart his plan for departing from Valdez out through  
 (24) Hinchinbrook and that is similar to the plan we saw in San  
 (25) Francisco

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- (1) Q Now in terms of rest fatigue what is done about that  
 (2) before departure?  
 (3) A Well he will have had an in port plan and he will lay that  
 (4) out so he can meet the rest criteria by the Coast Guard Every  
 (5) officer is required to adhere to that plan and advise the  
 (6) officers So he will check to make sure everybody has had six  
 (7) hours within the last 12 and everybody is ready to go and  
 (8) conform with that regulation  
 (9) Q Now, before he leaves is there anything else he needs to  
 (10) do? He, the captain  
 (11) A Yes He's going to give a lot of instructions but one of  
 (12) the instructions is to put out the messenger line over the  
 (13) stern  
 (14) Q What is that?  
 (15) A Well, as part of our continuing look for safety, there are  
 (16) emergency towing gears on the front of the vessel and the  
 (17) stern He puts out on the stern a messenger line that hangs  
 (18) out over the stern If anything goes wrong one of the  
 (19) messenger tugs can grab that without depending on a crew  
 (20) member So this is just a safety issue that we have  
 (21) introduced, but he will have checked with the Coast Guard, the  
 (22) weather, incoming ships, the pilots, what's the weather  
 (23) situation what's the ice situation out in the Sound and start  
 (24) to develop this plan for departure  
 (25) Q Are there more restrictions regarding the weather than

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- (1) there were in 1989?  
 (2) A Yeah The Coast Guard has some additional guidelines that  
 (3) they are imposing as to what wave or wind conditions will close  
 (4) the Narrows or Hinchinbrook so yes that's part of his  
 (5) information flow prior to departure, he wants to know that  
 (6) Q What about ice?  
 (7) A The new ice policy that the industry introduced with a lot  
 (8) of input from the Coast Guard is also new, and that is again  
 (9) information that he will be gathering from a number of sources  
 (10) Q Now what is your ice policy today with respect to - let's  
 (11) say it's nighttime and you're leaving the Port of Valdez and  
 (12) there is ice near the lanes What does your policy say about  
 (13) that?  
 (14) A Well our policy says that with the information that the  
 (15) captain will be getting if there is sufficient ice in the  
 (16) lanes or there is ice in the lanes that are going to hinder the  
 (17) navigation he does not leave and we're talking about reduced  
 (18) visibility at nighttime he simply does not leave he stays  
 (19) there and waits for either an improvement in the ice conditions  
 (20) or more light  
 (21) Q In determining whether there is a hindrance - let me ask  
 (22) you the question Is a captain now permitted to go outside the  
 (23) traffic separation system in Prince William Sound?  
 (24) A The only time the captain of a SeaRiver system is to leave  
 (25) the TSS is under extreme emergency

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- (1) Q So therefore in determining will ice will hinder  
 (2) navigation that captain has got to know that he can't leave  
 (3) the system in order to avoid that ice?  
 (4) A That's correct yes, Mr Sanders  
 (5) Q Now he can change lanes I suppose, as long as he stays  
 (6) within the system?  
 (7) A He can change lanes but if it's dark and low visibility,  
 (8) and if he thinks he's going to have to be changing lanes in  
 (9) our judgment that's sufficient to say it's hindering navigation  
 (10) and he will stay there until nighttime - until daytime  
 (11) Q Now is your judgment communicated to the captains?  
 (12) A Yes  
 (13) Q They know what that means in this circumstance?  
 (14) A Yes, sir  
 (15) Q Now, is Defendants Exhibit 3555, is that the first  
 (16) pronouncement of that ice policy that actually went out in  
 (17) writing?  
 (18) A Yes I think it is  
 (19) Q I think the date on that is September 9th '89?  
 (20) A September '8, 1989  
 (21) Q And that's in evidence  
 (22) A It's a Telex to all of the ships on the West Coast from our  
 (23) West Coast fleet manager  
 (24) Q Now let's take a situation with ice where the - where it's  
 (25) daylight and either ice comes up not a hindrance not a

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- (1) danger and those are different levels that have a precise  
 (2) definition I gather?  
 (3) A Right  
 (4) Q And the captain is permitted to leave, but what happens in  
 (5) those circumstances if there is ice good visibility, is there  
 (6) another precaution taken?  
 (7) A Yeah Incorporating the policy that established the escort  
 (8) vessels these big escort tugs called SERVS, those vessels have  
 (9) been outfitted with powerful search lights, but they can ask an  
 (10) ice scout and what happens instead of being positioned  
 (11) behind  
 (12) the vessel in close proximity to the stern, one of the big  
 (13) escort vessels will move to the front and position itself so  
 (14) that it will be looking out as a scout in front of the vessel  
 (15) as it goes out  
 (16) Q Now these escort vessels that's something new too?  
 (17) A Yeah That was introduced in 1989 as well  
 (18) Q And who introduced that?  
 (19) A That came in through the State of Alaska and in cooperation  
 (20) with Alyeska  
 (21) Q And that exists today, the requirement of escort vessels?  
 (22) A Oh, yes  
 (23) Q And there are two per transit?  
 (24) A Minimum of -  
 (25) Q No two per voyage out?  
 (26) A Minimum of two Under certain weather conditions they can

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- (1) actually require three  
 (2) Q Now as you go out through the Narrows and the Arm do you  
 (3) have better navigational aids from the Coast Guard now than  
 you  
 (4) used to have in 1989?  
 (5) A Yes we do They have additional - a major change at  
 (6) Bligh Reef there is an additional navigational aid there The  
 (7) equipment that the VTS uses for the Coast Guard has been  
 (8) upgraded at Potato Point better radars as examples of the  
 (9) improvements that are being made  
 (10) Q Now, there is a system that s close to being implemented  
 (11) that SeaRiver is ready to do as soon as the equipment gets to  
 (12) the Coast Guard that will further enhance this safety going out  
 (13) and coming in to Valdez?  
 (14) A Yes there is It s a good point I think to remind us  
 (15) about this alarm that went off for everybody and the Coast  
 (16) Guard certainly heard the alarm, and they have introduced  
 (17) what s called ADSS automatic dependent surveillance system  
 (18) and all of the ships are required to have that system that will  
 (19) tie into the ADSS  
 (20) What it is is a transponder that continues to send out a  
 (21) signal as to what you are how big you are where you re  
 (22) traveling what you're carrying et cetera et cetera and that  
 (23) signal will go to the VTS system in Valdez, and they have  
 (24) upgraded all their equipment  
 (25) Bear with me for a second In the old days their radars

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- (1) could see down to Bligh Reef only, but with this new ADSS  
 (2) system set up and their charts, not dissimilar to what you saw  
 (3) with Ex-bridge, they will be able to pick up a ship outside of  
 (4) Hinchinbrook and track it all the way in So it s going to  
 (5) tremendously enhance their ability to help us and work with us  
 (6) as we track ships taking them in and out of Prince William  
 (7) Sound  
 (8) That should be very soon maybe as we speak  
 (9) Q But as we speak do you on your ships have that technology  
 (10) ready to go as soon as the Coast Guard s equipment is in?  
 (11) A It s all on board ready  
 (12) Q Now there are speed restrictions in the Arm and in the  
 (13) Narrows and in Prince William Sound?  
 (14) A Yes  
 (15) Q That were not there in 1989?  
 (16) A Well there is speed restrictions in the Narrows of six  
 (17) knots We cut it back and only go five We feel that s a  
 (18) number that we re more comfortable with But overall you  
 (19) cannot exceed ten knots on the transit out because you have to  
 (20) recognize that these tugs have to stay close so we re limited  
 (21) to a maximum of ten knots When there is ice present that ten  
 (22) knots is throttled back to six So there are various levels  
 (23) but never exceeding ten  
 (24) Q Now I wanted to go to the oil spill response capabilities  
 (25) that exist now that did not exist in 1989, and I believe we

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- (1) have a blow-up Now I m probably a little ahead, but I m going  
 (2) to put it up so I don't have to do it again, or later  
 (3) A Do you want me to help you?  
 (4) Q Now first question I want to ask you is, the requirement  
 (5) to have capabilities generally comes from the governments  
 (6) correct?  
 (7) A Yes it does  
 (8) Q And tell us a little bit about how that is done generally  
 (9) and then I want to ask you to explain to the ladies and  
 (10) gentlemen of the jury what is there specifically in response to  
 (11) this requirement  
 (12) A Well there is the - there has always been the need for  
 (13) having contingency plans for response I won't start way back  
 (14) in history, but the Oil Pollution Act of 1990 made it clear for  
 (15) the need of the contingency plan Oil spill response plans  
 (16) national wide spoke about areas Puget Sound being one and  
 (17) Prince William Sound in Alaska and there are very specific  
 (18) guidelines coming out of the State of Alaska, but also bills  
 (19) that have been passed by the government here in Alaska as to  
 (20) what the oil spill response must address And I think what  
 (21) we ve here displayed - I don t think His Honor can see it.  
 (22) THE COURT Don't worry about it. I m concerned  
 (23) whether the jury can read I think you better leave it where  
 (24) they can see it  
 (25) THE WITNESS What you see there displayed in Prince

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- (1) William Sound is the product of the work of a lot of people,  
 (2) the government represented by ADEC, the United States Coast  
 (3) Guard Alyeska, the pipeline company the marine companies,  
 all  
 (4) of the shipping companies that come here a lot of input from  
 (5) the RCAC that s the regional citizens advisory council and  
 (6) what we re displaying there is where we stand today with this  
 (7) response effort  
 (8) BY MR SANDERS  
 (9) Q Now in this response effort you have involved - you and  
 (10) the governments have involved people in the communities,  
 have  
 (11) you not?  
 (12) A Yes sir we have  
 (13) Q And as a matter of fact in part of the response you use  
 (14) fishermen correct?  
 (15) A Oh yes  
 (16) Q Do you have some on contract? What does the plan call for  
 (17) in terms of that?  
 (18) A Well we have a library of over 3 500 fishing vessels in  
 (19) the library that we know their size and capability  
 (20) Q What do you mean by library?  
 (21) A Well it s a data bank who owns the vessel where it s  
 (22) moored the size of the vessel But 350 of those are under  
 (23) some form of contract so that they can participate in training  
 (24) and keep everybody up to date as to what their location is but  
 (25) even within that 350 there is a fleet of 50 fishing vessels

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- (1) that are active in participating in this plan and in this  
 (2) contingency plan and they are located in the Sound  
 (3) Q Now for the group, and I'm not sure which group, so you  
 (4) tell them are training exercises done on an annual basis or  
 (5) more than once a year?  
 (6) A Yes including the fishing vessels?  
 (7) Q Right  
 (8) A Yes they are involved in training and part of the  
 (9) contract calls for them to be in that training and make  
 (10) themselves available for training, yes, they are  
 (11) Q And you pay them for that?  
 (12) A They have an annual income of about \$15 000 per boat for  
 (13) participating in the training That includes a \$2 000  
 (14) retainer and to be sure the vessels are available in the  
 (15) wintertime as opposed to being out of the water from ice  
 (16) conditions we pay their winter mooring so the fish boats  
 (17) are -  
 (18) Q That's the 50?  
 (19) A That's the 50 The 350 participate in some training and  
 (20) their annual income is about \$2 000  
 (21) Q Now this sets forth in certain places on the chart where  
 (22) equipment is, and then these other places like, for example  
 (23) the Chenega Village community protection Sawmill Bay  
 hatchery  
 (24) protection, what does that mean? What are these other places  
 (25) on the map? Obviously we know what these others are

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- (1) A We'll use Chenega That's a good example  
 (2) Q Is that all right?  
 (3) A Yeah, I can see that I think that's an indication of  
 (4) preplanning to make sure you have very very fast response  
 (5) First of all, there is a hatchery there so there are  
 (6) prepositioned boom and anchors and equipment so that if any  
 (7) accident should take place you don't have to bring the  
 (8) equipment to the hatchery and that equipment is prepositioned  
 (9) there  
 (10) Q Is that true for these other hatcheries?  
 (11) A Yeah There are five or six hatcheries identified all the  
 (12) way up to Solomon Gulch in Valdez I can't read all of them  
 (13) off the top of my head Tatitlek is another one  
 (14) Secondly, there are also at the communities extra  
 (15) communication equipment to be sure that they can  
 communicate  
 (16) quickly and of course we have some fishing vessels located  
 (17) there as well  
 (18) Q Now just so that nobody is misled the impetus behind this  
 (19) response plan comes by law correct?  
 (20) A Yes it does  
 (21) Q It's not something we went out and volunteered to do  
 (22) that's something that's required by law and this makes up part  
 (23) of our response?  
 (24) A Yes it does And I think you have to look at the response  
 (25) in two distinct areas You have to look at the prepositioning

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- (1) of equipment such as the hatcheries as protecting very  
 (2) environmentally sound areas and things that have to be right  
 (3) there in the core The other positioning of equipment that is  
 (4) shown is there to respond effectively and I think - I think  
 (5) effectively and quickly if there is an accident at the accident  
 (6) site  
 (7) Q In other words to catch the oil while it's still on the  
 (8) water?  
 (9) A That's what I mean, yes  
 (10) Q Is there anything I have forgotten here?  
 (11) A I don't think so  
 (12) Q Just a couple more questions and then Mr O'Neill can make  
 (13) good on his threat yesterday  
 (14) Now as I said I don't want you to repeat what Mr Raymond  
 (15) is going to talk about so we have duplication, but I want to  
 (16) ask you specifically today does SeaRiver Maritime have an  
 (17) after-care - a specific, written out, formal after-care  
 (18) program in its alcohol policy implementation?  
 (19) A Yes we do  
 (20) Q And does it have a specific written down, formal procedure  
 (21) for monitoring people who have had alcohol treatment?  
 (22) A Yes we do  
 (23) Q Now I have one other area of questioning When the jurors  
 (24) see the documents that are in evidence concerning these  
 (25) changes, obviously - it is obvious that all of these things

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- (1) didn't occur in the first four or five months six months or  
 (2) year or so after the spill, these changes, and I want to put  
 (3) the question to you, why did some of these things take months  
 (4) or years?  
 (5) A The fundamental answer is that we - I'll go back to what I  
 (6) said yesterday When this fire alarm went off we were not  
 (7) going to take a quick fix We were going to look and have  
 (8) continued to look and I think we'll continue to look into the  
 (9) future forever at everything, people, procedures equipment,  
 (10) and we wanted to do it right the first time and therefore we've  
 (11) studied everything  
 (12) As we introduced changes we wanted to make sure those are  
 (13) the changes that are going to achieve the objective Some of  
 (14) the changes we've made that we have discussed this morning  
 (15) involve the development of technology, some of them develop  
 the  
 (16) changing of procedures within the company some of them  
 reflect  
 (17) the changing law state and federal and as a result where we  
 (18) are today is on this journey, as I see it and we will continue  
 (19) to model - change our procedures change our equipment  
 change  
 (20) our people as times goes on and we continue to learn and  
 (21) that's why it takes time to do it right.  
 (22) MR SANDERS That's all the questions I have I'll  
 (23) turn you over to Mr O'Neill and try to be easy on him  
 (24) MR O NEILL Don't worry about that  
 (25) CROSS EXAMINATION OF GUSTAS ELMER

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- (1) BY MR O NEILL  
 (2) Q Sir who is John Redman?  
 (3) A John Redman is a member of the legal staff of Exxon USA  
 (4) Q And he is a relatively senior member of the legal staff?  
 (5) A Yes he is  
 (6) Q And Mr Redman is an advisor to the board of directors on  
 (7) occasion isn't he?  
 (8) A What board of directors?  
 (9) Q Exxon Corporation  
 (10) A I don't know  
 (11) Q Do you know whether Mr Redman is a trusted advisor to Mr  
 (12) Raymond and was a trusted advisor to Mr Rawl or have you  
 (13) heard that?  
 (14) A I did not hear that as you've stated it Mr Redman is a  
 (15) very senior member of the law department of Exxon USA and I'm  
 (16) sure he is a trusted person  
 (17) Q I'm asking these questions because and you Mr Redman  
 (18) signed a document together, which is called a dispute  
 (19) resolution agreement?  
 (20) A Yes, sir we did I certainly signed on behalf of the  
 (21) company I represent  
 (22) Q And this dispute resolution agreement, that you've signed  
 (23) and Mr Redman, who is a high lawyer with Exxon Corporation,  
 (24) has a provision in it The agreement is between you and  
 (25) Captain Hazelwood isn't that right?

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- (1) A It is a document that was signed as you can see by Mr and  
 (2) Ms Hazelwood and Mr Redman and myself and it has certain  
 (3) provisions  
 (4) Q And one of the provisions is that the parties agree that  
 (5) neither shall use in any manner deposition or trial testimony  
 (6) or any evidence derived therefrom given by either party in the  
 (7) Valdez litigation in connection with the mediation or  
 (8) arbitration provided for herein between Hazelwood and Exxon  
 (9) Shipping and Exxon Corporation isn't that right?  
 (10) A That's what that document says  
 (11) Q And you signed this agreement?  
 (12) A Yes sir that's my signature  
 (13) Q And the agreement was signed this year?  
 (14) A It says the 12th day of January  
 (15) Q And you're aware that the agreement was signed the day  
 (16) before Captain Hazelwood's deposition was taken?  
 (17) A I did not know that  
 (18) Q You didn't know that?  
 (19) A No I did not know that  
 (20) Q Did you read and understand this provision when you signed  
 (21) it?  
 (22) A I don't sign it unless I understand it  
 (23) Q Good Thank you  
 (24) Now you talked some about OPA 90 and indeed you talked  
 (25) about a House bill and a Senate bill?

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- (1) A Can I put this one away?  
 (2) Q Yes You talked about a House bill and a Senate bill and  
 (3) then you talked about OPA 90?  
 (4) A No I talked about a House bill that was never a Senate  
 (5) bill  
 (6) Q The House bill was passed?  
 (7) A Yes sir  
 (8) Q And OPA 90 was passed in response to the Exxon Valdez oil  
 (9) spill in major part wasn't it?  
 (10) A I believe the spill was a catalyst.  
 (11) Q So the Congress of the United States felt, as a result of  
 (12) this catalyst that it had to involve itself in your industry?  
 (13) MR SANDERS I object to that That's kind of  
 (14) misleading I think they had been involved before  
 (15) BY MR O NEILL  
 (16) Q At this point in time the Congress of the United States  
 (17) felt it had to involve itself in your industry?  
 (18) A The Congress and the laws of the United States have always  
 (19) been involved in our industry from the Constitution  
 (20) Q And the Congress of the United States indeed had specific  
 (21) concern about your company, didn't they?  
 (22) A Specific concern about our company?  
 (23) Q That's right.  
 (24) A Maybe you could explain what you mean by that  
 (25) Q The Congress of the United States, could I have the Elmo,

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- (1) felt obligated to pass a statute which prohibits the Exxon  
 (2) Valdez from going into Prince William Sound?  
 (3) A Section 5007, what you have there prohibits any vessel  
 (4) that has spilled more than a million gallons of oil into the  
 (5) marine environment after March 22nd from operating in the  
 (6) navigable waters of Prince William Sound It sounds that if  
 (7) you have an accident anywhere you can't go into Prince  
 William  
 (8) Sound It's a generic statement.  
 (9) Q How many vessels does it apply to?  
 (10) A I don't know how many vessels have spilled a million  
 (11) gallons There unfortunately have been spills and I think  
 (12) you're well aware of many of them, of more than a million  
 (13) gallons The tragic accident is that we have spilled more than  
 (14) a million gallons, so it does apply to the SeaRiver  
 (15) Mediterranean the former Exxon Valdez  
 (16) Q You just talked it a tragic accident It was the result of  
 (17) recklessness?  
 (18) A It was the result of a tragic accident  
 (19) Q So you're not willing to commit that it was the result of  
 (20) reckless activity?  
 (21) A Mr O'Neill, I'm very well aware of the verdict in section  
 (22) one of this trial It was a tragic accident and we are so  
 (23) deeply sorry for it  
 (24) Q You said we're sorry for it The chairman of the board of  
 (25) Exxon - you just said we're sorry for it. The chairman of the



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- (1) board of Exxon published an open letter didn't he?  
 (2) **A** Yes  
 (3) **Q** And were you here yesterday when he referred to that public  
 (4) apology as an advertisement?  
 (5) **A** What I heard yesterday in that regard was a question asked  
 (6) by the attorney who referred to it as an advertisement. I  
 (7) think it was a public apology that Mr Rawl and other members  
 (8) of the senior management of Exxon made to the public because  
 it  
 (9) was generally felt it is felt today and it will be never  
 (10) forgotten  
 (11) **Q** Who used the word advertisement in the colloquy?  
 (12) **A** I can't remember  
 (13) **Q** I'll play it tomorrow for the jury and I'll bet you dollars  
 (14) to donuts it's Mr Rawl  
 (15) **A** I don't recall  
 (16) **Q** Do you recall Mr Rawl testified in this court yesterday  
 (17) under oath that he wasn't particularly enthused about this open  
 (18) letter to the public, he didn't think it was a good idea?  
 (19) **A** I don't recall him saying that  
 (20) **Q** Now I want to talk for a minute about the Exxon Valdez  
 (21) What is it today?  
 (22) **A** SeaRiver Mediterranean  
 (23) **Q** And who is the captain of it?  
 (24) **A** Well, today, on the vessel today, I'm not so sure who is on  
 (25) board

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- (1) **Q** Who are the two captains assigned to the vessel?  
 (2) **A** Well, Captain Mihajlovic is one of those Captain Pierce is  
 (3) frequently on board as well, but depending upon the  
 (4) circumstances there may be other captains on board  
 (5) **Q** Captain Mihajlovic is the captain that came in here and  
 (6) testified, is that a correct statement?  
 (7) **A** Yes  
 (8) **Q** You were here when he testified?  
 (9) **A** Yes I've been here for quite a few months  
 (10) **Q** And - we all have  
 (11) **A** I know  
 (12) **Q** And I'm interested -  
 (13) **A** I know the judge has too  
 (14) **Q** In fact, we wore coats when we started and we wear coats  
 (15) today  
 (16) **A** I'm pretty close to taking mine off  
 (17) **Q** When Captain Mihajlovic testified here he was asked the  
 (18) question with regard to the Exxon bridge manual your  
 employer  
 (19) you know takes the position - do you know that your employer  
 (20) takes the position that at or about the time of the grounding  
 (21) of the Exxon Valdez there was a requirement that there be two  
 (22) officers on the bridge, you know that's what your employer's  
 (23) position is, don't you?  
 (24) **Q** Where you asked me what I can - my question is do you  
 (25) know what your employer's position is and he said I don't

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- (1) remember sir  
 (2) Were you here when he testified to that effect?  
 (3) **A** Let's agree I was here when Captain Mihajlovic testified  
 (4) and I was listening intently I think I remember that. You  
 (5) read it I expect, from the transcript so I'll accept that  
 (6) **Q** I am reading, and Captain Mihajlovic testified that going  
 (7) through the Narrows he would leave the bridge?  
 (8) **A** That's not what Mr Mihajlovic testified to He testified  
 (9) that on one occasion going through the Narrows he left the  
 (10) bridge  
 (11) **Q** For the wheel transit?  
 (12) **A** Yes And I think that Captain Mihajlovic deserves an  
 (13) explanation of what happened that day  
 (14) **Q** And Captain Mihajlovic also testified that he didn't  
 (15) believe there was a pilotage requirement in place Do you  
 (16) recall that?  
 (17) **A** I think he mentioned something about pilotage  
 (18) **Q** And Captain Mihajlovic also testified that as far as he was  
 (19) concerned he set watch condition A as opposed to watch  
 (20) condition C Do you recall that?  
 (21) **A** Prior to the grounding yes, he did That's what he said  
 (22) **Q** So we have a man who violated your company's policies with  
 (23) regard to operation of Prince William Sound and you have now  
 (24) put him in charge of the Exxon Valdez?  
 (25) **A** Mr O'Neill, I think you're doing a terrible disservice to

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- (1) Captain Mihajlovic It is absolutely true that he stated he  
 (2) had some confusion about the pilotage or the bridge conditions  
 (3) in Prince William Sound, and some of my people have talked to  
 (4) the captain and what he meant to say and what he tried to say  
 (5) from this stand, but didn't have the real opportunity That  
 (6) prior to the grounding he had some confusion but the steps  
 (7) that the company took to clarify what that bridge organization  
 (8) manual - he said from the day of the grounding he has never  
 (9) had any confusion about that  
 (10) **Q** Captain Mihajlovic didn't know the rules when he came in  
 (11) here and testified?  
 (12) **A** I don't think so that's right  
 (13) **Q** The jurors know what they saw  
 (14) **A** You asked me, I don't think that's right  
 (15) **Q** You said when you started your testimony and then you  
 (16) mentioned it a couple times in your testimony you said that  
 (17) you took a look at people equipment and policies?  
 (18) **A** No, I said procedures  
 (19) **Q** People, equipment and procedures okay?  
 (20) **A** I said that yes, and we still do today  
 (21) **Q** And I want to address that and I want to ask you some  
 (22) questions about some people and where they are today Do  
 you  
 (23) know in those movies like American Graffiti, they tell you  
 (24) where everybody is today?  
 (25) **A** Yeah

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- (1) Q Let s do that  
 (2) A This ought to be fun  
 (3) Q Mr Rouse that testified where is he do you know?  
 (4) A Yes sir  
 (5) Q He s in charge of human services at Exxon USA?  
 (6) A No He s in charge of the public affairs department  
 (7) Q Rouse?  
 (8) A That s what I said yes  
 (9) Q And he is the fella who came in and testified about the  
 (10) alcohol policy allowing a relapsed alcoholic to command a  
 (11) tanker?  
 (12) MR SANDERS Objection to that characterization  
 (13) THE WITNESS Mr Rouse testified here to answer your  
 (14) question the public affairs department -  
 (15) BY MR O NEILL  
 (16) Q Mr Sanders objected to my characterization of the  
 (17) testimony, so let s get the testimony  
 (18) Here is Mr Rouse testimony Now is this the  
 (19) testimony - this is the same guy right, Rouse public affairs  
 (20) at Exxon USA Now how about Mr Cornett?  
 (21) A I m not so sure exactly what Mr Cornett s title is but he  
 (22) is still in the public affairs department of Exxon USA  
 (23) Q And he testified in his deposition that he was the  
 (24) director Do you recall that?  
 (25) A The director of what?

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- (1) Q Of public affairs or public relations  
 (2) A I think Mr Cornett said he was on assignment here in  
 (3) Alaska but he s not a director of public affairs  
 (4) Q Now I want to know do you recall Mr Koops who came in to  
 (5) testify?  
 (6) A Dwight Koops?  
 (7) Q Yes  
 (8) A Yes sir  
 (9) Q What is Mr Koops job?  
 (10) A He s the ocean fleet manager for SeaRiver Maritime He  
 (11) reports to the operations vice-president  
 (12) Q So we have you?  
 (13) A Me?  
 (14) Q You re the president?  
 (15) A Yes  
 (16) Q And then we have a vice-president Mr Revere?  
 (17) A We have several vice presidents but we have an operations  
 (18) vice-president  
 (19) Q Mr Revere at one time had a responsibility over Captain  
 (20) Hazelwood didn t he? You re aware of that?  
 (21) A Mr Revere was the operations vice-president in Exxon  
 (22) Shipping Company yes and now he s vice-president of  
 (23) SeaRiver  
 (24) Maritime  
 (24) Q We have Koops, that s the same Dwight Koops that was the  
 (25) Gulf Coast fleet manager?

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- (1) A Yes he s now ocean fleet manager  
 (2) Q So he got promoted is that fair?  
 (3) A He masters the fleet now I m not so sure when you say  
 (4) promoted whether he had a classification change or not He  
 (5) hasn't had a classification change since I came to the company  
 (6) Q How about Mr Dan Paul?  
 (7) A Mr Paul is a manager of the safety environmental and  
 (8) regulatory department of SeaRiver Maritime  
 (9) Q So he s the safety manager?  
 (10) A Environmental and regulatory  
 (11) Q Now Dan Paul testified here about the fact that he had had  
 (12) a problem monitoring Captain Hazelwood in the early '80s and  
 (13) he  
 (13) didn t pass that on to anybody after '85 Do you recall that?  
 (14) A I wasn't here when Mr Paul testified  
 (15) Q Now, we have him as the safety manager Now, how about  
 (16) Mr  
 (16) Borgen?  
 (17) A Mr Borgen is on special assignment.  
 (18) Q What s his assignment?  
 (19) A He s working on special projects as - I don't know  
 (20) Q Who does he report to?  
 (21) A Mr Revere  
 (22) Q We ve got Borgen, so he is still with us?  
 (23) A I'm sorry I can't read it  
 (24) Q Borgen special projects Is that terrible or are we  
 (25) going to remember Borgen special projects?

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- (1) MR SANDERS Both of those  
 (2) BY MR O NEILL  
 (3) Q How about Mr Myers the Shadow do we still have him?  
 (4) A He works for Mr Paul  
 (5) Q Mr Myers is over in the safety and environment  
 (6) department. How about Mr Tompkins?  
 (7) A Mr Tompkins reports to Mr Revere  
 (8) Q What does he do?  
 (9) A He s in charge of repairs  
 (10) Q Speaking of repairs Is Herb Leyendecker still working for  
 (11) Exxon?  
 (12) A Yes  
 (13) Q Where does he work?  
 (14) A He reports to Mr Tompkins He s on special project.  
 (15) Q He s repairs?  
 (16) A Yes  
 (17) Q How about Ben Graves?  
 (18) A He works for Exxon USA I believe, and I m not so sure what  
 (19) his capacity is at this point in time I believe he s still  
 (20) with Exxon USA I haven't seen the gentleman in a long time  
 (21) Q Were you here when he testified? He testified by  
 (22) deposition because he looked like two different guys Do you  
 (23) remember that?  
 (24) A Yes I remember that. I don't know what to look for now,  
 (25) he s changed so much

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- (1) Q You could run into him and you wouldn't know who he was?  
 (2) A Maybe you can help me  
 (3) Q That s the problem Maybe he has two jobs  
 (4) A Maybe I don't know  
 (5) Q And then Mr Raymond was the president of Exxon Corporation  
 (6) at the time of the Valdez grounding and now he s the chairman  
 (7) of the board?  
 (8) A Yes he is  
 (9) Q So we'll put him up on top  
 (10) This is sort of the end of our American Graffiti movie  
 (11) These are all folks that are still here?  
 (12) A We need to send you to a course on organizational charts  
 (13) but you'll notice we significantly modified the operations and  
 (14) Mr Koops reports to Mr Revere, but those people are still  
 (15) employed, yes, they are  
 (16) O NEILL. Let me mark this as Plaintiffs' Exhibit 6587  
 (17) for identification Offer 6587  
 (18) (Exhibit 6587 offered)  
 (19) MR SANDERS My only objections are aesthetics  
 (20) THE COURT Aesthetics aside it's admitted  
 (21) (Exhibit 6587 received)  
 (22) BY MR O NEILL.  
 (23) Q So between now and the grounding, the Exxon Valdez has  
 (24) changed its name to SeaRiver Mediterranean That's a correct  
 (25) statement?

- (1) Q And my question is very narrow the guilty plea was to a  
 (2) charge of negligence and that was all it was to negligence?  
 (3) A Let me put it in my terms In front of the gentleman to my  
 (4) right we pleaded guilty to three charges of negligent  
 (5) misdemeanor when I pleaded guilty  
 (6) Q I want to talk a little bit about equipment The global  
 (7) positioning system that you talked about is a spinoff of DOD,  
 (8) Department of Defense, technology They have all these  
 (9) satellites up they used it in the Gulf War?  
 (10) A That s my understanding yeah I think it s been up before  
 (11) the Gulf War  
 (12) Q It was up for a period of time before the Gulf War, but  
 (13) they did use it in the Gulf War But with regard to vessels  
 (14) having GPS systems are you aware that many fishing vessels  
 (15) have GPS systems?  
 (16) A Yes In fact, it s available commercially to anyone  
 (17) Q You can get a little hand held GPS for 600 bucks?  
 (18) A The hand held GPS like any other technology is a  
 (19) demonstration of a perfect point that we are in a rapid  
 (20) changing technology era, and what was available in 1989, to  
 (21) not  
 (22) anybody but the Department of Defense These things have  
 (23) become available more and more to the commercial people and  
 (24) the  
 (25) general public These are not as good as the big ones  
 (26) Q I m going to get one  
 (27) A Me too I need one for my small boat

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- (1) A Yes  
 (2) Q And Exxon Shipping Company has changed its name to  
 SeaRiver  
 (3) Maritime That s a correct statement?  
 (4) A Yes it is  
 (5) Q This is just for clarification and I want to be clear on  
 (6) this We saw Mr Rawl s press conference after the criminal  
 (7) pleas?  
 (8) A We saw a press conference  
 (9) MR SANDERS I think that's incorrect  
 (10) THE WITNESS I don't know  
 (11) BY MR O'NEILL.  
 (12) Q About the same time we saw the press conference about the  
 (13) criminal pleas -- you had some involvement with the criminal  
 (14) pleas?  
 (15) MR SANDERS That s incorrect Can I talk to you for  
 (16) a second?  
 (17) MR O'NEILL. Yeah You can tell me how to say it  
 (18) you can ask the question  
 (19) BY MR O'NEILL.  
 (20) Q He s right I also admit when you're wrong  
 (21) A That s a good policy  
 (22) Q And we ll get to that.  
 (23) At some point in time you participated in a guilty plea  
 (24) with regard to the grounding of the Exxon Valdez?  
 (25) A Yes I did

- (1) Q Now I want to talk for a minute, if I could, about -- you  
 (2) mentioned a Prince William Sound Citizens Council?  
 (3) A Regional Citizens Advisory Council  
 (4) Q Exxon opposed Alyeska s participation in the Regional  
 (5) Citizens Advisory Council at a number of Alyeska board  
 meetings  
 (6) in late 88 and 1990 didn't it?  
 (7) A One I don't know that 1988 I was working in the Exxon  
 (8) international circuit  
 (9) Q 1989 and 1990?  
 (10) A I ll answer your question 1988 I was working in Exxon  
 (11) International on overseas projects 1989 the same thing I  
 (12) didn't come to this job until 1990 And Exxon Shipping  
 (13) Company, SeaRiver Maritime we are a carrier of crude and  
 (14) products I think you said Alyeska I can't answer that  
 (15) question because I don't know  
 (16) Q Have you ever been told or informed that the participation  
 (17) of the industry in the Regional Citizens Advisory Council was  
 (18) approved by Alyeska over Exxon and Mobile s vote? Have you  
 (19) ever been told that?  
 (20) A I don't think so and I certainly don't recall if I did  
 (21) I m sorry, I just don't think so  
 (22) Q Now, most of this is set up as we said -- let me ask you a  
 (23) question Everybody in this room has to comply with the law,  
 (24) basic proposition?  
 (25) A Yes sir

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- (1) Q And we all don't come home everyday and expect praise about
- (2) complying with the law I had a great day I ought to be
- (3) awarded for complying with the law What I said is a
- (4) ridiculous proposition?
- (5) MR SANDERS I'll object It's almost impossible to
- (6) answer It's really an argument.
- (7) THE COURT I think -
- (8) MR O NEILL The point is made I'll move on
- (9) THE COURT I think he's up to answering your
- (10) question
- (11) BY MR O NEILL
- (12) Q This is set up to comply with the law?
- (13) A Absolutely
- (14) Q And it's set up under the auspices of Alyeska the State of
- (15) Alaska and a variety of other organizations isn't that right?
- (16) A That's correct I think that proves that OPA 90 is
- (17) working and I think we ought to as American citizens, take a
- (18) comfort and also a pride that it is showing that industry joins
- (19) with government state and federal with the local citizens,
- (20) the local communities and that by working on a project
- (21) together you can come to an agreement because all of what you
- (22) have there reflects input from the RCAC the United States
- (23) Coast Guard, various regulatory boards in the United States,
- (24) the marine industry the pipeline industry and it's proven by
- (25) focusing we can work together

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- (1) And I think yes sir the people in Alaska require that
- (2) and I think are participating in it and I think it's achieved
- (3) the objective
- (4) Q And it has and the reason for it is because industry by
- (5) itself up to 1989 didn't get the job done did they? Is that
- (6) right?
- (7) A The statement you're making maybe you could clarify when
- (8) you say we didn't get the job done
- (9) Q We had a 200,000-plus barrel spill in Prince William Sound
- (10) with a contingency plan in place that foresaw that much of that
- (11) oil was going to hit the beach?
- (12) A If you recall, Mr O'Neill, the testimony was that that
- (13) contingency plan was approved by the State and the Coast
- (14) Guard
- (15) and the tragic accident resulted in what it did, and, yes, this
- (16) is a response to make it better for the future and that's what
- (17) we're trying to do
- (18) Q You called it an accident again
- (19) A Yes I think that's what it was
- (20) Q So as the president of SeaRiver Marine today as you sit
- (21) here - I'm going to ask you directly and I think it's
- (22) important to attitude and I think it's important to punishment,
- (23) was the grounding of the Exxon Valdez the result of reckless
- (24) acts?
- (25) A The result of - the grounding of the Exxon Valdez was a
- (26) result of not taking action by certain members of the crew It

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- (1) was an accident and we have done the very best we could to try
- (2) to correct it. And as I said earlier we are certainly very
- (3) sorry for it and we will always be
- (4) Q Now I have in front of you Plaintiffs Exhibit Number 175
- (5) A I have that yes sir
- (6) Q And this is a memo it's in evidence, and it's a memo from
- (7) Mr Iarossi to Mr Koops, and Mr Koops, as we talked about is
- (8) the - now the ocean fleet manager?
- (9) A Yes he is
- (10) Q And you've seen this memo before, I'm sure you've spent
- (11) some time with it?
- (12) A I have Yes I have
- (13) Q And in the memo Mr Iarossi complains that he is impatient
- (14) with the slowness of the coming to grips with other operational
- (15) issues highlighted by the grounding of the Exxon Valdez And
- (16) he says that to Mr Koops and he says it in September of 1989
- (17) isn't that right?
- (18) A September the 5th
- (19) Q So half a year after the grounding of the Exxon Valdez we
- (20) have the president of the company complaining to one of his
- (21) chief aids about the fact that we're slow in doing something
- (22) about what happened is that a fair statement?
- (23) A We have a memorandum that I think deserves a certain
- (24) amount
- (25) of explanation You want to remember what the shipping
- (26) company
- (27) was going through in 1989, you want to remember that we still

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- (1) had a ship that had a million barrels on it after the accident
- (2) that had to be lightered We had a ship that had to be
- (3) prepared and removed from Prince William Sound and taken
- (4) down
- (5) to San Diego That ship didn't actually get to the repair yard
- (6) until some time much later, could have been August or
- (7) September
- (8) Secondly we had a situation where Mr Iarossi If you look
- (9) at his logs at his diary spent very, very little time in
- (10) Houston He was in front of the National Transportation and
- (11) Safety Board for their inquiry, he was in front of the
- (12) Congress he was in front of the Coast Guard There was a
- (13) tremendous amount of stress on the man He simply wasn't
- (14) there
- (15) I think it's fair to this court and only fair to this court
- (16) if you take that letter and then you follow it with the two
- (17) letters that come shortly thereafter in which Mr Iarossi,
- (18) having written this letter, then writes to his supervisor, Mr
- (19) LeGrange, and others, look at all the things we've done, and
- (20) within five weeks there were two separate memos that
- (21) demonstrate it.
- (22) Mr Iarossi was simply so preoccupied with responding to
- (23) the accident and getting the ship to San Diego and all the
- (24) other pressures on him, gentlemen, Mr O'Neill, he didn't know
- (25) what was going on in the organization His organization was
- (26) studying everything and as you can see this morning we were

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- (1) starting to institute significant important changes  
 (2) Q Are you finished sir?  
 (3) A I m finished  
 (4) Q Paragraph one, very clear instruction to our masters  
 (5) regarding operations in Prince William Sound during ice  
 (6) season It is incredible that September is here and we still  
 (7) have not addressed this issue Do you see that?  
 (8) A Yes sir  
 (9) Q Now, you can't change the written word can you?  
 (10) MR SANDERS Object to that That s argumentative  
 (11) THE COURT Sustained  
 (12) BY MR O NEILL.  
 (13) Q He also finds a clear directive on maintaining a lookout at  
 (14) all appropriate times, the idea of allowing a coffee break is  
 (15) just unbelievable Do you see that observation?  
 (16) A Yes, I do  
 (17) Q These are observations that Mr larossi made in writing -  
 (18) and have you ever talked to Mr larossi about this memo?  
 (19) A No, I haven't.  
 (20) Q On the second page of this memo, he says, last week during  
 (21) a hearing before the Alaska Oil Spill Commission, Jerry Aspland  
 (22) asked of ARCO Marine and publicly and for the record stated  
 (23) that in the aftermath of the Exxon Valdez grounding ARCO  
 (24) Marine had established the following policies Do you see  
 (25) those?

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- (1) A Yes, I do  
 (2) Q And then he goes on and says, It is more than a little  
 (3) disturbing to me that ARCO has come to grips with life after  
 (4) the Valdez grounding, while we, over five months later have  
 (5) not. I understand we are responding to many pressures and we  
 (6) are in transition, but safe operation of the fleet is the  
 (7) paramount task of your group what is needed is some  
 (8) initiative Do you see that?  
 (9) A Yes That s the closing paragraph  
 (10) Q Were you here when Mr Jerry Aspland testified?  
 (11) A He testified by video deposition?  
 (12) Q Yes  
 (13) A I think so  
 (14) Q He testified on the subject of when he had a ship captain  
 (15) that went through treatment This is the same Mr Jerry  
 (16) Aspland isn't it?  
 (17) A Yes I know Jerry  
 (18) Q Mr Aspland is a leader in the industry isn't he?  
 (19) A He's the president of ARCO Marine and yes he has a large  
 (20) fleet under his management.  
 (21) Q I want to talk, if I could for a minute about these  
 (22) changes  
 (23) A Can I put this away?  
 (24) Q Yes sir  
 (25) A Thank you

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- (1) Q And in that context I want to talk about this memo that  
 (2) you referred to in your testimony if I can find it the  
 (3) Staizer memo  
 (4) MR SANDERS Do you want a copy?  
 (5) MR O NEILL. I've got one that s highlighted  
 (6) BY MR O'NEILL  
 (7) Q Do you have Exhibit Number 13 in front of you?  
 (8) A Yes I do sir  
 (9) Q I ll use Mr Sander s copy This is in evidence It is  
 (10) Exhibit Number 13 And to put it in context, this is dated in  
 (11) March of 1990 That s a correct statement, isn't it?  
 (12) A Yes sir, I m looking at it  
 (13) Q And he talks about there are safety concerns about the  
 (14) number of hours individuals have been working in the fleet  
 (15) That s the general subject of the memorandum isn't it?  
 (16) A Well, that's the introducing sentence  
 (17) Q Now when you talked about manning, you were very careful,  
 (18) when you started your testimony, to deny that fatigue had  
 (19) anything to do with the grounding?  
 (20) MR SANDERS Objection to the characterization of  
 (21) testimony  
 (22) BY MR O NEILL.  
 (23) Q Is that a fair characterization of your testimony?  
 (24) THE COURT You can answer  
 (25) THE WITNESS My position and my belief is that the

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- (1) testimony that I've heard and what I understand, that there is  
 (2) no evidence that fatigue caused this accident And you used  
 (3) the word accident and I agree with you My belief, my  
 company  
 (4) we don't believe fatigue caused this accident  
 (5) BY MR O NEILL  
 (6) Q Now this is a study by Captain Staizer, who came in here  
 (7) and testified with other Exxon people and he refers to the  
 (8) past He said these concerns arose in the 80s when manning  
 (9) reductions were occurring and additional responsibilities were  
 (10) being shifted to the fleet officers with no accounting for the  
 (11) additional time required to do these tasks Do you see that?  
 (12) A Yes I do  
 (13) Q What s he talking about?  
 (14) A I don't know what concerns arose in the '80s I wasn't  
 (15) there so I d be speculating to give you an answer I know  
 (16) about this memo I read it as you do  
 (17) Q Would it be fair to say that we have a piece of paper from  
 (18) your company which indicates that there were concerns about  
 (19) manning - there were concerns about safety concerns about  
 the  
 (20) number of hours people were working in the fleet and that  
 (21) those concerns arose in the 80s when manning reductions  
 were  
 (22) occurring?  
 (23) A That s what it says  
 (24) Q And this is a paper from SeaRiver Maritime Exxon Shipping  
 (25) Company?

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- (1) A It s a paper that was put together by a group of people and  
 (2) Captain Stalzer was part of that group  
 (3) Q Your best people on it?  
 (4) A That s my understanding  
 (5) Q In March of 1990 we had - they took a look at 94  
 (6) positions is that right?  
 (7) A That s what it says  
 (8) Q And for 74 out of those 94 positions or 78 7 percent of  
 (9) the work rule guidelines were being violated?  
 (10) A Right not laws or rules or Coast Guard regulations By  
 (11) the guidelines that Exxon Shipping Company had introduced  
 (12) guidelines yes sir, company imposed guidelines  
 (13) Q Your own internal rules were violated three-quarters of the  
 (14) time?  
 (15) A Internal guidelines  
 (16) Q Indeed most of the compliance was only on two vessels, the  
 (17) Baytown and the Galveston?  
 (18) A That s what I believe this report summarizes yes  
 (19) Q And this is almost a year - this memo is almost a year  
 (20) after the grounding of the Exxon Valdez?  
 (21) A Yeah  
 (22) Q And in this memo it says that the data indicates that the  
 (23) workload is heaviest for the senior officers in each  
 (24) department Do you see that?  
 (25) A I recall that I don t see it as I m looking at it

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- (1) Q It s the fourth bullet down  
 (2) A Yes sir, I see it now  
 (3) Q And the data was collected in January 1990 so this isn't  
 (4) old data this is data about work conditions ten months after  
 (5) the spill That s a correct statement isn t it?  
 (6) A I don t think - yeah nine ten months that s correct  
 (7) Q Do you find it alarming that your work guidelines were  
 (8) violated 75 percent of the time in excess of 75 percent of the  
 (9) time, by people on ocean-going vessels, like the Exxon Valdez  
 (10) a full ten months after the grounding of the Exxon Valdez? Do  
 (11) you find that alarming?  
 (12) A Will you allow me to answer the question my own way? This  
 (13) memo reflects management pulling together a group of senior  
 (14) officers to look at an issue We had put the second third mate  
 (15) on the Galveston and the Baytown already and that s where  
 (16) you  
 (17) see those two ships are performing best What you see, this  
 (18) basis this memorandum that came from a management request  
 (19) identified and you haven't shown the middle part of it, in  
 (20) which they announced a great number of changes that they  
 (21) suggested be done were largely accepted by management  
 (22) The  
 (23) third mate was then put on every ship in order to conform with  
 (24) our guidelines which then subsequently conformed with the  
 (25) law  
 (26) of the land  
 (27) Q So you said you put an extra mate on The memo says that  
 (28) the concerns about workload occurred - arose in the 80s about

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- (1) manning reductions were occurring Do you see that?  
 (2) A I recall that.  
 (3) Q Were those manning reductions occurring to cut costs?  
 (4) A Those manning reductions were in large part to reflect new  
 (5) modern ships that we were bringing out of the shipyards We  
 (6) had the most modern fleet in the American merchant marine  
 (7) Q And you saved money by taking a mate off?  
 (8) A The - if you have lower costs, yes, I can't dispute that.  
 (9) But, Mr O'Neill this is an excellent memo When you do  
 (10) something and you see how it s working then you go on  
 (11) Q It was not impossible to put a fourth mate on these vessels  
 (12) prior to March 23rd of 1989 was it?  
 (13) A Impossible is that your word?  
 (14) Q That s correct?  
 (15) A Many ships don t have them today but it's not impossible  
 (16) to put them on  
 (17) Q And indeed it wasn t impossible to put a fourth mate  
 (18) working on these vessels in 1989 when these concerns were  
 (19) exposed in the 80s, was it?  
 (20) A No, it was not impossible  
 (21) Q I want to talk for a minute if I could about  
 (22) breathalyzers This is Defendants' Exhibit 9423 which is in  
 (23) evidence which is dated March 1, 1990 It s on Exxon Shipping  
 (24) Company s stationery and it s signed by Mr Koops and it deals  
 (25) with breathalyzers Have you ever seen it before?

