

Ken
Jude
File

DEC - TAG 2/4/91

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
EXXON VALDEZ OIL SPILL PROJECT

DRAFT

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
*	AE002	A *	R R	90 LRP 10/02/90 identifies (AP,CV,CT,TB,FL,RS) 90 LRP 10/02/90 identifies (AP,CV,CT,TB,FL,RS)	Y Y	* *
*	AE004	A B *	R R R	90 ASAP identifies (OP,MS,RS,CT,TB,OR,AP) 90 ASAP identifies (OP,OR,MS,RS,CV,CT,AP,FL) 90 ASAP identifies (OP,OR,MS,RS,CV,CT,TB,AP,FL)	Y Y Y	* * *
*	AE005	A B C *	R R R R	90 ASAP identifies (OF,MS,RS,CT,ST,OP,OR,AP) 90 ASAP identifies (MS,RS,ST,AP) 90 ASAP identifies (MS,ST,AP) 90 ASAP identifies (OF,MS,RS,CT,ST,OP,OR,AP)	Y Y Y Y	* * * *
*	AE006	A *	R R	90 DNR field report 09/28/90 identifies (CV,CT,TB) 90 DNR field report 09/28/90 identifies (CV,CT,TB)	Y Y	* *
*	AG001	A *	R R	90 ASAP identifies (OF,RS,CV,CT,OR,FL) 90 ASAP identifies (OF,RS,CV,CT,OR,FL)	* *	* *
*	AG009	A B *	R R R	90 ASAP identifies (CT,CV,RS,OR,OF) 90 ASAP identifies (OR,RS,CV,CT,ST) 90 ASAP identifies (OR,RS,CV,CT,ST,OF)	Y Y Y	* * *
*	BA002	A *	R R	90 ASAP identifies (RS,CV,CT,MS,TB,FL,OR) 90 ASAP identifies (RS,CV,CT,MS,TB,FL,OR)	Y Y	* *
*	BA003	A *	R R	90 DNR field report 10/08/90 identifies (AP,TB) 90 DNR field report 10/08/90 identifies (AP,TB)	Y Y	* *
*	BA004	A *	R R	90 DNR field report 09/16/90 identifies (AP,CV,CT,OP,OR) 90