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- (1) A I m sure I have I just don t recall when, but I presume I  
 (2) have  
 (3) Q This memo points out that on June 1, 1989 the State of  
 (4) Alaska required that the owners and operators of tankers  
 (5) calling upon the Valdez terminal make arrangements to have a  
 (6) chemical breath test for analyzing alcohol blood concentrations  
 (7) administered to the master within one hour of the scheduled  
 (8) departure  
 (9) That was a requirement that was imposed by the State of  
 (10) Alaska isn't that right?  
 (11) A Yes it is  
 (12) Q And this memo telling people about it is being sent out  
 (13) almost nine months before it occurred isn't it?  
 (14) A It s a circular letter I m not sure what point you're  
 (15) making other than we conformed with the law the day it became  
 (16) effective  
 (17) Q You conformed with the law?  
 (18) A Absolutely  
 (19) Q Because we all try to conform with the law?  
 (20) A This is America.  
 (21) Q Captain Deppe s assignment to - I couldn't help but notice  
 (22) that Captain Deppe s assignment to the Valdez terminal and  
 (23) essentially the elimination of Alamar occurred at about the  
 (24) same time as the date was set for this trial?  
 (25) A It was?

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- (1) Q Are you aware of that?  
 (2) A No I m not  
 (3) Q And in any event, it was four-and-a half years post  
 (4) grounding, wasn't it?  
 (5) A It was done in 1993 yes sir, and for you information as  
 (6) we continued to progress We have now added a parallel  
 (7) position to Mr Deppe down in Puget Sound because we are  
 (8) evolving we're learning and we're changing and we only made  
 (9) that change within the last ten days As we learn we make  
 (10) changes, try and improve our performance  
 (11) Q I want to go over some of these changes that you talked  
 (12) about that have been made  
 (13) A Okay  
 (14) Q With regard to - you re aware of the six hour rule?  
 (15) A With regard to the mates, yes, I am  
 (16) Q And the changes with regard to keeping records putting  
 (17) additional mates on monitoring time records with regard to the  
 (18) mates, are made in effect to comply - among other reasons,  
 (19) they are made in recent to comply with 8104-A?  
 (20) A They are made to comply with the regulations of the United  
 (21) States Coast Guard  
 (22) Q And the Congress because the six hour rule is a statute  
 (23) passed by the Congress?  
 (24) A Sure  
 (25) Q And the six hour rule is not new it was passed first in

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- (1) A The ice policy has continued to evolve as more information  
 (2) is available to enhance safety, and, yes sir It changed in  
 (3) 1989 and 1984 But those are company policies Mr O'Neill  
 (4) not Coast Guard regulations  
 (5) Q Now with regard to leaving the traffic separation  
 (6) scheme -  
 (7) A Leaving the traffic separation scheme  
 (8) Q You talked about how you no longer authorize anybody to  
 (9) leave the traffic separation scheme?  
 (10) A Unless it's an emergency  
 (11) Q Are you aware -  
 (12) A And you only leave it with the Coast Guard's approval  
 (13) Q Are you aware of the fact that in standard maritime text  
 (14) dated as early as 1984 they give the advice to mariners never  
 (15) to leave the traffic separation scheme?  
 (16) A I saw that this morning 15 minutes before that but  
 (17) general guidelines under IMO, and the Prince William Sound  
 (18) system is part of IMO is that you should adhere to the traffic  
 (19) separation scheme that's why they are there But you also  
 (20) have the oversight regulatory body, namely, the Coast Guard,  
 (21) that responds to the circumstances at the moment and that's  
 (22) why our policy is never leave the traffic separation scheme  
 (23) the lanes or the system without the full approval of the U S  
 (24) Coast Guard  
 (25) Q And we could have had a policy of generally staying in the

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- (1) 1913 Are you aware of that?  
 (2) A Yeah I read that someplace, very interesting  
 (3) Q So it has been a requirement to comply with six on and six  
 (4) off for almost 80 years 81 years?  
 (5) A So it would seem  
 (6) Q And indeed in OPA '90 when the Congress took a look at the  
 (7) issues with regard to tanker safety, they went ahead and they  
 (8) amended it and they added even more requirements didn't  
 (9) they,  
 (10) with regard to the number of hours you could work?  
 (11) A Yeah Work hours yes  
 (12) Q And so that indeed now nobody can work more than 36  
 (13) hours  
 (14) of duty in any 72-hour period?  
 (15) A That's part of the rules  
 (16) Q And that was a subject that Congress addressed in OPA '90  
 (17) in part as a result of this oil spill?  
 (18) A It's part of OPA '90 yes  
 (19) Q And with regard to the ice policy the State of Alaska has  
 (20) imposed a series of requirements on ice policy?  
 (21) A The State of Alaska?  
 (22) Q Are you aware of that that certain Alaska statutes and the  
 (23) Alaska administrative code caused the promulgation of Prince  
 (24) William Sound prevention and contingency plan force of law?  
 (25) A Okay  
 (26) Q And that sets out requirements with regard to ice policy in  
 (27) Prince William Sound and that was done after this disaster?

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- (1) traffic separation schemes in place prior to March 23rd 1989  
 (2) couldn't we, not impossible?  
 (3) A I think our policy always was to stay within the scheme and  
 (4) not leave without the Coast Guard knowing it or approving it  
 (5) Q And with regard to ice policies ice policies Exxon was  
 (6) aware in the early 1980s about the calving off of Columbia  
 (7) Glacier and the dangers that those growlers presented  
 (8) Have you ever seen an issue of underway in which Jarossi  
 (9) talks about that?  
 (10) A Yeah I think that is another good example where the  
 (11) industry was working with the State and with the Coast Guard,  
 (12) looking at the problem, and if you look at the reports that  
 (13) came out of those in the 1983/ 84 time frame, the conclusion  
 (14) by the Coast Guard and the experts that were brought in was  
 (15) that at that time the policies being followed would ensure safe  
 (16) navigation  
 (17) And one of the very important people that agree with that  
 (18) are the pilots The Prince William Sound pilots agreed with  
 (19) that and they wrote in the memo that they did so  
 (20) Q So in 1983 it was a good idea to steam at 12 knots at night  
 (21) among ice but in 1994 it's a bad idea to steam at 12 knots at  
 (22) night among ice?  
 (23) MR SANDERS Objection Your Honor mischaracterizes  
 (24) the testimony and it's argumentative  
 (25) MR O NEILL I think that's a fair question

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- (1) THE COURT I think it s argumentative the way you put  
 (2) it I think you can ask the same question a little differently  
 (3) and accomplish your purpose  
 (4) BY MR O NEILL.  
 (5) Q Are you aware that prior to 1989 post rehabilitation  
 (6) testing was commonly done in industry before 1989?  
 (7) A I have looked at some documents that document some  
 studies  
 (8) were done post 89 but I was not involved with them nor do I  
 (9) know all the background to those memos  
 (10) Q Mr Carr testified in the trial transcript at page 1692  
 (11) that it was not an uncommon occurrence for Exxon mates to  
 (12) violate 8104 prespill Were you here for that testimony?  
 (13) A I don't deny what you re reading I just don't recall  
 (14) Q Have you investigated that, called Mr Carr in and talked  
 (15) to him about it?  
 (16) A I have not no  
 (17) Q Are you aware that Congress passed OPA 90, Alaska  
 amended  
 (18) its state statutes are you aware as a result of the Valdez oil  
 (19) spill all of the west coastal states amended their laws to  
 (20) provide for oil spill statutory provisions California Oregon  
 (21) and Washington?  
 (22) A And Virginia and others There has been - as you probably  
 (23) well know, one of the important parts of OPA 90 was it no  
 (24) longer gave federal preemption in the area of marine and many  
 (25) states have taken it upon themselves to change the law, and oil

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- (1) spill response is there  
 (2) Q You said, as you well know as a result of OPA 90 -  
 (3) A As part of OPA  
 (4) Q There is no federal preemption -  
 (5) A With regard to marine  
 (6) Q And I didn t ask that question but you said that and I  
 (7) want to follow up on that Federal preemption means if there  
 (8) is a federal statute there can t be state statutes?  
 (9) A That s my understanding  
 (10) Q You brought the subject up and I want to follow it  
 (11) through And OPA 90 says in layman s terms we can have  
 (12) federal statutes and state statutes isn t that right?  
 (13) A Yes sir  
 (14) Q And your company Exxon Corporation took the position that  
 (15) it didn't want there to be federal preemption didn't it?  
 (16) A I don t recall whether we did or not and I just can't  
 (17) answer that I just don t know  
 (18) MR O NEILL Could we take a break three minutes  
 (19) early so I could reorganize? I think it would take me three  
 (20) minutes to find where the heck I am  
 (21) THE COURT Let s take our first recess at this  
 (22) point We ll be in recess for 15 minutes  
 (23) (Jury out at 9 57)  
 (24) (Recess from 9 57 to 10 15)  
 (25) (Jury in at 10 15)

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- (1) THE CLERK. All rise  
 (2) BY MR O NEILL.  
 (3) Q Over the break I had the opportunity to send somebody back  
 (4) to the office and let s clear up this apology slash open  
 (5) letter slash advertisement and who raised the advertisement  
 (6) first  
 (7) Now, you were here when he testified and you can see in the  
 (8) middle of the page that it was the chairman who originally  
 (9) described it as an ad Do you see that?  
 (10) A I see at line number three it was a newspaper ad  
 (11) Q As I recall -  
 (12) A Is that what you're referring to?  
 (13) Q I am And he goes on to say that he doesn't recall  
 (14) participating in the drafting and he goes on to say on line  
 (15) 14th well, I recall not really thinking that it was necessary  
 (16) to have such an advertisement. Do you see that?  
 (17) A Yes I do  
 (18) Q And that s the chairman of the board, the then chairman of  
 (19) the board of your company talking about the apology in the  
 (20) newspaper?  
 (21) A That s my understanding yes  
 (22) Q And that apology or ad it was published in the Washington  
 (23) Post Washington D C , are you aware of that and the Wall  
 (24) Street Journal?  
 (25) A I didn t read the Washington Post, but if you tell me it

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- (1) was published there, I ll believe that.  
 (2) Q And the Wall Street Journal, the New York Times, the Dallas  
 (3) newspapers Rocky Mountain News all over the United States  
 (4) Are you aware of that?  
 (5) A I don t know what you mean all over the United States It  
 (6) was published in several newspapers I don't know which ones  
 (7) it was or not I can't help you  
 (8) Q Now you went back to Mr Cornett s testimony at the same  
 (9) time and he describes him as the public relations manager for  
 (10) Exxon Company USA Do you see that?  
 (11) A I see what you have up on the screen  
 (12) Q Are you aware that he is the public relations manager for  
 (13) Exxon Company USA?  
 (14) A I m not aware of what time frame this statement was made  
 (15) Was it made this year?  
 (16) Q I think it was made in 1990 or 991  
 (17) A Well, public relations and public affairs are two slightly  
 (18) different things In our nomenclature there is a public  
 (19) affairs department and I don t know - I'm not so sure what  
 (20) he s talking about.  
 (21) Q Do you know going from public affairs to public relations  
 (22) manager if it was a promotion for Mr Cornett?  
 (23) A No  
 (24) Q I m just about done, believe it or not, and while I may  
 (25) take a lot of time sometimes when I say I m almost done, I m



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- (1) almost done But would it be fair to say that when you spill  
 (2) oil whether you're reckless or not you have an obligation to  
 (3) clean it up?  
 (4) A Within the context of describing a particular circumstance  
 (5) and the law -  
 (6) MR SANDERS Can we inquire as to what is being shown  
 (7) the witness?  
 (8) MR O NEILL It s the Trans Alaska Pipeline liability  
 (9) statute and then I'm going to show him the Alaska statute both  
 (10) which were in effect at the time of the spill I ll ask your  
 (11) general understanding -  
 (12) THE WITNESS Just a second I m familiar with what  
 (13) you re reading, but what are you asking me?  
 (14) BY MR O NEILL.  
 (15) Q When you spilled oil in 1989 off of Bligh Reef into Prince  
 (16) William Sound, specifically, you're legally obligated to clean  
 (17) up the spill?  
 (18) A There are laws - I'm not a lawyer, I'm a marine man I'm  
 (19) an engineer, and I have a couple legal advisors to help me  
 (20) There are laws of the land to which you have to responded and  
 (21) where your thumb is points it out quite clearly I m not a  
 (22) lawyer  
 (23) Q You don't know, so as the president of SeaRiver Maritime  
 (24) five years after the Exxon Valdez spill you don't know whether  
 (25) your company was obligated to clean up that spill on March

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- (1) 23rd 1989? You don't know?  
 (2) A What I know is what we did and I understand it took place  
 (3) on the laws, et cetera, but I'm not a lawyer  
 (4) Q Have you ever looked at the Alaska statute that was in  
 (5) effect with regard to the requirements to clean up a spill?  
 (6) A Back in 89?  
 (7) Q Yeah  
 (8) A I don't think I have  
 (9) Q Would it surprise you to know that a person causing or  
 (10) permitting the discharge of oil shall immediately contain and  
 (11) clean up the discharge of oil?  
 (12) A I think you're showing us a statute so I can read it as you  
 (13) can  
 (14) Q That s the statute, that is the statute in effect in 1989  
 (15) Does that statute surprise you?  
 (16) A I don't think it does, no, sir  
 (17) Q It doesn't because - would you agree with the concept that  
 (18) one of the things we learn in kindergarten whether we re at  
 (19) fault or not, when we make a mess we clean up the mess?  
 (20) MR SANDERS I object to that The statute he has  
 (21) just shown has an exclusion in it that has to do with fault,  
 (22) like for example, act of God, so he's kind of  
 (23) mischaracterizing the question to the witness  
 (24) THE COURT I ll sustain that objection  
 (25) BY MR O'NEILL.

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- (1) Q Subject to certain narrow exclusions like acts of God,  
 (2) would it be fair to say that one of the things we learned in  
 (3) kindergarten is that whether you re at fault or not when you  
 (4) make a mess the first thing you do is clean up the mess? Did  
 (5) you learn that at any point?  
 (6) A Well the nuns taught me that  
 (7) Q Yeah the nuns taught me that too in the cafeteria  
 (8) A I was kept after school  
 (9) Q Yeah they wrapped your knuckles with those rulers They  
 (10) did then and you couldn't do that now But Catholic  
 schoolboys  
 (11) at least have bodies to hit, don't they?  
 (12) MR O NEILL. I have no more questions sir, thank  
 (13) you  
 (14) THE WITNESS Do I leave this here or would you like  
 (15) me to bring this down to you?  
 (16) MR SANDERS Hold tight Mr Elmer I have a couple  
 (17) questions  
 (18) REDIRECT EXAMINATION OF GUSTAS ELMER  
 (19) BY MR SANDERS  
 (20) Q Mr Elmer, I guess you probably noticed Mr O Neill is more  
 (21) interested in the questions put to you than the answers you  
 (22) give, so I want to ask you a couple questions that he didn't  
 (23) ask you, one of them was about Captain Mihajlovic  
 (24) Did you in fact take it upon yourself to look into the  
 (25) circumstances of that one time after the oil spill in which

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- (1) Captain Mihajlovic left the bridge while his ship was in Prince  
 (2) William Sound?  
 (3) A Yes I did  
 (4) Q What were the circumstances under which that captain did  
 (5) that that one time?  
 (6) A The - he left the bridge at the transit of the Narrows  
 (7) What happened was that a couple days after the oil spill, I  
 (8) don't have the exact date his ship was at the dock in Valdez  
 (9) and discharging its ballast in preparation for going out and  
 (10) participating in the lightering of the Valdez, to help get the  
 (11) million barrels off  
 (12) He got a call from the Coast Guard saying terminate your  
 (13) discharge, hurry up, leave the dock and get out there, we need  
 (14) you right away As he was reaching Entrance Island, which is  
 (15) the beginning of the Narrows the captain was told by the Coast  
 (16) Guard woops we really don't need you now we won't need  
 you  
 (17) for about 12 hours or so but we want you to go out and steam  
 (18) around in the vicinity so we can call you  
 (19) Now, here we have a man who has got a ship that wasn't  
 (20) fully deballasted it wasn't trimmed like he wanted it. They  
 (21) were asking him to be out there among the environment that  
 was  
 (22) going on we had oil in the water we had a lot of boats, a lot  
 (23) of boom there was still ice because - excuse me - in that  
 (24) area and they were asking him to do what we call donuts  
 (25) just - he considered it to be an extremely unsafe act to be

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- (1) asked to do it  
 (2) Q Did he go below?  
 (3) A He was very upset and went below to have a very private  
 (4) discussion with the Coast Guard officer who was asking him to  
 (5) do that and to make sure that that request could be  
 (6) overridden and it was. And he went straight out and lightered  
 (7) and came in in order to make sure that it was not unsafe  
 (8) Q And those are the circumstances under which Captain  
 (9) Mihajlovic went below after the grounding the one time?  
 (10) A Yes Mr Sanders that's correct  
 (11) Q Now, I suppose that you're not a lawyer and you don't know  
 (12) about that - the first statute that Mr O'Neill showed to you  
 (13) I guess you didn't realize that was a statute that was enacted  
 (14) after the spill?  
 (15) A No, I didn't.  
 (16) Q And I guess you don't know for sure but you mentioned  
 (17) limitations of liability -  
 (18) MR O NEILL I'm going to object to that That was  
 (19) the TAPAA statute that was in effect at the time of the spill,  
 (20) that's the statute I showed him That's a very misleading  
 (21) question That's 1133 C which we talked about incessantly  
 (22) THE COURT Let's back up a second get it out and  
 (23) let's find out who is right and who is wrong about it  
 (24) MR SANDERS He's right on the effective date  
 (25) THE COURT All right What you had was the

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- (1) Pipeline -  
 (2) MR SANDERS '72 version  
 (3) MR O NEILL Version that was passed in 1972 by the  
 (4) Congress  
 (5) MR SANDERS I stand corrected thank you  
 (6) BY MR SANDERS  
 (7) Q Now, in that law concerning liability is there a  
 (8) limitation of liability on the cleanup?  
 (9) A I understand there is yes  
 (10) Q And is that limitation of liability \$14 million?  
 (11) A Under the TAPAA law yes, I understand that's the  
 (12) limitation  
 (13) Q Now he asked you a couple questions about the Koops  
 memo,  
 (14) or the memo from Mr Larossi to Dwight Koops in September of  
 (15) 1989 and that memo for the jury, listed four or five or six  
 (16) things that Mr Larossi wanted some action on that hadn't been  
 (17) done  
 (18) Were other things other changes other studies being done  
 (19) during that period of time?  
 (20) A Yes, they were  
 (21) Q Including in the areas in which those questions were asked?  
 (22) A That's correct  
 (23) Q Now, the second thing was with respect to the policy about  
 (24) leaving Valdez at night with ice in the water?  
 (25) A Yes

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- (1) Q In the summer of 1989 - or let's say between the time of  
 (2) the grounding and the end of August or August the 28th 1989  
 (3) did the Coast Guard have a rule down that affected that issue?  
 (4) A Yes it did  
 (5) Q What was that rule?  
 (6) A You couldn't leave at night.  
 (7) Q Regardless of ice or anything else?  
 (8) A There was effectively a daylight only transit rule imposed  
 (9) by the Coast Guard shortly after the accident.  
 (10) Q From the time of the accident until late August, there was  
 (11) an awful lot going on in Prince William Sound with the clean up  
 (12) effort and it was daylight only?  
 (13) A That's correct  
 (14) Q And that policy ended in, what August 28th?  
 (15) A It was towards the end of the summer  
 (16) Q Then between August 28th and September the - what was it  
 (17) the 6th is the time frame that there was any delay between  
 (18) the end of the daylight only and the promulgation of the ice  
 (19) policy correct?  
 (20) A That's correct yes sir  
 (21) Q Now you mentioned a question or two about the six hour  
 (22) rule The six hour rule, as enacted back in 1913 applies only  
 (23) to one mate on the ship, doesn't it?  
 (24) A It applies to the ones taking the watch  
 (25) Q Right. The mate on watch at the time of departure from the

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- (1) dock -  
 (2) A Right  
 (3) Q - Is under the six hour rule?  
 (4) A That's correct  
 (5) Q Now, your work hour regulations that you put in before OPA  
 (6) 90 that applied to everybody, didn't it?  
 (7) A That's correct  
 (8) Q And then when OPA 90 came along OPA 90's work hour  
 rules  
 (9) applied to everybody and not those just with regard the six  
 (10) hour rule?  
 (11) A That's correct.  
 (12) Q You were asked several questions by Mr O'Neill about  
 (13) adding a third mate and that makes your ships while at sea  
 (14) four mate ships, correct?  
 (15) A That's correct, yes  
 (16) Q And of course in port then they become essentially  
 (17) five mate ships?  
 (18) A Yes  
 (19) Q Are you familiar with what the rest of the industry is  
 (20) doing today in for example the Pacific Ocean Gulf of Alaska  
 (21) Prince William Sound what is the standard in the industry  
 (22) today as to the number of mates on a vessel?  
 (23) A The standard for the West Coast is a mixture Some of the  
 (24) companies have three mates some of the companies have four  
 (25) mates but to my knowledge no company has four mates and the

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- (1) loading or discharge mate effectively making five-mate ships
- (2) when we re in port.
- (3) MR SANDERS Thank you That s all I have You may
- (4) come down
- (5) MR O NEILL May I approach Your Honor Wait for
- (6) just a second You re probably done
- (7) (At side bar off the Record)
- (8) MR O NEILL. You're done sir
- (9) MS STEWART Your Honor, defendants call Admiral
- (10) Ciancaglino by deposition testimony,
- (11) DIRECT EXAMINATION OF DAVID E CIANCAGLINI (Video)
- (12) BY VIDEO EXAMINER
- (13) Q Would you state your full name for the record
- (14) A My name is David E Ciancaglino
- (15) Q For the record why don't you spell that
- (16) A C-I A N-C-A G L-I-N-I
- (17) Q And what is your current position?
- (18) A My current position is the chief of the office of command
- (19) control and communications for the United States Coast Guard
- (20) I'm a rear admiral in the United States Coast Guard
- (21) Q You became the federal on-scene coordinator in what
- (22) October 1st?
- (23) A 30 September
- (24) Q 30 September?
- (25) A O'89

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- (1) Q Did you have a group of technical advisors on your staff to
- (2) advise you?
- (3) A Yes I did but the - my scientific advisor was NOAA
- (4) National Oceanographic Atmospheric Administration, but we
- (5) had
- (6) teams already in place from representatives of different
- (7) federal and state organizations there who would provide
- (8) counsel
- (9) to the federal on scene coordinator Those were established
- (10) and in place when I got there for the August stint and the
- (11) following year I changed it.
- (12) Q Returning to the winter program in Exhibit 45240 you gave
- (13) your approval of the Exxon winter program?
- (14) A Yes
- (15) Q And you set out some conditions for your approval in
- (16) paragraphs A, B and C?
- (17) A Yes
- (18) Q And Exxon indicated its willingness to abide by those
- (19) conditions, did it not?
- (20) A Yes, it did I don't know of one instance in any plan that
- (21) I submitted that Exxon did not comply with the provisions I
- (22) don't know of any
- (23) Q Was it your experience that Exxon consistently followed the
- (24) conditions of your approvals of these plans?
- (25) A Yes
- (26) Q Did Exxon do a good job of keeping you informed of its
- (27) progress?

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- (1) A Absolutely they did
- (2) Q Did Exxon meet the commitments it made for the 1990
- (3) clean up season?
- (4) A Yes
- (5) Q What was the status of the beaches as you began the
- (6) clean up season for 1991?
- (7) A That more cleanup was required, but to a far lesser degree
- (8) than in 1990 that we left the shorelines in good condition in
- (9) 1990 Mother Nature, the storms seas, wind conditions, snow
- (10) ice whatever had its affect on the shorelines and provided
- (11) further cleansing action And so when we came back in '91, we
- (12) had - I guess we pretty much estimated exactly what they
- (13) would
- (14) look like and so the shorelines, I felt, were in good shape in
- (15) '91, but still required a full season cleanup, but with a
- (16) reduced crew than what we had in 1990
- (17) Does that answer your question?
- (18) Q Yes When you came to the end of the 1991 season, what
- (19) was
- (20) your kind of assessment of what kind of clean-up season you
- (21) had?
- (22) A Again, highly successful We accomplished what we set out
- (23) to do I had hoped that we would be finished but we knew we
- (24) would have to come back in '92, but we knew also it would be a
- (25) short time because we knew the winter action would work on
- (26) what
- (27) we accomplished or the condition of the shorelines that we left
- (28) them in in '91 And so we knew that what we would do in '92

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- (1) would be very minimal and it was
- (2) Q Did you expect that the winter storms from 1991/1992 would
- (3) further reduce whatever oil remained on the beaches?
- (4) A Yes
- (5) Q And was that expectation borne out by surveys conducted in
- (6) spring of '92?
- (7) A Yes We did another survey in the spring of '92
- (8) Q Now, did there come a time in the summer of 1992 when you
- (9) concluded that the clean-up activities should be terminated?
- (10) A Yes
- (11) Q How did you make that judgment?
- (12) A I made the judgment on the fact that we had reached a
- (13) point as I said previously that any further cleanup on any of
- (14) the shorelines would cause more harm than good We have
- (15) met
- (16) the federal standards and, therefore, from a federal point of
- (17) view that s all I can address The shorelines were deemed to
- (18) be cleaned
- (19) In addition to that we had worked closely with the State
- (20) of Alaska to find out if they had any shorelines that they felt
- (21) did not meet the standard There were a few We went and
- (22) worked them off and so when we came off the shoreline, we
- (23) were
- (24) all in agreement that the cleanup was complete both from a
- (25) federal and a state perspective
- (26) MS STEWART That concludes defendants' direct on
- (27) Admiral Ciancaglino

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(1) MS WAGNER Your Honor we have a short cross  
 (2) CROSS EXAMINATION OF DAVID E CIANCAGLINI (Video)  
 (3) BY VIDEO EXAMINER  
 (4) Q Admiral once you took over as FOSC did you take any steps  
 (5) to give yourself broader base of information about spills and  
 (6) spill response?  
 (7) A Absolutely  
 (8) Q What did you do?  
 (9) A I and - on one trip I and NOAA went to Nova Scotia to  
 (10) look at the motor vessel Arrow I believe and the motor vessel  
 (11) arrow case - to answer to your question yes We went to  
 (12) observe the motor vessel Arrow in Nova Scotia and then I and  
 (13) the State of Alaska rep, Steve Provant, and NOAA rep Dave  
 (14) Kennedy he went with me on the motor vessel arrow in Nova  
 (15) Scotia and we worked out of Brest France and took a look at  
 (16) the Amoco Cadiz spill and the three of us went to the state of  
 (17) Washington to look at the - I think it was a barge Nestucca, I  
 (18) think that's how you pronounce it I don't remember that which  
 (19) spilled some oil on the shorelines there  
 (20) And each of those places were specifically picked because  
 (21) they were on different types of shorelines occurring at certain  
 (22) times Like the motor vessel Arrow case, if I remember  
 (23) correctly occurred either ten or 20 years in the past and we  
 (24) wanted to go you up there and take a look at the shoreline  
 (25) conditions in certain areas the high energy and low energy

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(1) areas  
 (2) The Amoco Cadiz spill occurred ten or 12 years before in  
 (3) '78 I think, off the northern coast of France and we wanted  
 (4) to go take a look at what the shorelines looked like now  
 (5) I wanted to talk to the on scene coordinator of that  
 (6) particular spill in France to find out what he did why he did  
 (7) it  
 (8) Q Did your view of the three previous spill sites give you  
 (9) any insights into what you could expect Mother Nature to do in  
 (10) Alaska?  
 (11) A Yes, it did  
 (12) Q And what insights did you gain?  
 (13) A In my mind I felt that primarily based on all the three  
 (14) spills, get as much oil as you possibly can up off the  
 (15) shorelines to give Mother Nature an opportunity to go ahead  
 (16) and  
 (17) heal the shorelines as best she can That by and large in the  
 (18) high energy area where a lot of wave action there that  
 (19) normally, in time the oil will be removed You'll find very  
 (20) little little oil, if any in the years to come depending on  
 (21) the type of shorelines However the area where you really  
 (22) want to concentrate your efforts if you can, is in the low  
 (23) energy area because if you don't that oil in my mind will  
 (24) still be there it won't move it won't move A perfect  
 (25) example of that is the motor vessel Arrow case In an area  
 where they forgot to - they didn't know the oil existed in

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(1) there and so they terminated the cleanup and someone later  
 on  
 (2) years down the road found it and it's used as a scientific  
 (3) area right now to study the effects of oil And also when we  
 (4) went into France we went into the marsh areas where you have  
 (5) the rise and fall of tides and you could stick your arm - go  
 (6) down arm deep in the marsh area and still pull up the oil from  
 (7) in down there  
 (8) MS WAGNER That concludes the cross, Your Honor  
 (9) MR NEAL. May it please the Court, we call Mr Lee  
 (10) Raymond as our final witness That's a gift to the jury  
 (11) THE COURT I'm sure they appreciate it.  
 (12) THE CLERK. Raise your right hand, sir  
 (13) (The Witness Is Sworn)  
 (14) THE CLERK. For the record, sir please state your  
 (15) full name your address and spell your last name please  
 (16) THE WITNESS The first name is Lee, L-E-E, the middle  
 (17) initial R, last name Raymond, R-A-Y M-O N-D Dallas Texas  
 (18) THE CLERK. Thank you  
 (19) DIRECT EXAMINATION OF LEE R RAYMOND  
 (20) BY MR NEAL  
 (21) Q Mr Raymond, we'll start out the way we do with everybody  
 (22) What is your occupation?  
 (23) A Chairman of the board and chief executive officer of Exxon  
 (24) Corporation  
 (25) Q Before we get to the actual spill and the what happened

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(1) after the spill I think I would like for you to tell the jury  
 (2) something about yourself We've talked a lot about Exxon  
 (3) Corporation here without going into detail into what it is, so  
 (4) I'd like for you to tell the jury something about Exxon  
 (5) Corporation what it is, what its essential business is, what  
 (6) it consists of and how its managed  
 (7) Now you are the CEO of a major international company and  
 (8) let's start with you beginning with your date and place of  
 (9) birth  
 (10) A Well Mr Neal, I hope this doesn't get too boring it kind  
 (11) of bores me I was born August 13th 1938 in a small town in  
 (12) South Dakota That doesn't say much because all towns in  
 South  
 (13) Dakota are pretty small But it's Watertown, which is 200  
 (14) miles due west of Minneapolis just across the border  
 (15) My father was a railroad engineer and he drove the train  
 (16) between Watertown and Aberdeen for as long as I can  
 remember  
 (17) My mother was born and raised there and still lives there in a  
 (18) nursing home My elementary and secondary education was all  
 in  
 (19) a public high school there and I graduated in 1958  
 (20) Somehow and I can't remember exactly how, but when I came  
 (21) along to being a junior in high school, I decided I wanted to  
 (22) study chemical engineering and I asked the chemistry teacher  
 (23) where is the best place to go in the country to study chemical  
 (24) engineering  
 (25) And as is typical of all high school teachers, it took a

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(1) couple weeks for him to finally respond but he came back with  
 (2) a lot of information and said the best place to go was the  
 (3) University of Wisconsin Madison, and I guess that's still true  
 (4) today  
 (5) I applied there, was fortunate enough to get in attended  
 (6) there and graduated with a bachelor's degree with an  
 (7) engineering degree in 1960 At that time I hadn't really  
 (8) decided whether I wanted to go on and teach or go into  
 (9) industrial research but in either event I really needed to go  
 (10) on to graduate school And that was also the time in the  
 (11) mid- 60s with the advent of the really first high speed  
 (12) computers, which of course are pretty slow by today's  
 (13) standards, but they were pretty fast back in 1958 and 1960  
 (14) And my interest was more in a mathematical approach to  
 (15) engineering as opposed to an experimental type of thing and I  
 (16) asked some of the faculty at Wisconsin where is the best place  
 (17) to go to study the kind of chemical engineering I wanted to  
 (18) study And the answer was very quick it didn't take as long  
 (19) as it did in high school, and the professor said well, the  
 (20) best place to go then, and is still true today was the  
 (21) University of Minnesota in Minneapolis  
 (22) So I went there and enrolled in September of 1960 and  
 (23) graduated in October of 1963 with a doctor's degree in 1963  
 (24) it was a lot easier to get jobs than it is today and there  
 (25) were a number of - I could have done a number of things I

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(1) asked my major professor, if you want to go into industrial  
 (2) research where should you go work and his answer was very  
 (3) quick His answers were always pretty quick but he was  
 (4) particularly quick He said well, you should go to work for  
 (5) what is now Exxon  
 (6) And the reason - he gave three reasons as I recall He  
 (7) said one they have a strong research organization and a  
 (8) strong commitment to research so if you really want to have a  
 (9) research career, you want to make sure you go someplace  
 (10) where  
 (11) you have a high level of confidence they are going to do  
 (12) research for a long time, you don't want to go there for a few  
 (13) years and find out they aren't interested anymore  
 (14) Second, they have a lot of interaction with the operating  
 (15) companies so the research isn't the kind of thing you do in an  
 (16) ivory tower think tank They spend a lot of time applying the  
 (17) research and it's going to give you an opportunity to learn  
 (18) about what they really do as opposed to just research  
 (19) And the other reason and I will never forget this because  
 (20) they have the best management.  
 (21) So I went to work, I was hired as an entry level research  
 (22) engineer in Tulsa October I'll remember the date it's easy  
 (23) to remember, it's Halloween and I've never really wanted to  
 (24) pursue if there was any significance to that but that's when I  
 (25) started  
 (26) Q That was Halloween in 1960 and 63?

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(1) A Correct.  
 (2) Q So you've been with Exxon Corporation by whatever name  
 (3) for what 3 -  
 (4) A Coming onto 31 years  
 (5) Q 31 years And you're approximately what, 59 years old?  
 (6) A 58 Thank you Mr Neal  
 (7) MR O NEILL Jim is going to get fired by -  
 (8) MR NEAL I'm getting so old I want everybody to get  
 (9) a little older with me  
 (10) BY MR NEAL.  
 (11) Q I'm going to do this by - I don't want to spend a long  
 (12) time as we did when we started this trial and we learned  
 (13) better, I don't want to ask you all the jobs you've had with  
 (14) Exxon I think that would take some time  
 (15) A It would  
 (16) Q Where do we start?  
 (17) A Let me see if I can't hit the segments instead of jobs I  
 (18) started with the research company in Tulsa and shortly  
 (19) thereafter went to the research company in Houston, and about a  
 (20) year-and-a-half later I went overseas I went to Venezuela, to  
 (21) work with our operating company in Venezuela, and at the end  
 (22) of  
 (23) 1960 I went back to Houston now what is Exxon USA and I  
 (24) spent  
 (25) a couple years there And in hindsight that's the last real  
 (26) stint with the domestic company  
 (27) In 1970 I went to the New York with the International

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(1) supply and transportation area on the international side of  
 (2) the business and most of the time was spent in Europe, the Far  
 (3) East and the Middle East.  
 (4) Then in 1975 I was sent to the island of Aruba, and that's  
 (5) kind of like a small town in South Dakota probably nobody  
 (6) knows where it is, but it's just off the coast of Venezuela  
 (7) Exxon at the time had one of the largest oil refineries in the  
 (8) world in Aruba and I was sent there to run that refinery and I  
 (9) was there I guess about four years  
 (10) So as the 70s closed I come back to the U S I spent  
 (11) about a year-and-a-half in Seattle and then was back to New  
 (12) York, all on the international side of the business  
 (13) In 1983 I went to Coral Gables, Florida, or Miami, where I  
 (14) was in charge of Exxon's Latin American oil and gas  
 (15) operations That is everything south of the U S /Mexican  
 (16) border down to the Straits of Magellan and I was there about a  
 (17) year  
 (18) And then in 1984 I was elected to the board of directors  
 (19) and a senior vice-president of the corporation In 1987 became  
 (20) president In 1990 we moved the headquarters from New York  
 (21) to  
 (22) Dallas And my wife pointed out to me that that's the 14th  
 (23) time we had moved She was making a speech that she hoped  
 (24) that  
 (25) was the last time And became chairman in early 1993  
 (26) Q You had been president of Exxon Corporation for about a  
 (27) year maybe slightly over a year, at the time of the spill is

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- (1) that correct?  
 (2) A It was about two years  
 (3) Q Two years I m sorry  
 (4) A And three or four months  
 (5) Q Now we ve talked in this case about Exxon Corporation  
 (6) Without further talking about it as if it s something different  
 (7) from people what is Exxon Corporation?  
 (8) A Well a lot of people ask that question, and I think there  
 (9) is a lot of misconception but I think the simplest description  
 (10) of Exxon is like a lot of other things, it s a business We re  
 (11) in the international oil and gas business so we re a large  
 (12) business but in fact we re a business  
 (13) As a corporation our owners are the shareholders If you  
 (14) own your own business in essence you re kind of a  
 (15) shareholder In our case a corporation a lot of individuals  
 (16) are but they are the owners they are the shareholders We  
 (17) have a lot of employees of course like any other business  
 (18) does  
 (19) We have a lot of customers and the most obvious customer  
 (20) is the one that goes to a service station and buys on average  
 (21) about eight gallons of gasoline when he goes to a service  
 (22) station We have a lot of other customers Airlines buy  
 (23) airplane fuel shipping companies buy bunker fuel railroads  
 (24) buy diesel fuel So we have a wide range of customers, and we  
 (25) buy a lot of things To run our refineries we have to buy

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- (1) catalysts to keep our lawyers going we have to buy a lot of  
 (2) erasers that type of thing  
 (3) And the last thing I would point out wherever we operate  
 (4) around the world in 80 countries we operate as the guest of  
 (5) the government and we work with the governments wherever  
 (6) we  
 (7) operate In the United States, the state and local  
 (8) governments In other countries there is a different  
 (9) governmental setup but we have to work with the governments  
 (10) no  
 (11) matter where we are because they are an interested party in  
 (12) this business that we try and run  
 (13) Q So the corporation basically is a group of - includes a  
 (14) group of stockholders which are owners and a large number  
 (15) of  
 (16) employees?  
 (17) A That s correct.  
 (18) Q And you're an employee yourself, is that correct?  
 (19) A Yes sir  
 (20) Q Now how many employees are there at Exxon as we speak?  
 (21) A Somewhere between 90 and 91 000 currently  
 (22) Q Now that's the active employees is that correct?  
 (23) A That s correct  
 (24) Q How many retired employees do you have who draw  
 (25) pensions  
 (26) from Exxon or annuities, if you call them that and their  
 (27) wives?  
 (28) A I think Mr Neal that s a hard question to answer all  
 (29) around the world because different countries deal with people

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- (1) who have retired in different ways, but in the United States we  
 (2) have 33 000 active employees and, interestingly enough it s  
 (3) just by coincidence we have about 33 000 annuitants and  
 (4) surviving spouses of Exxon  
 (5) Q How many stockholders does Exxon have? And I  
 (6) understand  
 (7) that this again is somewhat difficult because the way you might  
 (8) hold stock but break it down any way you want to How many  
 (9) stockholders?  
 (10) A It s pretty clear to us as individuals there are about a  
 (11) million individual shareholders of Exxon and that would be  
 (12) people who either directly own the stock or through a  
 (13) brokerage  
 (14) account own the stock Difficult to estimate but several  
 (15) million, almost no doubt, own Exxon indirectly, that is, if you  
 (16) own a share in a mutual fund that owns Exxon Indirectly you're  
 (17) an owner of Exxon shares And there are a lot of mutual funds  
 (18) that own Exxon shares, retired funds that own Exxon shares  
 (19) pension funds, that type of thing  
 (20) So I would say millions fall into that category  
 (21) Q So there are about a million that you could go out and find  
 (22) out whether or not they are, or several million that you could  
 (23) say there is a pension fund they hold or a retirement fund or  
 (24) something like that?  
 (25) A That s correct  
 (26) Q And it would be stockholders indirectly?  
 (27) A Yes sir

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- (1) Q I think we ve talked about - I think that pretty much  
 (2) describes then, who the stockholders are And a company like  
 (3) Exxon, there has been some discussion here with somebody, I  
 (4) think it was a Mr Rhodes about dividends and dividends have  
 (5) gradually increased or something like that.  
 (6) What do your stockholders, a company like Exxon, expect?  
 (7) A Well I think by almost any measure, we're an unusual  
 (8) company in that these million direct owners of Exxon shares  
 (9) that I ve mentioned, for a company our size we have, I think,  
 (10) probably the largest percentage of shareholders who are  
 (11) individuals A lot of companies a lot of their share is owned  
 (12) by pension funds or mutual funds or arbitrage funds or that  
 (13) type of thing  
 (14) Exxon is unusual because 60 percent of our shares are owned  
 (15) by, I ll call it people as opposed to other institutions, and  
 (16) the reason that that s true - we keep trying to understand why  
 (17) people want to buy Exxon stock and why they want to own it.  
 (18) The reason that s true is over the years Exxon has always  
 (19) paid out a good share of its income as dividends So we found  
 (20) that most of the shareholders are those people who are  
 (21) interested in some stable secure source of income as opposed  
 (22) to other stocks that you can buy for just capital  
 (23) appreciation These people are interested in the dividend  
 (24) check and that stable dividend is very important to them  
 (25) Now, I think it s fair to say also, Mr Neal, that the

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- (1) shareholders also hope that we'll run the company in a way,  
 (2) both short and long range that the share price will gradually  
 (3) appreciate, I think all of us would like that but the driving  
 (4) force if you look at all the work we've done to analyze Exxon  
 (5) stock most closely most directly with the rise in dividend  
 (6) payments  
 (7) Q By the way there was something here about how much the  
 (8) market capitalization was and buying and selling stock is it  
 (9) fair to say that if Joe Jones sells a share of Exxon stock to  
 (10) Billy Smith and he makes a profit, that doesn't go to Exxon?  
 (11) A No Billy Smith might get the next year's annual profit  
 (12) and Joe Jones might not but it doesn't have any impact at all  
 (13) on us  
 (14) Q You're the chairman of the board and what you've said the  
 (15) chief executive officer, or sometimes referred to as simply the  
 (16) CEO of Exxon, just briefly thumbnail for us what the duties of  
 (17) a CEO is of a company like Exxon  
 (18) A Well you're right you could make a long speech on it and  
 (19) I don't want to do that and you don't want to hear it  
 (20) Q You're right.  
 (21) A The point being the CEO really has the responsibility for  
 (22) what I call the safe, reliable, profitable operation of the  
 (23) company on behalf of the shareholders, the employees and all  
 (24) other people who have a stake in the company and there are a  
 (25) lot of people who do have a stake in the company

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- (1) Q Do you have a boss?  
 (2) A Yes I do it's the board of directors  
 (3) Q How do the board of directors fit in here?  
 (4) A Well all the authority I have - another way to say it  
 (5) all the responsibility I have is delegated to me by the board  
 (6) of directors Without that delegation of the board of  
 (7) directors I wouldn't have any authority or responsibility at  
 (8) all  
 (9) Q They actually, under the law, are in charge of the company?  
 (10) A That's correct  
 (11) Q Now, could you give us just again briefly some of the - by  
 (12) category who some of the directors are, the directors of Exxon  
 (13) Corporation?  
 (14) A Well, we currently have 12 directors of Exxon Corporation  
 (15) three are employees and nine are non-employees The  
 (16) employees  
 (17) that you might expect tend to be - have backgrounds probably  
 (18) dissimilar to mine, but will have years of service that come to  
 (19) mind and they come from various of the activities that the  
 (20) corporation has whether it's financial or chemicals or some  
 (21) other activity  
 (22) The outside directors are a group of people that really  
 (23) don't have anything to do with the oil business and know  
 (24) relatively little about it when they first become directors of  
 (25) Exxon, and that's by design, because the intent is to try and  
 have people who have a background in managing complex  
 problems

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- (1) large organizations but can bring a different perspective to  
 (2) our group than we would because we have spent most of our  
 (3) careers in Exxon  
 (4) So consequently we usually have two or three people on the  
 (5) board of directors that come out of the academic community  
 and  
 (6) we will have two or three that come from - for example we  
 (7) currently have the chairman of Pepsi Cola we have the  
 chairman  
 (8) of JCPenney They are in businesses that are widely different  
 (9) than ours, but they are large and complex businesses such that  
 (10) they serve as a sounding board to us in terms of the kinds of  
 (11) things we think about and worry about and often say, have -  
 (12) have you guys thought about this And I think they also in  
 (13) turn get something from being with us because of the kinds of  
 (14) things we do, they learn some things  
 (15) Now, these people are selected by kind of a search and  
 (16) that is either other people you know or we use search firms to  
 (17) identify people who might have this interest. They are  
 (18) effectively selected by the nominating committee The  
 (19) nominating committee is made up of directors all of them  
 (20) non-employee  
 (21) I'm not on it no other employee director is on the  
 (22) nominating committee and of course are elected at the  
 (23) shareholder meeting by the shareholders And in the last ten  
 (24) years I don't think any individual director has gotten a vote  
 (25) below 98 or 99 percent of all the shareholders at the election

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- (1) time  
 (2) Q Now, we've said something about what Exxon is and who  
 (3) composes Exxon Let's move to sort of the organization and  
 (4) management, and when I first started talking to you about this  
 (5) I happened to look at an organization chart and it occurred to  
 (6) me that neither the jury nor I needs to get that complicated,  
 (7) so I have prepared an organization chart, it's in evidence now  
 (8) and I'd like for you to look at that  
 (9) It's probably the simplest organization chart in the  
 (10) history of the company Do we have that put up?  
 (11) Can everyone see that now?  
 (12) A I will tell you that is the short form of the organization  
 (13) chart.  
 (14) Q You've talked about the board of directors at the time is  
 (15) that correct?  
 (16) A That's correct  
 (17) Q And then the chief executive officer and chairman is you  
 (18) Mr Sitter is president?  
 (19) A Right  
 (20) Q And then the senior vice-presidents are Mr Harrison -  
 (21) that's not the Mr Harrison who testified here?  
 (22) A No  
 (23) Q Is there any relation?  
 (24) A No It's Mel Harrison It's been a confusion for 30  
 (25) years

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- (1) Q And Mr Hess and Mr Wilhelm is that correct?  
 (2) A That s correct  
 (3) Q Now below that you have Exxon Chemical Company and in  
 (4) that box you have Mr Sitter down there is Mr Sitter the  
 (5) president of Exxon Chemical Company?  
 (6) A No he s not Mr Neal Well can I back up and just make  
 (7) a comment with what these boxes are?  
 (8) Q Sure you can do that  
 (9) A The three boxes that are shown here Exxon Chemical  
 (10) Company Exxon Company International and Exxon Company  
 USA are  
 (11) the three largest operating units of our company and they are  
 (12) also the units that produce nearly all the profit that the  
 (13) company has  
 (14) It s a little box that s shown off to the right there is  
 (15) others, and I don t mean to slight the people that are over  
 (16) there but for example that would be - our research  
 (17) companies would be over there, our exploration company and a  
 (18) lot of the staff support for example the law department, the  
 (19) human resources, they would be over there for support, and the  
 (20) senior management group, but the fundamental operation are the  
 (21) three that are shown here  
 (22) Q Let s take the one that s not the others - they basically  
 (23) support the three?  
 (24) A That s correct  
 (25) Q Let s take Exxon Company USA That s sometimes referred  
 to

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- (1) as USA?  
 (2) A That s correct  
 (3) Q What is the business of Exxon Company USA?  
 (4) A Well Exxon Company USA is responsible for all the oil and  
 (5) gas business in the United States Exxon Company  
 International  
 (6) is responsible for all the oil and gas business outside of the  
 (7) United States and Canada Over in this little box are others  
 (8) over here Imperial of Canada things like that  
 (9) Q Now, is it fair to say Mr Raymond maybe we said this  
 (10) but the essential business of Exxon Corporation here is the  
 (11) exploration - getting the oil and gas out of the ground,  
 (12) transporting it refining it and selling it?  
 (13) A That s correct We are I think Mr Neal what would be  
 (14) called in business school, a classic vertically integrated  
 (15) company We have a lot of people who look for oil and gas  
 (16) When we find it we extract it develop it transport it and  
 (17) in the case of the North Slope both by pipeline and tanker  
 (18) it goes to refineries, it s cut up into finished production,  
 (19) and those are transported usually by pipeline tanker or tank  
 (20) truck for distribution all over the United States  
 (21) Q Now, you said the operating companies were these  
 companies  
 (22) in here Do the people up here you and the others up there  
 (23) have no jobs?  
 (24) A Well I think sometimes the people in those boxes may think  
 (25) that but no I think that comes back Mr Neal to a

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- (1) philosophy of how we run the company We ve had a  
 philosophy  
 (2) for a long time that the people who should be responsible for  
 (3) the day to-day operation are the people who are closest to that  
 (4) day to-day operation So consequently we have a lot of  
 (5) delegation of authority in our organization but as all of us  
 (6) know with delegation of authority comes the accountability that  
 (7) comes back to that.  
 (8) And in terms of the progress that the company - the  
 (9) operating companies are making on all the plans and all the  
 (10) decisions and the policies that we try and implement - for  
 (11) example in the chemical company Mr Sitter is responsible for  
 (12) the day-to-day involvement with the chemical company  
 business  
 (13) as to how they are doing from the corporation s perspective, as  
 (14) is Mr Wilhelm is responsible for the day-to-day base in the  
 (15) United States and Exxon USA as to how they are doing  
 (16) We keep track of - as I say, that s the accountability  
 (17) part of the equation  
 (18) Q What about now, does that mean, then, that, Mr Raymond,  
 (19) you, are responsible for Exxon Company International?  
 (20) A When I came to the board in 1984, I basically - basically  
 (21) at that time was given the responsibility for the international  
 (22) side of the business I ve had that all the time I ve been  
 (23) there about ten years  
 (24) In addition, Mr Neal, right after the Valdez, I was given  
 (25) the additional responsibility to deal with all the issues that

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- (1) flowed from the grounding of the Exxon Valdez  
 (2) Q So at the time of the grounding you were not here in this  
 (3) chain, but you were in this chain?  
 (4) A That s correct.  
 (5) Q Now after the grounding, you ve taken over - have you  
 (6) kept this?  
 (7) A I still have that.  
 (8) Q But you ve taken over dealing with the spill and aftermath?  
 (9) A That s correct.  
 (10) Q Now is it fair to say then, to move on, that the function  
 (11) of corporate headquarters up here or at the corporate level is  
 (12) to set policy, oversee the operating companies, and how about  
 (13) development of people now?  
 (14) A Well, the headquarters function really, Mr Neal, is  
 (15) three fold The first one you mentioned is right in terms of  
 (16) developing policy and oversee the day-to-day operation, in our  
 (17) words stewarding the operations of how people are doing  
 (18) The second thing we spend a lot of time on are capital  
 (19) budgets When we invest, it s usually in projects that last  
 (20) 20 30, 40 years So if you really want to have a handle on  
 (21) what the future of the company is, you have to very carefully  
 (22) watch the kind of capital investments you make That can be  
 (23) different than some companies where their equipment lasted a  
 (24) couple years and they are turning it over very quickly  
 (25) Ours is the other stream of that spectrum We make



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- (1) long term decisions so management of the capital budgets is  
 (2) really the key from the business point of view of our company  
 (3) And thirdly and not last at all is the selection of  
 (4) people and we spend a lot of time in the corporation the  
 (5) group you see on the board there what we call the  
 management  
 (6) committee which are the five senior people there I would say  
 (7) we meet at least once a week and sometimes in a year more  
 (8) frequently than that with the focus totally being on the  
 (9) organization of people  
 (10) Q Trying to get quality people and move them up through the  
 (11) organization?  
 (12) A Well, our whole philosophy of course is we operate as I  
 (13) say in 80 countries around the world and each operating  
 (14) company has the responsibility of hiring people of that  
 (15) nationality to run our businesses in that country About 98  
 (16) percent of our employees are nationals of the countries where  
 (17) they live and work We have very few, for example, Americans  
 (18) who work overseas There are a few and they tend to be  
 (19) experts they come from the research or engineering company  
 (20) and they bring some very, very specific set of knowledge that's  
 (21) required, as opposed to just general management  
 (22) So the first place it starts is with the hiring of the  
 (23) people, and most of these generally are college graduates and  
 (24) we try, as you would expect to hire the best college graduates  
 (25) we can find, whether it's in England or Germany or Japan, or

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- (1) wherever it is We spend a lot of time trying to develop these  
 (2) people  
 (3) We have a requirement in the company that every individual,  
 (4) and I'm talking about 91 000 every individual has his or her  
 (5) performance reviewed every year And by reviewed not only  
 (6) written down on a written form but the last part of the form  
 (7) requires that the supervisor have a discussion with that  
 (8) person, and the objective of the discussion is how you can  
 (9) improve your performance And presumably from this process,  
 (10) then we start to identify people who we think can move to  
 (11) higher levels in the organization, take on more  
 (12) responsibility  
 (13) And when those people are identified we try to move them  
 (14) to different jobs in the organizations to give them a different  
 (15) exposure to different kinds of things we do and hopefully they  
 (16) will be people that move up in the company and hopefully  
 become  
 (17) senior management  
 (18) Q We have had Mr Rhodes talk about the financials of Exxon  
 (19) Corporation I'm not going to give you a lot of charts Can  
 (20) everybody see this?  
 (21) I'm not going to give you a lot of charts but I have a  
 (22) couple talking about finances This is Defense Exhibit 6347,  
 (23) and let's make sure that we understand this This is the net  
 (24) income of Exxon Corporation 1988 through 1993, is that  
 (25) correct?

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- (1) A That's correct.  
 (2) Q And when we say in millions of dollars that means - let's  
 (3) take a million - this is 5,280 000,000?  
 (4) A Right  
 (5) Q So if you wanted to get it right you put six more zeros  
 (6) out there?  
 (7) A That's correct  
 (8) Q Let's talk what this is and I'll try to do this  
 (9) hurriedly Am I correct in saying that this is the total for  
 (10) each year in the boxes here total after-tax income for the  
 (11) entire company worldwide? Is that correct?  
 (12) A That's correct, that's what's shown on the annual reports  
 (13) Q So for the year 1988 - and these are calendar years  
 (14) right?  
 (15) A Right  
 (16) Q For the calendar year 1988 Exxon worldwide made 5 million  
 (17) 260 thousand (sic) In 1989 the year of the spill it dropped  
 (18) down to 3 million 500 thousand (sic), is that correct?  
 (19) A That's correct.  
 (20) Q Now down here broken out is the U S net increase?  
 (21) A That's correct  
 (22) Q So that of the 5 million (sic) we're talking about figures  
 (23) here from all sources 5 280,000,000 worldwide only 1,444 000  
 (24) of that was made from this U S operations?  
 (25) A That's correct 1,444 000 000

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- (1) Q 1 444 000 000 And the same here in 1989, of this  
 (2) 1 122 000 000 was from all U S operations?  
 (3) A That's correct If you'll notice, Mr Neal the subtotal  
 (4) down at the bottom under petroleum and chemicals 2226 is the  
 (5) same number at the top of the chart that shows United States,  
 (6) so the only thing we had to do was allocate the interest cost  
 (7) and some accounting changes that apply to the U S operations  
 (8) to get the U S after tax income  
 (9) Q But I am correct if the jury wants to see what relatively  
 (10) small percentage of after tax income Exxon makes from the  
 (11) operation, they can look at Exhibit 6347 as compared with  
 (12) overall operations?  
 (13) A That is correct  
 (14) Q Now then I want to go to one more chart We have broken  
 (15) out all U S operations upstream, downstream We better  
 (16) define that What does that mean?  
 (17) A Upstream is exploration and production That is the  
 (18) exploration and production of crude oil and gas Downstream  
 is  
 (19) refining and marketing That is after the refineries take the  
 (20) crude oil and start to cut it into products  
 (21) Q And chemicals refers to the U S portion of the U S  
 (22) income?  
 (23) A That is correct  
 (24) Q I want to take that chart and break it down, because we  
 (25) want to talk about U S income of Exxon Corporation simply  
 from

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- (1) Its major business oil and gas operations correct?  
 (2) Now I show you here what is in evidence as Defense Exhibit  
 (3) 6346 and again in order to save time if I'm incorrect you  
 (4) let me know, but to save time let me see if I can do it  
 (5) quicker  
 (6) What we have here on this exhibit is the same down to U S  
 (7) petroleum, right?  
 (8) A Right.  
 (9) Q That's the net after tax income for the entire thing?  
 (10) A Right  
 (11) Q Now, down what we have below then shows that of the total  
 (12) income here is what the net after-tax income was for these  
 (13) years from your main operation oil and gas?  
 (14) A Right It's just taking chemicals out right  
 (15) Q That's from the time you explored until the time somebody  
 (16) pops down their money at a gasoline station?  
 (17) A That's correct  
 (18) Q So for example in 1989 the year of the spill, for all  
 (19) your U S oil and gas operations you made 470 000 000?  
 (20) A That's correct  
 (21) Q In 1992 for example you've made 85,000 000?  
 (22) A That's correct  
 (23) Q From anything you do in this country in oil and gas?  
 (24) A That's correct  
 (25) Q And in 1993 you made 1 million 238 million (sic) out of

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- (1) Q Let's take what is the total investment of Exxon  
 (2) Corporation the United States total investment in all of its  
 (3) oil and gas business in the entire country?  
 (4) A Well let me answer it this way I would describe it, the  
 (5) total amount of money we have involved in that business  
 (6) because that includes working capital and all those types of  
 (7) things is about 14-and-a half billion dollars at the end of  
 (8) 1993  
 (9) Q 14-and-a half billion dollars?  
 (10) A That's correct.  
 (11) Q Now I want to deal with you briefly in response to what Mr  
 (12) Rhodes - or Mr O'Neill brought up in relation to Mr Rhodes  
 (13) and that's about your compensation Mr Raymond, do you set  
 (14) your compensation?  
 (15) A No, sir I do not.  
 (16) Q How - step by step how is your compensation set?  
 (17) A Well the board of directors of course is organized as you  
 (18) might expect In addition to the board there are several  
 (19) committees to the board of directors one that you would expect  
 (20) to be the audit committee, when they look at the kind of audit  
 (21) controls that we have, and they basically certify the annual  
 (22) report working with Price Waterhouse  
 (23) We have another group called the board compensation  
 (24) committee and these are the people that have the  
 (25) responsibility of overlooking all the compensation policies of

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- (1) your total worldwide?  
 (2) THE COURT You're saying millions Mr Neal  
 (3) BY MR NEAL  
 (4) Q Let me say this again Of the 5,280 000,000, 1 238 000 was  
 (5) all your oil and gas business throughout the United States?  
 (6) A Correct  
 (7) Q And the same is true for the others Now this is  
 (8) 470 000,000 here and this is 85 000 000 here?  
 (9) A Correct  
 (10) Q I've straightened that out I hope  
 (11) This Mr Rhodes says that Exxon had gross revenues of  
 (12) something like 111 000 000 000 for 1993 I believe?  
 (13) A That's correct.  
 (14) Q That's every dollar coming in from anywhere in the world?  
 (15) A Right  
 (16) Q Approximately how much is profit of that each dollar that  
 (17) comes in, how much actually is profit how much is expenses  
 (18) and  
 (19) taxes?  
 (20) A About a nickel is a profit  
 (21) Q About a nickel out of every dollar?  
 (22) A That's correct  
 (23) Q Now let me go back here just a moment I want to put in one  
 (24) more figure for the jury's benefit You said your major  
 (25) business was oil and gas exploration refining selling?  
 (26) A Correct

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- (1) the corporation and have the specific duty of also making  
 (2) recommendations with regard to the compensation of the senior  
 (3) executives  
 (4) None of the people who are on the board compensation  
 (5) committee are employee directors They are all people who  
 (6) don't work for Exxon in that sense They are from other  
 (7) companies or other institutions They have their own staff  
 (8) And they do competitive salary surveys to see how everybody  
 (9) gets paid, not only in the oil industry where you look at how  
 (10) people get paid in the oil industry and how Exxon is relative  
 (11) to those other companies but they also look at the companies  
 (12) outside of the oil and gas business to see how those people are  
 (13) compensated This group makes recommendations to the  
 (14) board of  
 (15) directors  
 (16) Q The full board?  
 (17) A To the full board of directors for compensation of the  
 (18) senior people When they make that report I'm not there I  
 (19) leave the room and eventually they call me back in the room  
 (20) and give me the good or the bad news but they tell me here is  
 (21) what the compensation is I have no involvement and  
 (22) unfortunately Mr Neal, I've never had any involvement in my  
 (23) own salary  
 (24) Q As a matter of fact, you told me you never asked for a  
 (25) salary or set a salary for yourself in the entire time you've  
 (26) been with Exxon?

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- (1) A That's correct
- (2) Q Never asked for or set it?
- (3) A Right
- (4) Q Now let me ask you this Which is the largest corporation, you or Mobile?
- (5) A We re about twice the size of Mobile
- (6) Q How about Chevron?
- (6) A Well if you add Chevron Mobile and Texaco together they are the size of us
- (8) Q How about ARCO?
- (11) A ARCO is probably a tenth of the size we are
- (12) Q Now let s take your compensation and compare it with Mobile - smaller companies Mobile, Chevron ARCO Who has the greatest compensation?
- (15) A I don't know You might want to tell me You might depress me, but go ahead and tell me
- (17) Q I'm not allowed to tell you If you don't know we ll find out and present it
- (18) A The reason I say that, Mr Neal, is I'm always uncomfortable talking about compensation The facts are I think in those case, all the chief executives of those companies are paid more than I am paid and that is consistent - to make a comment that is consistent with the policy the company has had for many, many years and that is our senior executives are compensated relatively conservatively

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- (1) over the next several days after the spill?
- (2) A Well, you know I've said before and every time I come to this question I come back to the same point I was chagrined, I was horrified and to an extent devastated that it happened
- (5) I think, as I think back at that time, maybe the most telling comment would be the one my wife made to me
- (7) She's been with me on this Exxon odyssey from back in graduate school and her comment to me was that it s the first time that she had ever been embarrassed that we worked for Exxon
- (10) Q Did you make any - over the next several days, did you make any personal decisions I mean to do what you could do any personal decisions with respect to the spill and the aftermath?
- (15) A Yes, I did I think there are three One it was clear to me immediately that we had to take responsibility for the spill we were responsible Secondly, we had to do everything we could to clean it up And while I recognized that was going to be a tough tough problem if you'd ever spent any time in operations, just the sheer magnitude was overwhelming, but at the same time we had to start to look also to the question of what could we do to make sure that this type of thing wouldn't happen again
- (24) Q Did you make a decision to do whatever you could to make sure it wouldn't happen again?

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- (1) to the other people in the industry, while our middle and lower level people are the most highly compensated in the industry
- (3) Q As a matter of fact, didn't you tell me you make about a third of what the CEO of Merrill Lynch makes?
- (5) A That s correct.
- (6) Q I don't want to give the wrong impression You re not complaining about your income?
- (8) A No I m not filing a claim
- (9) Q You're putting it in context with what's going on out there?
- (11) A Exactly right
- (12) Q Now I want to go to the Exxon Valdez oil spill and we ll stay on this for the next - for the next hopefully 30 minutes, no more
- (15) Where were you when you heard of the spill?
- (16) A I was in Jacksonville Florida As I indicated Mr Neal that was a period of time when we were looking at potential locations to move our corporate headquarters out of New York and Jacksonville just happened to be one of the stops along the trail with our real estate people to look for potential sites
- (21) Q I'd like for you, for the ladies and gentlemen of the jury - now you've been president of the company for a short period of time but you ve been dealing with Exxon International not the operations here I would like for you to describe your reaction your personal thoughts and reactions

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- (1) A Absolutely
- (2) Q Now you told me - well let me go back to put this in context The spill occurred on - ten minutes after midnight. That would be March 24th, 1989 I believe you told me you were sick for the next day or two I m not saying the spill necessarily made you sick
- (7) A Well that was true too No I m one of these unfortunate people every spring I get a bad cold, I've never been able to get out of that cycle from when I was a kid and so every spring I end up kind of grounded for three or four days and the doctors don't let me fly
- (12) Q After that did you go to Anchorage - I m sorry to Alaska?
- (13) A I went to Valdez
- (14) Q When did you go to Valdez after the spill?
- (15) A About ten days after the spill I was in Valdez
- (16) Q And that was just a few days after you recovered?
- (17) A Correct
- (18) Q And how many times over 1989 the year of the spill did you visit Alaska?
- (20) A Three or four times
- (21) Q Did you insure that the company - you said one of your decisions was that the company would accept responsibility for the spill?
- (22) A Yes
- (24) Q Did you insure that?

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- (1) A Did everything I could  
 (2) Q Now let me ask you this You said your second decision was  
 (3) to do what you could do what could be done or do the best  
 you  
 (4) can to clean up the spill Is that correct?  
 (5) A That s correct  
 (6) Q What did you personally do in that regard? Now as a human  
 (7) being, take off your cap for a moment -  
 (8) A No, I understand, Mr Neal The first time I came to  
 (9) Valdez as I recall of course the first thing you want to do  
 (10) is get out and look at the shoreline look at the beaches see  
 (11) what kind of problem we had I did that a spent a lot of time  
 (12) talking with the people who were here who as you might expect  
 (13) were in very, very difficult circumstances  
 (14) And my objective in doing that was to first of all let  
 (15) them know that we were committed to cleaning up the spill and  
 (16) that whatever they concluded they had to do, they had the  
 (17) support of the senior management to get it done  
 (18) And I guess the last thing, Mr Neal, as I looked around  
 (19) and talked with all the people, your mind couldn t help but  
 (20) start to wander through the immensity of the task that was  
 (21) ahead and how to start to organize and get the resources And  
 (22) I don t mean just the money In some respects that s part it  
 (23) The more important thing is the people, the equipment, the  
 (24) technology, everything else that we had to bring in to begin  
 (25) the clean up operation

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- (1) Q Did you personally participate in clean up plans?  
 (2) A Yes I did As I commented I walked the beaches, I was  
 (3) reminded yesterday when someone waved an April 15th 1989  
 (4) clean up plan, brought back memories, because I was involved  
 in  
 (5) the preparation of those plans with Mr Harrison Mr  
 (6) Harrison, I think as he commented yesterday had those plans  
 (7) reviewed and approved here in Alaska by the state and the  
 (8) federal government, but that approval process was not only  
 (9) here, it went beyond Alaska, particularly for the Coast Guard,  
 (10) and I used to have a lot of discussions with the Coast Guard  
 (11) and their management about approval, but we ll say on the  
 other  
 (12) side of the United States I kept track of what was going on  
 (13) I would have to in all likelihood I guess Mr Neal I got  
 (14) a report from clean up operations at least once a day and  
 (15) probably more frequently than that, and as Mr Harrison  
 (16) commented there were a lot of things they needed in terms of  
 (17) equipment, people and we did everything we could to make  
 sure  
 (18) that those resources and tools were available to them  
 (19) Q Did you personally participate in that effort?  
 (20) A Oh absolutely  
 (21) Q I think I m going to - I think we ve talked about how long  
 (22) the cleanup lasted and so forth Let me ask you this Were  
 (23) you involved in any other part of the program? Let s take the  
 (24) claims program for fishermen and others Were you involved in  
 (25) that?

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- (1) A Yes The claims program was an area of, I guess  
 (2) particular interest to me I guess if you probably talk to  
 (3) some people in the company, you d find out that I from time to  
 (4) time can drive them kind of nuts but one of the reasons that  
 (5) that happens is I tend to kind of walk around and see what s  
 (6) going on  
 (7) And the first time I was ever in Valdez we were having a  
 (8) lot of discussions - it was over some strip shopping center  
 (9) and we had some offices up there and we got into a discussion  
 (10) about the claims program And I was asking how does it work  
 (11) and all that type of thing And they said, well the office is  
 (12) just downstairs  
 (13) So I kind of filed that away and the next time we took a  
 (14) coffee break, I just wandered downstairs and walked in and  
 said  
 (15) I m here to file a claim what s going to happen And I found  
 (16) out what was going to happen  
 (17) Now, as we left - as I left Alaska that time, I stopped in  
 (18) Juneau to see the governor, and we talked about a lot of things  
 (19) that had to do with the spill but on the specific issue of the  
 (20) claims program the people in Valdez had pointed out to me that  
 (21) the speed of the claims program was going to be held back  
 (22) because they really didn t have all the information they  
 (23) needed They needed to have confirmation that the fishermen  
 (24) actually had licenses and what kind of licenses they had and  
 (25) all kinds of data before they felt comfortable paying the

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- (1) claim  
 (2) And it was going to be very difficult for us to get that  
 (3) kind of information so I stopped - among the things I talked  
 (4) with the governor about, he said I have all this information,  
 (5) well we didn t have this information So I said, to the  
 (6) extent you can make that available to us, we can really get  
 (7) this going  
 (8) And his chief of staff was there Mr Pesta We had  
 (9) access, on a confidential basis, but we had access to all the  
 (10) data the State would confirm, this is the kind of license the  
 (11) person has, this is the kind of thing they do, to accelerate  
 (12) the claims program  
 (13) Now, somewhat later as I tried to chase what was going on  
 (14) in the claims area I kind of got the impression that it was  
 (15) getting bogged down and it was kind of getting bogged down  
 (16) because the lawyers were getting involved And what was  
 (17) happening - of course normally when you pay money out, you  
 (18) ask people to sign a release and some people were willing to  
 (19) sign releases, other people weren t willing to sign releases,  
 (20) and there was a lot of to-ing and fro-ing  
 (21) I said from New York forget the release, just pay the  
 (22) money get a receipt that you paid the money and some day  
 we ll  
 (23) sort all this out in court Here we are But some day we ll  
 (24) sort it out in court, because it isn t good to not pay the  
 (25) people

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- (1) Q So you paid claims without getting a release from the  
 (2) person you paid?  
 (3) A Right  
 (4) Q You just got a receipt?  
 (5) A That's correct.  
 (6) Q How much did you pay out? We'll do this in a moment but  
 (7) how much was paid out in this claims program?  
 (8) A Over 300 000 000  
 (9) Q By the way how much was spent on the cleanup?  
 (10) A About \$2.1 billion  
 (11) Q Now in addition to that did you believe that - what  
 (12) was - strike that.  
 (13) What, if anything was done to help restore Prince William  
 (14) Sound in addition to the cleanup?  
 (15) A Well there were a number of steps taken. The first one  
 (16) was, within days of the spill we gave I guess is the  
 (17) right word, we paid to the federal government \$15 million  
 (18) NRDA Natural Resources Damage Assessment, to help the  
 (19) federal  
 (20) agencies who were involved to start work on how they would  
 (21) have  
 (22) to go about restoring Prince William Sound. Of course then we  
 (23) paid in the settlement with the federal and state governments  
 (24) on the negligent misdemeanor. There was another hundred  
 (25) million for restoration and 25 million for fine that went in  
 (26) And also as part of that, which was approved here in this  
 (27) court there was \$900 000 000 paid over ten years with the

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- (1) potential of another hundred million dollars depending on  
 (2) what's going on in the year 2003 or some such thing  
 (3) Q So that, in addition to cleanup and claims, that's 15  
 (4) million, 125 million and another 9 hundred million to a  
 (5) billion?  
 (6) A That's correct  
 (7) Q Now then Mr Raymond let's go to the last thing here  
 (8) your commitment after the spill to see that it didn't happen  
 (9) again. Did you have this spill investigated?  
 (10) A Yes I did  
 (11) Q By whom?  
 (12) A By the law department  
 (13) Q Did the law department report to you on the investigation?  
 (14) A Yes they did  
 (15) Q Did the law department ever make - hand you a formal  
 (16) written investigation?  
 (17) A No they did not  
 (18) Q As the law department reported to you on the investigation  
 (19) did you pass that on or report that on to your board of  
 (20) directors?  
 (21) A Let me make a comment Mr Neal, about a decision we made  
 (22) very early on. The spill was such an important event and had  
 (23) such a high profile that of course all of our directors were  
 (24) very interested in anything they could hear about the spill  
 (25) We concluded almost immediately that what we were not going  
 (26) to

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- (1) do was to tell them we're going to now do what I would call the  
 (2) equivalent of what I would call a government investigation and  
 (3) eight months from now we'll send you some book like this that  
 (4) you can read. We took the exact opposite approach  
 (5) And I think if you will look at the agendas for the monthly  
 (6) board meetings you will see that starting I think in April  
 (7) of 1989 I was on the agenda every board meeting for probably  
 (8) two-and-a-half years to talk about the Valdez spill and that  
 (9) was anything about the Valdez spill  
 (10) And the objective of that was to tell the board every month  
 (11) everything we knew about what was going on so that they knew  
 (12) as  
 (13) we knew what was going on, and that - what that did basically  
 (14) is it eliminated in my mind, and I think in their mind, the  
 (15) need ever for this document that would have in essence put  
 (16) off discussing what was going on for some time  
 (17) Q On that Mr O'Neill took your deposition examined you in  
 (18) your deposition and at pages 6 and 7 you said what you've  
 (19) said  
 (20) here. You reported to the board about the spill as information  
 (21) became available?  
 (22) A That's correct  
 (23) Q But at page 60 you said you did not make a specific report  
 (24) to the board on the cause of the accident. What did you mean  
 (25) by that?  
 (26) A What I meant by that is I made a continuous report to the  
 (27) board. I didn't wait for a notebook to be prepared at the

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- (1) end. I told them at the end of every month what we knew  
 (2) Q Now going to changes or possible changes made you were  
 (3) here when Mr Gus Elmer testified today about the many  
 (4) changes  
 (5) made some required by law but most on the shipping  
 (6) company's  
 (7) initiative?  
 (8) A That's correct  
 (9) Q Including directions about not leaving the bridge in Prince  
 (10) William Sound about adding mates and so forth and about the  
 (11) Ex bridge?  
 (12) A That's correct  
 (13) Q And many others  
 (14) I want to know - you're aware, I don't want to take the  
 (15) time of the court and the jury to repeat those that's the  
 (16) shipping company part.  
 (17) Did you make changes in the corporate level?  
 (18) A Yes we did Mr Neal. I think my point of view would be  
 (19) that it would not have been the proper thing to do to have  
 (20) assumed necessarily that this was just something that should  
 (21) be  
 (22) looked at in the shipping company. We have a lot of operations  
 (23) all around the world. A lot of them have a - have high risk  
 (24) involved with them in the sense of chemical plants and  
 (25) refineries that type of thing and our whole task many times  
 (26) is how to effectively manage that risk  
 (27) So consequently I started a program for all of our  
 (28) affiliates everywhere in the world and all their activities to

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- (1) re-apprise risk and set up a department in the corporation that  
 (2) reported to me to help the people in how to carry out that  
 (3) evaluation and monitor their progress  
 (4) We also took a hard look as you might expect at our drug  
 (5) and alcohol policy We changed that We also instituted  
 (6) what s called a hotline or an anonymous post office box We  
 (7) have always had in the corporation an open door policy, that if  
 (8) something is going on you don't think is right doesn't conform  
 (9) with policy or it s not a safe type of thing to do that you  
 (10) should go talk to your supervisor But all of us know that  
 (11) people still may not be totally comfortable doing that  
 (12) Q We ll talk about that in just a minute So you assessed  
 (13) the risk all the way around the world created a new  
 (14) organization to make changes and reduce those risks, you  
 (15) created an organization to monitor that?  
 (16) A That s correct  
 (17) Q You changed the alcohol policy corporate-wide?  
 (18) A Right  
 (19) Q Now - and you instituted a hotline and a post office box  
 (20) and we ll talk about that Did you do anything with respect to  
 (21) something called the marine spill - what s the name of it,  
 (22) marine spill?  
 (23) A Response corporation? No, I think, Mr Neal, the point I  
 (24) would make is we did a couple more things We weren t  
 (25) satisfied, at least I wasn t satisfied, that we just look

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- (1) internally, that there were also some things I thought we could  
 (2) do to look externally And there was two of significance one  
 (3) was the marine spill response corporation, which was an oil  
 (4) spill response the group The oil spill companies got together  
 (5) after the spill and concluded that there should be more  
 (6) equipment specially designed equipment at various places  
 (7) around the United States  
 (8) And the total cost of the marine spill response corporation  
 (9) is about a billion dollars and our share which I think is the  
 (10) largest runs about 80 or 90 million dollars for that.  
 (11) Q You contributed that?  
 (12) A Yes  
 (13) Q That s not a money making operation?  
 (14) A No, sir that s not a money making operation  
 (15) Q You weren t contributing that to make an investment?  
 (16) A No sir Then, as you recall on oil spill plans, there is  
 (17) also first prevention and then if the accident happens there is  
 (18) response The work in the MSRC was a response type of  
 (19) activity and I was also concerned about whether there was  
 (20) anything we could do on prevention  
 (21) And I ll try and make a long story short but as I  
 (22) indicated in the beginning I went to undergraduate school at  
 (23) the University of Wisconsin and the fellow that is currently  
 (24) the dean there is a good friend of mine and he s the world  
 (25) class expert on robotics It s not as nasty as it sounds If

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- (1) you've seen pictures of new cars being assembled these days  
 (2) the arms come down and they weld parts of cars  
 (3) Well that's the kind of things he's doing and he s an  
 (4) expert on how these things work And after the Valdez, when I  
 (5) would see him we would get into a long discussion on what we  
 (6) call man-machine interface how do you manage all these new  
 (7) kinds of technology to hit do we give people the right kind of  
 (8) training design these things so they could effectively utilize  
 (9) them  
 (10) And after a couple years I said, look, if you re  
 (11) interested in this and you can do some research, we ll seed the  
 (12) money we ll give you a couple million dollars over the next  
 (13) four or five years and I ll put most of it upfront so you got  
 (14) some money to get started If you can get some other people to  
 (15) also get in this and support it because I don't want it to be  
 (16) just an Exxon kind of activity And I said I think I can work  
 (17) that  
 (18) And it s interesting now the Institute of College and  
 (19) Engineering at Wisconsin that's doing work and the others, the  
 (20) National aeronautic and Space Administration, the Army is  
 (21) involved because the people operating tanks the Air Force for  
 (22) the planes they fly at the Air Force, the Navy for ships and  
 (23) particularly aircraft carriers, General Motors is involved  
 (24) because of the assembly of cars, so it s turned out to be -  
 (25) now whether or not we re going to get any research out of it

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- (1) that has an application, I can't tell you but I m hopeful that  
 (2) there will be what I call fundamental changes that all of us  
 (3) can make  
 (4) Q And you and Exxon started that?  
 (5) A Yes sir  
 (6) Q Now we talked about the risk around the world and changes  
 (7) and so forth I want to talk to you a minute about the  
 (8) corporate alcohol policy The jury heard that Exxon, prior to  
 (9) the spill had an alcohol policy that says alcoholism, by -  
 (10) whatever, alcohol abuse alcoholism whatever, I don't want to  
 (11) get into that discussion again whatever it is is an illness  
 (12) and is a treatable illness and it provides full step forward  
 (13) and seek - and successfully seek treatment, you will be in  
 (14) effect - will not be jeopardized in your job, et cetera?  
 (15) A That s correct  
 (16) Q The interpretation at the shipping company was you d be  
 (17) entitled to go back to your job?  
 (18) A That s correct  
 (19) Q Is that still the policy with Exxon today?  
 (20) A No, part of it is not And that is of course -  
 (21) Q Well I remember the part about the return  
 (22) A We still think the right thing is do, and we try as best as  
 (23) we can to encourage people to who either have a drug or  
 (24) substance abuse problem, to come forth for treatment, and we  
 (25) assure them that they will have a job

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- (1) Q Have a job?  
 (2) A Have a job But the other things we've done Mr Neal is  
 (3) we have looked at all of the jobs in the organization and I  
 (4) literally mean all of the jobs in the corporation and we have  
 (5) identified those jobs or positions may be a better way to say  
 (6) it where we think there is a substantial safety risk or  
 (7) environmental risk and the individual may be unsupervised -  
 (8) Q Or unsupervisable?  
 (9) A Or unsupervisable Examples would be a tank truck driver  
 (10) that delivers gasoline to service stations My biggest  
 (11) nightmare is to have one of those run into a school bus you  
 (12) think about that and that's always been a tough one for me A  
 (13) tanker captain we have a lot of positions in refineries and  
 (14) loading docks and chemical plants where they operate 24  
 (15) hours a  
 (16) day, where they will be alone on the night shift and we're  
 (17) concerned about the risk that's associated with that  
 (18) We have identified about - for example, in Exxon USA  
 (19) about 13 percent of all the positions in Exxon USA, that's not  
 (20) the number of employees that's a different thing, I'm talking  
 (21) about positions now 13 percent of the positions are what are  
 (22) called designated safety positions Anybody who has been  
 (23) through either drug or alcohol rehabilitation cannot hold one  
 (24) of those positions  
 (25) If someone goes through drug and rehabilitation and they  
 (26) come out we assure them they have a job in the company We

- (1) Q But you will certainly get him a job in order to get him to  
 (2) come forward a job with the same pay?  
 (3) A That's correct  
 (4) Q But if he gets into that job he's subject to random  
 (5) testing?  
 (6) A Yes  
 (7) Q Monitor, do you have a detailed monitoring plan?  
 (8) A Yes, sir  
 (9) Q And with respect to safety sensitive jobs even though  
 (10) nobody has ever indicated any problem you have a random  
 (11) testing there?  
 (12) A That's correct  
 (13) Q Now as a matter of fact Mr Raymond, is this random  
 (14) testing policy applied to the low and middle level or does it  
 (15) apply to you, sir?  
 (16) A It does apply to me, as a matter of fact, and that in our  
 (17) human resources department is unfortunately known as the  
 (18) Raymond Rule I wish it didn't have that title but in  
 (19) designing this policy and if I can just make a comment Mr  
 (20) Neal designing a worldwide drug and alcohol policy is not an  
 (21) easy task It's not an easy task just for this country alone  
 (22) but to try and do it where it will apply to 80 countries and 80  
 (23) different cultures is a tough, tough problem  
 (24) For example let me just give you one example When we  
 (25) told our operating affiliates we were thinking about this

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- (1) make sure they do not lose any pay that is, they have the same  
 (2) pay level as when they went in for rehabilitation but they  
 (3) cannot hold those positions anymore  
 (4) Q In other words there was a Dr McMasters who testified  
 (5) here that a recovering alcoholic could fly a 747 again but a  
 (6) recovering alcoholic now can never drive another Exxon tanker  
 (7) or be a master of an Exxon tanker?  
 (8) A Hopefully a recovered alcoholic but even if he's recovered  
 (9) he cannot drive a tank that's correct  
 (10) Q There was some discussion do you think that eliminates all  
 (11) risk of that problem in our society?  
 (12) A No sir, it doesn't and that's one of the great concerns I  
 (13) would have We have gone to the other side of the issue, so to  
 (14) speak We want to encourage people to come forward, we want  
 (15) them to have treatment, we want them to be rehabilitated but I  
 (16) think society has been moving in this area very rapidly in the  
 (17) last several years as to how to most effectively deal with  
 (18) those risks  
 (19) Now we also in the policy provided for testing after  
 (20) rehabilitation random testing and random testing of people  
 (21) who are in these safety sensitive jobs  
 (22) Q Let me see if I understand that now if a person declares  
 (23) he's got an alcohol problem and goes through rehabilitation,  
 (24) there are certain jobs he cannot hold?  
 (25) A That is correct

- (1) change in policy, we asked them what kinds of problems are  
 (2) you  
 (3) likely to encounter, and Esso Malaysia came back and said this  
 (4) is going to be a serious problem for us because under  
 (5) Malaysian law if you have somebody take a drug test and they  
 (6) fail, they are subject to the death penalty  
 (7) Q Wouldn't be any lawyers around?  
 (8) A That kind of makes us a little bit uncomfortable That's  
 (9) not really our role in life but the Malaysian management to  
 (10) their credit went to the government and said look, here is  
 (11) what our objective is we don't want to have in some of these  
 (12) safety sensitive positions in Esso Malaysia people with drug  
 (13) and alcohol problems And the government said, yes, we  
 (14) agree  
 (15) absolutely right  
 (16) Now, the question is how are we going to be able to  
 (17) accomplish that and not run afoul of the law and they found a  
 (18) very clever way through testing and that type of thing through  
 (19) the medical department if it's done at the request of the  
 (20) individual, you don't have to report it So, in essence in  
 (21) order to hold that job the individual has to say, I want to  
 (22) have random testing and under those circumstances, if there  
 (23) were a problem, we don't get ourselves into the southeast Asia  
 (24) difficulty here  
 (25) My point is it's not easy, and the point where we are Mr  
 (26) Neal, when I commented on the Raymond Rule is I felt very,  
 (27) very strongly, this couldn't be a policy just for designated

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- (1) positions because the designated positions tended to be  
 (2) operating level jobs and therefore tended to be at lower levels  
 (3) in the organization  
 (4) Q This random testing you mean?  
 (5) A Right And I just didn't want people in the organization  
 (6) at the operating level to say, well those guys - all they are  
 (7) trying to do is put the heat on us and they are just going to  
 (8) usurp themselves So in addition to these designated safety  
 (9) positions we have another category called specified executive  
 (10) positions and about the 300 senior level managers in Exxon  
 (11) around the world are also subject to random testing  
 (12) And my view is, just as we can't tolerate that in operating  
 (13) level jobs, from the standpoint of policy administration and  
 (14) position of the corporation with the public we can't tolerate  
 (15) to have those kinds of people in our senior management jobs  
 (16) either  
 (17) Q And now, Mr Raymond there was some testimony here by  
 Mr  
 (18) Larossi and Mr Graves that when the question was do we  
 (19) return - Captain Hazelwood has successfully completed  
 (20) rehabilitation voluntarily, do we return him to his job as  
 (21) master of a tanker, and Mr Larossi concluded that it was a  
 (22) weighing of risks, that if we return him, there is always a  
 (23) possibility that some problem would reoccur but, on the other  
 (24) hand if we don't return him we're not going to get unknown  
 (25) people who will come in and volunteer?

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- (1) A That's exactly right  
 (2) Q Now how do you handle that now a master of a tanker out  
 (3) there who has a problem that nobody has ever discovered, now  
 (4) he's not going to turn himself in because he's no longer going  
 (5) to be able to go back to a tanker?  
 (6) A You bring up a good point And I'll use the word  
 (7) conundrum that we have - let me raise a point In our drug  
 (8) and alcohol policy in 1989 people who identified as having a  
 (9) problem go through rehabilitation they cannot return to those  
 (10) jobs That policy in this country alone has been challenged  
 (11) 105 times We have 20 actions by the federal government or  
 (12) agencies of the federal government where they basically have  
 (13) told us you have to put that person back in the job he came  
 (14) from  
 (15) Q Even though you're to give him a job and keep him in the  
 (16) company with the same pay?  
 (17) A That's correct  
 (18) Q Now let's talk just a moment about the - talk just a  
 (19) moment about the hotline and the post office What do you  
 (20) mean  
 (21) there?  
 (22) A Well, you know I think all of us recognize that we want  
 (23) people, if they think there is something wrong - for example  
 (24) I guess in this case people said that perhaps Hazelwood was  
 (25) drinking when he shouldn't have been and there was a question  
 of how those people should report if in fact they had seen

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- (1) that type of thing  
 (2) Q You're not saying you know that happened you're just  
 (3) saying that's what some evidence is?  
 (4) A Right And people are often reluctant to identify  
 (5) themselves if they say I saw so-and-so type of thing  
 (6) Q Particularly if the guy you're reporting on is your  
 (7) superior?  
 (8) A Exactly And although we've tried to encourage people over  
 (9) the years to find other avenues to do that I'm not totally  
 (10) confident we were ever really successful in that, so what we  
 (11) have done is set up a hotline a number you can call You  
 (12) leave a message you don't have to identify yourself  
 (13) Now, as you might expect some of the calls get kind of  
 (14) flaky but whenever you have a telephone, you get flaky calls  
 (15) but some are serious And similarly, if you don't feel you  
 (16) want to call on the phone there is an anonymous post office  
 (17) box number You can write a note send it to that post office  
 (18) box number Somebody goes there everyday and looks at it.  
 And  
 (19) there is a tape and the lawyers everyday play the tape to see  
 (20) what has come in  
 (21) Q Has that been promulgated that if you see somebody  
 (22) violating company policy or you see something that's wrong,  
 (23) here is how you can report it if you don't want to give your  
 (24) name?  
 (25) A We hope we have

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- (1) Q Well it's in your books that you send out?  
 (2) A That's correct.  
 (3) Q And this was done following the spill in the concern that  
 (4) maybe there was some concern about reporting fears if that be  
 (5) a fact?  
 (6) A Right  
 (7) Q Now then one other thing -  
 (8) MR NEAL I don't have too long I can't do it by  
 (9) 12  
 (10) THE COURT Couple minutes?  
 (11) MR NEAL I don't think so  
 (12) THE COURT Let's take our break We will be in  
 (13) recess for 15 minutes  
 (14) (Jury out at 12 00)  
 (15) (Recess from 12 00 to 12 20)  
 (16) (Jury in at 12 20)  
 (17) THE CLERK All rise  
 (18) THE COURT You may proceed  
 (19) MR NEAL Your Honor, I need to introduce my  
 (20) primitive organization chart that I offer into evidence,  
 (21) DX6317 A  
 (22) (Exhibit DX6317 A offered)  
 (23) MR O NEILL. No objection  
 (24) THE COURT It is admitted  
 (25) (Exhibit DX6317-A received)



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(1) BY MR NEAL.  
 (2) Q Mr Raymond did you discipline or was anyone discharged  
 as  
 (3) a result of the spill apart from Captain Hazelwood?  
 (4) A No they were not  
 (5) Q Was there any discipline for others apart from the spill?  
 (6) A No If I may make a comment I think we felt that with  
 (7) all the other problems at the time of the spill that the last  
 (8) thing that we wanted to do was undertake what I would call a  
 (9) witch hunt We didn't think, and I still wouldn't believe -  
 (10) over a long period of time I've kind of come to these  
 (11) conclusions When you have an accident or a problem  
 perhaps  
 (12) the simplest thing to do is try and identify one or two people  
 (13) and say well, that takes care of that and that's probably  
 (14) exactly the wrong thing to do  
 (15) That's not to say that people who violate company policies  
 (16) and the policies are clear shouldn't be discharged, and of  
 (17) course the policy says that in fact people when they violate  
 (18) company policy, are subject to disciplinary action up through  
 (19) termination But at the same time, I think it's important to  
 (20) try and look beyond one or two people and to see if there is  
 (21) more to the issue than what I'll call just a single individual  
 (22) not doing what they ought to do  
 (23) The question of whether or not all the training was right  
 (24) whether or not we gave them all the equipment that we could  
 (25) all kinds of issues come up That doesn't mean to say that at

(1) they would move on?  
 (2) A And I appreciate not mentioning the names but I think  
 (3) that's true  
 (4) Q One other thing, and I think we can wrap up quickly here,  
 (5) there is something here called a dispute resolution agreement  
 (6) that's been referred to two or three times Plaintiffs Exhibit  
 (7) 828 and it says that between Hazelwood and the Exxon  
 (8) defendants he reserves the right to testify or not testify,  
 (9) but in any event neither party will use what is the testimony  
 (10) or deposition against each other when they get to this dispute  
 (11) resolution  
 (12) Do you know how this clause or this part came about?  
 (13) A Yes, I do This was discussed with me just before the  
 (14) potential - as I recall Captain Hazelwood's deposition and  
 (15) it was represented to me by our attorneys after having talked  
 (16) with Captain Hazelwood's attorneys that unless he could get  
 (17) this type of an agreement, he would not testify And lawyers  
 (18) being what they are, they said, well, if he wants that, we've  
 (19) got to have it the other way  
 (20) So that's why you have that form in the agreement, but the  
 (21) substantive point here, I think, is we decided that it was  
 (22) important for the jury to be able, for whatever reason, to hear  
 (23) from Captain Hazelwood and it was made clear to me that if we  
 (24) did not have this kind of agreement, Captain Hazelwood would  
 (25) not testify

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(1) the end you couldn't conclude that the only thing you should do  
 (2) is discipline a couple people But I'm just reluctant to  
 (3) automatically assume at the outset that is the solution to the  
 (4) problem, because it probably isn't  
 (5) Q Did some people in your mind, leave the company because  
 of  
 (6) the spill?  
 (7) A Well I think they did Mr Neal I think there were a lot  
 (8) of people in the company who one way or another were  
 impacted  
 (9) by the spill I think as they looked back on what had  
 (10) happened they were either going to have a tough time dealing  
 (11) with what happened - I think there were a lot of people in the  
 (12) shipping company, for example, that felt that they had let  
 (13) Exxon down and they carried the burden of having done that  
 and  
 (14) I think a number of them - and I suppose all of us in our  
 (15) lives at one time or another have had to face these kinds of  
 (16) things where we say, well I guess we got to kind of get on  
 (17) with it, we've got to find something else and we've got to move  
 (18) beyond this somehow And I think there were probably a  
 number  
 (19) of people that concluded that it was in their best interest to  
 (20) move on and some did  
 (21) Q And do you know of two people I don't want to mention  
 (22) names and I think Mr O'Neill and I have agreed it doesn't do  
 (23) any good to mention names here, but do you believe there are  
 (24) two people who thought that they had lost such - the top  
 (25) management had lost such confidence in them that they  
 decided

(1) Q And you agreed?  
 (2) A And I agreed  
 (3) Q Thank you sir Was there any intent in that to as has  
 (4) been suggested here that there is - somehow that this  
 (5) agreement was meant to falsify testimony or allow perjured  
 (6) testimony to come in?  
 (7) A Not to my knowledge and if that had been the case, we  
 (8) would have never agreed  
 (9) Q Now then there is also mention that Mr Rawl mentioned the  
 (10) word newspaper ad or advertising ad and the advertisement  
 Do  
 (11) you know why that was - the apology was put in as an ad an  
 (12) advertising ad?  
 (13) A Well, it will come to a great astonishment to everybody in  
 (14) the room but newspapers usually aren't running things for  
 (15) free And the case was if you want to get the apology  
 (16) published was you had to do it as advertising space So he  
 (17) was remembering correctly To run the ad we had to buy  
 (18) advertising space to run the letter, we had to buy advertising  
 (19) space Had we been unwilling to do that there would have  
 (20) been no way to publish the ad and have everyone read it  
 (21) Q Now let's get down to the cost of the spill I have  
 (22) Defense Exhibit 6399-A which is in evidence, and let's run  
 (23) over this quickly Okay? The total actual and potential costs  
 (24) of the Exxon Valdez spill, now he's talking about cost to  
 (25) Exxon right? And we have them all here lined up, less tax

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- (1) reduction and adjustment?  
 (2) A Correct  
 (3) Q So the fixed and incurred expenditures are approximately  
 (4) two-and-a half billion dollars, is that correct?  
 (5) A After tax that s correct  
 (6) Q After tax?  
 (7) A Right.  
 (8) Q And then what s out there waiting to be will total that  
 (9) plus what s out there waiting to be will be up to 2 8 billion  
 (10) dollars after tax is that correct?  
 (11) A That's correct  
 (12) Q Now, you have in here -- there has been some suggestion  
 (13) that there has been no penalty or no punishment for negligence  
 (14) here no punishment for conduct Were we punished for our  
 (15) conduct criminally?  
 (16) A Yes sir we were  
 (17) Q Now, was there a criminal case in this court?  
 (18) A There was in this court  
 (19) Q And as a part of that, was there a payment of a hundred  
 (20) million dollars to the state and federal as part of the  
 (21) criminal case?  
 (22) A Yes there was  
 (23) Q And was there a federal fine of \$25 million?  
 (24) A Actually there was a fine Mr Neal of \$150 million of  
 (25) which \$125 million was remitted because of the response that

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- (1) Exxon had taken following the spill  
 (2) Q So the fine was really \$150 million but was reduced to 25  
 (3) million because of --  
 (4) A That is correct and I assume that was not for just  
 (5) complying with the law  
 (6) Q Now, let s see what else we have on that So to this point  
 (7) the cost to Exxon is two-and a half billion after tax and may  
 (8) be 2 8 billion after tax?  
 (9) A That s correct  
 (10) Q Now, Mr O Neill in his opening statement said the cost to  
 (11) Exxon was a mere hiccup Do you remember that?  
 (12) A I certainly do  
 (13) Q Was this a mere hiccup to Exxon?  
 (14) A Well, that comment, I think, Mr Neal, has bothered me and  
 (15) I've been trying to think about how to try and put this in some  
 (16) kind of perspective in terms of its impact on Exxon and let me  
 (17) see if there aren t two or three ways I can describe it  
 (18) First of all Exxon is about a hundred -- at this point  
 (19) it s 113 years old There has never been any single event in  
 (20) the history of the company that has had this kind of cost  
 (21) associated with it  
 (22) Q The largest expenditure in the 113-year history of the  
 (23) company?  
 (24) A That's correct  
 (25) Q You said you had some more ways?

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- (1) A In order to pay these bills, of course, our plans are  
 (2) usually pretty well set for the forward years, and although you  
 (3) see a tax offset there, as we all know, you don't get a tax  
 (4) reduction until you have made the tax expenditure So as the  
 (5) costs began to escalate in 1989, the only way the corporation  
 (6) really had of dealing with those costs was to go out and borrow  
 (7) money And in 1989 at the end of 1989, our debt levels were  
 (8) by far the highest they had ever been in the corporation s  
 (9) history  
 (10) I think another perspective I would put on that draws on  
 (11) data I have already talked about earlier today And that is if  
 (12) you look at \$2 8 billion after tax, and you try and put that in  
 (13) the context of our U S operations, to pay that \$2 8 billion,  
 (14) we had to have 33,000 people operating a capital employ of  
 (15) \$15 billion for three-and-a half years in order to pay that  
 (16) bill  
 (17) Now the other comment I'll make just to try to still  
 (18) answer this as the costs started to escalate rapidly in 1989,  
 (19) and if you ll recall that little folder that Otto Harrison  
 (20) waved yesterday and said this is a clean-up plan on April 15th,  
 (21) 1989 there was no conceivable way we had any idea what the  
 (22) total cost was going to be and the cost started to escalate  
 (23) very rapidly  
 (24) The first point I d make we didn't flinch, we wouldn't  
 (25) back off, we were going to pay the bill But the other point

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- (1) I ll make it became clear to me that the corporation could  
 (2) never never have this kind of thing happen to us again  
 (3) Q Is that the reason you started talking about all the  
 (4) changes that you insisted be made?  
 (5) A Yes sir  
 (6) Q Now then I want to put this in context for the jury  
 (7) because they will have the exhibits If you take \$2 8 billion  
 (8) and you take Defense Exhibit 6347, I ll ask you this isn't  
 (9) that far more than all the after-tax income from Exxon  
 (10) Corporation from all U S sources, for the year 1991, '92  
 (11) 93?  
 (12) A That s correct  
 (13) Q Now, what would it be --  
 (14) A And the first half of 94  
 (15) Q What if you added the first half of 94 to it?  
 (16) A Well I think that's about \$400 million for the first half  
 (17) of 94  
 (18) Q So you would have then approximately the cost, ultimate  
 (19) cost for the spill after-tax cost for the spill of \$2 8  
 (20) billion, would be all -- the after-tax income would  
 (21) approximately equal all the after-tax income from Exxon  
 (22) Corporation from all U S operations throughout the entire  
 (23) country for the last three-and a half years?  
 (24) A That s correct  
 (25) Q Now, Mr Raymond let s drop just for a minute the thing

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(1) about money Was that the only impact that this spill had on  
 (2) Exxon Corporation?  
 (3) A No In some senses It s hard to even try and verbalize or  
 (4) articulate what happened to us As I commented we're a  
 (5) company that's 113 years old and while there will be people in  
 (6) the court who will focus on how many oil wells we own and how  
 (7) big our refineries and how many tank truck and service stations  
 (8) we have the real key to Exxon is the people and that's always  
 (9) been the case  
 (10) I reminded - and I know, Mr Neal, this is going to take  
 (11) longer than you want, but I m reminded in the early days of the  
 (12) corporation when the people - when the people who were  
 (13) managing it then, if you look at the history, said what we  
 (14) really need - the only thing we really need are the best  
 (15) people and if you have the best people all the rest of these  
 (16) things we can deal with  
 (17) And I would make that same comment here The Exxon people  
 (18) have a tremendous pride in the organization and they have  
 (19) gotten that over the years by - all across the world, by  
 (20) virtue of their dedication and to a degree the success that the  
 (21) company has had I can't think of a single event that really  
 (22) shook what I would say, the bedrock of our employees' views  
 (23) of  
 (24) themselves and the corporation as did this event  
 (25) Now, in saying that I also want to make it clear that in  
 no way am I trying to suggest redeflect or minimize the effect

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(1) that this spill had on Alaskans and Prince William Sound I  
 (2) understand that I understand that from the first days I came  
 (3) here, and that s why we did a lot of the things that we tried  
 (4) to do  
 (5) But I do have to point out in terms of Exxon and our  
 (6) people our 90 000 around the world this has had a very, very  
 (7) serious impact on them and their whole focus is and many  
 (8) have  
 (9) said in their careers they worry about whether or not we ll  
 (10) ever be able to regain the position we had in the communities  
 (11) around the world and the stature we had in the business  
 (12) community because of this event  
 (13) Q I think two more questions, really Mr Jamin said  
 (14) something to the effect that well, the taxpayers helped pay  
 (15) for the cleanup and all of these other things The chart I ve  
 (16) showed you was 2 8 billion after tax?  
 (17) A That's correct  
 (18) Q And what do you think about the statement that the  
 (19) taxpayers helped clean it up?  
 (20) A I don't think that s totally accurate You have to realize  
 (21) that nearly all the money we paid out went to other people who  
 (22) the IRS always has a way of finding and they pay taxes So to  
 (23) that extent the government got revenues from another source  
 (24) and I suppose I could get some highfaluting economist to come  
 (25) in and run through the multiplier effect and he could tell you  
 how this all dribbled down the chain

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(1) I m not saying that the government came out even I have no  
 (2) idea on that, but to suggest that all of that tax reduction  
 (3) fell on the burden of the taxpayer simply isn't accurate  
 (4) Q Anyway, 2 8 billion after-tax dollars fell on Exxon?  
 (5) A That s correct  
 (6) Q We re talking about punitive damages In view of Exxon s  
 (7) situation would a punitive damages award be deductible for tax  
 (8) purposes?  
 (9) A Well as you can expect, first of all I'm not a tax  
 (10) expert, so all I can do is ask our tax people how that works  
 (11) out  
 (12) MR O NEILL He s disqualified himself from  
 (13) answering I object, 403 he disqualified himself from  
 (14) answering  
 (15) MR NEAL Could we have just a brief side bar on  
 (16) this?  
 (17) (At side bar off the Record)  
 (18) BY MR NEAL  
 (19) Q Mr Raymond, thank you You, very frankly, have  
 (20) disqualified yourself from answering that question by not being  
 (21) a tax expert  
 (22) A I m rather pleased  
 (23) Q Now, Mr Raymond one final question Under the law  
 (24) where  
 (25) appropriate punitive damages may but are not required to be  
 awarded to punish and deter Do you believe punitive damages

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(1) are necessary to punish and deter Exxon and others in this  
 (2) case?  
 (3) A Well, Mr Neal, no, I do not, but that s exactly what  
 (4) everybody in this courtroom would expect me to say It s not  
 (5) my decision to make It s the jury s decision to make and I  
 (6) guess I would just hope that the jury when they consider this  
 (7) issue they consider the response that Exxon had, the  
 (8) commitment we made the responsibility we accepted and the  
 (9) commitment we've made both for the corporation and for others  
 (10) to find better ways such that this thing won't happen again  
 (11) MR NEAL You may examine  
 (12) CROSS EXAMINATION OF LEE RAYMOND  
 (13) BY MR O NEILL  
 (14) Q Mr Raymond your lawyers said in the opening of Phase III  
 (15) that we accept the jury's verdict in Phase I Were you here  
 (16) for that?  
 (17) A Yes I was  
 (18) Q Was your company reckless?  
 (19) A The jury, I believe, Mr O Neill has concluded that.  
 (20) Q Now, in all these 12-step programs including treatment for  
 (21) alcoholism -  
 (22) A I didn't understand  
 (23) Q In these 12 step programs including psychological  
 (24) treatment for alcoholism and other diseases are you aware that  
 (25) it is an established principle that before you make any

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- (1) progress you have to acknowledge the full scope and  
 (2) responsibility of your mistakes? Have you ever heard that  
 (3) before talk to anybody who has gone through treatment?  
 (4) A No I really haven't. I m not trying to be argumentative  
 (5) but I don't know what you mean by 12 steps  
 (6) Q It s a very different thing, would you agree with me, to  
 (7) say yes we were reckless or I understand that that s what the  
 (8) jury found in Phase I? Those are two very different things,  
 (9) aren't they?  
 (10) A I m not sure I understand the question you re asking me  
 (11) Q Can you answer the question was your company reckless?  
 Can  
 (12) you answer that yes or no? Can you answer it - if you can t  
 (13) answer it yes or no - if you want to answer it yes or no,  
 (14) either way tell me but I d like either yes or no, or I can t  
 (15) answer the question  
 (16) The question is was your company reckless? And I think  
 (17) that s a fair question  
 (18) A Again I don't want to be argumentative but I don t think  
 (19) in asking the question you can tell me how I have to answer  
 (20) The facts are as we know The facts are as we know The  
 (21) jury concluded that Exxon was reckless, I m not arguing about  
 (22) that, I'm not looking back, I'm not disputing it  
 (23) Q Are you going to appeal it?  
 (24) MR NEAL. Your Honor objection  
 (25) THE COURT Sustained

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- (1) BY MR O NEILL.  
 (2) Q Now you testified that this 25 million dollar number, 1  
 (3) hundred million dollar number and 9 hundred million dollar  
 (4) number were because of recklessness - excuse me, because of  
 (5) negligence A couple minutes ago you said they had to do with  
 (6) negligence?  
 (7) A May I say what I said?  
 (8) Q Sure  
 (9) A I think what I said was in the federal and state  
 (10) settlement which was in this court which was a negligent  
 (11) misdemeanor, which was for whatever happened in Prince  
 William  
 (12) Sound, there was a federal fine of - really it was 150  
 (13) million, of which 125 was remitted, a hundred million for  
 (14) federal and state restoration and 9 hundred million for state  
 (15) and federal settlement  
 (16) Q Isn t it true in the agreement settling of the case this  
 (17) one hundred million dollar number and this 9 hundred million  
 (18) dollar number were described as compensatory and remedial  
 in  
 (19) nature and not punitive?  
 (20) A That s what the agreement says  
 (21) Q Yes?  
 (22) A Then I m not going to argue with it.  
 (23) Q Would it be fair to say that with regard to punishment for  
 (24) negligence that we re down to a 25 million dollar number?  
 (25) A Well I m not sure I agree with the logic but -

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- (1) Q How about the agreements? Now, you testified for a minute  
 (2) about this dispute resolution agreement?  
 (3) A That s correct  
 (4) Q And just so we re clear, this agreement was discussed with  
 (5) and approved by the chairman of the board of Exxon  
 Corporation?  
 (6) A That agreement - I think a better characterization,  
 (7) because did I not review each and every word -  
 (8) Q Did you review this -  
 (9) A The concept, let me say the concept of what was going on  
 (10) here was reviewed with me  
 (11) Q Including the proposition that with regard to walking into  
 (12) this courtroom you and Hazelwood could say whatever you said  
 (13) and, for whatever tactical reasons not use them, again you were  
 (14) free to say what happened to say it in this courtroom and they  
 (15) wouldn t be held against you when you finally settled your own  
 (16) disputes?  
 (17) A But I thought I was clear as to why the concept - I can't  
 (18) sit here and talk about each word, but the concept of what was  
 (19) going on here, Captain Hazelwood's attorneys required that  
 they  
 (20) have that portion And in typical legal fashion, our lawyers  
 (21) said if they are going to get it we re going to get it.  
 (22) But the idea that was behind it, which was really  
 (23) fundamental, Captain Hazelwood's attorneys represented to  
 our  
 (24) attorneys that if he didn't have this portion of the agreement  
 (25) for him, forget about Exxon for the moment, for him, he would

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- (1) not testify I felt very strongly that it was in this court s  
 (2) interest and this jury s interest perhaps even yours, that he  
 (3) testify  
 (4) Q Does this shock you the same way that it shocks me, this  
 (5) paragraph?  
 (6) MR NEAL Objection, Your Honor, that s not a  
 (7) question If he wants to testify, he ought to take the stand  
 (8) about his shock  
 (9) BY MR O NEILL.  
 (10) Q Does this shock you?  
 (11) A The concept doesn t because it was discussed with me with a  
 (12) very clear objective in mind and that is getting Captain  
 (13) Hazelwood to testify  
 (14) Q Now you testified at these arbitrations with regard to the  
 (15) drug and alcohol policy Do you recall that?  
 (16) A Go ahead  
 (17) Q Do you recall you did testify about it?  
 (18) A I made a comment that there had been 105 challenges to our  
 (19) new drug and alcohol policy  
 (20) Q And indeed some of these challenges were taken to the 3rd  
 (21) Circuit Court of Appeals Exxon versus Exxon Seaman s Union  
 (22) Are you aware of that? And the Court of Appeals for the Third  
 (23) Circuit which is a step higher than His Honor which by my  
 (24) world is pretty  
 (25) high -

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(1) A Careful  
 (2) Q - vacated the arbitration awards because the Court of  
 (3) Appeals found that in conclusion the award violated public  
 (4) policy we emphasize as did the District Court the  
 (5) potentially disastrous effects of a major oil spill on the  
 (6) environment. We also share the District Court's concern about  
 (7) seaman operating vessels under the influence of drugs or  
 (8) alcohol. The magnitude of possible harm to the public  
 (9) distinguishes this case from those cases upholding arbitration  
 (10) awards against public challenges. And the court noted that  
 (11) Congress has declared that it is the policy of the United  
 (12) States that there should be no discharge of oil or hazardous  
 (13) substance, and the opinions go on and on like that with regard  
 (14) to a national policy about oil spills and drinking.  
 (15) Are you aware of that?  
 (16) A Well, I am, Mr. O'Neill, but I'm not sure, although I'll  
 (17) disqualify myself immediately as an expert because I'm not a  
 (18) lawyer, and I'm not too sad that I'm disqualified, but the  
 (19) point being here is I believe that that case doesn't relate to  
 (20) the never-never rule of the drug and alcohol rehab. I think  
 (21) that case relates to someone who was terminated for drinking  
 (22) on  
 (23) the job, which is a different issue than I think I was trying  
 (24) to reference when I talked about the drug and alcohol policy.  
 (25) Q Are you aware in another opinion the Court of Appeals  
 talked about a well-defined and dominant public policy about

(1) Valdez disaster isn't that correct?  
 (2) A That's correct.  
 (3) Q And you described today the fact that you periodically kept  
 (4) them up to date?  
 (5) A That's correct.  
 (6) Q Would it be fair to say that at least as of the time of  
 (7) your deposition in November of 1992 nearly all of the reports  
 (8) to the board regarding the Exxon Valdez oil spill were made by  
 (9) you?  
 (10) A That's correct.  
 (11) Q And would it be fair to say that you as the person  
 (12) bringing this information to the board as of November 19,  
 (13) 1992, didn't know whether or not Hazelwood self-identified?  
 (14) You didn't as of three years after the spill, you didn't know  
 (15) that, did you?  
 (16) A I think - do you have the deposition there?  
 (17) Q Yeah, I do have the deposition here.  
 (18) MR NEAL Page?  
 (19) MR O NEILL Page 18, lines 7 through 9  
 (20) BY MR O'NEILL.  
 (21) Q Did you know?  
 (22) A Well, first, I want to know what I said in the deposition  
 (23) You raised the question of the deposition could I see it?  
 (24) Q I'll bring it to you.  
 (25) A Thank you.

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(1) the operation of a vessel under the influence of drugs or  
 (2) alcohol and concluded that the arbitration award violated the  
 (3) policy and they emphasized the potentially disastrous effects  
 (4) of a major oil spill on the environment and expressed concern  
 (5) about seamen operating vessels under the influence of drugs or  
 (6) alcohol.  
 (7) Are you aware of that?  
 (8) A Mr. O'Neill, there is nobody in this court today who can  
 (9) say more about the need to not have people who have drug and  
 (10) alcohol problems operate in safety-sensitive positions.  
 (11) Q And you did for years prior to 1989 didn't you?  
 (12) A Not to our knowledge.  
 (13) Q And are you aware of the fact that in 1985 a Mr. Ben Graves  
 (14) wrote a report at Exxon Shipping Company in which he detailed  
 (15) the fact that Captain Hazelwood had returned to ship  
 (16) occasionally drunk? Are you aware of that?  
 (17) A Mr. O'Neill, I was not here for Phase I. I'm not aware of  
 (18) all the evidence or all the discussions that took place  
 (19) surrounding Hazelwood, what he did or didn't do. I'm sorry.  
 (20) Q I want to talk to you about that. That specific topic. I  
 (21) want to talk to you about.  
 (22) You were the person that reported to the board of directors  
 (23) of Exxon Corporation about this, that was your major - you  
 (24) were the guy on the board, the officer from the company that  
 (25) did most of the informing of the board with regard to the

(1) Q If that's the way you want to do business, we'll use the  
 (2) deposition for the rest of the afternoon?  
 (3) A No, I don't want to. Just read it to me.  
 (4) Q I'll do that. Your testimony at the time of your  
 (5) deposition was and this is page 18 lines 7 through 9, did  
 (6) Captain Hazelwood self-identify, do you know? Answer: I don't  
 (7) know. I do not personally know by my own knowledge.  
 (8) A That's the point. I said I did not know by my own personal  
 (9) knowledge.  
 (10) Q Then the question was asked do you know if or at about the  
 (11) time Captain Hazelwood went into treatment he was under  
 (12) investigation with regard to drinking? And your answer was I  
 (13) don't know.  
 (14) So would it be fair to say that you, as the man that  
 (15) reported to the board of directors, as of 11/19/92 didn't take  
 (16) it upon yourself to inform yourself as to whether Captain  
 (17) Hazelwood was under investigation with regard to drinking at  
 (18) the time he went in for treatment?  
 (19) A I think the point I was making in the deposition Mr.  
 (20) O'Neill as I recall was there was great emphasis placed in  
 (21) that deposition as to whether or not I personally knew  
 (22) Hazelwood whether I personally knew what he had done and  
 (23) had  
 (24) not done, and I don't personally know that. I can ask people  
 (25) in the shipping company, but my reaction to that still is I  
 don't personally know.

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- (1) Q Would it be fair to say that as of this – the time of your  
 (2) deposition three years after the spill you were not aware that  
 (3) Hazelwood admitted drinking aboard the vessel back in 1985  
 and  
 (4) that he returned from port on occasion drunk?  
 (5) A That is true  
 (6) Q And would it be fair to say that three years after the  
 (7) spill you didn't know who the following people were Katherine  
 (8) Haven, is that a fair statement?  
 (9) A Keep going  
 (10) Q James Shaw? You weren't aware of the Paul Myers/Steve  
 Day  
 (11) walkie-talkie incident in Portland is that correct?  
 (12) A That's correct  
 (13) Q You vaguely recall the names of William Sheehy or Mike  
 (14) Stalzer?  
 (15) A That's correct  
 (16) Q You never heard the name Mary Williamson?  
 (17) A That s correct  
 (18) Q And you were not aware of the fact that Captain Hazelwood  
 (19) may have been drinking in March of 1989 is that a correct  
 (20) statement?  
 (21) A I thought we also identified some people that I did  
 (22) recognize  
 (23) Q And you were the person that was charged by the board of  
 (24) directors with the responsibility of coming into the board –  
 (25) and this is three years after the spill, and saying members of

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- (1) the board of directors, I ve looked into this carefully  
 (2) thoughtfully, I m getting to the bottom of this so I can tell  
 (3) you what happened, is that right, you were that person charged  
 (4) with that responsibility?  
 (5) A That s correct  
 (6) Q And would it be fair to say that the board of directors at  
 (7) least as of the time of your deposition had not asked for an  
 (8) assessment as to the cause of the grounding?  
 (9) A That s correct  
 (10) Q So three years after the grounding of the Exxon Valdez the  
 (11) Exxon Corporation board of directors had not asked for an  
 (12) assessment as to the cause of the grounding of the Exxon  
 (13) Valdez?  
 (14) A Well, Mr O Neill, I think you have to put that in  
 (15) context If you look back at the beginning of the  
 (16) deposition – which you controlled, as I recall  
 (17) Q I don't think I control –  
 (18) A – one of the first things we talked about was the reports  
 (19) to the board of directors As a matter of fact I think one of  
 (20) the first questions you asked was I notice on the agendas that  
 (21) you spoke with a board of directors The board of directors  
 (22) didn't have to ask for a report they got a monthly, I ll call  
 (23) it ongoing report of what happened  
 (24) And I think I also pointed out at that deposition that they  
 (25) were aware of the report the shipping company had made to the

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- (1) National Transportation and Safety Board Isn't that true?  
 (2) Q I want to call your attention to page 49 of your  
 (3) deposition lines 20 through 22 and I want you to read the  
 (4) question and the answer to the jury Was that question asked  
 (5) and was that answer given? Why don't you read it out loud  
 (6) A It says Have your directors asked you for an assessment  
 (7) as to the cause of the incident. My answer is no, they have  
 (8) not And I think I have just explained why  
 (9) Q Now, this is Exhibit 6587, and it has on it the names  
 (10) Revere, Koops Borgen, Paul Myers Tompkins, Leyendecker,  
 (11) Rouse, Cornett, Graves Do you see all these names there?  
 (12) A Yes  
 (13) Q Have you interviewed any of those people about what  
 (14) happened?  
 (15) A I've talked with Mr Tompkins I've talked with Mr Myers  
 (16) when I was in Valdez the first time I talked with Mr Paul, I  
 (17) believe Mr Borgen was first here when I was in Valdez Of  
 (18) course I talked with Mr Elmer, but he wasn't in the shipping  
 (19) company at the time of the accident.  
 (20) Q Did you ask any of them what they knew about Hazelwood s  
 (21) drinking?  
 (22) A I asked them – my specific question was that it had been  
 (23) reported to me that Mr Larossi had said that Mr Hazelwood was  
 (24) the most, and I think this is a quotation could be incorrect,  
 (25) was the most monitored person in the fleet. And I asked those

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- (1) people what did that mean  
 (2) Q Did you ask them if Joe was drinking?  
 (3) A I presumed when I asked about monitoring they would have  
 (4) answered  
 (5) Q Did they tell you he was the most monitored man in the  
 (6) fleet?  
 (7) A I got that impression They didn't say no  
 (8) Q Let s assume that s the case, and I believe that s what you  
 (9) were told If in fact he wasn't the most closely monitored  
 (10) man in the fleet, and we have all of these people here telling  
 (11) you that he was, we have a real institutional problem, don't  
 (12) we?  
 (13) A Well I don't know what all these people have said in this  
 (14) court.  
 (15) Q Let s assume for the sake of discussion that, and I don't  
 (16) know what the jury found but let's just assume for the sake of  
 (17) the discussion – they looked at the question Let s assume  
 (18) that they concluded that he wasn't the most closely monitored  
 (19) man in the fleet just for the sake of the discussion because  
 (20) we put evidence on on that for weeks  
 (21) A Yeah but Mr O Neill, you know you and I are going to  
 (22) have difficulty when we re coming to hypotheticals  
 (23) Q I m talking about your institution and the work you put in  
 (24) to make sure you don't have a cancer in your institution  
 (25) A I understand that but you re making a hypothetical about

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- (1) what the jury decided and that's something I can't deal with  
 (2) Q The jury found your company reckless you know that they  
 (3) found your company reckless?  
 (4) A I think we've already discussed that  
 (5) Q That's right And I'm saying are you going to conduct an  
 (6) investigation personally of these people when this is over  
 (7) about the jury's finding of recklessness?  
 (8) A I think that would be a fair conclusion to come to  
 (9) Q And that's five years after the incident isn't it?  
 (10) A Well Mr O'Neill, you know better than I in your  
 (11) profession that while things are under litigation, they become  
 (12) very very difficult to deal with  
 (13) Q Let's talk about the law department investigation  
 (14) A Yes sir  
 (15) Q Exxon Corporation took the investigation from Exxon  
 (16) Shipping Company, as Mr Larossi has testified and centralized  
 (17) the investigation of this incident in the law department  
 (18) That's a correct statement?  
 (19) A I believe that's correct  
 (20) Q And at the time of your deposition which was three years  
 (21) after the grounding of the Exxon Valdez you were of the  
 (22) opinion that you had no plans to tell Congress the results of  
 (23) the investigation, isn't that right?  
 (24) A I believe the exact question was, you asked me do you plan  
 (25) to publish this to the Congress

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- (1) Q That's right  
 (2) A And I said I don't believe you publish things to the  
 (3) Congress  
 (4) Q Well let's go see what's on page 52 Do you have the  
 (5) deposition transcript up there? Let's see if we can find it on  
 (6) page 52 lines 13 through 15 and 19  
 (7) A I'm sorry I can't read this  
 (8) Q Those are multiple pages  
 (9) A 52 what lines?  
 (10) Q 13 through 15 and 19  
 (11) A Can I start on line 9?  
 (12) Q As I always say, sir you can start whenever you want to  
 (13) start  
 (14) A No that's not my point I was trying to pick up the  
 (15) conversation you and I just had Question Do you presently  
 (16) have an intention of publishing the results of that  
 (17) investigation to Congress  
 (18) Answer I'm afraid I don't understand the question You  
 (19) don't publish something to the Congress  
 (20) Q Then what happens next?  
 (21) A Are you going to tell the Congress - are you going to tell  
 (22) the Congress or any of its committees what the results of your  
 (23) investigation are  
 (24) And Mr Lynch intercedes and said What the results of the  
 (25) law department's investigation are ?

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- (1) And Mr O'Neill That's right  
 (2) My answer We have no plans to do that  
 (3) Question Mr O'Neill's question are you going to tell  
 (4) the press what the results of the law department's  
 (5) investigation are?  
 (6) Answer No sir  
 (7) Question Why not?  
 (8) Answer Because in my view those investigations were  
 (9) carried out in anticipation of litigation and I believe the  
 (10) litigation still goes on  
 (11) Q And indeed at that time of your deposition you had no  
 (12) intention of ever telling anybody not within the Exxon  
 (13) attorney/client circle the results of the legal department's  
 (14) investigation isn't that correct?  
 (15) A So long as the litigation was going on that's correct  
 (16) Q Now there were a number of statements made to the  
 Congress  
 (17) in April of 1989 including Hazelwood being the most closely  
 (18) monitored man in the fleet, and statements about his drinking  
 (19) Has there been an effort by your company to go back and  
 (20) revisit those statements and see whether any of these  
 (21) statements ought to be corrected with regard to the  
 (22) congressional testimony with regard to the Congress of the  
 (23) United States?  
 (24) A No there has not  
 (25) Q I want to talk for a minute about compensation, if I

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- (1) could You raised the subject so let's take it through to its  
 (2) conclusion  
 (3) In 1988 your cash compensation salary bonus and cash  
 (4) equivalents was about 863 000 is that right?  
 (5) A I'll accept that  
 (6) Q And -  
 (7) A I mean these all came out of a proxy statement?  
 (8) Q Yeah  
 (9) A Well whatever is in the proxy statement it is  
 (10) Q Maybe I'll shortcut this and put this up  
 (11) A Fine certainly  
 (12) Q In the - these are from the proxy statement These are my  
 (13) notes oddly enough They weren't prepared as an exhibit but  
 (14) in the column one we have what your salary and bonuses were  
 (15) The reason that there are these ND's you're aware that the  
 (16) Securities and Exchange Commission changed the disclosure  
 on  
 (17) that in about '90 or '91?  
 (18) A Yes sir  
 (19) Q So we show base compensation in the left hand column by  
 (20) year and that looks about right?  
 (21) A And as defined in the proxy statement as salary and  
 (22) bonuses  
 (23) Q Salary bonuses for 1988, 1989 and it continues to be that  
 (24) way and columns two and three thereafter split out bonuses?  
 (25) A So the sum of two and three are one

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- (1) Q They are and the reason we don't have them for 88 and  
 (2) 89 the proxy statement - the SEC didn't require the  
 (3) disclosure on the proxy statements So would it be fair to say  
 (4) that from 1989 88 to the present you've gotten a raise  
 (5) every year?  
 (6) A That's true  
 (7) Q And that included the year of the spill?  
 (8) A That's correct Let's just leave it at that I could make  
 (9) another comment on 89 but I'm not going to  
 (10) Q You also got these things called EBU's?  
 (11) A Yes, sir  
 (12) Q What does EBU -  
 (13) A Earnings bonus unit  
 (14) Q That's tied to the earnings of the company that year?  
 (15) A No it's tied to -  
 (16) Q There is a formula for it?  
 (17) A There is a formula for it and what it's tied to is the  
 (18) earnings of the company in the years subsequent to the  
 (19) granting  
 (20) of the EBU and once the summation of earnings over time gets  
 (21) to a number, then the EBU has value  
 (22) Q And in column five we have the at least the company's  
 (23) attempt to value potentially value of the EBU's that you got  
 (24) every year, isn't that right?  
 (25) A Well, that, Mr O'Neill that's the face value If the  
 earnings total, and I think all of these are \$7 50, then at

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- (1) that time that's the amount of money that the earnings bonus  
 (2) will pay  
 (3) Q And in column seven you also got stock options and we see  
 (4) in column seven on a year-by-year basis the stock options that  
 (5) were awarded to you, including in the second block down the  
 (6) year of the spill?  
 (7) A That's correct  
 (8) Q And just so that we know generally what the stock options  
 (9) are worth, we have for 1992 and 1993 when again disclosure  
 (10) becomes required, the value of your unexercised stock  
 options?  
 (11) A Is that the one on the left, Mr O'Neill?  
 (12) Q You're going to have to explain to me the one on the left,  
 (13) where my finger is You guys call value unexercised options  
 (14) and value exercisable options and the one on the right where I  
 (15) put my finger is potential of value of options granted ten  
 (16) years?  
 (17) A Well, the one on the left is the value of the option if  
 (18) they were exercised on the first day in this case the first  
 (19) day of 1994 The ones on the right are a theoretical  
 (20) calculation that the SEC requires you to do And if you do  
 (21) that calculation and assume that Exxon stock is \$71 58 or \$82  
 (22) and a nickel that's what that number would be but that's  
 (23) strictly a hypothetical  
 (24) Q With regard to the chairman of the board at the time of the  
 (25) grounding of the Exxon Valdez he made in cash compensation,

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- (1) which is salary bonus and cash equivalents more the year of  
 (2) the spill than he did the year before isn't that right?  
 (3) A I think and I was going to make a comment early just for  
 (4) clarity no other reason, in 1989 the fact that the total  
 (5) compensation is up slightly reflects that the salary was up  
 (6) and it was established I believe on January 1st of the year,  
 (7) but the bonus payment in 1989 was actually below that in 1988  
 (8) reflecting the earnings of the company being down that year  
 (9) versus the prior year and the reason they were down was  
 (10) primarily because of the Valdez spill  
 (11) Q The proxy statements which are filed with the Securities  
 (12) and Exchange Commission reflect that in 1989 the year of the  
 (13) spill in his cash compensation, Mr Rawls made more than in  
 (14) 1988 Is that a correct statement?  
 (15) A That is correct and I think I explained to you why  
 (16) Q And in 1990 he made even more?  
 (17) A That is correct  
 (18) Q And in 1991 he made even more, and in 1992 it rose to  
 (19) almost \$2 million in base compensation and then in 1993 he  
 (20) retired?  
 (21) A That's correct.  
 (22) Q And indeed Mr Rawls was awarded EBU's the year of the  
 (23) spill by the formula That's a correct statement?  
 (24) A No it's not a correct statement but it's not worth  
 (25) talking about.

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- (1) Q And then on - I'll take your word on that. With regard to  
 (2) options, he was awarded more stock options the year of the  
 (3) spill than he was the year before That's a correct statement?  
 (4) A Yes, it is, and that was a decision that the board  
 (5) compensation committee made They had a specific reason for  
 (6) that  
 (7) Q So the board compensation committee and the board of  
 (8) directors, who run the company - and I'm making no  
 allegations  
 (9) that you give this to yourself, that isn't what I'm saying  
 (10) A No, I understand that  
 (11) Q But the board compensation committee indeed the board of  
 (12) directors, who has overall responsibility for the corporation,  
 (13) made the decision on these pay levels for these years  
 (14) including the pay level for the year of the spill?  
 (15) A That's correct  
 (16) Q And Mr Rawls also had significant value with regard to all  
 (17) of his unexercised options as reported, and just so we complete  
 (18) the compensation package, we can go back to yours on this  
 (19) because you know more about yours, but there is also -  
 (20) A That's the truth  
 (21) Q You also get an annuity, is that right?  
 (22) A All employees do, Mr O'Neill under the same formula  
 (23) Q And you also get a thrift plan and life insurance and in  
 (24) deed for example on the thrift plan and life insurance there  
 (25) was 82 grand spent on that?



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- (1) A Again may I comment on that?  
 (2) Q Sure I just get these out of the proxy statements  
 (3) A Sure and I'm just trying to explain what they are in the  
 (4) case of a thrift plan that is a plan that is available to all  
 (5) employees under the same rules regardless whether or not  
 you're  
 (6) chairman of the board or you're just hired on to the company  
 (7) there is nothing peculiar  
 (8) The life insurance is a rather interesting phenomena that  
 (9) involves the federal government and that is we have a group  
 (10) life insurance plan that we pay premiums on. However the  
 (11) statistical results or mortality rate of Exxon executives seems  
 (12) to be better and I'm pleased to report this, seems to be  
 (13) better than the average of the population, so as a result we  
 (14) are required under federal law to impute income to all  
 (15) employees for this benefit that we get and then we pay income  
 (16) tax on that.  
 (17) Q That's the same for all citizens, that isn't a special tax  
 (18) rule for Exxon Corporation?  
 (19) A No but the amount that is imputed to us is special for  
 (20) Exxon. It has to do with the mortality tables of Exxon versus  
 (21) the population at large.  
 (22) Q Now, you talked for some period of time about the cleanup,  
 (23) and I want to ask you whether you ever made this comment.  
 Did  
 (24) you make the comment on or about July 19th of 1989 well I  
 (25) don't know if we'll be back next spring, when you look at it

- (1) Did you ever make that statement?  
 (2) A No I've never read the book and I never met the author  
 (3) Q Exxon files with the Securities and Exchange Commission as  
 (4) a legal requirement financial statements isn't that right?  
 (5) A Yes  
 (6) Q And it files consolidated financial reports for Exxon  
 Corporation and all affiliates?  
 (7) A Yes  
 (8) Q And it does not file unconsolidated reports?  
 (9) A That's correct  
 (10) Q And at Exxon Corporation cash flow was centrally  
 (11) coordinated in order to efficiently move funds from units  
 (12) generating cash to units to meet operating requirements  
 (13) A That's a correct statement  
 (14) Q So with regard to what you do one of the things you do is  
 (15) and I don't mean to minimize it or trivialize it, but you're an  
 (16) asset manager in a manager respect you see where the  
 company  
 (17) has its assets where they are committed and depending upon  
 a  
 (18) variety of analyses you move assets from one place in the  
 (19) company to the other, cash assets?  
 (20) A Well in the sense we manage cash centrally, yes, we did  
 (21) Q And indeed that ability is the fact that you do it as one  
 (22) company and you have cash flows of about 10 to 12 billion  
 (23) dollars annually is one of the strengths of the company isn't  
 (24) it?  
 (25)

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- (1) from the shareholders' point of view we're not willing to go  
 (2) anywhere and do anything anybody says. It's not in the  
 (3) interest of our shareholders for management to do that, there  
 (4) has to be an end to it. And no matter when we say there has to  
 (5) be an end we're going to have an argument about it because  
 (6) some people don't want it to end they have a different agenda  
 (7) than we do about cleaning up the beach?  
 (8) A May I ask the source?  
 (9) Q In the wake of the Exxon Valdez  
 (10) A The answer is I did not  
 (11) Q Did you make this - I'm not making these up  
 (12) A Somebody is  
 (13) Q Well, I'm not and you know it's in the book  
 (14) A I'm not -  
 (15) Q And if you didn't make them go ahead and say I didn't make  
 (16) them  
 (17) A I didn't make them  
 (18) Q Did you ever make this statement Now maybe all of us in  
 (19) hindsight would say we should never have a plan that a  
 (20) significant amount of oil will get on the beach maybe we all  
 (21) made a bad judgment. The plan made it clear that some oil is  
 (22) going to get on the shore Now if people don't understand  
 (23) that they haven't read the plan I'm not responsible for  
 (24) that if they approve it without reading that's their  
 (25) problem

- (1) A Yes, it is  
 (2) Q With regard to the various elements on that chart we saw,  
 (3) Exxon International, Exxon - there is a high degree of  
 (4) interdependence among the things that they do, isn't that  
 (5) right?  
 (6) A I'm not sure I understand - I'm not trying to be obtuse,  
 (7) I'm just not sure I understand the question  
 (8) Q Well one of the year-end statements it says it is  
 (9) recognized that the different elements of the company can be  
 (10) expected to contribute at different profit rates and this is  
 (11) reflected in different functional goals To recognize not only  
 (12) these different profit levels but also the high degree of  
 (13) interdependence amongst the company which maximize the  
 general  
 (14) interest?  
 (15) A That's correct  
 (16) Q And the general interest is Exxon Corporation?  
 (17) A The general interest is the shareholders  
 (18) Q And even in people's careers like Mr. Elmer is now at  
 (19) Exxon Shipping Company, which is part of Exxon U.S. but he  
 (20) used to be with Exxon International?  
 (21) A That's correct  
 (22) Q And with regard to the progress, the final progress of the  
 (23) company from 1988 to 1993 would it be fair to say that the  
 (24) company's assets have expanded between '88 and '93?  
 (25) A I think the data that we saw the other day would say that

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- (1) the - as reported in the 10K s the assets are larger I  
 (2) don't want to get into a debate on that that s an issue that  
 (3) you have to be very careful how you characterize it but that's  
 (4) correct  
 (5) Q How about revenue?  
 (6) A Revenue, revenue is not - I don't believe is appreciably  
 (7) higher than it was in the middle to 1980s It may be somewhat  
 (8) higher but it s not - It s gone up and down as the price of  
 (9) oil goes up and down and that s something we don't have any  
 (10) control over  
 (11) Q And 1988 revenues were about \$88 billion and in 1993 they  
 (12) were about \$111 000 000,000?  
 (13) A Yeah but probably back in 1984 or 85 they were a hundred  
 (14) billion dollars too So as I say, that has a lot to do Mr  
 (15) O Neill, with the price of oil, and in many cases we are the  
 (16) tax collector if you will for local governments I m not  
 (17) trying to make a point out of it, but there is not any  
 (18) significance to it  
 (19) Q Your company is bigger than many of these local  
 (20) governments isn't it?  
 (21) A Yes it is  
 (22) Q And with regard to cash flow the cash flow on the average  
 (23) over the last five or six years has been about 150,000 000,000?  
 (24) A The cash flow generated from operations  
 (25) Q Yes And after-tax net averages about \$5 billion?

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- (1) A With the exception of the Valdez year it s been at about  
 (2) \$5 billion for the last 12 years  
 (3) Q And over the course of the last four or five years the  
 (4) company's investments in property plant or equipment, five or  
 (5) six or seven billion dollars a year?  
 (6) A No  
 (7) Q That s not correct?  
 (8) A No That s one of the problems with the chart you have  
 (9) What you have on that chart and again I m not trying to be  
 (10) technical but what you have on that chart is the change each  
 (11) year in plant property and equipment That is not what we  
 (12) invest It s the difference between what we ve invested and  
 (13) depreciation in those same assets  
 (14) Q The cash dividends that you paid to your shareholders from  
 (15) 88 to 93 on a gross basis have improved every year from 88  
 (16) to 93 including the year of the spill?  
 (17) A You mean have gone up?  
 (18) Q I think improve and gone up -  
 (19) A Well I don't want to get into semantics  
 (20) Q The amount of the stock dividend has gone up every year  
 (21) from 198 to 93 including the year of the spill?  
 (22) A You mean dollars per share?  
 (23) Q Dollars per share  
 (24) A One thing that s not on that chart that probably maybe is  
 (25) the most important in terms of the rating agencies is the level

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- (1) of debt.  
 (2) Q Well, let s talk about the rating agencies That's Moody s  
 (3) and Standard & Poor's?  
 (4) A That's correct.  
 (5) Q And with regard to your level of debt and your ratings with  
 (6) regard to your ability to borrow money you have a credit  
 (7) rating today like you did five years ago that is among the  
 (8) best -  
 (9) A That is not technically correct  
 (10) Q You have a triple A rating?  
 (11) A We have a triple A negative rating Back in 1989 we had a  
 (12) triple A stable rating  
 (13) Q How many companies have triple A ratings?  
 (14) A We're the only one that has the negative  
 (15) Q So you're still the top 13 or 14 rated companies by Moody s  
 (16) and Standard & Poor's?  
 (17) A That s correct.  
 (18) Q I wish I could -  
 (19) MR NEAL Excuse me I object to him not letting him  
 (20) finish  
 (21) BY MR O NEILL  
 (22) Q I apologize if I cut you off Go ahead  
 (23) A You were making the point that it s the same today as it  
 (24) was in 1989, and I m saying that s not true  
 (25) Q And then let me make the next point. You re still one of

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- (1) the 15 blue chip borrowers in the world? -  
 (2) A That is correct  
 (3) Q I m throwing a lot of pages out so we can finish today  
 (4) Would it be fair to say that by 1993 your shareholder  
 (5) dividends increased for 11 consecutive years?  
 (6) A That s correct  
 (7) Q Now what was the stock buy-back program?  
 (8) A The stock buy back program which was started I m going to  
 (9) say - you might have some data there but about 1981 or 1982  
 (10) Q That s my recollection  
 (11) A Roughly that type of thing, in the early 1980s  
 (12) Q I ve got a chart on it  
 (13) A But in the early 1980s, Mr O Neill, there was a lot of  
 (14) consolidation going on in the petroleum industry For example  
 (15) some of you will probably remember there used to be a  
 (16) corporation named Gulf Oil Corporation which was taken over  
 (17) by  
 (18) Chevron There used to be a company called Superior that was  
 (19) taken over by Mobile There was a lot of consolidation and  
 (20) aggregation  
 (21) At that time we had a strong cash flow, and the decision  
 (22) that we made rather than trying to acquire someone else as the  
 (23) industry consolidated, was that we thought, in terms of  
 (24) managing our financial structure that we were better off to  
 (25) buy our own shares of stock So in essence what we did by  
 buying the shares of stock for the people who continued to own

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- (1) It they owned a little bit more of Exxon the day after we  
 (2) bought the shares than they did before we bought the shares  
 (3) Q Does this exhibit which is in evidence which is 6316  
 (4) reflect the amount of money that the corporation paid to buy  
 (5) stock as part of the stock buy-back program?  
 (6) A I have no reason to doubt the accuracy of that  
 (7) Q I was - I listened to your description of your reaction to  
 (8) the spill and it called to mind a report in the Seattle Post  
 (9) Intelligence on Monday April 3 we're chagrined disappointed,  
 (10) we're even devastated to a degree Would you say that's a fair  
 (11) statement of what you said?  
 (12) A I think that's a fair statement of what I've said today  
 (13) Q What does it mean to be devastated to a degree?  
 (14) A Well, I think the point Mr O'Neill is if I had been  
 (15) totally devastated personally because the question was a  
 (16) personal question if I had been totally devastated, I wouldn't  
 (17) have been able to get up and go to work and I concluded that  
 (18) wasn't the right answer, that somebody in the company had to  
 (19) say come on, guys, let's get going, we've got some serious  
 (20) problems to deal with and I want to be there to deal with them  
 (21) Q Would it be fair to say that you and Mr Rawl met with  
 (22) members - representatives of the investment community and  
 (23) discussed the impacts of the spill on Exxon as a financial  
 (24) institution before either one of you went to Alaska?  
 (25) A That is not true

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- (1) Q Wasn't there a meeting in New York with representatives of  
 (2) the investment community?  
 (3) A There was, but I believe that meeting was held right after  
 (4) the announcement of the first quarter earnings, which you can  
 (5) give me a couple days here I'm not sure but should have been  
 (6) somewhere around the 22nd or 23rd of April I believe I was in  
 (7) Alaska on about the 8th or 9th of April  
 (8) Q Let me rephrase it Would it be fair to say -  
 (9) A Just trying to be accurate  
 (10) Q And I'm not arguing with you I'm going to rephrase my  
 (11) question so we can capture the truth in the question  
 (12) Would it be fair to say that the then chairman of the board  
 (13) of Exxon Corporation met with members of the investment  
 (14) community and discussed the potential financial impacts of the  
 (15) spill prior to the chairman of the board of Exxon Corporation  
 (16) going to Alaska?  
 (17) A I really don't know Mr O'Neill I can't recall - I can  
 (18) remember when I went to Alaska, but I don't recall when  
 (19) Mr Rawl went to Alaska  
 (20) Q Mr Rawl was criticized in the popular press for not coming  
 (21) up he eventually came up?  
 (22) A He was criticized for not coming immediately I think would  
 (23) be the more appropriate way to say it  
 (24) Q Do you know any fishermen from Prince William Sound?  
 (25) A No, I do not.

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- (1) Q Do you know any fishermen from Upper Cook Inlet?  
 (2) A No I do not  
 (3) Q Do you know any fishermen from Kodiak?  
 (4) A No  
 (5) Q Do you know any Chignik fishermen?  
 (6) A No I do not  
 (7) Q Do you know any people that live in the Native villages in  
 (8) Alaska?  
 (9) A No I do not  
 (10) Q Do you know the names of any of them?  
 (11) A You mean the Native villages?  
 (12) Q No, the people Do you know the names of any fishermen?  
 (13) A No  
 (14) Q Natives?  
 (15) A I wouldn't want to make a comment on that  
 (16) Q Do you think it might be appropriate as a matter of  
 (17) contrition to at least learn the names of some of the victims  
 (18) of the spill?  
 (19) A Mr O'Neill I've read the whole list of claims and the -  
 (20) and my interpretation of your question was do I personally  
 (21) know  
 (22) any of them I could go back and memorize a whole list of  
 (23) names that came out that I looked at as to who got payment and  
 (24) that type of thing but that wasn't particularly responsive  
 (25) Q No, it isn't and I wasn't concerned about the payment of  
 (26) money I was concerned whether you knew the names of these

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- (1) victims to come up and say Fred, John, Mary, Susan I'm sorry  
 (2) about what my company did to you?  
 (3) A Well, I am sorry about what happened  
 (4) Q Well, they don't know that because you haven't told them  
 (5) that have you?  
 (6) A We've said that publicly I won't say an infinite number of  
 (7) times because that's an overstatement but it's a very large  
 (8) number of times  
 (9) Q Including in the advertisement is that right?  
 (10) A Well, can I comment - I believe I already commented the  
 (11) only way you could get a letter like that in a paper was to pay  
 (12) the advertising rate Newspapers don't - I mean, I know it  
 (13) shocks all of us but they don't publish things for free  
 (14) Q Yes And it was important to make sure we got all the  
 (15) Kodiak fishermen that lived in Detroit and Boston and New York  
 (16) and Washington D C -  
 (17) A No but it was -  
 (18) MR NEAL This is grossly unfair, objection  
 (19) THE WITNESS It was -  
 (20) THE COURT Mr Raymond please The question was a  
 (21) bit sarcastic, if you wish to ask it again rephrase it  
 (22) BY MR O NEILL  
 (23) Q The Exxon claims payments I just want to clear this up  
 (24) were made to - this is the detail for the claims payments, but  
 (25) of the 300 million, 168 million was paid to fishermen and crew,

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- (1) isn't that right?  
 (2) A I think that s correct  
 (3) Q And seven or eight processors got about \$113 000 000?  
 (4) A I think that s correct.  
 (5) Q It was the big seven or eight processors do you recall  
 (6) that, isn't that right?  
 (7) A I believe that s correct  
 (8) Q And indeed the big seven or eight processors were paid and  
 (9) then claims payments to all processors stopped in 1992?  
 (10) A Could be I think that's true  
 (11) Q And there were an awful lot of small processors who didn't  
 (12) participate in the claims program?  
 (13) A You mean they didn't file a claim?  
 (14) Q No The claims program from this chart and from my  
 (15) recollection, essentially shuts down in 1991 Do you recall  
 (16) that?  
 (17) A I m not sure I d characterize it quite that way but there  
 (18) became - I think my best recollection is that the claims  
 (19) program was getting to the point where it was becoming very  
 (20) difficult for us as the payor, so to speak to also make the  
 (21) judgment as to what the - being in the position of both judge  
 (22) and jury, in a sense of paying and having to make the  
 (23) judgment  
 (24) of who should get that payment  
 (25) Q So you decided to duke it out with the fishermen in the  
 court system?

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- (1) A That is not a fair characterization What we decided to do  
 (2) was we concluded that there is a purpose in the law and the  
 (3) purpose in the law is to come to a reasonable decision as to  
 (4) what the right level of compensation was, which I think is the  
 (5) issue - one of the issues that this jury has already dealt  
 (6) with  
 (7) Q Have you been aware of the fact that the chairman of the  
 (8) board of Exxon Corporation represented - the then chairman of  
 (9) the board of Exxon Corporation represented to Senator Stevens  
 (10) from Alaska that this kind of proceeding wouldn't be necessary  
 (11) were you aware of that?  
 (12) A I m not aware of that  
 (13) Q Exxon has in the course of this proceeding blamed a variety  
 (14) of other people, hasn't it?  
 (15) A You have not heard me blame a variety of other people  
 (16) Q Well did you authorize a suit against Sperry?  
 (17) A Yes, I did authorize a suit against Sperry  
 (18) Q And that was an attempt to blame Sperry?  
 (19) MR NEAL Your Honor, we might go into a settlement  
 (20) on that if he keeps on going  
 (21) MR O NEILL I ll move into another area  
 (22) BY MR O NEILL  
 (23) Q Exxon tried to blame the Coast Guard in Phase I Are you  
 (24) aware of that?  
 (25) A Well I m not an expert on the instructions in Phase I so

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- (1) I just can't comment.  
 (2) Q I m interested in a little bit of basic corporation  
 (3) organization, Business Enterprises 101 And a corporation has  
 (4) stockholders That s a correct statement?  
 (5) A That s correct.  
 (6) Q And the stockholders vote for the members of the board of  
 (7) directors?  
 (8) A At the annual meeting that s correct  
 (9) Q So if the stockholders - the stockholders as a matter of  
 (10) course normally do approve the management slate, at least at  
 (11) Exxon meetings?  
 (12) A They have in the past.  
 (13) Q But they vote on these people?  
 (14) A That s correct  
 (15) Q So they have some responsibility for who the directors are?  
 (16) A The shareholders do?  
 (17) Q Yes  
 (18) A Yes sir they elect them all  
 (19) Q And a shareholder, in addition to having responsibility for  
 (20) who the director is if he doesn't like the company, he can do  
 (21) a couple things, he can walk with his feet, take his money,  
 (22) sell the stock go invest in another company?  
 (23) A That s correct.  
 (24) Q He can do that at any time?  
 (25) A It s a market system

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- (1) Q And with regard to people who have invested in Exxon  
 (2) Corporation they have had the opportunity since the time of  
 (3) the spill to move their investments elsewhere?  
 (4) A That s a decision that each person makes all the time, Mr  
 (5) O'Neill  
 (6) Q No I understand that So these stockholders are not  
 (7) captives?  
 (8) A No they are not captives but there are a lot of them -  
 (9) the other side there is a lot that have been shareholders for  
 (10) a long long time  
 (11) Q And these shareholders - then the board of directors has  
 (12) overall management responsibility for the company and -  
 (13) A Under the law that s correct.  
 (14) Q And you delegate authority, but you don't delegate  
 (15) responsibility do you? Have you ever heard that?  
 (16) A We delegate authority that s correct but the ultimate  
 (17) responsibility comes back to the board of directors  
 (18) Q That s all I m saying  
 (19) A Yeah  
 (20) Q It s obvious to you because you operate in that realm, but  
 (21) the ultimate responsibility comes back to the board of  
 (22) directors?  
 (23) A Absolutely  
 (24) Q And that s from the vessel all the way up?  
 (25) A Sure

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- (1) MR O NEILL. If I could have just a second to look at  
 (2) my notes  
 (3) My brain is telling me that I m done He said that I  
 (4) should sit down so being smarter than me although not as  
 (5) handsome I ll sit down Thank you sir  
 (6) THE WITNESS I assume that wasn't a question  
 (7) MR O NEILL No but I m sure the answer would be  
 (8) yes  
 (9) RE DIRECT EXAMINATION OF LEE RAYMOND  
 (10) BY MR NEAL  
 (11) Q Mr O'Neill asked you if your lawyers had been trying to  
 (12) bring the Coast Guard in this case Let me read you something  
 (13) from the transcript in this case Whether the Coast Guard does  
 (14) or does not have any responsibility in this matter is not an  
 (15) issue in this case You are to focus on the rights and the  
 (16) responsibilities as between the plaintiffs and the defendants  
 (17) Nevertheless, I have allowed evidence about the Coast Guard  
 and  
 (18) the vessel traffic system operated by the Coast Guard to be  
 (19) presented to you In evaluating whether or not defendants  
 (20) acted recklessly you may take into account all the information  
 (21) available to the defendants at the time they acted, including  
 (22) any understanding or belief they may have had respect to Coast  
 (23) Guard monitoring of the vessel traffic  
 (24) Were you here when I summed up Phase I and told the jury  
 (25) that we were not blaming the Coast Guard?

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- (1) A No I was not  
 (2) Q Another question has been asked you about newspapers  
 and  
 (3) something about do you think the fishermen would be  
 interested  
 (4) in whether the ad was carried in a Detroit newspaper I m  
 (5) going to ask you if it was carried in the Daily Sentinel?  
 (6) A Is that a Detroit newspaper?  
 (7) Q No  
 (8) A I have no idea  
 (9) Q You know you can't read this so I ll ask about something  
 (10) I can read  
 (11) Was it carried in the Valdez Vanguard?  
 (12) A Yes, it was It was carried in a number of Alaskan  
 (13) newspapers  
 (14) Q Was it carried in the Juneau Empire?  
 (15) A Yes  
 (16) Q Was it carried in the Anchorage Times?  
 (17) A Yes  
 (18) Q Was it carried in the Seward Log?  
 (19) A Yes  
 (20) Q Was it carried in the Cordova Times?  
 (21) A Yes  
 (22) Q Was it carried in the Ketchikan Daily News?  
 (23) A Right  
 (24) Q Among others?  
 (25) A Right

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- (1) Q Now the dividends he asked you about the dividends  
 (2) increasing somewhat every year?  
 (3) A Correct  
 (4) Q Have those dividends - you probably know more about  
 (5) inflation and the cost of living index than I do but is it  
 (6) fair to say that the dividends when you consider the price of  
 (7) stock have not increased at the rate of inflation or am I  
 (8) wrong about that?  
 (9) A Well in the early part of the period they were higher  
 (10) than inflation and in more recent times they have not been  
 (11) Q Have not been?  
 (12) A Inflation  
 (13) Q Kept up with inflation?  
 (14) A Right  
 (15) Q So the dividends he s talking about increasing were not  
 (16) worth as much in 1989 as much as the dividends were worth in  
 (17) 1988, that s the feeling?  
 (18) A The last couple of years the rate of dividend increases  
 (19) have been very slow They have talled off  
 (20) Q Now he showed you about the stock purchase plan that's  
 (21) the Plaintiffs' Exhibit 6366 I won't take a lot of time but  
 (22) if a juror is interested in this they should look at  
 (23) Plaintiffs Exhibit 6368, and I ll ask you if practically all  
 (24) the prepurchases didn't occur before 1989 the spill?  
 (25) A As a matter of fact one of the actions that was taken Mr

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- (1) Neal, in 1989 in the aftermath of the spill was to take that  
 (2) stock purchase/repurchase plan down to the point where the  
 (3) level of purchases was equal to the level of options that was  
 (4) exercised so the total number of shares remained constant, so  
 (5) we stopped the program  
 (6) Q I have one last may be compound but one last question  
 (7) He asked you if you were going to tell the media if you were  
 (8) going to tell Congress about the results of the investigation  
 (9) Let me ask you this Did you instruct your people to cooperate  
 (10) fully in the investigation by the National Traffic Safety  
 (11) Board?  
 (12) A Yes sir  
 (13) Q Did you instruct your people to cooperate fully with the  
 (14) United States Department of Justice investigation?  
 (15) A Yes sir  
 (16) Q He mentioned -  
 (17) A And if I may, Mr Neal I was sitting in this court when  
 (18) that plea bargain was approved and when the Department of  
 (19) Justice reported their findings as to the cause of the spill,  
 (20) we agreed  
 (21) Q And in that same agreement did the Department of Justice  
 (22) compliment Exxon on its total cooperation during their  
 (23) investigation?  
 (24) A Yes it did  
 (25) MR NEAL Thank you Mr Raymond

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- (1) THE COURT Thank you sir you may step down  
 (2) MR NEAL May it please the Court the defendants  
 (3) rest  
 (4) MR CHALOS Your Honor for the record we rest as  
 (5) well We've been resting  
 (6) MR NEAL I m not sure he has any right to rest.  
 (7) That assumes a fact not in evidence  
 (8) THE COURT Mr O'Neill will there be any rebuttal  
 (9) case from the plaintiffs?  
 (10) MR O NEILL No sir, there will not.  
 (11) THE COURT If that completes the taking of the  
 (12) evidence in Phase III may I see counsel behind the Barco for  
 (13) just a moment  
 (14) (At side bar off the Record)  
 (15) THE COURT We are going to adjourn for the day in  
 (16) just a moment Ladies and Gentlemen Tomorrow as was done  
 (17) before will be a day for arguments and for instructions I  
 (18) think rather than start at 8 00 let s start at 9 00 tomorrow  
 (19) morning  
 (20) There will be at least one matter that I will need to take  
 (21) up with counsel that I want to schedule for, let s say 8 30 so  
 (22) we re going to adjourn now as far as the jury is concerned  
 (23) until 9 00 tomorrow morning with counsel 8 30 tomorrow  
 (24) morning I'll need to see counsel for a couple more things  
 (25) but the jury is excused at this time

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- (1) (Jury out at 1 52)  
 (2) THE COURT Mr Lynch  
 (3) MR LYNCH Your Honor pursuant to Rule 15, we renew  
 (4) our motions for judgment as a matter of law made at the end of  
 (5) Phase I insofar as this phase relates those issues and our  
 (6) motions for judgment as a matter of law made at the end of  
 (7) Phase II insofar as compensatory damages are an official  
 (8) prerequisite for punitive damages and if I may I'll simply  
 (9) bring my writings that Your Honor has received tomorrow  
 (10) MR O NEILL Your Honor, for the record Captain  
 (11) Hazelwood joins in that motion  
 (12) THE COURT I m not hearing you  
 (13) MR O NEILL For the record Captain Hazelwood joined  
 (14) in the motion I m not joining in Captain Hazelwood s motion  
 (15) by saying that and the plaintiffs hereby move pursuant to  
 (16) federal rule of civil procedure 50 for judgment as a matter of  
 (17) law as to the defendants liability for punitive damages In  
 (18) light of the determination in Phase I that the defendants are  
 (19) guilty of reckless misconduct there can be no legally  
 (20) sufficient evidentiary basis for a reasonable jury to find that  
 (21) the defendants are not liable for punitive damages And we  
 (22) oppose the defendants motions  
 (23) MR LYNCH We oppose Mr O'Neill s motions Your  
 (24) Honor  
 (25) THE COURT Then all of the motions are denied at this

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- (1) time  
 (2) MR LYNCH Thank you Your Honor  
 (3) MR O NEILL Thank you Judge  
 (4) THE COURT Anything else that we need to put on the  
 (5) record at this point?  
 (6) MR O NEILL Just for planning purposes it s my  
 (7) purposes to go an hour-and-a-half and a half an hour like I did  
 (8) in Phase I and II  
 (9) MR NEAL Your Honor I plan to be much shorter than  
 (10) that It s difficult for me to see how we need that much time  
 (11) to argue a three-day trial, but I certainly won't take that  
 (12) long All I can say is that -  
 (13) MR CHALOS Your Honor -  
 (14) THE COURT Having in mind what's at stake here I m  
 (15) going to allow counsel a considerable more latitude than I  
 (16) would ordinarily give on a trial of this duration But Mr  
 (17) Chalos I trust that you can fit your position into the two  
 (18) hours that we re looking at  
 (19) MR CHALOS Well I always feel like a stepchild, but  
 (20) five to ten minutes ought to do it  
 (21) MR NEAL Your Honor we can both do it Mr Chalos  
 (22) and Mr Russo both we can fit it in  
 (23) THE COURT Mr Lynch anything else?  
 (24) MR LYNCH No  
 (25) THE COURT Mr O'Neill?

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- (1) MR O'NEILL No, Your Honor  
 (2) THE COURT I will see counsel in chambers to -  
 (3) MR LAKOSH Your Honor, I was hoping to make a motion  
 (4) under pretrial order number 9 to provide a short rebuttal in  
 (5) reference to defendants obligation to pay in accordance with  
 (6) their lease obligations for production on the North Slope with  
 (7) specific reference to the fact that if defendants did not out  
 (8) of the goodness of their hearts help the fishermen pay them  
 (9) they would have been obligated to do so under their lease  
 (10) obligations  
 (11) MR O NEILL As designated lead trial counsel under  
 (12) order 192 for the plaintiffs I considered this issue today,  
 (13) and I've decided that it is not in the plaintiffs interest in  
 (14) my professional judgment to pursue the matter by putting on a  
 (15) rebuttal case  
 (16) THE COURT That s the way it will be This trial was  
 (17) set up to be basically a class trial Class plaintiffs'  
 (18) counsel were designated to make these decisions and  
 (19) counsel s  
 (20) decision on this point will stand  
 (21) MR O NEILL Thank you, Your Honor  
 (22) THE COURT We'll see counsel in chambers to consider  
 (23) jury instructions in about ten minutes please  
 (23) (Proceedings recessed at 1 58)

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- (1) STATE OF ALASKA )  
 (2) Reporter s Certificate  
 (3) DISTRICT OF ALASKA )  
 (6) I, Leonard J DiPaolo a Registered Professional Reporter and Notary Public,  
 (7) 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) LEONARD J DIPAOLO RPR  
 Notary Public for Alaska  
 (22) My Commission Expires 2-3-96

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- (1) EXHIBITS  
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**Look-See Concordance Report**

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UNIQUE WORDS 3,185  
TOTAL OCCURRENCES 13,815  
NOISE WORDS 385  
TOTAL WORDS IN FILE 43,581

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SINGLE FILE CONCORDANCE

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CASE SENSITIVE

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NOISE WORD LIST(S)  
NOISE NOI

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INCLUDES ALL TEXT  
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(1) IN THE UNITED STATES DISTRICT COURT  
 (2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No A89 0095 CIV (HRH)  
 (5) ) Anchorage Alaska  
 The EXXON VALDEZ ) Monday August 29 1994  
 (6) ) 8 00 a m  
 TRANSCRIPT OF PROCEEDINGS  
 (9) TRIAL BY JURY 70th DAY  
 (10) BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE  
 VOLUME 43 Pages 7553 7672  
 Realtime Transcription

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(1) PROCEEDINGS  
 (2) (Jury in at 8 04)  
 (3) THE CLERK. All rise  
 (4) (Call to Order of the Court)  
 (5) THE COURT Good morning, ladies and gentlemen We  
 (6) are ready now for closing arguments in Phase III of our trial  
 (7) in the course of these arguments counsel may and probably  
 will  
 (8) refer to some of the jury instructions I will be giving at the  
 (9) end of the trial It s entirely appropriate if they do so,  
 (10) however if after all is said and done if there is any  
 (11) difference between what counsel says and what the court gives  
 (12) as instructions you should be governed by my instructions on  
 (13) the law and your evaluation of the facts of the case  
 (14) MR O NEILL. Your Honor, we have two housekeeping  
 (15) matters, and they require a motion to reopen, which I assume is  
 (16) unopposed  
 (17) MR SELNA That's correct.  
 (18) MR O'NEILL. And the motion having been granted the  
 (19) plaintiffs move the admission of plaintiffs' Exhibits 3 and  
 (20) 828  
 (21) (Exhibits Plaintiffs' 3 and 828 offered)  
 (22) MR SELNA No objection Your Honor  
 (23) THE COURT Plaintiffs' Exhibits 3 and 828 are  
 (24) admitted by agreement  
 (25) (Exhibit Plaintiffs' 3 and 828 received)

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(1) MR SELNA Your Honor we would also at this time  
 (2) like to withdraw DX8317  
 (3) MR O'NEILL. There is no objection to that.  
 (4) THE COURT That's agreed Defendants' exhibits 6317  
 (5) is withdrawn Is that it?  
 (6) (Exhibit DX8317 withdrawn)  
 (7) MR O NEILL. I'd like to approach the side bar for  
 (8) one second with Mr Daum and Mr Oesting  
 (9) (At side bar off the Record)  
 (10) THE COURT For the record, the cases of both  
 (11) plaintiffs and defendants is now again closed and we have an  
 (12) agreement that the written exceptions that have been filed with  
 (13) respect to my instructions will be taken up a little bit later  
 (14) in the proceeding  
 (15) MR O NEILL. Thank you  
 (16) THE COURT You may argue  
 (17) MR O'NEILL. May it please the Court, counsel, ladies  
 (18) and gentlemen of the jury What amount of money is necessary  
 (19) to punish Exxon Corporation for its reckless acts reckless  
 (20) acts that caused the worst environmental disaster in United  
 (21) States history? And that's the question before us  
 (22) Now, your role is unique to our country in that the 7th  
 (23) Amendment to the constitution sets up the jury system, and in  
 (24) our country when it comes to issues of punishment like this  
 (25) that is not relegated to the executive branch of the

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(1) government and the legislature can't do it the Congress can't  
 (2) do it and state legislators can't do it the jury system does  
 (3) it And when it comes time to express society's condemnation  
 (4) of conduct that we all know is wrong under our system of  
 (5) government, juries do it That's how we do business in our  
 (6) country  
 (7) So to the extent that you sit there and you think who am I  
 (8) to cast judgment on Exxon Corporation for what went wrong  
 the  
 (9) answer to it is two-fold The constitution and the laws of the  
 (10) United States have set it up so that you're the ones And the  
 (11) second reason is that, the reason that there are 11 of you is  
 (12) so that you can bring the considered judgment of 11 people  
 and  
 (13) their life experiences to the problem at hand  
 (14) Makes sense But instead of having one juror or two  
 (15) jurors we have a number of jurors so that all your life  
 (16) experiences, your attitudes your different views which are  
 (17) all valuable are brought to the problem at hand, and the  
 (18) combined wisdom of 11 of you, history has proven that the  
 (19) combined wisdom of 11 of you is a heck of a lot better than the  
 (20) combined wisdom of one or two people so we have a jury  
 (21) system  
 (22) And the jury system has been with us for hundreds and  
 (23) hundreds of years goes back to the tenth and eleventh century  
 (24) in England and punitive damages as a concept for expressing  
 (25) our disapproval society's disapproval of actions has been

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(1) with us for hundreds of years  
 (2) Now, could we see the first jury instruction?  
 (3) Jury instruction 24 says that the amount of punitive  
 (4) damages that is necessary to punish a defendant is the penalty  
 (5) that is necessary to express society's disapproval of conduct  
 (6) that society condemns and that's what I'm talking about. You  
 (7) are here to express society's disapproval of conduct that  
 (8) society condemns  
 (9) And that is the jury instruction and that is your role,  
 (10) and in this case, because we have set up a punitive damages  
 (11) class and because Your Honor has chosen to supervise a  
 punitive  
 (12) damages class this is the only jury that is going to address  
 (13) this issue And in fact with regard to Exxon Corporation this  
 (14) is the only jury that has heard the whole story With regard  
 (15) to Exxon this is the only jury that has heard the whole story  
 (16) of Exxon's conduct with regard to the grounding of the Valdez  
 (17) Exxon has not appeared before a jury before in the last five  
 (18) years with regard to this grounding  
 (19) So you have the responsibility of being the only jury, you  
 (20) had the responsibility of being a jury that takes the place of  
 (21) juries in the state court system that takes the place of  
 (22) juries in other federal cases You are supposed to take it all  
 (23) in and do it once and that's quite a responsibility  
 (24) And to say - a lot of times in these cases the lawyers  
 (25) say well the world is looking at you and you read in

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(1) newspapers about the lawyers making an argument 'you have  
 to  
 (2) send a message to the world or corporate America most of the  
 (3) time that isn't true most of the time those cases end up on  
 (4) the back page of the business section that's a lawyer's  
 (5) argument  
 (6) In point in fact the world is looking at you the  
 (7) directors in mahogany polished boardrooms in Houston New  
 York  
 (8) Brussels Paris France Hong Kong are going to know exactly  
 (9) what you did And ordinary citizens in the United States  
 (10) Norway Germany Japan are going to know what you did And  
 (11) what you do in this Phase III is an expression of what our  
 (12) society's values are That's how it's going to be interpreted  
 (13) and everybody is going to know about it  
 (14) Now I want to talk for a minute about the standard for  
 (15) punitive damages and jury instruction 27 lays them out as  
 (16) clearly as they can be laid out. And the first is the degree  
 (17) of reprehensibility of the conduct The conduct the Phase I  
 (18) conduct, is the first thing that you look at The second thing  
 (19) that you look at is the magnitude of the harm likely to result  
 (20) from the conduct as well as the harm that actually occurred  
 (21) That's two separate things what was put at risk and what  
 (22) happened And the third is the financial condition of the  
 (23) defendants These are the three primary things you look at  
 (24) As mitigating factors you look at the existence of prior  
 (25) criminal sanctions or civil awards and the extent to which a

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(1) defendant has taken steps to remedy his conduct. Now, the  
 word  
 (2) mitigated is defined in the jury instructions and when you go  
 (3) back to the jury room and you consider this, I urge you to look  
 (4) at the definition of mitigating because it doesn't say if you  
 (5) find these factors in place you let them off the hook  
 (6) The three primary factors are the degree of  
 (7) reprehensibility harm and the financial condition of the  
 (8) defendants and they ought to be What they did, who they hurt  
 (9) and how wealthy they are make eminent sense because you  
 punish  
 (10) the conduct, the conduct has to be looked at within the scope  
 (11) of the danger it presents to society and what is punishment  
 (12) for a poor man can be nothing for a rich man  
 (13) Now with regard to the conduct at issue I want to pull up  
 (14) jury instruction 28 from Phase I That's the one you've got  
 (15) right there This is the jury instruction that I am sure you  
 (16) discussed back in the jury room at great length because it is  
 (17) the core of the Phase I jury instruction and this is the  
 (18) conduct that you found to be reckless in Phase I and now I'm  
 (19) asking you because of the seriousness of the conduct to  
 (20) condemn the conduct  
 (21) Now I want to if we can revisit a minute and I'm going  
 (22) to do it by videotape some of the proof that we've seen in  
 (23) Phase I Phase II and Phase III I could stand here and talk  
 (24) about it but all that seems to do is engender arguments about  
 (25) who said what to who So rather than talk about the conduct

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- (1) I'm going to put on a videotape and we're going to revisit some  
 (2) Phase I evidence and some Phase II evidence and then  
 (3) because I  
 (4) didn't have the time to put the Phase III evidence on a  
 (5) videotape, I'll talk about that afterwards but if we could -  
 (6) (Videotape Played)  
 (7) MR O'NEILL. The conduct that led to the grounding of  
 (8) the Exxon Valdez took place over four years and it took place  
 (9) with the complicity of almost every officer of Exxon Shipping  
 (10) Company, Dwight Koops, Harvey Borgen, Frank Larossi, Andy  
 (11) Martineau and you can go on and on and on. They were told  
 (12) during the course of that four years, repeatedly from 1985 to  
 (13) 1989 to two or three days before the grounding there is a  
 (14) problem here  
 (15) And the conduct wasn't a result of paper policies the  
 (16) conduct was a result of a sickness in the organization, and  
 (17) that sickness had to do with the way we treat each other as  
 (18) decent human beings. And I talked about it at some length with  
 (19) the witnesses. If somebody has a problem, you say how are  
 (20) you  
 (21) doing on your problem, how is your treatment how is your  
 (22) family are you happy unhappy is there something I can do for  
 (23) you is there something the company can do for you  
 (24) What happened here was the result of a lack of basic human  
 (25) decency. And what happened as a result of that lack of basic  
 human decency at Exxon Corporation? A lot of people were hurt.  
 (25) The Exxon Valdez in fact had impacts on landowners in the

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- (1) Sound on Kodiak and the Alaska Peninsula. It had over \$280  
 (2) million worth of impacts on commercial fishermen. Phase II  
 (3) commercial fishermen  
 (4) Municipalities Valdez Cordova Whittier Seward Kodiak  
 (5) Chignik were impacted both with regard to the spill on their  
 (6) lands and the basic nature of those communities was ripped  
 (7) apart. The influx of clean up workers and influx of demands on  
 (8) city services took those small, sleepy happy communities and  
 (9) turned them upside down. There are fishermen who were hurt  
 (10) by  
 (11) this who we haven't talked about yet with any jury, and they  
 (12) will be in Phase IV of this case  
 (13) As His Honor read there were some payments made to  
 (14) canneries there was a disruption with regard to canneries  
 (15) Aquaculture associations, Prince William Sound Aquaculture  
 (16) Association Cook Inlet Aquaculture Association the Kodiak  
 (17) Aquaculture Association were hurt by the spill. Alaska Native  
 (18) corporations were hurt by the spill  
 (19) In point of fact, in Prince William Sound Kodiak Chignik  
 (20) the communities were ripped apart as a result of the spill  
 (21) And this is a foreseeable event the consequences of which  
 (22) occurred as predicted. These are the people that are here for  
 (23) justice and they include the full tapestry of society in the  
 (24) affected spill areas  
 (25) Now the second part in His Honor's instructions not only  
 covers the harm that occurred but also covers the harm that

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- (1) could have occurred, one million more barrels of oil on the  
 (2) ship, and the fact that the conduct at issue places people's  
 (3) lives in danger, and it does and Captain Deppe testified about  
 (4) that. This conduct resulted in scope-wise the greatest  
 (5) environmental disaster in the history of America. That's the  
 (6) second factor  
 (7) The third factor is wealth and I'd like to take a look at  
 (8) jury instruction 34 for a minute. Your new jury instruction 34  
 (9) will say, in considering a defendant's net worth or net income  
 (10) you may consider what portion of a defendant's net worth or net  
 (11) income is most relevant to the activities that were impacted  
 (12) or you may decide that all the defendant's net worth or net  
 (13) income is relevant so it's up to you what you look at.  
 (14) Now Exxon Corporation is run as a corporation, and you  
 (15) don't go to work for Exxon Shipping or Exxon Chemical or  
 Exxon  
 (16) USA, you go to work for Exxon Corporation. And like Mr Elmer  
 (17) you go between division and division. And Exxon Corporation  
 (18) if you look at those annual reports, publishes consolidated  
 (19) financial statements and the reasons that they do that is  
 (20) because they are run as one company, and, more importantly  
 (21) with regard to their assets they are run as one company  
 (22) Now I want to go to the 1991 annual report of their  
 (23) company, and this is how they tell you they manage their  
 (24) money. Cash flow is centrally coordinated in order to  
 (25) efficiently move funds from units generating cash to units

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- (1) where funds are needed to finance new investments or meet  
 (2) new  
 (3) operating requirements  
 (4) That's the 1991 annual report at page 4. This is how they  
 (5) run their business. And this 10 to \$12 billion of cash flow is  
 (6) an important number because this 10 to \$12 billion is  
 (7) discretionary cash that they have at the end of the year, and  
 (8) it can be invested in dividends for the shareholders, it can be  
 (9) invested in how much cash they keep in their wallet at the end  
 (10) of the year, or it can be invested - reinvested in the  
 (11) company  
 (12) In addition and this stipulated fact is in the jury  
 (13) instructions the number of which I do not recall, but you'll  
 (14) see it the parties have stipulated that we have the Exxon  
 (15) defendants and when you look at the special verdict form,  
 (16) which I'm going to talk about at the end, this is one number  
 (17) for the Exxon defendants, and in this case I would suggest to  
 (18) you that the complicity doesn't just go throughout Exxon  
 (19) Shipping Company, but who came in here to defend the  
 (20) conduct  
 (21) the Exxon medical department, Mr Cornett, where is he from,  
 (22) the Exxon USA public relations department.  
 (23) But when it gets right down to it, the big defenders of the  
 (24) conduct were Mr Rawl and Mr Raymond. And what they did in  
 (25) coming in and defending the conduct, they ratified that  
 conduct. When they mounted this defense in Phase I, they  
 (25) ratified the conduct. The complicity of this thing goes from



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(1) top to bottom but I'm going to come back to the complicity of  
 (2) this thing going from top to bottom when I talk about that  
 (3) dispute resolution agreement, because that's reprehensible  
 but  
 (4) we'll get to that  
 (5) So Exxon Corporation is in fact run as one corporation and  
 (6) I want to go over for a minute if we could the board that Mr  
 (7) Rhodes used and I want to talk about its financial health  
 (8) And I figured out one thing over the weekend that I want to  
 (9) talk to you about too  
 (10) Now remember we started in '88 and go all the way through  
 (11) to '93 I'm going to sneak by, I'll block His Honor off he  
 (12) won't mind  
 (13) The dividends per share of Exxon Corporation have gone up  
 (14) every year from 1988 to the present including the spill They  
 (15) have The total amount of cash dividends paid out for every  
 (16) year including the spill, have gone up, and they pay out about  
 (17) \$3 billion a year, three-and-a-half billion dollars a year in  
 (18) cash dividends The stock price on the stock market, like my  
 (19) clients permits is affected by things extrinsic to the piece  
 (20) of paper The stock price has gone up every year, including  
 (21) the year of the spill  
 (22) Now, we see that there is a drop in earnings per share in  
 (23) 1989 and I was curious about that and I went back and I read  
 (24) the 1989 Exxon annual report, and I did it for two reasons If  
 (25) you recall Mr Raymond testified that the \$2.7 billion was the

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(1) looking at a hundred billion dollars in revenue and that makes  
 (2) a lot of sense But this number here the equity, is a net  
 (3) number okay and in addition the after-tax net is a net  
 (4) number  
 (5) And this last sentence here if you consider a defendant's  
 (6) income in assessing its financial condition you may not  
 (7) consider a defendant's gross income but only the difference  
 (8) between gross income and all expenses that must be paid out  
 (9) This is a definition of cash flow That is gross income and  
 (10) expenses that must be paid out of that income  
 (11) Now I want to leave this one up and if you could get me  
 (12) the cash flow board, this is an exhibit, it is Exhibit Number  
 (13) 6317 B, and it shows what the cash flow is for each of these  
 (14) years And then it shows that out of this cash flow, they make  
 (15) a decision to expend a discretionary decision to spend on  
 (16) property, plant and equipments or dividends or other reasons  
 (17) this 10 billion, 8 billion, 11 billion, 10 billion, 10 billion  
 (18) and 11 billion So this fills out the detail from here  
 (19) Now what is Exxon going to say? It's going to talk about  
 (20) the two mitigating factors Do you remember we had five  
 (21) factors, the big three and the two mitigating factors and they  
 (22) are going to say look at the cleanup And I would offer again  
 (23) what I've been asking about in the interrogation of the  
 (24) witnesses, the law required the cleanup, and this is Mr  
 (25) Elmer's testimony Have you ever looked at the Alaska statutes

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(1) biggest expense Exxon has ever made on anything He  
 testified  
 (2) to that And looking at these numbers, it struck me that \$2.7  
 (3) billion shouldn't have had this kind of effect on earnings per  
 (4) share so I went back And when you go back to the jury room  
 (5) I would recommend to you pages 33 and 34 of the 1989 annual  
 (6) report because Exxon paid in 1989, for McColl-Frontenac,  
 (7) which is formerly Texaco Canada \$4.2 billion in cash in the  
 (8) year of the spill, and on pages 33 and 34 they describe that  
 (9) So the year of the spill, where this allegedly devastating  
 (10) expense was taking place they had cash to pay \$4.2 billion for  
 (11) another subsidiary and that's in here on pages 33 and 34 and  
 (12) if they want to argue about it, I suggest you read it. So the  
 (13) year of the spill, not only could the dividends go up, but we  
 (14) have over \$4 billion to use on another acquisition  
 (15) Now the after tax net number is an important number to  
 (16) look at but so is the cash flow number The cash flow number  
 (17) represents what you and I would have left over at the end of  
 (18) the year, and we might, if we had anything left over at the end  
 (19) of the year we might put something in the bank, we might  
 (20) reinvest some of it in our house, but that's an important  
 (21) number and I want to talk about that.  
 (22) Let me have the next one  
 (23) Jury instruction 33 says that you cannot take the gross  
 (24) numbers, and I'm just looking for one gross revenue that you  
 (25) need to be more sophisticated in your approach than just

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(1) that was in effect with regard to the requirements to clean up  
 (2) the spill? Would it surprise you to know that you're obligated  
 (3) to immediately contain and clean up the discharge of oil,  
 (4) that's the statute, that's the statute in effect in '89 Does  
 (5) the statute surprise you? I don't think it does, no sir  
 (6) Now, why doesn't it surprise him? A, because he's in the  
 (7) business, and B in this book, All I Really Needed to Know I  
 (8) Learned in Kindergarten one of my favorite books and this is  
 (9) a really good book - you know part of the problem in this  
 (10) courtroom process is that it's possible for a defendant with  
 (11) enough money to come in and create a reality that doesn't  
 make  
 (12) sense and what a book like this does is it reminds you of  
 (13) basic human decency And in the rules of this book, there is a  
 (14) rule that says clean up your own mess, it's one of the eight or  
 (15) nine rules in here Another rule is say you're sorry when you  
 (16) hurt somebody, but you clean up your own mess  
 (17) And Exxon is in here claiming credit for what I really need  
 (18) to know I learned in kindergarten And in point of fact they  
 (19) cleaned up about 15 percent of what they spilled, so they are  
 (20) claiming credit for what the law requires what we learned in  
 (21) kindergarten and doing part of the job  
 (22) Now, they spent a lot of money on it and the people who  
 (23) worked on the cleanup worked hard Not only does Exxon's  
 sense  
 (24) require them to clean up their own mess but that was a  
 (25) business risk they took

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- (1) Let me see that one
- (2) Now this may seem sort of a "why is he doing that"
- (3) question but you see how it fits in the business We all
- (4) don't come home everyday to expect praise about complying
- (5) with the law "I ought to be awarded for complying with the law"
- (6) What I said is a ridiculous proposition this setup to comply
- (7) with the law that's what I said Absolutely everybody has to
- (8) comply with the law You comply with the law I comply with
- (9) the law I don't come home and say to my wife Ruth good job
- (10) today I complied with the law I mean I don't do that
- (11) But in addition to clean up was a risk that they took it
- (12) was a risk doing business It was so highly unlikely that the
- (13) consequences of it which occurred pretty well as much as
- (14) envisioned were viewed as acceptable The spill was a callous
- (15) cold-hearted business risk that they took and they made the
- (16) risk worse
- (17) If this was the risk that I was going to take with
- (18) defenseless people - and they were viewed as acceptable by
- (19) who by fishermen? If this was the risk I was going to take
- (20) with defenseless people, I would be real careful Fishermen
- (21) have no protection against this risk The Native corporations
- (22) the landowners the municipalities have no protection against
- (23) this risk If I was going to take this risk I would be
- (24) really really careful I would not have this policy
- (25) Now with regard to clean up I would submit to you that at

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- (1) least - and remember Mr Cornett in the emergency center
  - (2) tapes
  - (3) and how they tried to disallow Mr Cornett, and he's now the
  - (4) director of public relations for Exxon USA, he got promoted
  - (5) this is the guy who brought you well if you just have to get
  - (6) out there and drive it around do it and I would encourage you
  - (7) to take the three noisiest fishermen down here and hire those
  - (8) suckers and hire those suckers and load them down with
  - (9) something and have them drive it around there in Prince William
  - (10) Sound and hire those suckers
  - (11) There is an exhibit that you ought to look at, Exhibit 603,
  - (12) this is an Exxon fax Even cleaning a few ducks and otters
  - (13) gives the impression of caring And then they promote Mr
  - (14) Cornett but that's the cleanup The claims program they are
  - (15) going to claim success for the claims program They paid half
  - (16) of what they owed to the fishermen, the biggest chunk of the
  - (17) claims program about a hundred million dollars went to seven
  - (18) or eight corporate canneries
  - (19) But the claims program you pay somebody when you hurt
  - (20) them you pay them when you hurt them It's compensatory in
  - (21) nature And Mr Rawl's promised the Congress and we saw the
  - (22) promise here on Monday, I'm not going to make the people of
  - (23) Alaska who were hurt by the spill go to the mat That's what
  - (24) he told the congressmen or senators and we're - we are going
  - (25) to the mat.
- (25) Now the third thing they are going to say is we made these

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- (1) changes in our policies Now the first thing I want to say
- (2) about that is didn't we hear about their policies in Phase I
- (3) remember the big collage of the safety awards remember the
- (4) safety belt buckles? We heard how great the policies were in
- (5) Phase I and the policies in Phase I didn't do a thing they
- (6) didn't do a thing And the safety belt buckles didn't do a
- (7) thing because safety belt buckles don't hurt unless the person
- (8) wearing the safety belt buckle cares
- (9) In addition the changes they claim they are making is what
- (10) the law requires so they are coming in and saying give me
- (11) credit for what the law requires There is a statute since
- (12) 1913 that says six on and six off, and it takes until 1990 to
- (13) get a board on the statute The Congress amends the work
- (14) hour
- (15) laws because it doesn't trust Exxon the states of California
- (16) Oregon, Washington Alaska feel they need protection, so they
- (17) pass oil spill statutes in the wake of the Exxon Valdez, the
- (18) Congress of the United States the American people need
- (19) protection from Exxon Corporation so it passes OPA '90
- (20) The Congress of the United States feels that the people of
- (21) Prince William Sound need such protection from Exxon
- (22) Corporation that it passes a statute that prohibits this vessel
- (23) from going into Prince William Sound The policies, whether
- (24) they deal with spilling oil or safety or fatigue or work hours,
- (25) are passed to comply with the law and they should have done it

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- (1) And with regard to their embracing of the future, I would
  - (2) like to discuss two exhibits with you I would like you to
  - (3) read Exhibit 13 and Exhibit 175 when you go back to the jury
  - (4) room Exhibit 13 says in March of 1990 our own internal
  - (5) policies with regard to work hours are being violated on three
  - (6) quarters of our vessels A year after the Exxon Valdez, the
  - (7) SeaRiver Mediterranean
  - (8) Exhibit 175 is in September of 1989 and it's by Frank
  - (9) Iarossi to Koops They put Koops in charge of implementing
  - (10) the
  - (11) changes to the program Koops is now the number two guy at
  - (12) SeaRiver Dwight Koops, the Gulf Coast fleet manager, one of
  - (13) the people that caused the problems is the number two guy, is
  - (14) Mr Elmer's assistant he's the ocean fleet manager Dwight
  - (15) Koops is the ocean fleet manager, Don Cornett is the director
  - (16) of public relations
  - (17) But in this memorandum Mr Iarossi says it is incredible
  - (18) that September is here and we still have not addressed the ice
  - (19) issue the idea of allowing a coffee break is just
  - (20) unbelievable and then he goes on to say about Jerry Aspland
  - (21) of
  - (22) ARCO Marine that ARCO is setting a new standard in the
  - (23) industry, ARCO sees the grounding of the Exxon Valdez and
  - (24) says
  - (25) we weren't involved we're not in trouble, but we're going to
- (25) go and look at what we're doing and set a new standard in the
- (24) industry which is what you would expect from ARCO but it is
- (25) not what you would expect from Exxon Corporation the people

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(1) who brought you the grounding of the Exxon Valdez  
 (2) Now I want to talk for a minute about what happened after  
 (3) the spill, and I'm going to suggest to you that Exxon  
 (4) Corporation lives in a different world and the corporation  
 (5) executives live in a different world, and I'm going to make  
 (6) reference now to a minor part of that, but it's a very telling  
 (7) minor part of that, and that Mr. Raymond's testimony compared  
 (8) how much he makes compared to Mobile  
 (9) Now, Mr. Raymond has \$14 million in stock options that he  
 (10) has yet to exercise. He makes a couple million dollars a year  
 (11) he lives in a different world than we do, and I'm going to talk  
 (12) about that, but after the spill Exxon cleaned up part of its  
 (13) mess. It paid for part of the harm done, contrary to what  
 (14) Mr. Rawl said. It is claiming credit for complying with the  
 (15) law, and now I want to talk a little bit about some things that  
 (16) we found out about last Thursday that I find very interesting,  
 (17) the law department investigation  
 (18) There is a law department investigation which apparently  
 (19) has never been reduced to writing. Couldn't tell that from the  
 (20) testimony, but it's never been reduced to writing. Now the  
 (21) genesis of this law department investigation, I want to go back  
 (22) in time with regard to the law department investigation. The  
 (23) genesis of the law department investigation was larossi there  
 (24) for the first day or two and he tells the people at a meeting  
 (25) in Valdez that he's going to get to the bottom of what happened

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(1) and report to them  
 (2) We had that videotape testimony last Monday or Tuesday and  
 (3) then he says, and a couple days later was taken over by the law  
 (4) department, and then he was asked, I asked him, did they ever  
 (5) tell you, and he says, well, no, but they will only tell me  
 (6) what I need to know to run my business. Now, I think the law  
 (7) department as to the real causes of this thing are real  
 (8) important to the guy who is running the business. Then the law  
 (9) department investigation goes on and the law department  
 (10) investigation is not going to be told to anybody so long as the  
 (11) litigation was going on, that's correct.  
 (12) Now what litigation is this? That's the litigation before  
 (13) you. So there is a law department investigation that we know  
 (14) nothing about that is being withheld from all of us by Exxon  
 (15) Corporation. Does that bother you? It bothers me a heck of a  
 (16) lot.  
 (17) Now, in this case, as you've seen from when we started on  
 (18) May 2nd, there is extreme difficulty with the proof in a case  
 (19) like this because none of these guys were there to do the  
 (20) monitoring, none of these guys were there at the board  
 (21) meetings. They weren't. So you got to pull the facts out, but  
 (22) one of those facts is the law department investigation.  
 (23) Now let's talk even more interestingly, though, despite the  
 (24) law department investigation. Mr. Raymond came here to testify  
 (25) about all of the changes that he and the board had implemented,

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(1) and I asked him a series of names. Mary Williamson, Jim Shaw  
 (2) those kind of names, and he didn't know who any of them were  
 -  
 (3) let's put that one up first  
 (4) So this is the guy, the take-charge CEO who comes in to  
 (5) testify here and says that he's fixed all the problems, but he  
 (6) didn't know who these people were three years after the  
 (7) grounding. He didn't know who the key players were and this is  
 (8) the guy who did the reporting to the board of directors, who is  
 (9) charged by law with running this company.  
 (10) I'm not - well, I was not here in Phase I, I'm not aware  
 (11) of all the evidence. You were the guy on the board, the  
 (12) officer from the company that did most of the information of  
 (13) the board with regard to the Valdez disaster, is that correct,  
 (14) that's correct. Oh, the board of directors that runs the  
 (15) corporation and the take-charge CEO who was supposed to fix  
 the  
 (16) problem doesn't know who was involved in the problem.  
 (17) I asked him, did you talk to Koops, Borgen and those guys?  
 (18) He says, yeah, I talked to them briefly and they told me  
 (19) Hazelwood was the most monitored man in the fleet. So up to  
 (20) May 2nd of 1994 Exxon Corporation who is trying to address  
 (21) serious institutional problems, a cancer within that company  
 (22) doesn't know what happened. The board of directors doesn't  
 know  
 (23) what happened, and indeed the board of directors in this  
 (24) mahogany polished boardroom in Houston, Texas, had at the  
 time  
 (25) of Mr. Raymond's deposition not asked for an assessment as to

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(1) the cause of the grounding  
 (2) Now, if you were a member of the board of directors  
 (3) bringing our common sense to this problem, if you were either  
 (4) the president or the CEO of the company or a member of the  
 (5) board of directors who caused this terrible thing to happen  
 (6) wouldn't you say I want to know exactly what happened? I  
 mean,  
 (7) we can have all of these policies and such that we're going to  
 (8) run out and scurry about writing, but don't you want to know  
 (9) what happened? I would. That's the first thing I would want  
 (10) to know, what happened. Maybe I would yell at somebody,  
 maybe  
 (11) I wouldn't, and if you yell at them, you yell at them but I  
 (12) want to know what happened.  
 (13) Now, here is a little quote on monitoring. This is Mr.  
 (14) Raymond's trial testimony on Thursday. Now, I find this kind  
 (15) of interesting, too, because now they are claiming credit for  
 (16) having a monitoring program in Phase III, but remember they  
 had  
 (17) a monitoring program in Phase I, but they didn't have a  
 (18) monitoring program.  
 (19) Now, the other interesting thing about Mr. Raymond, who  
 (20) comes in here and testifies about the alcohol policy, and this  
 (21) goes to how far remote these people are from the rest of society,  
 (22) and I was in a dialogue with him about recklessness, and if you  
 (23) recall, I said isn't one of the first things you have to do in  
 (24) a 12 step program is come to grips with the full ramifications  
 (25) of what you did. Do you recall that testimony? What was his

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- (1) answer? He didn't know what a 12 step program was  
 (2) Now in the world that most of us live in we know about  
 (3) Alcoholics Anonymous and the 12 step program We may not know  
 (4) what the 12 steps are but we know what the 12 step program  
 (5) is  
 (6) Now if you were chairman of the board - let's approach  
 (7) this from an Exxon sense If I was a chairman of the board of  
 (8) one of the biggest companies in the world and my company caused  
 (9) the biggest environmental disaster in the history of America  
 (10) and there was alcohol involved, I'd learn a little bit about  
 (11) the problem  
 (12) And with this particular problem is it possible to learn  
 (13) about it without at least hearing what a 12 step program is?  
 (14) If I was the chief executive officer or a member of the board  
 (15) of directors of one of the biggest institutions in the world  
 (16) and I hurt people and I hurt them I would want to know who I  
 (17) hurt I'd want to know who I hurt so I could know how to help  
 (18) them and I wouldn't come before a jury in the United States  
 (19) courtroom and not know the name of one single person that I  
 (20) hurt You know the names of more people that Exxon  
 Corporation  
 (21) hurt than the chairman of the board of Exxon Corporation, Tom  
 (22) Dooley, Les Meredith  
 (23) Exxon covered up before Congress and we saw that in the  
 (24) videotape Exxon gave the year of the spill Exxon  
 (25) Corporation gave these guys bonuses they have given Mr

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- (1) Raymond and Mr Rawl bonuses every year  
 (2) Now, with regard to Mr Raymond's unexercised stock  
 (3) options the book value of the unexercised options is \$10  
 (4) million The potential of the options reported to the  
 (5) Securities and Exchange Commission is \$20 million but in 1989  
 (6) he and Mr Rawl were given bonuses  
 (7) Now what happens in Japan what happens in Japan if in  
 (8) fact something like this happens? The chairman of the board of  
 (9) a Japanese company steps down but I guess in the United  
 (10) States in one of the biggest companies in the world if you  
 (11) create a disaster, you give people bonuses The world that  
 (12) these people live in is like Never, Never - it's like Alice in  
 (13) Wonderland  
 (14) Do you want to look at the bonuses go through the proxy  
 (15) statements and when you look at them the rules change in  
 about  
 (16) 1991, about reporting so they need to give fair reports after  
 (17) 1991 but the compensation consists of the compensation -  
 (18) these EBU units and stock options the most lucrative of which  
 (19) are the stock options and Mr Raymond and Mr Rawl stock  
 (20) values went up between 1989 and 1994  
 (21) Did they discipline those involved? I would suggest to you  
 (22) that most of the people who brought you the wreck of the Exxon  
 (23) Valdez if they haven't been given bonuses they have been  
 (24) promoted And that isn't right, either  
 (25) Now, while people were being promoted, and people in the -

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- (1) another interesting thing go to the 1989 year-end statement  
 (2) if you search through it you can find that the outside  
 (3) directors that they approved a stock bonus program for the  
 (4) outside directors in 1989  
 (5) 1989 was quite a year We buy a company in Canada we give  
 (6) ourselves bonuses and with regard to the outside directors we  
 (7) put into place a bonus system for the outside directors That  
 (8) isn't remorse You know if you're sorry you acknowledge the  
 (9) full scope of what you did You don't come in and weasel work  
 (10) around was your company reckless, yeah, my company was  
 (11) reckless first step towards moving on But these are the  
 (12) people who brought it to you, and they are still with us  
 (13) How many of these employees who came in here, the people  
 (14) who were forced to come in here and testify about these stories  
 (15) in Phase I are victims  
 (16) Yeah let me see that the dispute resolution agreement.  
 (17) They will try to argue this away and argue this away and argue  
 (18) this away but you cannot change the written word Why would  
 (19) anybody agree to this? This is a contract to lie, and I didn't  
 (20) know until Thursday that this contract to lie was approved this  
 (21) year, this year by the chairman of the board of Exxon  
 (22) Corporation  
 (23) Now you can try to argue it away or you can say the  
 (24) lawyers made me do it or you can say Captain Hazelwood made  
 me  
 (25) do it but this is a contract to lie by both parties Does

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- (1) this signify remorse?  
 (2) And then you ask - something like this you ask the guy,  
 (3) isn't this reprehensible does this bother you? It should  
 (4) bother him Thank you  
 (5) They have called some of their own employees liars Shaw  
 (6) Steve Day Mary Williamson, and they denied in Phase I a series  
 (7) of problems fatigue alcohol manning No one would have  
 (8) known but for this jury and the persistence of these plaintiffs  
 (9) what went on No one would have known the full scope of what  
 (10) went on but for these plaintiffs and their persistence and this  
 (11) jury and its attention  
 (12) Now, with regard to punishment, you have two tasks in front  
 (13) of you Would an award of punitive damages serve the  
 purposes  
 (14) of punishment and deterrence, and, if so, what amount is  
 (15) necessary to achieve those purposes  
 (16) I'm going to use this one because I don't have the right  
 (17) one There are two purposes and the instructions in the  
 (18) verdict form lay out the two purposes Really there are three  
 (19) punishment in and of itself and you'll see that's clear in the  
 (20) instructions and clear on the verdict form, the deterrence of  
 (21) Exxon Corporation - yeah, that will work This works  
 (22) Punishment purpose one, deterrence of the defendant and  
 (23) others So we have three purposes We punish the conduct in  
 (24) and of itself and then we punish for deterrence of Exxon and we  
 (25) punish for deterrence of others Now with regard to the

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- (1) punishment of the conduct that serves purposes of retribution  
 (2) and it serves the purpose of condemning the conduct. Makes  
 (3) sense  
 (4) With regard to deterrence what is punishment for a poor  
 (5) man can be nothing for a rich man And with regard to the  
 (6) deterrence of others in point of fact, without exaggeration  
 (7) the world is watching you  
 (8) I want to talk about some numbers Let's take a look at  
 (9) that just for a minute We're going to hear a lot about the  
 (10) stockholders and I want you to keep in mind with regard to the  
 (11) stockholders the following No one is required to be a  
 (12) stockholder in Exxon Corporation They could have walked  
 with  
 (13) their feet in 1988 and they can walk with their feet in 1993  
 (14) and 1994 Anybody who chooses to remain a stockholder  
 today  
 (15) has made that choice knowing about this litigation  
 (16) The stockholders are not without complicity because the  
 (17) stockholders have had five years to express their disapproval  
 (18) of Mr Rawl and Mr Raymond and their management team and their  
 (19) board of directors and haven't The stockholders haven't  
 (20) gotten any message, like the board the stockholders haven't  
 (21) gotten any message  
 (22) Why haven't the stockholders gotten any message? Because  
 (23) the stockholders have done better than their contemporaries  
 who  
 (24) invest in the Standard & Poor's 500 stocks and the  
 (25) contemporaries who invest in the industry group stocks and in

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- (1) addition poor stockholders unlike, for example Captain  
 (2) Hazelwood have profited every year from the spill  
 (3) Now, Captain Hazelwood is an interesting comparison both  
 (4) with regard to Mr Raymond Mr Rawl Mr Koops, Mr Borgen,  
 (5) The Shadow, Paul Myers, Captain Sheehy, you can go on and  
 on  
 (6) and on Frank Iarossi is now the president of the American  
 (7) Bureau of Shipping Who did the industry put in charge of  
 (8) safety standards for the industry, Frank Iarossi All of those  
 (9) people are better off today than they were in 1989  
 (10) Captain Hazelwood is a good example Why do you ask for a  
 (11) dollar against Captain Hazelwood? Enough is enough But  
 (12) everybody else has thrived, they have thrived Thank you  
 (13) I want to go over a board of numbers and I want to talk  
 (14) about it in terms of punishment. This is not an exhibit but  
 (15) it's to make me be able to talk better off of a board than a  
 (16) piece of paper  
 (17) We know that with regard to a billion dollars, that has no  
 (18) impact on them, that was not worth Rawl's time, and you'll have  
 (19) in the jury room that videotape of his press conference  
 (20) Remember the press conference that I told you about in the  
 (21) opening? Watch that It will give you a clue about the value  
 (22) of a billion dollars to the chairman of the board of Exxon  
 (23) Corporation \$2.7 billion is the total that was spent and as  
 (24) Exxon's lawyers admitted in the opening, Exxon has thrived  
 (25) since 1989 despite the \$2.7 billion and in the year that they

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- (1) spent \$2.7 billion on the grounding of the Valdez they bought  
 (2) this company in Canada for 4 \$1 billion they paid their  
 (3) executives top bonuses and the shareholders got the highest  
 (4) dividend in the history of Exxon Corporation  
 (5) Now they demean that and they say these dividends aren't  
 (6) so high because you've got to take into consideration  
 (7) inflation When you go back into the jury room, look at the  
 (8) highlight pages on each of the year-end statements The  
 (9) year-end statements are filed with the Security & Exchange  
 (10) Commission Look at the highlight pages and in the highlight  
 (11) pages, including every year, 1989 '90, '91 they tell you this  
 (12) is the best the company has ever done  
 (13) So we know that \$2.7 billion Exxon thrives and money is  
 (14) the language of corporations You and I have souls to damn  
 and  
 (15) bodies to kick, we do Exxon Corporation has no soul and has  
 (16) no body, and its language and the language of the people in  
 (17) boards of director's rooms throughout the world is this, this  
 (18) is their language The 1989 after-tax net was \$3.5 billion,  
 (19) and that includes a year in which they spent \$4.1 billion on  
 (20) this acquisition, and they paid the costs of the spill That's  
 (21) a number you can place in context. 5 billion is the average  
 (22) yearly net profit 7.92 billion was the cash flow the year of  
 (23) the spill  
 (24) This 5 billion Exxon because of its size and wealth can  
 (25) sustain a 5 billion dollar award and shrug their shoulders

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- (1) just shrug their shoulders One year's average cash flow is 10  
 (2) billion Exxon spent \$16 billion of its cash in buying its own  
 (3) stock back. A bizarre thing for a company to do, but that is  
 (4) not money that needed to be invested in its year-to-year  
 (5) operations  
 (6) They paid out \$16.7 billion in dividends between the year  
 (7) of the spill and the time of the signing of the dispute  
 (8) resolution agreement, and they paid out \$20 billion, or the  
 (9) value of the Exxon stock appreciated over these five years  
 (10) The poor Exxon stockholders get the benefit of a \$20 billion  
 (11) appreciation in stock  
 (12) Now, my job in this is to represent them (indicating) and  
 (13) to drag the truth out of them (indicating) and to bring that to  
 (14) you Your job is to look at these numbers and to come up with  
 (15) a number that does three things, or maybe you come up with  
 (16) three numbers and put them together, I don't know, but that  
 (17) punishes the conduct in light of its reprehensibility, the  
 (18) scope of the harm, the scope of the harm that could have  
 (19) occurred, and the wealth of the defendant.  
 (20) You're going to punish the conduct, you're going to get  
 (21) them a message And I would submit to you that based upon  
 what  
 (22) they did in the courtroom in Phase I and what they did in the  
 (23) courtroom on Thursday and the changes they have made in  
 their  
 (24) personnel and the state of knowledge of the board of directors  
 (25) of Exxon Corporation about what happened and the state of

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(1) knowledge of its executive officer about what happened and the  
 (2) fact that we hear the same thing about safety policies in Phase  
 (3) III as we heard about in Phase I and the fact that they think  
 (4) it is a keen thing to claim credit for complying with the law  
 (5) and the fact that they think it is a nifty thing to claim  
 (6) credit for cleaning up their own mess and the fact that the  
 (7) chairman of the board describes the advertisement (sic) as an  
 (8) advertisement and he didn't particularly think it was a good  
 (9) idea at the time. They haven't gotten the message  
 (10) And then to all of the other Exxon corporations of the  
 (11) world if there is not a significant verdict in this case to  
 (12) the other Exxons of the world what does that say about our  
 (13) society's values what does it say about business risks? You  
 (14) know if you're going to take these business risks you're  
 (15) supposed to be careful. What does it say about reckless  
 (16) conduct and our society's approval or disapproval of reckless  
 (17) conduct?  
 (18) If the headline in the newspaper and in this case it will  
 (19) be Barons or Future or Money is that Exxon walks away Exxon  
 (20) gets off Exxon goes scot free what does that say to the rest  
 (21) of the oil industry, what does that say to the big 15 or 16  
 (22) powers of the world, that we can mount a defense in a  
 (23) courtroom  
 (24) that gets us off the hook, that we don't have to change our  
 (25) people  
 (26) You know it's interesting who they fired. They didn't

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(1) fire anybody who wears a white shirt. They didn't fire anybody  
 (2) who wears a white shirt. As the kids would say there is an  
 (3) attitude there. But you have to do something you are the ones  
 (4) that have to do something  
 (5) And the point of fact where I started off the constitution  
 (6) says that you're the ones charged to deal with this problem  
 (7) and His Honor with a mandatory punitive class says you're  
 (8) going  
 (9) to deal with it for all of the different plaintiffs and the  
 (10) different court systems that are involved in this thing  
 (11) And then you say in Phase I the conduct was reckless so  
 (12) what you're going to tell Exxon Corporation and you're going to  
 (13) tell these people in these boards of director's rooms and they  
 (14) are not the Connie Buhls of the world the meeting that you're  
 (15) talking about has Jack Clarke, Lee Raymond Larry Rawl,  
 (16) bodyguards outside in a board of director's room that's where  
 (17) you're going, isn't it?  
 (18) I have five more minutes and I want to talk about the  
 (19) verdict form because I always do. Now make sure you sign  
 (20) it. I didn't catch it but I'm guessing that's what the heck  
 (21) happened. Ken Murray jury  
 (22) Do you unanimously find from a preponderance of evidence  
 (23) that an award of punitive damages against Defendant  
 (24) Hazelwood  
 (25) is necessary in this case to achieve punishment and deterrence,  
 (26) and I've asked you to fill that in yes and I think that is an  
 (27) important social statement to make. You have to condemn the

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(1) conduct and you have to condemn the fact that he hadn't come  
 (2) to  
 (3) grips with the conduct  
 (4) If your answer to interrogatory number one is yes, what  
 (5) amount of punitive damages do you find necessary for those  
 (6) purposes and the purposes are punishment and deterrence  
 (7) and  
 (8) I'd ask you to put in one dollar because I think that's a  
 (9) significant statement and I think it's a statement that has  
 (10) relevance in Captain Hazelwood's life in all honesty,  
 (11) because this is the first time that everything has come out, I  
 (12) think he would take a dollar to heart. I think it will make a  
 (13) difference to him like St. Paul falling off his horse on the  
 (14) road to Damascus  
 (15) Do you find from a preponderance of the evidence that an  
 (16) award of punitive damages against the Exxon defendants is  
 (17) necessary in this case to achieve punishment and deterrence?  
 (18) Should Exxon be punished for its recklessness in the grounding  
 (19) of the Exxon Valdez the greatest environmental disaster in the  
 (20) history of America? Yes. For punishment deterrence of Exxon  
 (21) and deterrence of others for justice for those guys, for  
 (22) justice for those women  
 (23) If your answer to interrogatory number three is yes, what  
 (24) amount of punitive damages do you find to be necessary for  
 (25) those purposes. And that's your job, and we know it's more  
 (26) than five and we know it's less than 20. We know it's more  
 (27) than five and we know it's less than 20 and I could give you a

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(1) number that I think and that is bringing my life experience to  
 (2) bear on a very difficult question and I think that's a waste  
 (3) of time because each of you are going to go back in there and  
 (4) bring your life experiences to bear on a very difficult  
 (5) question  
 (6) But it's more than five and it's less than 20, and that's  
 (7) what they ask you to do is they ask you for purposes of  
 (8) punishment and deterrence to make the world a better place  
 (9) and  
 (10) a situation in which you in fact, have the opportunity to make  
 (11) the world a better place to grapple with those numbers and to  
 (12) grapple with age-old concepts of punishment and deterrence  
 (13) and  
 (14) right and wrong  
 (15) Thank you  
 (16) THE COURT Let's take a short 15 minute break at this  
 (17) point and then we'll have the defendants  
 (18) (Jury out at 9:40)  
 (19) (Recess from 9:40 to 10:17)  
 (20) (Jury in at 10:17)  
 (21) THE CLERK. All rise  
 (22) THE COURT Mr. Neal  
 (23) MR. NEAL. May it please the Court counsel, ladies  
 (24) and gentlemen of the jury I waited for an hour-and-a-half  
 (25) while Mr. O'Neill was up here to simply admit to you that this  
 (26) massive amount of money that he's asking for doesn't go to  
 (27) charity it doesn't go for something else. It goes solely to

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- (1) their side to their side who have already been awarded all  
 (2) their actual damages Not once did he mention that.  
 (3) Let me start out a little slowly here by simply telling you  
 (4) that I m sure you know by now now that you have become  
 judges  
 (5) of the facts what Judge Holland learned several years ago  
 when  
 (6) he assumed the bench and became a judge of the law Judges  
 of  
 (7) the facts and of the law never, ever, satisfy everyone and  
 (8) judges of the facts and judges of the law sometimes never  
 (9) satisfy anyone That s the burden you have  
 (10) In Phase I although we disagreed you found us reckless  
 (11) That s your decision that s the system we respect it in  
 (12) Phase II you awarded the plaintiffs \$287 million That s your  
 (13) decision that s the system we respect the system  
 (14) I doubt that Mr O Neill and I have ever been involved in a  
 (15) case in our years when the jury came back and didn't agree  
 with  
 (16) our position I doubt that there was ever a time when we want  
 (17) to jump up and say hey, you re right I can't speak for Mr  
 (18) O Neill but he is a fellow trial lawyer and I've never had a  
 (19) time when I ever thought the jury was right if they didn't  
 (20) agree with me By definition they are only right when they  
 (21) agree with me Well that s not the way it works everyone  
 (22) agrees with you or not.  
 (23) Let me tell you from the bottom of my heart, and I know  
 (24) this to be a fact every man and woman at Exxon whether they  
 (25) agree with your verdict or not appreciate your methodology

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- (1) We appreciate the way you went about resolving Phase I and  
 (2) Phase II We appreciate the obvious care you took to decide  
 (3) the case on the facts as presented in this courtroom and under  
 (4) the law as given you by His Honor  
 (5) Your reward is not to have people agree with you because  
 (6) it never happens all the time, and sometimes - as I said  
 (7) sometimes no one agrees with you Your reward is simply your  
 (8) knowledge that you ve done the best you can do under the  
 (9) circumstances And by golly let me tell you you keep doing  
 (10) that and that's good enough for me  
 (11) We now start Phase III and that s the issue of whether -  
 (12) whether you should award punitive damages, and if so how  
 (13) much We start out with two propositions One and I'll show  
 (14) you by the Court s instruction number 26, one is that you  
 (15) which is a fact, you must assume all the plaintiffs involved  
 (16) have been paid or will be paid all of their actual damages and  
 (17) that this phase is not to compensate for actual damages  
 (18) Your Honor do you want us to pull this back?  
 (19) Okay Now let me say what Mr O Neill didn't say, but I m  
 (20) sure it was an oversight When we put up some kind of  
 (21) instruction like this I want you to know that s not  
 (22) necessarily the entire instruction It s what we want you to  
 (23) notice out of that for the sake of this argument, but Mr  
 (24) O Neill did it and I'll do it We put up a part of it, but the  
 (25) Court expects you, I expect you and I know you will to look

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- (1) at not only this entire jury instruction but the entire set of  
 (2) jury instructions  
 (3) So back to this The first thing we start with in Phase  
 (4) III is that quote you should assume that all plaintiffs have  
 (5) been or will fully be compensated for all damages they may  
 have  
 (6) suffered as a result of the spill which is in fact a fact  
 (7) You may not make an award of punitive damages for the  
 purpose  
 (8) of compensating any plaintiff  
 (9) The second thing we start with is the proposition in the  
 (10) law, as will be charged you by Judge Holland, that punitive  
 (11) damages are not favored they are not favored in the law and I  
 (12) will talk about why I submit to you they are not favored later  
 (13) on but jury instruction number 25, the first paragraph says  
 (14) punitive damages are not favored in the law and are never  
 (15) awarded as a matter of right, no matter how egregious the  
 (16) defendant's conduct  
 (17) I ve learned that egregious means the same thing basically  
 (18) as outrageous means, that you have discretion to award or not  
 (19) award punitive damages in accordance with these instructions  
 (20) So punitive damages are not favored and are not a matter of  
 (21) right regardless of how egregious or outrageous the conduct.  
 (22) The third thing we learned is instruction number 22  
 (23) punitive damages may be awarded to punish and deter to  
 punish  
 (24) and deter  
 (25) Ladies and gentlemen of the jury we apologized for the

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- (1) spill from the get-go We accepted responsibility  
 (2) immediately We immediately handed a check to the federal  
 and  
 (3) state governments for \$15 million to conduct scientific studies  
 (4) to see what it would be - what it would cost or how to go  
 (5) about restoring the Sound Nobody required us to do this no  
 (6) law required us to do this We cleaned up our spill at a cost  
 (7) of \$2.1 billion  
 (8) Let me tell you something Mr O Neill says all of this is  
 (9) required by the law and therefore you get no credit. Look at  
 (10) the instructions, look at the instructions and see where in  
 (11) there it says it's required What we did was required by the  
 (12) law Your law comes from the Court s instructions We paid  
 (13) claims over \$300 million in claims to fishermen and others  
 (14) And you know what we never asked for a release  
 (15) Now one of my colleagues when I was talking about  
 (16) releases the other day suggested that since the jurors are not  
 (17) lawyers somebody might not know what a release is Well, in  
 (18) this - in our business, if you re going to settle - somebody  
 (19) makes a claim against you and you re going to settle with him  
 (20) you say I m going to give you this money but I'm going to  
 (21) release you from all liability, I want to give you this money  
 (22) and have you sue me  
 (23) In our case as Mr Raymond told you it was slowing up the  
 (24) process to start that in the beginning Forget the releases  
 (25) we'll give them the money and they can also sue us, all we want

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(1) are receipts showing that we gave them the money No law  
 (2) required us to do that no law whatsoever  
 (3) We tried to ease the stress to the communities involved by  
 (4) the spill We should have done that but contrary to what Mr  
 (5) O'Neill told you no law required us to do that. If we were  
 (6) taking people away to work on the spill and paying them  
 (7) substantial sums we brought people in to do the work that s  
 (8) necessary to run a city or a village Nobody required us to do  
 (9) that  
 (10) We stepped up and the Court will instruct you on  
 (11) punishment too and how to consider that we stepped up - the  
 (12) federal government charged us and we stepped up and we  
 (13) said  
 (14) yes we were negligent Unlike what plaintiffs' lawyer told  
 (15) you we have never in this case said we did it all right, we  
 (16) have never said that We stepped forward and said we were  
 (17) negligent and we were assessed a 150 million dollar fine for  
 (18) that negligence right here in this court  
 (19) Now as Mr Raymond told you all but 25 million of that  
 (20) fine was reduced or reduced to 25 million because of our  
 (21) conduct our good conduct following the spill Now in that  
 (22) case that criminal case we also paid a \$100 million to the  
 (23) state and federal government In toto - strike that  
 (24) We also committed to see that the Sound was restored and we  
 (25) committed 900 million to a billion dollars, which is flowing  
 out now as we speak to the Trustees federal state Trustees

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(1) to restore the Sound In total we spent \$2.8 billion after  
 (2) taxes and you'll have it here and this is a chart that is in  
 (3) evidence \$2.8 billion lacking what 798 \$2,798,000,000 after  
 (4) taxes to clean up claims punishment et cetera and I'll talk  
 (5) some more about this We vowed to do everything in our power  
 (6) to change whatever we had to change to make sure this didn't  
 (7) happen again  
 (8) Mr O'Neill talks a lot about message and getting the  
 (9) message and sending the message Ladies and gentlemen of  
 (10) the  
 (11) jury, this is getting the message, this is acting responsibly  
 (12) this is acceptance of responsibility this is punishment and  
 (13) it is deterrence  
 (14) Now I want to talk a few minutes about Phase I I had  
 (15) hoped not to do this, because we spent a month on Phase I but  
 (16) I have to do it, I have to answer some things that were brought  
 (17) up, and I know that you all don't like squabbles between  
 (18) lawyers I appreciate that I know you think that it doesn't  
 (19) help you I appreciate that I know that you've gotten the  
 (20) message that what Mr O'Neill and I say is not evidence the  
 (21) evidence is in Nevertheless I have to address certain  
 (22) allegations he made and certain snippets of testimony he took  
 (23) out of context on Phase I and II and tried to readdress them  
 (24) and put them in context without going through the entire Phase  
 (25) I again I know you'd kill me if I tried to and I would  
 deserve death if I tried to

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(1) I do want to say this One of the suggestions he made was  
 (2) that the Exxon board of directors didn't get reports and were  
 (3) not interested in this Members of the jury, you heard it  
 (4) uncontradicted The Exxon board of directors were very  
 (5) interested in this and every month they got a report on  
 (6) everything Mr Raymond knew And indeed as Mr Raymond  
 (7) pointed out to Mr O'Neill Mr O'Neill you had the agenda for  
 (8) every board meeting every month, you got that in discovery and  
 (9) you have seen that there was a place there for a report to the  
 (10) board of directors every month  
 (11) Now there is a suggestion - there is a suggestion that we  
 (12) didn't go around firing people We didn't conduct a witch hunt  
 (13) and therefore we didn't care Members of the jury, your own  
 (14) experiences - and I submit to you the fact it's easy to fire  
 (15) people lop off their heads - as Alice in Wonderland lop off  
 (16) their heads off with their heads That doesn't fix the  
 (17) problem  
 (18) What we did was not conduct a witch hunt, but to go out as  
 (19) I'll talk to you in a few minutes we went out to look at the  
 (20) problems and tried to fix every problem Everything that might  
 (21) be a problem we tried to fix it and change it The easiest  
 (22) thing for us in the world to do would have been fire a couple  
 (23) of people and say okay now we fixed the problems let's go  
 (24) onto business as usual We didn't do that.  
 (25) They have also said that well Mr Raymond up here didn't

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(1) say, oh we were reckless when he was on the stand and didn't  
 (2) say the first step that he's talking about. You know what, if  
 (3) Mr Raymond had said - this is the kind of Catch 22 you get  
 (4) into sometimes with a clever lawyer like Mr O'Neill If Mr  
 (5) Raymond had said oh we were reckless you would have been  
 (6) hearing from Mr O'Neill saying that we're lying in Phase I  
 (7) when we thought we were not reckless  
 (8) If we say we are not reckless then you'd hear Mr O'Neill  
 (9) say we are in denial and therefore we didn't get the message  
 (10) Mr Raymond said it best when he said, look, what I think is  
 (11) not important what I thought wasn't important. The jury  
 (12) decided we were reckless now let's move on and that is the  
 (13) perfect answer to that question  
 (14) One thing Mr O'Neill couldn't avoid talking about was the  
 (15) compensation to Mr Raymond Let me tell you something, I  
 (16) wouldn't have the responsibilities for 91,000 employees with  
 (17) the problems that exist - involve now, for that compensation  
 (18) or double his compensation Life is too short for that. But  
 (19) he went into Mr Raymond's compensation and he never, never  
 (20) refuted what we brought out, and that is Mr Raymond makes  
 (21) far  
 (22) less than CEO's of anything like comparable companies in this  
 (23) company He makes less than ARCO, he makes less than  
 (24) Mobile  
 (25) he makes less than Texaco And you know what, he makes one  
 third the compensation of Merrill Lynch, but, as he said to you  
 somewhat humorously I'm not trying to file any claim on that,



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(1) I get paid handsomely  
 (2) Now, there is a suggestion made that we didn't make a  
 (3) formal report thus there was some kind of coverup Mr  
 (4) O'Neill says the law department investigated, I'd love to have  
 (5) their report I'd love to see their report.  
 (6) Ladies and gentlemen of the jury we have been  
 (7) three-and a half months giving you the law department report  
 (8) Mr O'Neill took literally hundreds of depositions of our  
 (9) employees He subpoenaed and got hundreds and thousands  
 and  
 (10) millions of pages of paper We gave you our law department  
 (11) report right here  
 (12) And let me tell you something else that this demonstrates  
 (13) that his idea is that there is some coverup is nonsense Mr  
 (14) Raymond, as he told you, directed every person at Exxon to  
 (15) cooperate fully in the investigation of the National  
 (16) Transportation and Safety Board and he directed to everyone  
 at  
 (17) Exxon cooperate fully with the United States Department of  
 (18) Justice, and as he told you in this very courtroom the United  
 (19) States Department of Justice, after they had conducted their  
 (20) investigation complimented Exxon for having fully cooperated  
 (21) with them That's not a coverup  
 (22) And there is a suggestion by Mr O'Neill that somehow we  
 (23) lied to the fishermen when we said we would pay claims And he  
 he  
 (24) points to this man Cornett Ladies and gentlemen of the jury,  
 (25) to fishermen and others we paid without releases \$300 million

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(1) in claims We couldn't pay them all They started in this  
 (2) courtroom as you'll remember, demanding \$980 million Even  
 (3) before you got to work on a verdict they had reduced that to  
 (4) 895 million and we all know that even that claim was far too  
 (5) high We did the best we could to settle claims but sometimes  
 (6) you just can't settle them  
 (7) Now the suggestion has been made and I'd like to put this  
 (8) up on the Elmo if I could, a suggestion has been made here  
 (9) that Prince William Sound is dead As a matter of fact, Mr  
 (10) O'Neill in his closing argument in Phase II said as follows I  
 (11) hope we can read that. There was damage to the nursery  
 (12) habitat, the areas along the shore there was a loss of food  
 (13) we find egg mortality, larval mortality, loss of juvenile  
 (14) growth genetic damage and a continuing damage to soil in the  
 (15) echo system, pink salmon - he's talking about Prince William  
 (16) Sound - pink salmon have crashed  
 (17) Members of the jury, I submit to you if they have crashed  
 (18) they have crashed against each other because there is not  
 (19) enough room in the streams for all that are coming back now  
 (20) And as Mr Hamson told you, in the last five years there has  
 (21) been the three largest returns of pink salmon to Prince William  
 (22) Sound in history  
 (23) He also suggested to you that, and you'll remember this  
 (24) you put an ad in the Detroit newspaper but you didn't tell the  
 (25) people of Prince William Sound and Alaska you were sorry We

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(1) brought out then that we had to put an ad in the newspapers  
 we  
 (2) had to put an ad out otherwise the papers wouldn't take it but  
 (3) we put an ad in practically every newspaper in Alaska saying we  
 (4) are sorry Those include the Valdez newspaper, Cordova -  
 (5) Cordova Juneau Anchorage, Ketchikan amongst others  
 (6) And then he suggested throughout this trial that our  
 (7) employees lied I think that hurt I think that hurt more  
 (8) than any statement made by the plaintiffs It is simply not  
 (9) true Our employees came up here and did the best they could  
 (10) to tell you the truth And now he's saying we called them  
 (11) liars We never called them liars We think our employees  
 (12) told you the best they could best they knew  
 (13) Ladies and gentlemen of the jury I don't consider myself  
 (14) the smartest lawyer in the world but when somebody suggests  
 (15) that I might put on perjured testimony, I dislike it. I  
 (16) dislike it for two reasons One, I wouldn't do it and number  
 (17) two if I were evil enough to do it although I may not be the  
 (18) smartest person to do it, if I were evil enough to put on  
 (19) perjured testimony, I would be smart enough to make sure a  
 jury  
 (20) wouldn't find us reckless in Phase I Our employees did the  
 (21) best to tell you the truth and not once did we suggest that  
 (22) they were liars  
 (23) Then Mr O'Neill goes to the dispute resolution agreement  
 (24) Mr Mike Chalos may have something to do about this but you  
 (25) heard the proof and Mr O'Neill kind of endorsed this in a

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(1) sense, because he says in this trial everything came out for  
 (2) the first time You know why everything came out for the first  
 (3) time? We asked Mr Hazelwood, Captain Hazelwood, to come  
 in  
 (4) and testify, hurt us or help us, but come in and testify, let  
 (5) the jury and let us have it because we, as was pointed out, we  
 (6) weren't able to talk to him his lawyer, doing an appropriate  
 (7) job would shield him from us so we couldn't talk to him  
 (8) So we go to him and say come in here and tell it like it  
 (9) is As they say sometimes around in Tennessee for sure tell  
 (10) it like it is, Captain Hazelwood, and he says, I won't do it  
 (11) unless you agree that you won't use what I say in our dispute  
 (12) later on That was the only way we could get him to testify  
 (13) And then being lawyers, being lawyers we said okay, if you  
 (14) want it, it got to be both ways, but that dispute resolution  
 (15) agreement let me assure you, was created solely and simply to  
 (16) get Captain Hazelwood in here to tell you and tell us his  
 (17) position, his reaction was he impaired, not impaired, and that  
 (18) was the only way we could get him in here  
 (19) Now they also said to you look you purchased a company  
 (20) in 1989 for \$4 billion even though the spill occurred Look  
 (21) at the same reports ladies and gentlemen of the jury, I think  
 (22) they will tell you that we committed to purchase that company  
 (23) in 19 hundred and 88 and we had to follow that through  
 (24) Now I want to speak a few more minutes about conduct and  
 (25) then I will move on and I will spend the rest of my time

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(1) members of the jury, talking about affirmative things  
 (2) You will remember that we returned Captain Hazelwood to  
 (3) master the vessel We did that we had a report from his  
 (4) doctor, that's undisputed that he was fit for duty to return  
 (5) as a master of a vessel We reviewed that - they talk about  
 (6) we just ignored the risk We weighed very carefully the risk  
 (7) of returning Captain Hazelwood to duty  
 (8) Do you remember that finally as Mr Larossi told you and  
 (9) Mr Graves told you we finally concluded that if we didn't  
 (10) return Captain Hazelwood to duty, we would be driving problem  
 (11) drinkers into the closet, and in their judgment the risk of  
 (12) driving problem drinkers into the closet and having problems  
 (13) from problem drinkers was greater than the risk of returning  
 (14) Hazelwood to duty, but we knew it was a risk either way  
 (15) Now we've changed our policy where safety sensitive  
 (16) positions are concerned and now we've reversed the risk, but  
 we  
 (17) thought that if we would tell people with a problem and I'm  
 (18) not going into whether he's an alcoholic or recovering  
 (19) alcoholic or an alcohol abuser but we thought that if we  
 (20) returned Captain Hazelwood, who has gone and successfully  
 (21) completed rehabilitation if we return him to the master of the  
 (22) vessel as the policy seems to suggest, then we will get others  
 (23) who have a problem we don't know about to come forward to seek  
 (24) help If we don't return him there will be masters and others  
 (25) out there in safety sensitive positions who won't come up

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(1) company is really his only basis as I can see it, for saying  
 (2) you should punish us  
 (3) He misses the following step, and I'll read from jury  
 (4) instruction 20 and jury instruction 30 and I fairly said these  
 (5) are excerpts so look at all of them The Court will instruct  
 (6) you that the fact that you have determined that the conduct of  
 (7) Joseph Hazelwood and the Exxon defendants was reckless  
 does not  
 (8) mean that you are required to make an award of punitive  
 damages  
 (9) against either one or both of them And then 30 the fact that  
 (10) you have found a defendant's conduct to be reckless does not  
 (11) necessarily mean that it was reprehensible or an award of  
 (12) punitive damages should be made  
 (13) So don't let - when you go back and I know you will  
 (14) because I observed your - haven't observed it but I've been  
 (15) sitting around knowing that you are taking all the care in the  
 (16) world so don't let him jump the step on you The first issue  
 (17) you have is should you award punitive damages at all And  
 (18) there again I remind you one more time that punitive damages  
 (19) are not favored by the law  
 (20) Now let's take one more point - two more points about our  
 (21) conduct Before I do that I want to talk to you a moment  
 (22) about these videotape clips You know we spent a month in  
 (23) Phase I putting on proof It's rather remarkable that  
 (24) plaintiffs would come in - as I looked at the clock I think  
 (25) there was something like 12 11 or 12 minutes maybe even  
 less,

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(1) So we waived that risk, not ignored that risk, but we  
 (2) waived that risk and gosh knows drink, drugs and alcohol are  
 (3) such a problem in society today we still don't know how to  
 (4) deal with that risk But we didn't ignore the risk we waived,  
 (5) we did the best we could  
 (6) Now you may have found - I don't know why precisely you  
 (7) found us reckless and it's not relevant, you may have found  
 (8) that returning Captain Hazelwood was such a bad judgment,  
 that  
 (9) was reckless so be it And we tried to monitor Captain  
 (10) Hazelwood I suspect we didn't do the world's best job of  
 (11) monitoring Captain Hazelwood, and as I think about it now, it's  
 (12) probably impossible to monitor the master of a seagoing  
 (13) vessel After all he's on 60 days and goes home 60 days when  
 (14) you can't monitor him at home, and you all wouldn't like it if  
 (15) we did but he's on a vessel, and we tried and we thought we  
 (16) could and we tried and we may have made bad mistakes in  
 there  
 (17) and that may be why you found us reckless but we didn't  
 (18) ignore - we didn't ignore the risk  
 (19) Now right here I'm going to go to a couple more  
 (20) instructions because I want very - I want - if I don't do  
 (21) anything else I want to call your attention to this Mr  
 (22) O'Neill says you found Exxon defendants reckless in Phase I,  
 (23) now how much how much punitive award He misses a step  
 He  
 (24) says you found them reckless, they are a big successful  
 (25) company Let's talk about how much, and being a big  
 successful

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(1) of little snippets of evidence in Phase I out of a month-long  
 (2) trial The opportunity for distortion, for misleading, is  
 (3) remarkable there, and I won't try to catch them all, because I  
 (4) think you'll probably remember the proof but they put on Mr  
 (5) Shaw, Mr Jim Shaw, and he says I reported that Captain  
 (6) Hazelwood had been drinking  
 (7) You know what they didn't put on as you remember, the fact  
 (8) that Mr Sheehy investigated that and came back and reported  
 to  
 (9) Mr Koops that he couldn't find any evidence of it. They  
 (10) didn't put on that. Then Captain Mihajlovic, do you remember  
 (11) him, went out there and also investigated that report and came  
 (12) back and said - and I can pull it up there because I did it on  
 (13) that screen - that is pure baloney That's the problem you  
 (14) get into when you use videotapes You take a little snippet,  
 (15) but you don't put on the truth the whole truth and nothing but  
 (16) the truth so help me And I'm not going to get into the  
 (17) snippets but I do have to correct one or two of them  
 (18) Now they did put on where Mr Day reported to Mr Myers  
 (19) the Mary Williamson matter, I believe it was What they didn't  
 (20) put on was Mr Day acknowledging and saying, you know, he  
 was  
 (21) busy and he may not very well have heard me  
 (22) And they put on Captain Hazelwood, who said that he told  
 (23) Mr Myers about having a beer or beers with Kimms in his  
 (24) apartment outside the Portland shipyards What they didn't  
 (25) tell you is that he went to lunch came back later got to

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- (1) thinking told you this from the stand and said you know I m  
 (2) not at all sure I don't think I told Mr Myers about the  
 (3) drinking beer Didn't put that on  
 (4) And then Mr Martineau, they put on a little clip of Mr  
 (5) Martineau saying I knew nothing about the monitoring of  
 Captain  
 (6) Hazelwood What they didn't put on, but what is the undisputed  
 (7) proof is that when - at the same time Captain Hazelwood was  
 (8) being transferred to the West Coast fleet Captain Martineau  
 (9) was leaving the West Coast fleet There was no way for him to  
 (10) know anything about monitoring, and if not leaving the West  
 (11) Coast fleet was becoming a master - master of a different  
 (12) vessel  
 (13) Now they also said that Mr Day - put on a little clip of  
 (14) Mr Day saying he knew nothing about monitoring Mr Day was  
 (15) involved in this process something like ten days to two weeks  
 (16) I won't continue on that. I think it's quite obvious to all of  
 (17) us that 10 or 11 minutes of a month's trial has a great  
 (18) opportunity for being misleading and unfair and I'm sure that  
 (19) you will recognize that and deal with it accordingly, and I  
 (20) won't go through a lot of other examples practically every one  
 (21) they put up  
 (22) Now you found us reckless and in - in Phase I but, you  
 (23) know as I think about it, there are many different levels of  
 (24) wrongful conduct in human endeavor One is negligence  
 that's  
 (25) the lowest We're all - all guilty of it I submit there is

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- (1) a thin line up to the next one which is reckless, and you  
 (2) found us guilty of that. Then you move to the next step of  
 (3) willful, malicious intentional wrongful conduct entered into  
 (4) for profit There is no suggestion that we were willful, that  
 (5) we were malicious and certainly we didn't run that tanker  
 (6) aground for a profit wrongful conduct, conduct not willful,  
 (7) not malicious and certainly not for profit.  
 (8) Now from this point on I want to be positive I have  
 (9) thought, and I know I've been directed, Jim, knowing that  
 (10) you're an advocate and sometimes you get excited and  
 sometimes  
 (11) you get agitated, I want to - and I've been directed to take  
 (12) the high road in this case and I want to spend the rest of my  
 (13) time not squabbling with lawyers, but to tell you what we've  
 (14) tried to do since this tragic spill occurred, which we were  
 (15) responsible  
 (16) First, as I said, we apologized Second, we step forward  
 (17) and said it's our oil it's our vessel, we accept  
 (18) responsibility Now, that seems like an ordinary merit, but  
 (19) that doesn't always happen First let me show you a clip of  
 (20) our immediate acceptance of responsibility  
 (21) (Videotape Played)  
 (22) MR NEAL Now, I said that's not always the case  
 (23) There was another oil spill around here, a spill from the  
 (24) Glacier Bay, and this is such a long trial, I'm not sure people  
 (25) remember, I know you don't remember everything that happens  
 in

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- (1) the course of the trial, but there was an interesting dialogue  
 (2) between one of the lawyers the plaintiffs witness Dr  
 (3) Crutchfield, and the Court, and here is what happened there  
 (4) Look at this now, contrast that with Exxon  
 (5) Question Now in the case of the Glacier Bay situation  
 (6) that you looked at that was a case where - by the way, that  
 (7) was a spill from a ship owned by some somebody called  
 (8) Trinidad  
 (9) Answer I'm - trying to determine who owned that ship was  
 (10) beyond my capabilities  
 (11) And then the question, there was difficulty with that, and  
 (12) the Court says We had trouble with that.  
 (13) Contrast the two Contrast the two That's a transcript  
 (14) of June 24th 1994 page 5094 line 14 to 5094 line 20  
 (15) Thank you  
 (16) By the way, I've had things come to my mind sometime that  
 (17) I didn't want to do it but I'll do it while it's on my mind  
 (18) Brian O'Neill and some of the lawyers up here are talking  
 (19) heads, we got a script and we talk, talk longer than you all  
 (20) want us to, but I do want to thank you, the people that have  
 (21) been helping us, Ms Irene Stewart, don't thank Jimmy Sanders  
 (22) he's too cocky anyway, but I'm sure Mr O'Neill thanks the  
 (23) people he's had who had to do most of the work here  
 (24) So we apologize we accepted responsibility immediately,  
 (25) unlike others and third we committed to clean up the spill

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- (1) Right here I want to say again, that plaintiffs lawyer says  
 (2) we're entitled to no credit for that. Well, you look at the  
 (3) instructions and see if we're entitled to no credit. You look  
 (4) at the instructions and see if it says everything that Exxon  
 (5) did it was required by law to do Look at it. I just leave it  
 (6) to you to look at it and see who is right.  
 (7) Our commitment, I think was demonstrated with our first  
 (8) two witnesses we put on in Phase III Connie Buhl, who worked  
 (9) all night what a magnificent employee and a magnificent  
 human  
 (10) being I don't think people like that would work for a company  
 (11) that is an evil empire, as plaintiffs try to make it out. And  
 (12) Bill Deppe who risked his life and crew to get that oil off  
 (13) the vessel, a million barrels One of the great stories not  
 (14) been told much, that Exxon people went out there at the risk of  
 (15) their life, lightered one million barrels of crude from that  
 (16) vessel in the position it was in, and not more loss of another  
 (17) barrel of oil and not a single serious injury A remarkable,  
 (18) remarkable story And people like Bill Deppe don't work for an  
 (19) evil empire  
 (20) Our commitment involved, and you've heard it, unlimited  
 (21) authority to Otto Harrison to spend whatever it took to clean  
 (22) this up You heard Mr Hamson say I talked to Mr Rawl  
 (23) Mr Rawl said you've got unlimited authority, you've got all  
 (24) authority and if somebody stands in your way, somebody from  
 (25) Exxon stands in your way, come to see me That is  
 commitment

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(1) And then we had this little anecdote that I thought was one  
 (2) of the most telling things I've heard A fish hatchery, a  
 (3) person from a fish hatchery in the first day or two of the  
 (4) spill came to Mr Larossi and said we need money immediately  
 (5) we can't wait until you get all geared up Mr Larossi took  
 (6) out his business card turned over his business card and wrote  
 (7) pay one million dollars That man took it to the bank and got  
 (8) his million dollars immediately That is commitment  
 (9) We brought in forces from all over the world At one time  
 (10) we had over 11 000 people here We built floating hotels on  
 (11) the water, we built bunkhouses on the shore we brought in 12  
 (12) million pounds of food just in 1989 and we brought in a  
 (13) massive amount of equipment and clothing But I think best -  
 (14) with regard to cleaning up the spill perhaps the best proof is  
 (15) from the admirals Robbins and Ciancaglini  
 (16) (Videotape Played)  
 (17) MR NEAL Thank you I have talked to you about the  
 (18) claims program not demanding releases, we did that I've  
 (19) talked to you about the community liaison program no one  
 (20) required us to do I want to point out to you with the Court  
 (21) instruction let's look at number 27, and this is what will  
 (22) guide you to see how our commitment to clean up, our  
 (23) commitment  
 (24) to pay claims our commitment to community liaison fits into  
 (25) the law and I'll start right up here This may be all of 27,  
 (26) but I've said enough about that

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(1) In determining the amount of punitive damages to award if  
 (2) any you may consider, among other factors and then the  
 (3) reprehensibility of the conduct the magnitude of the harm that  
 (4) Mr O'Neill went over the financial condition down here the  
 (5) extent to which a defendant has taken steps to remedy the  
 (6) consequences of his or its conduct or prevent repetition of  
 (7) that conduct I'm talking about the spill here the cleanup  
 (8) the claims program and in a minute I will talk about the  
 (9) changes we have made that you should consider to prevent  
 (10) repetition of that conduct.  
 (11) We made another commitment We made a commitment to do  
 (12) whatever was necessary to restore Prince William Sound or to  
 (13) make Prince William Sound sound again and what we did  
 (14) there,  
 (15) we - as I said we immediately committed \$15 million to  
 (16) conduct studies on the processes to go about that.  
 (17) We paid \$100 million to the state and federal government,  
 (18) and we committed - and are spending 900 million to a billion  
 (19) dollars to make the Sound sound again You have seen the  
 (20) Sound I've seen the Sound You will have to judge how well  
 (21) we're doing Not all of that money has been spent as yet And  
 (22) then - why don't we leave that up just a moment Irene  
 (23) The next commitment we made was commitment to do  
 (24) whatever  
 (25) we could to make sure that this didn't happen again and again  
 (26) this instruction number 27 will tell you in determining  
 (27) punitive damages you may consider what the defendants did to

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(1) prevent repetition of that conduct.  
 (2) Now I'm going to tell you - Mr O'Neill said but you don't  
 (3) get any credit for that because the law required that. I'm  
 (4) going to challenge him on that and see what we did that the law  
 (5) didn't require and did require First thing we did is you  
 (6) heard Mr Raymond say I said we could never have this happen  
 (7) again and I'm not going to look just at the shipping company  
 (8) I'm going to look at the whole worldwide organization And so  
 (9) he undertook an audit of all the risks that would be out there  
 (10) in the company and he made changes and ordered changes in  
 (11) those risks and then he created a separate organization to  
 (12) look at those changes every year to see that they were being  
 (13) followed whether any more was needed to be made, that's the  
 (14) worldwide company The law did not require it  
 (15) He was - the company was instrumental in creating a marine  
 (16) spill response corporation, and Exxon committed 50- to \$80  
 (17) million to that organization to make sure that they could  
 (18) respond - the whole industry could respond better and quicker  
 (19) to oil spills, no law required that.  
 (20) As Mr Raymond told you, they went in and revised  
 (21) completely the corporate wide alcohol policy, and, as I said  
 (22) before, I don't know how these all come out, but they revised  
 (23) the policy to say, gee and I don't want to back up and say on  
 (24) behalf of Captain Hazelwood and Mr Chalco we don't say that  
 (25) Captain Hazelwood was impaired or not impaired when making this

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(1) statement but did he drink that evening, and he did maybe  
 (2) inadvertently have a drink within four hours, and he had had  
 (3) some sort of a problem What Mr Raymond said is, whether  
 (4) that  
 (5) had anything to do with this spill or this precise spill other  
 (6) not, we can't take that chance again We are going to create  
 (7) something called safety sensitive positions, and if you've had  
 (8) an alcohol problem in the past you will never go back to those  
 (9) safety sensitive positions But not being an evil empire what  
 (10) they said was if you seek treatment, we will give you a job  
 (11) we will give you a job with the same pay you had, but you won't  
 (12) go back to these safety sensitive positions, we just can't take  
 (13) that chance  
 (14) Now you know what? As Mr Raymond told you, that is an  
 (15) effort to avoid what problem you may or may not have found in  
 (16) this case You know what, Exxon has been sued 106 times  
 (17) claiming that's the wrong policy, that you got to put them  
 (18) back The alcohol policy also provided for random testing  
 (19) Now, you remember Mr McMasters? Mr McMasters the  
 (20) plaintiffs put on as an expert in the alcohol policy, the  
 (21) alcohol problems He said I don't like random testing, don't  
 (22) believe in it We said we're putting in random testing, too  
 (23) we're putting in random testing for those sensitive - safety  
 (24) sensitive positions and we're putting in random testing for  
 (25) other positions  
 (26) And then Mr Raymond, as he told you said look, I don't

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- (1) want people our employees to think that senior management or  
 (2) higher people in higher positions of the company can avoid  
 (3) random testing you put it on all senior management  
 (4) And you know what? As he told you, he will get a call at  
 (5) his office and say, you will be at the infirmary or wherever  
 (6) it is in one hour for random testing and if he doesn't go, he  
 (7) can be fired  
 (8) We change the policy for those who had a problem and were  
 (9) returned to their positions not safety sensitive positions  
 (10) but they have gone through rehab returned to work We now  
 (11) have a written - written detailed policy for monitoring those  
 (12) people We thought we monitored before but we admitted we  
 (13) didn't have a written detailed policy  
 (14) And then, you know Exxon and Exxon Shipping if somebody  
 (15) thought that there was a problem that might have contributed to  
 (16) the spill we'd look at that, and if we thought it might  
 (17) have - whether we agreed it did or not, we thought if it had  
 (18) merit we will look at it and maybe we will change it  
 (19) Now, there has been a suggestion in this case that crew  
 (20) members or subordinates won't report on a superior  
 Remember  
 (21) some question about whether a crew member would report  
 Captain  
 (22) Hazelwood if he had been drinking You know what we did  
 about  
 (23) that maybe that's a problem so we instituted a hotline and a  
 (24) post office box and now every employee is told repeatedly  
 (25) published, if you find anybody who is violating the law who is

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- (1) violating the company policy or who is doing anything you  
 (2) consider to be wrong, if you don't - we want you to report it  
 (3) and if you don't want to report it and give your name for some  
 (4) problem you call an 800 number and you make your report  
 you  
 (5) tell us about it you don't have to give your name you don't  
 (6) have to identify yourself  
 (7) And then they went one step further and said if you don't  
 (8) want to call if calling bothers you send a message to a post  
 (9) office box and tell us what you said And you know what they  
 (10) did? They set up an organization If they get those  
 (11) complaints they have set up an organization to investigate  
 (12) them That's not required by law That is not required by  
 (13) law  
 (14) And then the shipping company went even further, and let me  
 (15) tell you what they have done, no, that's not required by law  
 (16) Still under the Coast Guard rules and regulations, even today,  
 (17) a master can have a drink as long as - of alcoholic beverages,  
 (18) as long as it's not within four hours of assuming duty and as  
 (19) long as he doesn't have 04 in his system Exxon Shipping  
 (20) Company says that's not good enough we can no longer take  
 that  
 (21) chance, we've got to see this doesn't happen again So if you  
 (22) are a master or a chief engineer you cannot have one single  
 (23) drink Whether it's six ten eight hours, you cannot have one  
 (24) single drink during your tour of duty, about 60 days, 50 60  
 (25) days You don't do it whether or not you're on the vessel -

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- (1) that's also been a prohibition, you can't do it when you're on  
 (2) shore too much of a chance and chief engineer same goes for  
 (3) you, you can't have a drink of alcoholic beverages whether  
 (4) it's on shore or not on your tour of duty That, ladies and  
 (5) gentlemen of the jury, is not only not required by the law but  
 (6) the Coast Guard still says you can  
 (7) And then there was a suggestion that maybe fatigue had  
 (8) something to do with this grounding We didn't think so, but  
 (9) because that suggestion had merit you know what we did we  
 (10) added another third mate to our vessel Now, unlike most  
 (11) shipping companies sailing the waters now, most shipping  
 (12) companies sailing the waters now have a master and three  
 (13) mates We now have a master and four mates A master, a first  
 (14) mate, a second mate, a third mate and a second third mate  
 The  
 (15) law does not require it whatsoever, not required by law  
 (16) And then we went beyond that and we said, look, if there is  
 (17) any sort of problem with the workload in loading and unloading  
 (18) these vessels we will add a mate stationed permanently at  
 (19) Valdez to help loading That mate is there today, it's not  
 (20) required by law  
 (21) And then we said, okay, we unload in San Francisco,  
 (22) lighter If there was a problem there we will add a mate  
 (23) permanently stationed there to help lighter in addition to  
 (24) these four people now that I've just mentioned So we have a  
 (25) lightering mate stationed in San Francisco to help with the

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- (1) lightering That's not required by law  
 (2) And then we created something called an Ex-bridge, and I  
 (3) won't take a lot of time with this but it's new technology  
 (4) that we've developed - there was a suggestion that maybe  
 (5) Cousins kind of lost where he was, so we came out with new  
 (6) technology called Ex bridge We locked on to the global  
 (7) positioning satellite, and now on Exxon vessels the mate with  
 (8) the conn can tell where he is within feet anywhere in the  
 (9) world tell anywhere in the world he is within feet and he can  
 (10) see from the Ex bridge concept the dangers or the obstacles  
 (11) that may be around him That's not required by law  
 (12) And there was a suggestion that maybe because our bridge  
 (13) navigation manual was ambiguous and maybe the master did  
 have  
 (14) the right to go off the bridge in Prince William Sound, we  
 (15) didn't think so We were confident that wasn't the way it  
 (16) read, but we said if there was any ambiguity, we have sent out  
 (17) a directive, in port is from the sea buoy at Hinchinbrook and  
 (18) therefore when you pass the sea buoy at Hinchinbrook going in  
 (19) the master will stay on the bridge with another mate until you  
 (20) pass the sea buoy going out into the Gulf of Alaska. That's  
 (21) not required by law  
 (22) We have always, unlike the requirement of the Coast Guard,  
 (23) required a master to undergo a ship handling course before  
 he's  
 (24) sailed for Exxon as a master Now every mate, every mate,  
 (25) first second, third third must go through a ship handling

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(1) course using a simulator before he can sail for Exxon That s  
 (2) not required by law  
 (3) And you know what they do on this simulator? One of the  
 (4) things they study one of the things they study is the  
 (5) grounding voyage of the Exxon Valdez Is that denial are we  
 (6) denying it when we say you must study it? Here we ll get your  
 (7) attention you must study this that s one of the things that  
 (8) all the mates must study, and that s not required by law  
 (9) And then we have put an independent auditor on our vessel  
 (10) and he rides our vessels and he reports on any problems he  
 (11) sees Independent auditor that s not required by law  
 (12) And these changes, may it please the ladies and gentlemen  
 (13) of the jury are still going on they haven t stopped And  
 (14) let s see what the Court says the Court s instructions will  
 (15) say about changes made to do everything you can to prevent  
 (16) the  
 (17) repetition  
 (18) And Mr O Neill kind of muted this a little bit in his  
 (19) argument because I suspect he knew the instruction that was  
 (20) coming but the two things this instruction says one you  
 (21) should consider - in determining whether an award of punitive  
 (22) damages is appropriate, you should consider steps taken by  
 (23) defendant to prevent recurrence of the conduct in question  
 (24) And the Court says something else because the law says  
 (25) something else and the Court is the repository of the law or  
 the law giver to you The law says if an accident happens or

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(1) event happens we should not penalize people if they make  
 (2) changes So the fact that changes have been made after an  
 (3) event does not tend to show that such changes should have  
 (4) been  
 (5) made before the event or that the policies and procedures in  
 (6) place were negligent or otherwise improper  
 (7) Accordingly, if you find that changes were made that reduce  
 (8) the likelihood of an oil spill in the future you may consider  
 (9) the making of such changes as a factor to mitigate punitive  
 (10) damages Ladies and gentlemen we have taken those steps  
 (11) and  
 (12) almost without exception, there are some required by law but  
 (13) not what I've been talking about.  
 (14) Every time my law partner Jimmy Sanders comes up I lose my  
 (15) chain of thought Why is that?  
 (16) MR SANDERS I m helping  
 (17) MR NEAL Okay, Jimmy  
 (18) I don t want to suggest to you indeed I think it s  
 (19) important that you know, Exxon Shipping Company and Exxon  
 (20) are  
 (21) not the only people who have gotten the message and made  
 (22) changes This was an event nobody thought would happen  
 (23) and  
 (24) when the event occurred not only Exxon but others made  
 (25) changes ARCO made changes You ve heard Mr O Neill talk  
 about that ARCO made changes They said we haven t been  
 doing it right we need to make changes or we ought to make  
 changes The Coast Guard has made changes and the United  
 States state governments have made changes So we have all

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(1) gotten the message thank you  
 (2) So I m coming to the end of my remarks I had promised  
 (3) myself that I wouldn t take as near as much time as Mr  
 (4) O'Neill I still believe I ll make that although I sometimes  
 (5) don't keep promises to myself  
 (6) We apologized immediately we accepted responsibility we  
 (7) committed to clean up the Sound we committed to clean up the  
 (8) spill we committed to pay claims we committed to restore the  
 (9) Sound and we committed to see that we could do everything in  
 (10) our power that this would not happen again  
 (11) Let me talk to you a moment about punishment and impact  
 (12) There were two cases here the civil case you ve been involved  
 (13) in and the criminal case and I can tell you briefly about  
 (14) this I told you about the criminal case 150 million dollar  
 (15) fine We paid 25 of that 125 remitted because of our good  
 (16) works following the spill We paid a \$100 million to federal  
 (17) and state government We have paid approximately 2 7 billion  
 (18) in addition to that Ladies and gentlemen that is  
 (19) punishment That is punishment  
 (20) Now this is after tax the 2 8 billion The other day in  
 (21) the opening statement he hadn't mentioned this summation as  
 (22) I  
 (23) remember it but you remember Mr O Neill saying, well they  
 (24) have been punished for negligence, but they haven t been  
 (25) punished for recklessness I m going to show you what the jur  
 instruction says about this You don't break it down that

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(1) way  
 (2) The judge will tell you you should consider the punishment  
 (3) we ve already had and it says you may consider as mitigating  
 (4) factors the existence of prior criminal sanctions or civil  
 (5) awards that's both of these cases against the defendant for  
 (6) the same conduct we were punished in this very court for  
 (7) negligence the same conduct  
 (8) We have now suffered approximately - in addition to the  
 (9) 125 million we have now suffered after tax approximately 2 7  
 (10) billion in civil awards But plaintiffs say - plaintiffs say,  
 (11) oh 2 8 they use 2 7 but you've use - seen of the chart,  
 (12) it s within a million of 2 8 billion And they said - really  
 (13) said this 2 8 billion is only a hiccup to Exxon You have the  
 (14) charts and you can see it for yourself but \$2 8 billion after  
 (15) taxes is equal - is equal to all the income Exxon has made  
 (16) from all of its oil and gas operations in the United States for  
 (17) the last three and one half years What we paid after tax is  
 (18) equal to all the income Exxon has made from all of its oil and  
 (19) gas operations in the entire United States  
 (20) As Mr Raymond told you and I think that Mr O Neill  
 (21) inadvertently got this confused Mr O Neill - Mr Raymond  
 (22) also told you that what we paid here is the largest single cost  
 (23) expenditure in the 113-year history of the company And he  
 (24) also told you that the expenditure here of 2 8 billion after  
 (25) tax caused the corporate debt level to go to its highest level

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- (1) in the history of the company  
 (2) And plaintiffs say well, give us 15 billion more, I know  
 (3) you're just giving it to us we have been paid our actual  
 (4) damages but give us 15 billion more Let me put that in  
 (5) context to you Because we've dealt with such numbers it's  
 (6) hard for me to comprehend them  
 (7) \$15 billion is \$500 million more than Exxon's entire  
 (8) investment entire investment, not income but entire  
 (9) investment in the oil and gas business - actually it's \$500  
 (10) million more than Exxon's entire investment in the oil and gas  
 (11) business in the entire United States but money is not the only  
 (12) story  
 (13) They brought up Steve Day I want to bring up Steve Day  
 (14) again One of the things that happened in this case is the  
 (15) impact the non-monetary impact. And I thought this was best  
 (16) expressed in a moment unguarded moment by Steve Day, who  
 (17) basically said - this was put on in Phase I It wasn't really  
 (18) relevant to Phase I then but it seems to signify the human  
 (19) impact this case has had on the 91,000 Exxon employees  
 (20) Would you play that?  
 (21) (Videotape Played)  
 (22) MR NEAL Mr Raymond told you that Exxon, and over  
 (23) the years tried to get his employees the best and the  
 (24) brightest And he says this spill has affected not only how  
 (25) employees think about themselves their devastation of pride

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- (1) but also how others think about Exxon It will have, as Mr  
 (2) Raymond said, a lasting effect for the indefinite indefinite  
 (3) future  
 (4) I want now to close by picking up another theme that Mr  
 (5) O'Neill has said time and time again, "send the message" Now  
 (6) I'm not going to be as flowery as he was talking about the  
 (7) world watching very little publicity about this case But how  
 (8) the world is watching you has nothing to do with your duty Do  
 (9) justice forget the world watching business as he said  
 (10) But he does keep saying send the message send the  
 (11) message Members of the jury, whatever you do you're going  
 to  
 (12) send the message, whatever you do We apologize for this  
 (13) accident, we accept the responsibility, we paid \$15 million to  
 (14) the federal government to start studying immediately, we  
 (15) committed to and did clean up the Sound we committed to  
 (16) restore the Sound to its original status or better we  
 (17) committed to pay claims We committed to do whatever we  
 could  
 (18) to see this didn't happen again and we put out \$2.8 billion  
 (19) not because we were required to, but because we should do it  
 (20) Now if you say now enough is enough the message you will  
 (21) send is to companies is if you stop following - if you accept  
 (22) responsibility and you act responsibly, when it comes to  
 (23) punitive damages, we will give that great weight  
 (24) On the other hand if you hit us now, the message you may  
 (25) send to other companies is don't do anything drag your feet.

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- (1) If you got any responsibility, make them take you to court  
 (2) because you'll be hit anyway It's a somber job I don't know  
 (3) what else we could have done that we haven't done in this case  
 (4) to rectify our conduct.  
 (5) Finally members of the jury the Court will instruct you  
 (6) as I've said several times that punitive damages are not  
 (7) favored in the law I submit to you that a reason punitive  
 (8) damages are not favored in the law is that punitive damages  
 (9) reward those who have already been made whole reward those  
 who  
 (10) have received all of their actual damages and run the grave  
 (11) risk probably do to punish the innocent employees and  
 (12) stockholders  
 (13) I've never, in 35 years of practicing law said to the jury  
 (14) give me this verdict or give me that verdict, answer this  
 (15) question my way et cetera I don't do it now Give us your  
 (16) care attention, do what you've done to this point, study the  
 (17) facts carefully study the law of His Honor carefully, do what  
 (18) is right and just, and go home and sleep go fishing  
 (19) Thanks Thank you very much  
 (20) THE COURT Mr Chalos  
 (21) MR CHALOS May it please the Court, counsel, ladies  
 (22) and gentlemen, before I get into the substance of my closing  
 (23) argument I think it's appropriate for me to comment on Exhibit  
 (24) PX828 That's that dispute resolution agreement, PX828, and  
 (25) the reason I think I need to comment is because I'm the

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- (1) architect of PX828 I wrote it.  
 (2) Mr O'Neill has characterized this document as a contract  
 (3) to lie He's implied that there was some sincere purpose in  
 (4) this agreement that would cause people to come in here  
 whether  
 (5) they be Captain Hazelwood or Exxon, to come in here and lie  
 (6) Nothing could be further from the truth Let me put this  
 (7) agreement in context for you  
 (8) Because of the problems that Captain Hazelwood had, the  
 (9) legal problems he did not testify or speak openly or publicly  
 (10) until January of this year That was the first opportunity he  
 (11) had to speak publicly Mr Neal is correct when he says that  
 (12) Exxon besieged us to make him available to testify That's  
 (13) true they did We resisted because of other considerations,  
 (14) but the time came when he did need to testify  
 (15) Now we my firm myself have zealously represented Captain  
 (16) Hazelwood for the last five years We made sure that his  
 (17) rights were fully protected Now Captain Hazelwood has a  
 (18) potential claim against Exxon, so does his wife Whether that  
 (19) claim is going to be successful or not I don't know Some  
 (20) arbitrator is going to have to decide down the line. But the  
 (21) point was that we wanted Captain Hazelwood to testify, Exxon  
 (22) wanted him to testify but we didn't want what he said in  
 (23) testifying truthfully and honestly and openly to be then used  
 (24) against him in this then potential claim  
 (25) So I draw up this agreement, and one of the clauses in the

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(1) agreement says that nothing that he says in his deposition  
 (2) testimony or at trial would be used against him later on in  
 (3) this potential claim that we have Quite reasonable I'm  
 (4) doing my job we're doing our job to protect him  
 (5) So I take that particular clause and I went to Exxon and I  
 (6) said this is what we want this is what we demand and we're  
 (7) going to have to consider whether he testifies or not They  
 (8) said okay we'll give it to you we see it as being  
 (9) reasonable But being lawyers also can't leave well enough  
 (10) alone They have got to do something to show that they are  
 (11) lawyers they said we want to make it reciprocal  
 (12) It's like that old joke I don't know if you ever heard  
 (13) it This young lawyer moves to a small town and is starving to  
 (14) death has no business Second lawyer moves in and they have  
 (15) more business than they know what to do with it Same thing I  
 (16) make the suggestion they want to add to it  
 (17) Mr Raymond is quite correct when he said that's what my  
 (18) lawyers wanted, they wanted to make it reciprocal so that's  
 (19) how it came to be reciprocal That's how we have that  
 (20) agreement, that's the basis of that agreement It has nothing  
 (21) to do with people coming in and lying or not telling the  
 (22) truth As a matter of fact it's the complete opposite I ask  
 (23) you when you go back into jury room to read the whole thing  
 (24) and you'll see what I'm telling you is absolutely right.  
 (25) Okay Now in light of Mr O'Neill's - and we appreciate

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(1) punishment should be rendered and whether that punishment is  
 (2) any to be rendered is just and fair  
 (3) When you sit down and you think about punishing somebody  
 (4) whether it's your children or Exxon or Captain Hazelwood  
 (5) that's got to come from your individual conscience You've got  
 (6) to think about it and determine whether you think based upon  
 (7) your life's experience whether the punishment is deserved  
 (8) and if it is how severe  
 (9) And so it is in this case the evidence relating to Captain  
 (10) Hazelwood has been put before you You've heard it, he's  
 (11) testified, you've seen him you've had a chance to observe  
 (12) him Captain Hazelwood is a good and decent man He is the  
 (13) sole individual in this case who for his mistakes and mistakes  
 (14) of others has lost his job he's lost his benefits, he is  
 (15) financially worse off today than he was prior to the spill  
 (16) That's a fact He has had to defend himself for the last five  
 (17) years He's been humiliated he's been insulted His family  
 (18) has had to endure the slights and nastiness of all the  
 (19) mean spirited individuals in this world His most personal and  
 (20) intimate aspects of his life have been laid out for all to  
 (21) see  
 (22) Captain Hazelwood has lost what he loves best, and that is  
 (23) the ability to go sail He cannot sail, he'll never sail  
 (24) again So when Mr O'Neill says that Captain Hazelwood hasn't  
 (25) fully comprehended the consequences of his conduct believe me

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(1) this very much - request and recommendation to you that you  
 (2) award a symbolic one dollar against Captain Hazelwood I  
 (3) didn't really have much to do in this phase, I just sat back  
 (4) there but it gave me the opportunity to observe you the work  
 (5) here in the courtroom and reflect a little bit on your role as  
 (6) jurors  
 (7) You know in the United States we have this wonderful and  
 (8) wondrous system and it's really a privilege and a right this  
 (9) judicial system that we have and you as the jury are part of  
 (10) that system You 11 citizens, everyday people are vested with  
 (11) tremendous power in this system tremendous power You have  
 (12) through your collective wills the ability to destroy an  
 (13) individual financially and emotionally You can do that You  
 (14) can bring a major corporation like Exxon to its knees if you  
 (15) want You can do that You can stop the federal government in  
 (16) their tracks if that's what you wanted to do You have that  
 (17) power You're that powerful sitting there but with that power  
 (18) comes a heavy responsibility  
 (19) You have this awesome power but you also have this heavy  
 (20) responsibility, and that responsibility is to be fair and just  
 (21) in your decision You have to take the evidence that's put  
 (22) before you and you have to consider it carefully Carefully,  
 (23) because you have all this power and then after you consider it  
 (24) carefully, you have to use your good sense and your individual  
 (25) conscience individual conscience to determine whether or not

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(1) he has He has, he understands it fully, and he's sorry He  
 (2) told you he was sorry and he knows exactly what mistakes -  
 (3) mistakes that he made, exactly what the consequences are  
 (4) Ladies and gentlemen Captain Hazelwood has been punished  
 (5) enough Even the symbolic dollar that Mr O'Neill asked for is  
 (6) additional punishment I ask you not to punish him anymore  
 (7) not to punish him anymore When you go back into the jury  
 (8) room  
 (9) to deliberate and to consider Captain Hazelwood's fate I ask  
 (10) you to remember that responsibility that comes with that  
 (11) awesome power that you have Be fair and be just.  
 (12) I thank you very much  
 (13) THE COURT Ladies and gentlemen, at this point we are  
 (14) going to take another recess but before we do, I want you to  
 (15) know what's going to happen We're going to take a 15 minute  
 (16) recess We will then have Mr O'Neill's final summation We  
 (17) will go directly from that to jury instructions, which I will  
 (18) read and which I will distribute when we come back in now  
 (19) I have already received and considered the written  
 (20) objections which have been filed with respect to the  
 (21) instructions and so we can proceed directly to the jury  
 (22) instructions after Mr O'Neill's closing arguments  
 (23) We'll be in recess now for 15 minutes  
 (24) (Jury out at 11 42)  
 (25) (Recess from 11 42 to 12 08)  
 (Jury in at 12 08)



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- (1) THE CLERK. All rise  
 (2) THE COURT Mr O'Neill  
 (3) MR O NEILL. Thank you Your Honor  
 (4) This is the whole - this is the first time the whole story  
 (5) has come out, everybody agrees to that. This is the whole  
 (6) time - the first time the whole story has come out and come  
 (7) out into the public in the air where everybody can hear it  
 (8) And who had control of the facts who had control of the  
 (9) facts? Exxon Corporation had control of the facts and the law  
 (10) department had control of the facts but it took five years for  
 (11) the whole story to come out despite congressional testimony  
 (12) National Transportation and Safety Board hearing, a justice -  
 (13) and investigation by the justice department of the United  
 (14) States and all of that, and this is the first time the whole  
 (15) story comes out Does that bother you? That isn't right  
 (16) That s amazing  
 (17) Now Exxon says - you know, some of these arguments that  
 (18) are made sound good when they are made and I m going to  
 (19) give  
 (20) you an example of one One is the first example Exxon said it  
 (21) did It points to the Glacier Bay and says we accepted  
 (22) responsibility for the spill It s our ship It s our oil we  
 (23) accepted responsibility and that s an important thing to do  
 (24) On its surface it makes sense  
 (25) Now I m going to show you that that is a ridiculous  
 statement This boat is on a reef and what does it say on the

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- (1) smoke stack and what does it say on the bow Now what are  
 (2) they  
 (3) going to say that this boat belongs to ARCO? This boat is in  
 (4) the 1986 annual report at page 13 Accept responsibility?  
 (5) They didn t have any choice but to accept responsibility It s  
 (6) on a reef, the state authorities are coming out the Coast  
 (7) Guard authorities are coming out what are they going to do  
 (8) paint the smoke stack and put SeaRiver on it We accepted  
 (9) responsibility, it s our boat, give me a break it s their  
 (10) boat  
 (11) I mean Exxon has no place to hide So they say having no  
 (12) place to hide we accepted responsibility That is a stupid  
 (13) stupid, misleading thing to say, and what it means is they are  
 (14) making up arguments so they won't be punished They are  
 (15) trying  
 (16) to get off the hook for a terrible terrible thing that they  
 (17) did  
 (18) And this is the hook jury instruction 27 and it lists the  
 (19) factors that you re to look at and the three major factors we  
 (20) had agreement on The degree of reprehensibility of the  
 (21) defendants' conduct It was reckless and it spanned five  
 (22) years The magnitude of the harm likely to result, as well as  
 (23) the harm that in fact resulted It was terrible and people  
 (24) could have died And the financial condition of the  
 (25) defendants there is no argument about that So in the jury  
 instruction with regard to the three major factors, we've got  
 agreement on that and that s what the law tells you

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- (1) And then the existence of prior criminal sanctions or civil  
 (2) awards against the defendant and the extent to which the  
 (3) defendant has taken steps to remedy the consequence of his or  
 (4) her conduct let me talk about those Could I have their  
 (5) exhibit please?  
 (6) The claims payments You are required under our civil  
 (7) justice system to make compensatory damage payments to  
 (8) people  
 (9) that you hurt, that s what Phase II A was about. The law  
 (10) requires this for an innocent spiller The federal fine, the  
 (11) 25 million dollar federal fine was for recklessness not  
 (12) negligence And at the time they paid the fine the whole  
 (13) truth was not out and that 25 million dollar federal fine was  
 (14) paid pursuant to a cop plea a plea agreement without a jury  
 (15) hearing the facts and without the full facts coming to light  
 (16) It s true the first time we heard the full story about the  
 (17) conduct was here in front of you and their persistence  
 (18) through their lawyers pulled it out. The state and federal  
 (19) restitution and the state and federal settlement, \$1 billion,  
 (20) that was paid to the federal and state governments for the  
 (21) damage done to federal and state resources That was  
 (22) compensatory damages to the state and federal government  
 (23) Clean-up costs The law requires them to clean up their  
 (24) own mess it does The casualty loss They are obligated to  
 (25) prevent a further disaster a million barrel disaster, and they  
 wanted to reclaim their vessel The Phase II-A and II B

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- (1) awards They are required to pay potential and contingent  
 (2) expenditures Phase IV claims and contingent state and federal  
 (3) claims are all compensatory damages, so I ask you - on this  
 (4) board every number on here, an innocent spiller would have  
 (5) had  
 (6) to pay, with one exception and that s the federal fine of \$25  
 (7) million paid for negligence  
 (8) Show me a dollar on that that is attributable to reckless  
 (9) behavior It is not fair and it is an improper, chronic  
 (10) message to send to society that innocent spillers and reckless  
 (11) spillers are going to be treated the same and you don't need  
 (12) to be a genius to figure that out  
 (13) On the claims payments there is a real interesting comment  
 (14) made, we paid without releases, we started to require releases  
 (15) and then we paid without releases What that means is they  
 (16) were making partial payments and they were initially requiring  
 (17) releases for partial payments and then they saw the wrong in  
 (18) that and they made payments to people who they owed money  
 (19) and  
 (20) they receded for that and that s what they should have done  
 (21) This oil spill, this disaster this thing that affected so  
 (22) many people's lives wasn t the result of written policies, it  
 (23) was the result of the same people that they still had working  
 (24) there who they promoted who have attitudes, and I don't think  
 (25) they live in the real world, but those same people are still  
 there Those same people were brought into the courtroom and  
 they defended reckless behavior

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(1) Now what message are you going to give Koops Borgen  
 (2) larossi and all of those people if you say you re coming in  
 (3) here defending that reckless behavior we re going to validate  
 (4) that we're going to validate that and then they are going to  
 (5) go back to their company and they are going to know for the  
 (6) things they did from 1985 to 1989 they got away with them and  
 (7) from the things they did from 1989 to 1994 they got away with  
 (8) those and that includes the conduct in the courtroom it  
 (9) does  
 (10) And if you want to talk about them learning their lesson -  
 (11) you know I have a boy and a girl Boy is older than the  
 (12) girl And you know we ve all heard it but I didn t hit my  
 (13) sister If I hit her she made me do it I didn t hurt her  
 (14) anyway And that s what we ve heard And when your kid  
 comes  
 (15) in and says - goes through the litany you say hold it there  
 (16) cowboy, we re going to have to have a serious discussion about  
 (17) accountability  
 (18) And we ve heard today that fatigue was a problem, but it  
 (19) wasn't a problem but it was a problem And we have the  
 (20) Stalzer memo in 1990 showing three quarters of the vessels in  
 (21) the fleet with serious fatigue problems  
 (22) Now from the closing today is alcohol a problem with  
 (23) Exxon or isn't it or was it a problem from 85 to 89? Can  
 (24) you tell whether the policy was a problem can you tell whether  
 (25) the monitoring was a problem? Can you tell? I can't tell

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(1) Subsequent remedial measures the extra mate - I mean,  
 (2) this is like the vessel - the extra mate and the loading mate  
 (3) in Valdez are made to comply with the six on/six off rule and  
 (4) they are claiming credit for complying with the six on/six off  
 (5) rule which has been in effect since 1913 and there is a  
 (6) memo The Stalzer memo when you go back to the jury room  
 (7) points out that the problems the fatigue problems were caused  
 (8) by manning problems in the 80s That s where they were  
 saving  
 (9) the buck that s where they were saving the buck but the extra  
 (10) mate and the loading mate are made to comply with the statute  
 (11) that was passed in 1913  
 (12) And it s interesting how they turn things around Well  
 (13) society has learned a lesson because these laws have been  
 (14) passed, the states of California Oregon Washington, Alaska  
 (15) and the federal government have enough of a distrust of this  
 (16) institution enough of a distrust of this institution to pass  
 (17) oil spill laws protecting us against Exxon Corporation That s  
 (18) what those laws do And it isn't that those laws weren't  
 (19) specifically passed The OPA 90 was passed in the wake of the  
 (20) Exxon Valdez and it prohibits this tanker from going into  
 (21) Prince William Sound  
 (22) So why do we need these laws by California Oregon  
 (23) Washington and Alaska and the federal government? Because  
 this  
 (24) is a responsible forthright can-do positive part of our  
 (25) society Is that why every legislator on the West Coast and in

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(1) Washington D C had to take a look at oil spill prevention and  
 (2) oil spill response? That s because what happened the first  
 (3) three factors the conduct the harm and the actors were so  
 (4) egregious and so powerful that they needed to do something  
 (5) about it.  
 (6) But one thing that they can t do and as I said before the  
 (7) Congress can t and the executive branch cannot punish And  
 (8) the framers of the constitution when they set up our  
 (9) government did that on purpose They wanted punishment in  
 (10) cases like this to be in the hands of the people and that s  
 (11) what we re talking about  
 (12) Now, there is - Mr Neal starts off by saying what about  
 (13) this money to the plaintiffs and why didn't Mr O'Neill  
 (14) mention that? Do you recall when he said that at the  
 (15) beginning why didn't I mention it like I was trying to hide  
 (16) it? Do you want me to show you why I didn't mention it?  
 (17) Because I was told not to because it s irrelevant to the  
 (18) purpose of punishment because it is irrelevant to the purpose  
 (19) of punishment  
 (20) The fact that the punitive damages would go to Alaska  
 (21) fishermen Native corporations every community in  
 Southcentral  
 (22) Alaska and benefit this economy is irrelevant to the purpose of  
 (23) punishment. And the jury instruction tells you that, and when  
 (24) you look at the five factors for punishment, your duty in this  
 (25) case that is not one of the five factors for punishment

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(1) His Honor, in a mandatory punitive class, will bring in not  
 (2) only the people that appeared before you, but people from all  
 (3) the other court systems and will administer the fund and that s  
 (4) what will happen to that and that s how come you re not  
 (5) supposed to speculate as to how that money might be divided  
 (6) among the punitive damages class, but the issue being raised  
 (7) it's going to Alaskans  
 (8) You are supposed to look at the defendants and you are the  
 (9) embodiment of our society with regard to the conduct that we re  
 (10) looking at You are it once and for all, only one ever, and  
 (11) the issue has never been tried in the open air of  
 (12) cross-examination your scrutiny has never been brought to  
 (13) these facts before And they have not paid once cent with  
 (14) regard to their reckless conduct they haven't.  
 (15) This case is about the members of these boards of directors  
 (16) at Exxon Corporation and at other corporations like it, the  
 (17) people who call the shots and that s why I think the most  
 (18) fascinating bit of discussion in the courtroom was when Mr  
 (19) Raymond was on the stand and we find out that he is the man  
 who  
 (20) is responsible for informing the Exxon board of directors he  
 (21) doesn t know who any of the players are he thinks Hazelwood  
 (22) was the most closely monitored man in the fleet. The board  
 (23) never asked for an assessment of why the grounding occurred  
 (24) All of those things are irrefutable  
 (25) He comes here and tells us that he doesn t know who Mary

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- (1) Williamson is he doesn't know that Hazelwood had a problem in
- (2) 1985 the Graves report. What does that tell you about the board of directors of Exxon Corporation about the interest of
- (3) what happened? What does that tell you about Mr Raymond's
- (4) interest in what happened?
- (5) You know, they don't know, they don't know what happened
- (6) You know more about what happened in their company than they
- (7) do and they are here to tell you that they fixed the problem
- (8) And that doesn't make any sense and the reason that it doesn't
- (9) make any sense is because they still haven't come to grips with
- (10) the problem and they haven't come to grips with the problem
- (11) because they live in a different world than we do, and they
- (12) haven't come to grips that everybody doesn't make what the head
- (13) of Texaco makes
- (14) And corporations are very interesting institutions The
- (15) moral tone or the moral leadership is set from the top down,
- (16) and corporations can have sick cultures Like schools can have
- (17) sick cultures corporations can have sick cultures And in a
- (18) corporation because everybody has got a specialized role,
- (19) medical department, that's not my responsibility, that kind of
- (20) thing, people avoid responsibility And because there are all
- (21) these layers people can avoid responsibility and because
- (22) there is an anonymity when you and I do something wrong on an
- (23) individual basis we can't hide We are sort of like the Exxon
- (24) Valdez aground We're us our name is - we have to accept
- (25)

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- (1) responsibility for what we do as individuals, and a
- (2) corporation, you can get a pass the buck, like we saw in the
- (3) medical department kind of thing, I wasn't supposed to monitor,
- (4) I was the president of the company
- (5) How do we police against that attitude? We're not policing
- (6) against paper policies we're policing against attitudes How
- (7) do we police against attitudes? We police against attitudes,
- (8) against institutions that are as big as this one through the
- (9) jury system, and the message from the jury has to go not to
- (10) Connie Buhl but it has to go to the board of directors and it
- (11) has to go to Mr Raymond so that five years after the grounding
- (12) of the Exxon Valdez, boards of directors have an interest in
- (13) finding out what happened and the chairman of the board of
- (14) Exxon Corporation has an interest in finding out what happened
- (15) and so that the boards of directors and the chairman of the
- (16) board have enough concern about the people that they hurt to at
- (17) least know the names of a few of them
- (18) With regard to all of these employees that have been
- (19) promoted, everybody who had any complicity in this thing at
- (20) all, I would submit to you that we have the same problem that
- (21) we had with Captain Hazelwood and that when bad things
- (22) happen
- (23) or people are having troubles we need tough love And if you
- (24) or I would have been the president of Exxon Shipping
- (25) Company,
- (26) or the president more importantly the president of Exxon
- (27) Corporation with regard to these employees who had these

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- (1) problems we would have seen some tough love
- (2) What does that do? Not only does it fix the problems with
- (3) regard to these individuals but what message does that send to
- (4) the company, what message does it send to the company to take
- (5) occasional adverse personnel actions, to suggest to people that
- (6) maybe this isn't their calling, to suggest to others that we
- (7) got to fix our attitudes?
- (8) If you do that in a company that sends a message to all of
- (9) the other employees and it changes the corporate culture
- (10) That's on the one hand
- (11) Now let's go on the other hand We promote everybody who
- (12) was involved we take no adverse personnel actions and then
- (13) we
- (14) parade them in the courtroom to defend them what happened
- (15) one
- (16) by one
- (17) Now Connie Buhl and Steve Day are two of over a hundred
- (18) Exxon employees that we saw in here, and the higher they get
- (19) up
- (20) the totem pole, the more you get a Mr Rouse that says, yeah
- (21) we have a relapsed alcoholic as the captain of our tanker, so
- (22) on the one spectrum we have promoted them, let's not fire
- (23) them
- (24) let's talk to them and five years after let's make them come
- (25) in here and defend the conduct.
- (26) Now you let that crew off What does that tell them? What
- (27) does that tell them that this behavior is right? What message
- (28) does that send? We got away with it I came in here and lied
- (29) my head off in Phase I and we got away with it. It's a

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- (1) question of tough love It was a question of tough love with
- (2) Captain Hazelwood and it is a question of tough love with the
- (3) employees, and I would submit to you today that it's a question
- (4) of tough love for society
- (5) And corporations as I said, have - when I was talking
- (6) with Mr Elmer, there was an interesting little colloquy I
- (7) don't have it, but it was - we were talking about learning to
- (8) clean up your own mess, and I mentioned the fact that school
- (9) boys get their knuckles wrapped And he said yeah, and I had
- (10) to stay after school Now, that's a very interesting comment
- (11) for two reasons The first is he had to clean up his mess and
- (12) then stay after school Obvious, but it's right.
- (13) And the second is, as people can have their knuckles
- (14) wrapped, but a corporation has no soul to damn and nobody to
- (15) kick. That goes back to the Lord Chancellor, the biggest
- (16) lawyer in England in about 1780 And the language of
- (17) corporations is unfortunately the language of might.
- (18) And shareholders get upset with their boards of directors
- (19) on money issues, and shareholders will force changes in the
- (20) board of directors either in attitude or personnel on the basis
- (21) of money And that is an ugly fact, but that is a fact of
- (22) life It's an ugly fact, it's a mean fact, but it's a fact of
- (23) life
- (24) What are the magazines entitled that you read that deal
- (25) with corporations? Fortune, Money I mean they are and if

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(1) you were going to effect a change in our society rather than -  
 (2) you know, many of these Exxon corporations Captain Deppe  
 who  
 (3) is now the port captain at the time the trial date is set how  
 (4) many of these changes are going to exist a year or two from  
 (5) now?  
 (6) We saw the number of mates go down in the 80s How many  
 (7) of these changes are going to exist a year or two from now if  
 (8) you let them off the hook? What kind of message is it going to  
 (9) send to other corporations if you let them off the hook  
 (10) The argument that they make it's a very interesting  
 (11) argument but again it's a childish argument is if you punish  
 (12) us, the message that you're going to send to other corporations  
 (13) is they shouldn't comply with the law and clean up their own  
 (14) mess Isn't that the argument?  
 (15) I've rephrased it, but isn't the argument if you punish us  
 (16) Mobile, Texaco, ARCO won't comply with the law and clean up  
 (17) their own mess? No If you punish them two things are going  
 (18) to happen If you punish them two things are going to  
 (19) happen There are going to be less messes And we know  
 there  
 (20) are other oil spills We know the Braer spilled in 1991 You  
 (21) punish them there are going to be less messes, that's the  
 (22) first thing  
 (23) And the second thing is they are going to clean their  
 (24) messes up and when they make messes they are going to  
 effect  
 (25) real meaningful changes in their personnel and when they  
 make

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(1) messes, they are going to say I'm sorry in a real and  
 (2) meaningful way  
 (3) The newspaper ad is in the plaintiffs' exhibits with the  
 (4) newspapers that it was published in, and it's kind of  
 (5) interesting It's not a big point but when you go back to the  
 (6) jury room there is an A version and a B version and we were  
 (7) given the A version a discovery version and then we were  
 (8) given the B version Notice the order in which the newspapers  
 (9) that it's run in They put the logos on the exhibits but  
 (10) notice the order they are in in the A-1 and the B-1 the A-1,  
 (11) all the national newspapers and then somebody with a  
 (12) litigation mind said we better switch the order of the ads and  
 (13) we better throw in a couple more Alaska ones Go back and  
 look  
 (14) at A and B  
 (15) But, most importantly, Chairman Rawl said he didn't think  
 (16) that it was necessary to run the ad that's what he said  
 (17) Saying you're sorry when you hurt somebody, and that is no  
 (18) small point Saying that you're sorry when you hurt somebody,  
 (19) in coming to grips with the full scope of what you did and not  
 (20) hiding it from the public, are the first meaningful steps to  
 (21) changing attitudes and moving forward  
 (22) And with regard to changing attitudes and moving forward  
 (23) nobody is going to move forward until you're through  
 (24) Fishermen can't move forward, there are tens twenties  
 (25) thirties of thousands of people in the municipalities and the

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(1) Native corporations the other groups impacted by the spill  
 (2) who are still angry and hurt about what happened  
 (3) And that is an important reason to punish That's why, you  
 (4) know, we used to resolve these disputes with six-guns Now we  
 (5) resolve them with juries, but the validation of their feelings  
 (6) is important and the validation of society's feelings and anger  
 (7) about this spill is important and changing Exxon's attitudes  
 (8) are important and sending a message to others - you know the  
 (9) statement that this case has not received any publicity, did  
 (10) you hear him say that? Absolutely incredible  
 (11) I mean, you're not supposed to read the newspapers I do  
 (12) Absolutely incredible And society - your verdict is going to  
 (13) be a validation of society's values, and that includes values  
 (14) on people, the environment honesty, that's - your verdict is  
 (15) a validation of society's values  
 (16) The numbers that I gave you there isn't much dispute  
 (17) about. They come out of the Exxon Corporation year-end  
 (18) statements and so as you go to do your duty, I wish you well  
 (19) And we started with coats on and we're finishing with coats  
 (20) on And all of the people who were hurt by the spill  
 (21) appreciate what you've done and what you're doing  
 (22) And in point of fact, these people in these board of  
 (23) directors' rooms are going to look to what you do and the day  
 (24) after you do it it will be discussed in every major board of  
 (25) director's meeting in the country that exists And your fellow

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(1) citizens are going to look to what you do, and it is a very,  
 (2) very important, important task  
 (3) Now my part is over You know, five years of work and all  
 (4) these depositions and looking at these documents, it's over,  
 (5) and now you can go and do your work And we all wish you  
 God  
 (6) speed and thank you for your time and we'll hang around and  
 (7) wait until you come back  
 (8) Thanks  
 (9) THE COURT Counsel the instructions as we have  
 (10) passed them out to you contain I believe, three corrections in  
 (11) the category of typos that were made as between the version  
 (12) that you saw on Friday and what you have now, and, secondly  
 (13) you'll note as we get toward the very end, that I have changed  
 (14) the sequence of I think two of the final instructions  
 (15) Members of the jury We have now completed Phase III of  
 (16) this trial Now that you have heard the evidence and the  
 (17) arguments, it becomes my duty to give you the instructions as  
 (18) to the law applicable to this part of the case Copies of  
 (19) these instructions will be available for you in the jury room  
 (20) for further review I urge you to review these instructions  
 (21) from time to time as you progress with your deliberations  
 (22) It is your duty as jurors to follow the law as stated in  
 (23) these instructions and to apply that law to the facts as you  
 (24) find them from the evidence in this case  
 (25) You are not to single out one instruction alone as stating

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- (1) the law but must consider the instructions as a whole
- (2) Neither are you to be concerned with the wisdom of any rule of law stated by the Court Regardless of any opinion you may have as to what the law ought to be it would be a violation of your sworn duty to base a verdict upon any other view of the law than that given in the instructions of the Court
- (3) Similarly it would be a violation to your sworn duty as judges of the facts to base a verdict upon anything but the evidence in the case presented here in open court
- (4) Nothing I say in these instructions is to be taken as an indication that I have any opinion about the facts of the case or what that opinion is It is not my function to determine the facts but rather yours
- (5) Justice through trial by jury must always depend on the willingness of each individual juror to seek the truth as to the facts only from the same evidence presented to all the jurors and to arrive at a verdict by applying the same rules of law as given in the instructions of the Court
- (6) You have been chosen and sworn as jurors in this case to try the issues of fact presented by the plaintiffs and the defendants You are to perform this duty without bias or prejudice as to any party Our system of law does not permit jurors to be governed by sympathy prejudice or public opinion as to either party The law requires and both the parties and the public expect that you will carefully and impartially

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- (1) consider all the evidence in the case follow the law as stated by the Court and reach a just verdict regardless of the consequences
- (2) Unless otherwise stated the jury should consider each instruction given to apply to all of the parties and to all of the plaintiffs and to all of the defendants in the case
- (3) This case should be considered and decided by you as an action between persons of equal standing in the same community of equal worth and holding the same or similar stations in life
- (4) In your decisions on issues of fact a corporation is entitled to the same fair trial at your hands as a private individual All persons, including corporations, partnerships, unincorporated associations and other organizations stand equal before the law and are to be dealt with by the judge and jury as equals in a court of justice
- (5) For purposes of this trial, the parties will refer to Exxon Shipping Company and Exxon Corporation as the Exxon defendants, and you should consider all evidence, arguments and questions submitted to you for decision as though the Exxon defendants were one party
- (6) Any act or failure to act of Exxon Shipping Company, or any knowledge or information known or available to Exxon Shipping Company shall be considered to be equally the act or knowledge of Exxon Corporation Any act or failure to act by Exxon

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- (1) Corporation or any knowledge or information known or available
- (2) to Exxon Corporation shall be considered the act or failure to act of or the knowledge of Exxon Shipping Company
- (3) There are generally speaking, two types of evidence from which a jury may properly find the truth as to the facts of the case One is direct evidence such as the testimony of an eyewitness The other is indirect or circumstantial evidence the proof of a chain of circumstances pointing to the existence or non-existence of certain facts
- (4) As a general rule, the law makes no distinction between direct or circumstantial evidence but simply requires that the jury find the facts in accordance with the preponderance of all the evidence in the case, both direct and circumstantial
- (5) The evidence from which you are to decide what the facts are consists of, one the sworn testimony of witnesses both on direct and cross-examination, regardless of who called the witness two the exhibits which have been received into evidence, and, three, any facts to which all the lawyers have agreed or stipulated
- (6) Plaintiffs and the defendants have agreed or stipulated to certain facts You should treat those facts as having been proved
- (7) Certain things are not evidence and you may not consider these things except insofar as they are supported by the evidence These things include one, arguments and statements

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- (1) by lawyers are not evidence The lawyers are not witnesses
- (2) What they say in their opening statements, closing arguments and at other times is intended to help you interpret the evidence, but it is not evidence If the facts as you remember them differ from the way the lawyers have stated them, your memory of them controls
- (3) Two, objections by lawyers are not evidence Attorneys have a duty to their clients to object when they believe a question is improper under the rules of evidence You should not be influenced by the objection or by the Court's ruling on it.
- (4) Three, testimony that has been excluded or stricken or that you have been instructed to disregard is not evidence and must not be considered
- (5) Four, evidence admitted for a limited purpose is not evidence for any other purpose thus when I have admitted some evidence for a limited purpose it would be improper to consider that evidence for any other purpose
- (6) Five anything you may have seen or heard when the court was not in session is not evidence You are to decide the case solely on the evidence received during the trial
- (7) Six some of you have taken notes during the trial Such notes are not evidence and are only for the personal use of the person who took them
- (8) Certain charts and summaries have been shown to you in

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- (1) order to help explain the facts disclosed by the books records
- (2) and other documents which are in evidence in the case
- (3) However such charts or summaries are not in and of
- (4) themselves evidence or proof of any facts If such charts or
- (5) summaries do not correctly reflect facts or figures shown by
- (6) the evidence in the case you should disregard them
- (7) In other words such charts and summaries are used only as
- (8) a matter of convenience so if and to the extent you find they
- (9) are not in truth summaries of facts or figures shown by the
- (10) evidence in the case you are to disregard them entirely
- (11) You are to consider only the evidence in the case, but in
- (12) your consideration of the evidence you are not limited to the
- (13) bald statements of the witnesses In other words you are not
- (14) limited solely to what you see and hear as the witnesses
- (15) testify or what appears on the face - what appears on the face
- (16) of exhibits
- (17) You are permitted to draw from facts which you find have
- (18) been proved by the evidence in this phase of the trial such
- (19) reasonable inferences as seem justified in the light of your
- (20) experience
- (21) Inferences are deductions or conclusions which reason and
- (22) common sense lead the jury to draw from the facts which have
- (23) been established by the evidence in the case
- (24) You are not bound to decide any issue of fact in accordance
- (25) with the testimony of any number of witnesses which does not

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- (1) produce in your minds belief in the likelihood of truth as
- (2) against the testimony of a lesser number of witnesses or other
- (3) evidence which does not produce such belief in your minds
- (4) The test is not which side brings the greater number of
- (5) witnesses or presents the greater quantity of evidence, but
- (6) which witnesses and which evidence appeals to your minds as
- (7) being most accurate and otherwise trustworthy
- (8) The testimony of a single witness which produces in your
- (9) minds belief in the likelihood of truth is sufficient for the
- (10) proof of any fact and would justify a verdict in accordance
- (11) with such testimony, even though a number of witnesses may
- (12) have testified to the contrary, if after consideration of all the
- (13) evidence in the case, you hold a greater belief in the accuracy
- (14) and reliability of the one witness
- (15) During this part of the trial certain depositions were read
- (16) or played to you These consist of sworn recorded answers to
- (17) questions asked of the witness in advance of trial by one or
- (18) more of the attorneys for the parties to the case
- (19) Such testimony is entitled to the same consideration and is
- (20) to be judged as to credibility and weighed and otherwise
- (21) considered by the jury, insofar as possible, in the same way as
- (22) if the witness had been present and had testified from the
- (23) witness stand
- (24) The rules of evidence ordinarily do not permit witnesses to
- (25) testify as to opinions or conclusions An exception to this

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- (1) rule exists as to those whom we call expert witnesses
- (2) Witnesses who by education or experience have become expert
- (3) in
- (4) some art, science profession or calling, may state their
- (5) opinions as to relevant and material matters in which they
- (6) profess to be expert and may also state their reasons for the
- (7) opinion
- (8) You should consider each expert opinion received in
- (9) evidence in this case and give it such weight as you think it
- (10) deserves If you should decide that the opinion of an expert
- (11) witness is not based upon sufficient education and experience
- (12) or if you should conclude that the reasons given in support of
- (13) the opinion are not sound or if you feel that it is outweighed
- (14) by other evidence you may disregard the opinion entirely
- (15) The burden is on the plaintiffs in a civil action such as
- (16) this to prove every essential element of their claims by a
- (17) preponderance of evidence If the proof should fail to
- (18) establish any essential element of a claim by a preponderance
- (19) of the evidence in the case the jury should find for the
- (20) defendant as to that claim
- (21) To quote establish by a preponderance of evidence end
- (22) quote, means to prove that something is more likely so than not
- (23) so In other words, a preponderance of the evidence in the
- (24) case means such evidence as when considered and compared with
- (25) that opposed to it has more convincing force, and produces in

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- (1) true than not true This rule, of course, does not require
- (2) proof to an absolute certainty since proof to an absolute
- (3) certainty is seldom possible in any case
- (4) In determining whether any fact in issue has been proved by
- (5) a preponderance of the evidence in the case, the jury may,
- (6) unless otherwise instructed consider the testimony of all the
- (7) witnesses, regardless of who may have called them and all
- (8) exhibits received in evidence regardless of who may have
- (9) produced them
- (10) When I say in these instructions that a party has the
- (11) burden of proof on any proposition, or use the expression
- (12) quote if you find, end quote, other quote, if you decide, end
- (13) quote, I mean you must be persuaded, considering all the
- (14) evidence in the case, that the proposition is more probably
- (15) true than not true
- (16) In deciding whether plaintiffs have proved a fact or an
- (17) element of a claim by a preponderance of evidence, you must
- (18) evaluate all the evidence In doing this, you must decide
- (19) whether testimony - you must decide which testimony to
- (20) believe
- (21) and which testimony not to believe You may believe all or any
- (22) part of or none of any witness' testimony In making that
- (23) decision you may take into account a number of factors,
- (24) including the following One, was the witness able to see or
- (25) hear or know the things about which that witness testified,

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(1) things, three what was the witness manner while testifying  
 (2) four did the witness have an interest in the outcome of this  
 (3) case or any bias or prejudice concerning any party or any  
 (4) matter involved in the case, five, how reasonable was the  
 (5) witness testimony considered in the light of all the evidence  
 (6) in the case Six was the witness' testimony contradicted by  
 (7) what that witness has said or done at another time or by the  
 (8) testimony of other witnesses or other evidence  
 (9) In deciding whether or not to believe a witness keep in  
 (10) mind that people sometimes forget things You need to  
 (11) consider, therefore, whether a contradiction is an innocent  
 (12) lapse of memory or an intentional falsehood, and that may  
 (13) depend on whether it has to do with an important fact or with  
 (14) only a small detail  
 (15) A witness may be discredited or impeached by contradictory  
 (16) evidence or by evidence that at some other time the witness has  
 (17) said or done something, or has failed to say or do something  
 (18) which is inconsistent with the witness' present testimony  
 (19) If you believe any witness has been impeached and thus  
 (20) discredited it is your exclusive province to give the  
 (21) testimony of that witness such credibility, if any, as you may  
 (22) think it deserves If a witness is shown knowingly to have  
 (23) testified falsely concerning any material matter you have a  
 (24) right to distrust such witness' testimony in other particulars  
 (25) and you may reject all the testimony of that witness or give it

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(1) proper, applying the instructions that I will give you  
 (2) In your Phase III deliberations you may consider the  
 (3) evidence admitted in Phases I and II, in addition to the  
 (4) evidence admitted in this Phase III  
 (5) The purpose for which punitive damages are awarded are,  
 (6) one to punish a wrongdoer for extraordinary misconduct, and  
 (7) two to warn defendants and others and deter them from doing  
 (8) the same  
 (9) It is for you to decide as to each of Defendant Hazelwood  
 (10) and the Exxon defendants whether or not plaintiffs have  
 (11) established by a preponderance of the evidence that one an  
 (12) award of punitive damages would serve the purposes of  
 (13) punishment and deterrence and two if so, what amount is  
 (14) necessary and appropriate to achieve those purposes  
 (15) Quote punishment, end quote means to impose a penalty  
 (16) because of wrong conduct of defendants  
 (17) Quote deterrence end quote means to discourage or  
 (18) prevent future wrongful conduct by defendants and others  
 (19) The amount of punitive damages that is necessary to punish  
 (20) a defendant is the penalty that is necessary to express  
 (21) society's disapproval of conduct that society condemns The  
 (22) amount of punitive damages that is necessary to deter a  
 (23) defendant and others is the amount of money you find will  
 (24) induce a defendant and others not to repeat the conduct that  
 (25) you have found to be wrongful

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(1) such credibility as you may think it deserves  
 (2) An act or omission is quote knowingly, end quote done if  
 (3) done voluntarily and intentionally, and not because of mistake  
 (4) or accident or other innocent reason  
 (5) Counsel have worked with the court in preparing these jury  
 (6) instructions and have been provided with a copy of them  
 (7) Counsel may properly refer to some of these instructions on the  
 (8) law applicable to the case in their arguments If however,  
 (9) any difference appears to you between the law as stated by the  
 (10) Court in these instructions and any law stated by counsel,  
 (11) either in their opening statements or closing arguments you  
 (12) are of course to be governed by these instructions now given by  
 (13) the Court  
 (14) In Phase I of the trial, you determined that the conduct of  
 (15) Joseph Hazelwood and of the Exxon defendants was reckless and  
 (16) that such conduct was a legal cause of the oil spill In Phase  
 (17) II of the trial, you awarded sums of money for actual damages  
 (18) to various commercial fishermen to compensate them for the  
 (19) losses legally caused by the oil spill  
 (20) The fact that you have determined that the conduct of  
 (21) Joseph Hazelwood and of the Exxon defendants was reckless does  
 (22) not mean that you are required to make an award of punitive  
 (23) damages against either one or both of them An award of  
 (24) punitive damages may be made only if you find that plaintiffs  
 (25) have shown by a preponderance of evidence that an award is

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(1) Punitive damages are not favored in the law and are never  
 (2) awarded as a right, no matter how egregious the defendant's  
 (3) conduct. This means that you have discretion to award or not  
 (4) to award punitive damages in accordance with these  
 (5) instructions If you find that punitive damages are  
 (6) appropriate, the amount of punitive damages may not be  
 (7) determined arbitrarily You must use reason in setting the  
 (8) amount When I say you must use reason, I mean that any  
 (9) punitive damages award must have a rational basis in the  
 (10) evidence in the case A punitive damages award may not be  
 (11) larger than an amount that bears a reasonable relationship to  
 (12) the harm caused to members of the plaintiff class by a  
 (13) defendant's misconduct, including any harm to any persons set  
 (14) forth in the stipulation that was read to you Also, the award  
 (15) may not be larger than what is reasonably necessary to achieve  
 (16) society's goals of punishment and deterrence Punitive  
 (17) damages, if any, should not reflect dislike for, bias,  
 (18) prejudice or sympathy toward any party An award of punitive  
 (19) damages may not be made for the purpose of taking revenge  
 (20) on a  
 (21) defendant. Rather, in determining whether to award punitive  
 (22) damages, your focus should be on the amount, if any, that you  
 (23) find reasonably necessary to effect just punishments and  
 (24) deterrent considering the factors discussed in these  
 (25) instructions  
 (25) You may impose punitive damages against one or more of the

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(1) defendants and not others and may award different amounts  
 (2) against different defendants An award of punitive damages is  
 (3) not intended to provide compensation for any loss suffered by  
 (4) any plaintiff In determining whether to make an award of  
 (5) punitive damages, you should assume that all plaintiffs have  
 (6) been or will be fully compensated for all damages they may  
 have  
 (7) suffered as a result of the oil spill You may not make an  
 (8) award of punitive damages for the purpose of compensating  
 any  
 (9) plaintiff  
 (10) In determining the amount of punitive damages to award if  
 (11) any you may consider among other factors A the degree of  
 (12) reprehensibility of the defendants' conduct B the magnitude  
 (13) of the harm likely to result from the defendants' conduct as  
 (14) well as the magnitude of the harm that actually - that has  
 (15) actually occurred, and three or C, the financial condition of  
 (16) the defendants  
 (17) You may also consider as mitigating factors A the  
 (18) existence of prior criminal sanctions or civil awards against  
 (19) the defendants for the same conduct and, B the extent to  
 (20) which a defendant has taken steps to remedy the  
 consequences of  
 (21) his or its conduct or prevent repetition of that conduct  
 (22) The following instructions number 28 through 38 amplify  
 (23) and explain the foregoing factors which you may consider  
 (24) In determining the harm to plaintiffs you may consider  
 (25) harms to all persons who suffered actual damages as a legal

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(1) result of the spill All such claims have been consolidated  
 (2) into this single proceeding for purposes of determining whether  
 (3) punitive damages should be awarded against the defendants,  
 and  
 (4) if so, the amount of such damages This includes claims of  
 (5) persons who are suing for their actual damages in the state  
 (6) courts Because of this consolidation of claims there will be  
 (7) no other claims for punitive damages in any other court  
 (8) With the exception of the claims you resolved in Phase  
 (9) II-A you will not be asked to decide the true amount of the  
 (10) actual damages if any, to which other claimants are entitled  
 (11) In a few cases the parties have agreed to the amount of actual  
 (12) damages sustained by certain claimants As to other claimants  
 (13) the parties have entered into a stipulation, which was read to  
 (14) you which states the approximate amount of the actual  
 damages  
 (15) claimed by other persons who contend that they were injured as  
 (16) a legal result of the oil spill This information was provided  
 (17) to give you an idea of the amounts of additional actual damages  
 (18) claimed by other plaintiffs although these claims are disputed  
 (19) in whole or in part by the defendants  
 (20) In determining the harm caused by the oil spill you should  
 (21) not consider any damage to natural resources or to the  
 (22) environment generally You may not base an award of punitive  
 (23) damages on such harms Any liability for punitive damages  
 (24) relating to these harms has been fully resolved in proceedings  
 (25) involving the Exxon defendants and the Natural Resource

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(1) Trustees Although time to time in the course of this case  
 (2) you have heard evidence about the Trustees for natural  
 (3) resources and about damage to the environment generally,  
 such  
 (4) evidence was admitted only to the extent it may have been of  
 (5) assistance to you in considering the extent of the injuries  
 (6) sustained by some or all of the plaintiffs  
 (7) In evaluating the degree of reprehensibility of a  
 (8) defendant's conduct you may take into account the nature of  
 (9) the conduct the duration of the conduct, and the defendant's  
 (10) awareness that the conduct was occurring The fact that you  
 (11) have found a defendant's conduct to be reckless does not  
 (12) necessarily mean that it was reprehensible or that an award of  
 (13) punitive damages should be made  
 (14) In considering whether an award of punitive damages is  
 (15) appropriate against a corporation, you may consider not just  
 (16) the fact that a corporation may have legal liability for the  
 (17) acts of its employees but also whether corporate policy makers  
 (18) actually participated in or ratified the conduct that was  
 (19) wrongful and whether the conduct that was wrongful was  
 carried  
 (20) out by lower level employees and was contrary to corporate  
 (21) policies If you find that corporate policy makers did not  
 (22) actually participate in or ratify the wrongful conduct, this is  
 (23) a factor that you may consider in mitigation of any award of  
 (24) punitive damages that you might otherwise find proper  
 (25) Similarly, if you find that wrongful conduct was contrary to

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(1) company policies, you may take this factor into account in  
 (2) mitigation of any award of punitive damages that you might  
 (3) otherwise find proper  
 (4) In considering whether an award of punitive damages is  
 (5) appropriate against a corporation, you may also consider the  
 (6) number of corporate employees who played some role in the  
 (7) conduct you are considering, the duties and responsibilities of  
 (8) such employees, the nature of their participation in or failure  
 (9) to prevent the wrongful conduct and whether the wrongful  
 (10) conduct and the participation of the employees in such conduct  
 (11) was in conformity with corporate policies  
 (12) If you find that a number of Exxon defendants' employees  
 (13) participated in or failed to prevent the wrongful conduct and  
 (14) that those employees held positions involving significant  
 (15) duties and responsibilities within the corporation, then in  
 (16) judging the reprehensibility of the Exxon defendants' conduct,  
 (17) you may take these factors into consideration in increasing any  
 (18) award of punitive damages that you might otherwise find  
 (19) proper  
 (20) In the alternative, if you find that only a limited number  
 (21) of corporate employees participated in or failed to prevent the  
 (22) wrongful conduct and that these employees had lesser duties  
 or  
 (23) responsibilities within the corporation and that the wrongful  
 (24) conduct was not in conformity with corporate policies, then in  
 (25) judging the reprehensibility of the Exxon defendants' conduct



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- (1) you may take these factors into consideration in mitigation of  
 (2) any award of punitive damages that you might otherwise find  
 (3) appropriate  
 (4) To quote mitigate end quote means to reduce diminish or  
 (5) lessen  
 (6) In considering whether an award of punitive damages is  
 (7) appropriate in this case, and, if so, in what amount, you may  
 (8) consider the financial condition of a defendant. This does not  
 (9) necessarily mean that you should punish one defendant more  
 than  
 (10) another defendant simply because of their relative financial  
 (11) conditions. If you find that a defendant's financial condition  
 (12) affects the level of award necessary to punish the defendant  
 (13) and to deter future wrongful conduct by that defendant and  
 (14) others, you may take the defendant's financial condition into  
 (15) account for that purpose  
 (16) In considering a defendant's financial condition, you may  
 (17) not consider the defendant's gross wealth that is the value  
 (18) of its assets without subtracting any debts or obligations that  
 (19) the defendant may owe, but only the defendant's net worth that  
 (20) is, the difference between the defendant's assets and the  
 (21) defendant's liabilities  
 (22) Similarly, if you consider a defendant's income in  
 (23) assessing its financial condition, you may not consider a  
 (24) defendant's gross income, that is the total amount of money  
 (25) received by the defendant but only the difference between

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- (1) gross income and all the expenses that must be paid out of that  
 (2) income  
 (3) In considering a defendant's net worth or net income you  
 (4) may consider what portion of the defendant's net worth or net  
 (5) income is most relevant to a defendant's activities that were  
 (6) implicated in the defendant's wrongful conduct. You may also  
 (7) decide that all of a defendant's net worth and net income is  
 (8) relevant to determining the appropriate amount of punitive  
 (9) damages, if any, necessary to punish a defendant and deter a  
 (10) defendant and others  
 (11) In considering whether an award of punitive damages is  
 (12) appropriate in this case, and, if so, in what amount you  
 (13) should consider steps taken by a defendant to prevent  
 (14) recurrences of the conduct in question, in this case another  
 (15) oil spill. Evidence of changes in policies, practices and  
 (16) procedures by the Exxon defendants has been put before you  
 so  
 (17) that you can consider this issue. The fact that changes have  
 (18) been made after an event does not tend to show that such  
 (19) changes should have been made before the event or that the  
 (20) policies, practices or procedures in place before the event  
 (21) were negligent or otherwise improper. Accordingly, if you find  
 (22) that changes were made that have reduced the likelihood of an  
 (23) oil spill in the future you may consider the making of such  
 (24) changes as a factor tending to mitigate any punitive damages  
 (25) award that you might otherwise find proper

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- (1) In considering whether an award of punitive damages is  
 (2) appropriate in this case and if so in what amount, you may  
 (3) consider whether a defendant has paid other criminal fines or  
 (4) civil penalties. You may also consider whether a defendant has  
 (5) made payments for compensatory damages settlements and  
 (6) incurred other costs and expenses of remedial measures. You  
 (7) may also consider the extent to which a defendant has been  
 (8) subjected to condemnation or reproof by society as a result of  
 (9) other means, such as loss of standing in the community, public  
 (10) vilification loss of reputation and similar matters. These  
 (11) are factors which you may consider in mitigation of any award  
 (12) of punitive damages that you might otherwise find proper  
 (13) In considering whether to make an award of punitive  
 (14) damages and if so in what amount, your decision should not  
 (15) take into account or be affected in any way by the tax  
 (16) consequences of such an award either to defendants, who  
 would  
 (17) pay such an award, or to plaintiffs who would receive it.  
 (18) In determining whether an award of punitive damages should  
 (19) be made and, if so, in what amount you may consider whether,  
 (20) and if so, to what extent an award of punitive damages against  
 (21) the corporate Exxon defendants might be borne by the Exxon  
 (22) shareholders. Consideration of who may bear the ultimate  
 (23) financial impact of punitive damages is but one of many factors  
 (24) you may consider in fixing the amount of punitive damages  
 (25) You should not speculate as to how any award of punitive

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- (1) damages you may make would be divided amongst the plaintiff  
 (2) class  
 (3) The law forbids you to decide any question in this case by  
 (4) relying to chance. For example, it would be unlawful for each  
 (5) juror to make an individual estimate of damages and for the  
 (6) jury as a whole to agree in advance to use the average of these  
 (7) estimates as the proper measure of any damages that are to be  
 (8) awarded. Each juror may express views on the correct amount  
 of  
 (9) damages so that all jurors may thoughtfully consider each  
 (10) other's views in order to determine what damages, if any,  
 (11) reasonably should be awarded in light of the law and the  
 (12) evidence  
 (13) In your deliberations and in any verdict which you may  
 (14) render, you shall not consider the matters of interest, costs  
 (15) or attorney's fees. These are subject matters for the Court to  
 (16) consider after your verdict has been rendered  
 (17) It is proper to add to caution that nothing said in these  
 (18) instructions and nothing in any form of verdict prepared for  
 (19) your convenience is meant to suggest or convey in any way or  
 (20) manner any intimation as to what verdict I think you should  
 (21) find. What the verdict shall be is your sole and exclusive  
 (22) responsibility  
 (23) The verdict must represent the considered judgment of each  
 (24) juror. In order to return a verdict, it is necessary that each  
 (25) juror agree thereto. Your verdict must be unanimous

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- (1) It is your duty as jurors to consult with one another and
- (2) to deliberate with a view to reaching an agreement if you can
- (3) do so without violence to individual judgment Each of your
- (4) must decide the case for yourself but only after an impartial
- (5) consideration of the evidence in the case with your fellow
- (6) jurors In the course of your deliberations do not hesitate
- (7) to reexamine your own views and change your opinion if
- (8) convinced it is erroneous but do not surrender your honest
- (9) conviction as to the weight or effect of evidence solely
- (10) because of the opinion of your fellow jurors or for the mere
- (11) purpose of returning a verdict.
- (12) Remember at all times that you are not partisans You are
- (13) judges judges of the facts Your sole interest is to seek the
- (14) truth from the evidence in the case
- (15) Upon retiring to the jury room the presiding juror you
- (16) previously chose will preside over your deliberations and will
- (17) continue to be your spokesman here in court
- (18) A special verdict form has been prepared for your
- (19) convenience
- (20) This special verdict form contains four interrogatories
- (21) The answer to each interrogatory must be the unanimous
- (22) answer
- (23) of the jury Your presiding juror will write the unanimous
- (24) decision of the jury in the space provided under each
- (25) interrogatory When you have finished answering the

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- (1) sign the form and then return with your verdict to the
- (2) courtroom
- (3) If you should agree upon your verdict before 2 00 p m this
- (4) afternoon your presiding juror should date and sign the
- (5) verdict This will indicate that all of you have agreed on the
- (6) verdict You should return your verdict immediately into open
- (7) court in the presence of the entire jury, together with the
- (8) exhibits and these instructions
- (9) If you do not agree upon your verdict before 2 00 p m this
- (10) afternoon you may return to your homes You must not talk
- (11) about the case or your deliberations outside the jury room
- (12) Before you go home the presiding juror should lock the jury
- (13) room so that the exhibits, instructions and unsigned verdicts
- (14) will remain undisturbed None of these materials should be
- (15) removed from the jury room until you reach a verdict. You
- (16) should return to your jury room at 8 00 a m tomorrow to
- (17) continue your deliberations Deliberations should not begin
- (18) until all jurors are present in the jury room
- (19) If it becomes necessary during your deliberations to
- (20) communicate with the Court you may send a note by a bailiff
- (21) signed by your presiding juror or by one or more members of
- (22) the jury Any note to the Court should include the date and
- (23) time the note was signed No member of the jury should ever
- (24) attempt to communicate with the Court by any means other than
- (25) by a signed writing and the Court will never communicate with

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- (1) any member of the jury on any subject touching the merits of
- (2) the case otherwise than in writing or orally here in open
- (3) court.
- (4) Bailiffs as well as all other persons are forbidden
- (5) communicate in any way or manner with any member of the jury
- (6) on
- (7) any subject touching the merits of the case
- (8) Bear in mind also that you are never to reveal to any
- (9) person not even to the Court how the jury stands numerically
- (10) or otherwise on the questions before you until after you have
- (11) reached a unanimous verdict
- (12) That completes the jury instructions ladies and
- (13) gentlemen If you would adjourn to your jury room We will
- (14) have made available to you copies of these instructions as well
- (15) as the exhibits in as short a time as possible You may begin
- (16) your deliberations at this time, and it is my assumption,
- (17) unless you tell me otherwise that you will adjourn at 2 p m
- (18) today and recommence at 8 00 tomorrow morning Jury is
- (19) excused
- (20) at this time
- (21) (Jury out at 1 20 p m )
- (22) THE COURT Counsel I will assume, unless someone
- (23) tells me otherwise that we will be able to contact you just as
- (24) we have previously should we need to do so
- (25) MR O NEILL That s a correct statement Your Honor

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- (1) instructions that have been filed with the Court are made as -
- (2) pursuant to the rules and we deem them made at the
- (3) appropriate
- (4) time
- (5) THE COURT I certainly do
- (6) MR O NEILL. Just so it s on the trial record
- (7) THE COURT If anyone disagrees say so now
- (8) MR DAUM Formally for the defendants we do object to
- (9) the instructions on the grounds set forth in our previous
- (10) filing I would add it seems to us that the portions of the
- (11) closing argument reiterate the necessity for our proposed jury
- (12) instruction number 2, which Your Honor declined and I would
- (13) bring that to your attention and it is our view it is more
- (14) necessary now than before
- (15) MR O NEILL. And we oppose that.
- (16) THE COURT I have considered the written objections
- (17) which have been submitted by counsel in advance of giving the
- (18) jury instructions They were filed in advance and - the first
- (19) thing this morning I have considered them all and have made
- (20) the decision to give the instructions as they were proposed and
- (21) as I have given them I understand and I believe I've seen a
- (22) copy of an index that you have available for the jury to help
- (23) them get through all of the Phase I, II and III exhibits As
- (24) you ve done in the past, please double check yourself on the
- (25) exhibits that are going to the jury We've gotten more now

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- (1) that we not submit anything to the jury that has not been
- (2) admitted so please double check one another on that if you
- (3) haven't already done so
- (4) One final housekeeping matter I wish that counsel and
- (5) whoever amongst you has the duty for the physical facilities
- (6) here would coordinate with our clerk of court on undoing the
- (7) courtroom
- (8) MR O NEILL Kind of a sad thing Judge
- (9) THE COURT Well, I'd like to leave it this way The
- (10) fact is we have a jury trial involving - a criminal jury
- (11) trial involving a substantial number of defendants coming up in
- (12) about a week and we need to replace this arrangement with
- (13) the -
- (14) MR NEAL The dock
- (15) THE COURT The dock that we use for multi defendant
- (16) trials because we use this room for all of our multi defendant
- (17) cases So if you would work with the clerk to please return
- (18) the courtroom to its original configuration I d appreciate it
- (19) MR LYNCH Your Honor just for clarification, would
- (20) you want that done before the verdict is taken?
- (21) THE COURT I think the answer to that has to be yes
- (22) MR O NEILL This is sort of like our earlier
- (23) discussions I don't think we have any choice
- (24) THE COURT I've gone back and forth on that but we
- (25) are at a point now where I think we simply have to have the

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- (1) I N D E X
- (2) CLOSING ARGUMENTS
- (3) Mr O'Neill 7558
- (4) Mr Neal 7588
- (5) Mr Chalos 7623
- (6) Mr O Neill 7629

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- (1) courtroom put in shape for this trial next week Quite
- (2) possible some of the defendants will plead out as we go along,
- (3) but it takes - it s going to take you folks a day or so to get
- (4) this stuff out of here and it s going to take us a day or so
- (5) to get the courtroom returned to its normal configuration so I
- (6) think we need to start thinking about that now
- (7) MR LYNCH Yes sir
- (8) THE COURT Anything else?
- (9) MR O NEILL Nothing, Your Honor
- (10) MR NEAL Nothing Your Honor
- (11) THE COURT Thank you all for your assistance on this
- (12) third phase and we are in recess subject to call
- (13) (Proceedings recessed at 1 25 p m )

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- (1) STATE OF ALASKA )
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA )
- (6) I Leonard J DiPaolo 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) LEONARD J DIPAOLLO RPR
- Notary Public for Alaska
- (22) My Commission Expires 2-3-96

**Look-See Concordance Report**

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 UNIQUE WORDS 2,423  
 TOTAL OCCURRENCES 10,055  
 NOISE WORDS 385  
 TOTAL WORDS IN FILE 29,498

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 SINGLE FILE CONCORDANCE

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 CASE SENSITIVE

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 NOISE WORD LIST(S)  
 NOISE NOI

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 INCLUDES ALL TEXT OCCURRENCES

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 IGNORES PURE NUMBERS

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(1) IN THE UNITED STATES DISTRICT COURT  
 (2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No A89 0095 CIV (HRH)  
 (5) ) Anchorage Alaska  
 The EXXON VALDEZ ) Tuesday September 6 1994  
 (6) ) 8 06 a m  
 TRANSCRIPT OF PROCEEDINGS  
 (9) TRIAL BY JURY 75TH DAY  
 (10) BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE  
 VOLUME 44 Pages 7673 7681  
 (13) A P P E A R A N C E S  
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(1) PROCEEDINGS  
 (2) (Jury In at 8 06)  
 (3) THE CLERK. All rise  
 (4) (Call to Order of the Court)  
 (5) THE COURT Good morning ladies and gentlemen Get to  
 (6) see what another courtroom looks like  
 (7) We have another trial starting this week in my courtroom  
 (8) so we ll be using this one I think until we conclude  
 (9) I have a supplemental instruction for you this morning  
 (10) After consultation with counsel we think it may be useful  
 (11) to repeat portions of several instructions which were given to  
 (12) you earlier and to augment them somewhat  
 (13) It is your duty as jurors to consult with one another and  
 (14) to deliberate with a view to reaching a verdict if you can do  
 (15) so without violence to individual judgment Each of you must  
 (16) decide the case for yourself but only after impartial  
 (17) consideration of the evidence in the case with your fellow  
 (18) jurors  
 (19) In the course of your deliberations do not hesitate to  
 (20) reexamine your own views and change your opinion if  
 convinced  
 (21) It is erroneous but do not surrender your honest conviction as  
 (22) to the weight or effect of evidence solely because of the  
 (23) opinion of your fellow jurors or for the mere purpose of  
 (24) returning a verdict.  
 (25) The Court is very mindful of the fact that this trial has

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 (15) Deputy Clerk TOM MURTIASHAW  
 U S District Court  
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(1) now been in progress for four months Due to the duration of  
 (2) these proceedings it is especially important that in your  
 (3) deliberations you observe some of the niceties that are  
 (4) required of attorneys and witnesses in the courtroom We do  
 (5) not interrupt one another we do not raise our voices - at  
 (6) least not very often We often disagree but we do not  
 (7) disparage the views of others Courtesy and consideration of  
 (8) the views of others will surely facilitate your deliberations  
 (9) In the courtroom each side has argued its case and has  
 (10) sought to persuade you and now you must endeavor to  
 persuade  
 (11) one another in order to arrive at a unanimous verdict. In  
 (12) doing this each of you should take the time to carefully  
 (13) explain your respective views based upon the evidence and the  
 (14) instructions to the other jurors Each of you should listen  
 (15) carefully to the views of the others in an effort to understand  
 (16) the respective views of the other jurors based upon the  
 (17) evidence and the instructions Seek to identify specific areas  
 (18) of disagreement and then review the evidence and instructions  
 (19) that bear upon the areas of disagreement The views of each of  
 (20) you are entitled to consideration from the other jurors  
 (21) Again referring back to one of my original instructions  
 (22) remember that you are not partisans It will not facilitate  
 (23) your deliberations to take sides You have no personal stake  
 (24) in any particular result.  
 (25) If it becomes necessary during your deliberations to

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- (1) communicate with the Court any juror or group of jurors may
- (2) send a note by a bailiff to the Court Any note to the Court
- (3) should include the date and time the note was signed No
- (4) member of the jury should ever attempt to communicate with the
- (5) Court other than by signed writing and the Court will never
- (6) communicate with any member of the jury on any subject touching
- (7) the merits of the case otherwise than in writing or orally in
- (8) open court.
- (9) Bailiffs as well as all other persons are forbidden to
- (10) communicate in any way or manner with any member of the
- (11) jury on any subject touching the merits of the case
- (12) Bear in mind also that you are never to reveal to any
- (13) person not even the Court, how the jury stands numerically or
- (14) otherwise on questions before you until after you have
- (15) reached a unanimous verdict.
- (16) That completes my supplemental instruction I have the
- (17) original a copy of it before you and you re excused to the
- (18) jury room at this time to continue with your deliberations
- (19) (Jury out at 8 12 a m )
- (20) THE COURT Anything further we need to do this
- (21) morning?
- (22) MR LYNCH Your Honor I have only two items One
- (23) we did submit Friday afternoon a proposed instruction for this
- (24) purpose and I just wanted to confirm that that is a part of
- (25) the record or can be made a part of the record?

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- (1) THE COURT It probably is not a part of the record at
- (2) this point. What I would suggest, because I have only a fax
- (3) copy of what you submitted What I would suggest is that you
- (4) submit with some kind of appropriate cover I know you ve been
- (5) doing this before -
- (6) MR LYNCH Yes sir
- (7) THE COURT - a standard hard copy of what was
- (8) submitted to me
- (9) MR LYNCH And can we deem to except to the exclusion
- (10) of those parts of that requested instruction that specifically
- (11) advise the jury that each has equal standing that you recall
- (12) Your Honor that that was the issue that was in dispute on
- (13) Friday and you took that -
- (14) THE COURT Yes certainly you may have an exception
- (15) to that. And in that regard I call your attention to the fact
- (16) that in response to that suggestion I included a sentence that
- (17) was not in the draft that we had under discussion at the time
- (18) and included the sentence that says "The views of each of you
- (19) are entitled to consideration from other jurors as a frankly
- (20) somewhat watered down version of what you requested
- (21) MR LYNCH I understand that, Your Honor The
- (22) concern we have is the indication from the colloquy that Your
- (23) Honor reported to us Friday that some of the jurors may
- (24) believe that the presiding juror involves more than a merely
- (25) administrative function and we therefore asked the Court to

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- (1) instruct the jurors that all have equal standing in the
- (2) deliberations to disarm any sense that there is a chief
- (3) executive officer of the jury and we remain concerned about
- (4) that Judge
- (5) THE COURT Understood and you may have your
- (6) exception
- (7) MR O NEILL And we have no comments about the
- (8) particulars of this instruction but we did object to any
- (9) instruction at all and the two grounds were number one there
- (10) was not a specific request from the jury and the second ground
- (11) is that this results from a communication that Your Honor had
- (12) with the jurors
- (13) THE COURT Yes I understand And so that the record
- (14) is clear on this Mr Murtashaw about noon Friday discovered
- (15) one of our jurors in the vestibule of the jury room weeping
- (16) He called it to my attention I went to see what was going
- (17) on Found one of our jurors in that condition obviously quite
- (18) distraught sobbing And I instructed the juror and another
- (19) who was consoling her that they should not convey anything to
- (20) me about the deliberations Had some diffuse conversation with
- (21) both of them about what the problem was and frankly learned
- (22) little or nothing about what the problem was
- (23) After consulting with you all I did contact the jury
- (24) foreman and in substance solicited a note from him which in
- (25) substance said we want to take the rest of the day off and I

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- (1) responded in the affirmative to that It was in that context
- (2) that we had further discussions about giving this instruction
- (3) and I determined to give such an instruction But your
- (4) exception to giving any instruction at all is noted for the
- (5) record
- (6) For the record both of you expressed these misgivings
- (7) about this instruction in the course of colloquy with me as a
- (8) part of the foundation for preparing the instruction that I
- (9) determined to give so your exception is noted
- (10) MR LYNCH Your Honor may I ask that we note on the
- (11) record that in the conversation you had with a juror there was
- (12) an indication from the juror that an attempt to send a note to
- (13) the Court had been frustrated in that the presiding juror had
- (14) to sign the note
- (15) THE COURT It wasn't quite as clear as you put it to
- (16) me that that was the problem but it certainly is accurate that
- (17) I came to have some concern that the juror may have
- (18) experienced
- (19) some difficulty in communicating with us
- (20) Anything else we need to do at this point?
- (21) MR O NEILL Nothing Your Honor
- (22) MR LYNCH No thank you
- (23) THE COURT We'll be in recess subject to call
- (24) (Proceedings recessed at 8 18 a m )

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- (1) STATE OF ALASKA )
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA )
- (6) I Leonard J DiPaolo 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) LEONARD J DIPAOLO RPR
- Notary Public for Alaska
- (22) My Commission Expires 2 3-96

Look See Concordance  
Report

UNIQUE WORDS 302  
TOTAL OCCURRENCES 496  
NOISE WORDS 385  
TOTAL WORDS IN FILE 1,680

## SINGLE FILE CONCORDANCE

## CASE SENSITIVE

NOISE WORD LIST(S)  
NOISE NOIINCLUDES ALL TEXT  
OCCURRENCES

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## Vol 45 - 7682

(1) IN THE UNITED STATES DISTRICT COURT  
 (2) FOR THE DISTRICT OF ALASKA  
 In re ) Case No A89 0095 CIV (HRH)  
 (5) ) Anchorage Alaska  
 The EXXON VALDEZ ) Wednesday September 7 1994  
 (6) ) 8 00 a m  
 TRANSCRIPT OF PROCEEDINGS  
 (9) TRIAL BY JURY 76TH DAY  
 (10) BEFORE THE HONORABLE H RUSSEL HOLLAND JUDGE  
 VOLUME 45 Pages 7682 7691  
 (13) APPEARANCES  
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(1) PROCEEDINGS  
 (2) THE CLERK All rise  
 (3) (Jury out )  
 (4) (Call to Order of the Court)  
 (5) THE COURT Good morning ladies and gentlemen  
 (6) MR O NEILL Good morning  
 (7) THE COURT We are convened in case A89-0095 in re  
 the Exxon Valdez We are without our jury for the purpose of  
 (8) some discussions about the jury s 12 55 note that we received  
 (9) yesterday Mr Lynch anything you want to put on the record  
 (10) as a result of our discussions yesterday?  
 (11) MR LYNCH Yes Your Honor On behalf of the Exxon  
 (12) defendants we move the Court to declare a mistrial We  
 (13) believe this note indicates this jury has reached an impasse  
 (14) and instructing the jury to continue deliberating would be  
 (15) coercive in making that motion  
 (16) We call the Court s attention to a number of factors  
 (17) First of all the fact that this jury has deliberated for a  
 (18) very substantial time on Phase II They clearly know when they  
 (19) are making progress and I believe Your Honor that they have  
 (20) indicated their awareness of the duty that they have to reach a  
 (21) verdict if they can without sacrifice to their individual  
 (22) judgment and that s I believe what s at stake here  
 (23) We have urged the jury throughout the trial to pay special  
 (24) attention since they are the judges of the facts We have a  
 (25)

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 In Court  
 (15) Deputy Clerk TOM MURTIASHAW  
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 (18) Reported by LEONARD J DIPAULO  
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(1) situation where it has become obvious where some jurors are  
 (2) emotionally - the deliberation process has taken an emotional  
 (3) toll on the jurors and that there is a risk that they will  
 (4) surrender their individual judgment solely for the purpose of  
 (5) reaching a verdict which you have instructed them repeatedly  
 (6) that they should not do  
 (7) And so for that reason and the difficulty of the issues  
 (8) presented to them which are quasi penal at least we believe  
 (9) this is a circumstance in which there is strong indication that  
 (10) instructing the jury to continue deliberating would be a  
 (11) coercive event We don t know how the jury is divided but all  
 (12) the jurors should not feel under undue pressure to sacrifice  
 (13) their individual judgment  
 (14) MR O NEILL Briefly Your Honor We oppose the  
 (15) motion The jury in comparison to Phases I and II has  
 (16) deliberated a short period of time The jury has asked the  
 (17) Court for an additional instruction We believe that the  
 (18) defendants in fact have created the issue in requesting  
 (19) supplemental jury instruction A  
 (20) This is the first note that the jury has asked for a  
 (21) further instruction The instruction that Your Honor purports  
 (22) to give is a benign instruction such instructions are  
 (23) sanctioned under the law with the Allen case and there is a  
 (24) 9th Circuit statement which is stronger than Your Honor  
 (25) purports to give And in reviewing the 9th Circuit cases with

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(1) regard to coercion it states most of the cases if not all go  
 (2) off in which the Court inquires about numbers which hasn't  
 (3) been done here  
 (4) With regard to what we've done over the last four months  
 (5) the nature of the notes, there is nothing coercive if you look  
 (6) at the total circumstances  
 (7) THE COURT Couple of thoughts here Firstly with  
 (8) respect to the supplemental instruction A that instruction was  
 (9) given because one of our jurors was in some emotional distress  
 (10) which I personally observed I have some substantial doubt  
 (11) that we really know why the juror was disturbed The jury  
 (12) foreman indicated to me when I, in substance solicited the  
 (13) note from him that we got the day before yesterday, something  
 (14) to the effect that he thought the juror was having some family  
 (15) difficulty with a child So I say again I think we don't know  
 (16) what the basis for the juror's emotional upset was  
 (17) While I think it was appropriate to give the instruction A  
 (18) that we gave, I do have a little concern in retrospect that  
 (19) that instruction might have almost invited the response that we  
 (20) got at 12:55 yesterday  
 (21) It may be that and probably is, that the jury is into some  
 (22) tough duty some tough time as far as what they are doing and  
 (23) an instruction telling them to be nice to one another, which is  
 (24) in substance what that instruction said may and out of  
 (25) frustration, have caused a juror to say, well if we have to be

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(1) nice to one another to heck, you can have this job back For  
 (2) that reason I think it's important that at this time we give a  
 (3) very soft response to the note that we have received that we  
 (4) not overreact to the note  
 (5) At this time I decline to treat that note as a real  
 (6) statement that we are at impasse, and I choose to focus on the  
 (7) second sentence of the note which really says give us some  
 (8) help Hopefully that's what our supplemental instruction will  
 (9) be will do  
 (10) Couple of other observations In discussing whether to  
 (11) give another instruction and what kind of instruction to give  
 (12) we yesterday had some conversation about United States  
 (13) versus  
 (14) Nichol which is 883 Fed 2nd 824 and Jimenez versus Meyers  
 (15) which is at 12 Fed 2nd 1474 I've reviewed those two cases  
 (16) Unlike this case they are both criminal cases technically The  
 (17) Jimenez case is a habeas corpus case which technically is a  
 (18) civil case but if you read it you found out that we are  
 (19) talking about instructions in a criminal case So really we're  
 (20) dealing with both of those cases with the Circuit's view of the  
 (21) problem of potential coercion in criminal cases and I think  
 (22) quite rightly the Circuit takes a very different view of what  
 (23) is appropriate in a criminal case and what you may do in a  
 (24) civil case It is my view that we have more latitude in a  
 (25) civil case  
 (26) Having said all that however I still believe contrary to

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(1) what I may have intimated by that first packet of instructions  
 (2) that I faxed over to you that the prudent thing to do at this  
 (3) point is to ignore the suggestion that there might be an  
 (4) impasse to if you will save the Allen chip for a later time  
 (5) and see what a very soft instruction brings us this morning  
 (6) If a soft instruction quickly leads to a -- some other  
 (7) declaration that they are having problems obviously we'll  
 (8) revisit the situation but this jury has demonstrated over I  
 (9) think it was something like 23 days as to Phase II-A that they  
 (10) are quite able to work hard quite willing to work hard quite  
 (11) able to deal with very complex problems and I want to see if  
 (12) we can't breach what I think is a frustration problem  
 (13) Is there anything further that we need to put on record or  
 (14) may I go with my own supplemental instruction?  
 (15) MR LYNCH Your Honor I would make a formal  
 (16) exception to the supplemental instruction on the grounds for a  
 (17) motion for a mistrial I think that Your Honor the form of  
 (18) the instruction as we discussed last night is more balanced  
 (19) and in those respects I think an improvement but it's our view  
 (20) that the jury has declared itself at an impasse I know you've  
 (21) objected to that view but I have to preserve the objection  
 (22) MR O NEILL Nothing Judge  
 (23) THE COURT Thank you Would you call the jury in  
 (24) please  
 (25) (Jury in at 8:10 a.m.)

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(1) THE COURT Good morning ladies and gentlemen In  
 (2) response to your 12:55 note of yesterday I have a supplemental  
 (3) instruction B that I will read to you at this time and provide  
 (4) you copies of as I did yesterday I have your note bearing the  
 (5) time 12:55 p.m. September 6, 1994 I have discussed this note  
 (6) with counsel  
 (7) Given the complexity and the duration of this case as well  
 (8) as the divergence of positions between the parties it is not  
 (9) surprising that individual jurors might at this stage of your  
 (10) deliberations as to Phase III have divergent views about the  
 (11) case This observation might well have been a description of  
 (12) some intermediate stage of your earlier deliberations The  
 (13) Court and counsel were very impressed by the manner in which  
 (14) you methodically worked through very difficult issues  
 (15) The techniques which have served you well previously should  
 (16) be brought to bear in this Phase III I suggest that you  
 (17) review all of my Phase III instructions and review all of the  
 (18) evidence which these instructions suggest will be relevant to a  
 (19) determination of the punitive damage issues -- let me try that  
 (20) again  
 (21) Review all of the evidence which these instructions suggest  
 (22) will be relevant to a determination of the punitive damages  
 (23) issues before you I suggest that you focus upon the issues or  
 (24) matters which divide you It may very well be useful for  
 (25) purposes of your deliberations to review each individual matter

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- (1) and evaluate to the extent possible how each matter might
- (2) affect your answer to one or the other of the two
- (3) interrogatories posed as to each of the two defendants
- (4) You may be as leisurely in your deliberation as the
- (5) occasion may require and should take all the time which you
- (6) may feel necessary I ask that you now retire once again to
- (7) the jury room and continue your deliberations with these
- (8) additional comments in mind to be applied of course in
- (9) conjunction with all the other instructions which I have
- (10) previously given you
- (11) This one is set up to be dated and signed so I m going to
- (12) do just that Would you hand this to Mr Murray please You
- (13) may now continue with your deliberations
- (14) (Jury out at 8 17 a m )
- (15) THE COURT Anything further we need to do at this
- (16) time?
- (17) MR O NEILL Nothing Your Honor thank you
- (18) THE COURT We ll be off the record now
- (19) (Proceedings recessed at 8 18 a m )

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- (1) STATE OF ALASKA )
- (2) Reporter s Certificate
- (3) DISTRICT OF ALASKA )
- (6) I Leonard J DiPaolo 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) LEONARD J DiPAOLO RPR  
Notary Public for Alaska
- (22) My Commission Expires 2-3-96

**Look-See Concordance Report**

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 UNIQUE WORDS 350  
 TOTAL OCCURRENCES 604  
 NOISE WORDS 385  
 TOTAL WORDS IN FILE 1,915

## SINGLE FILE CONCORDANCE

## CASE SENSITIVE

NOISE WORD LIST(S)  
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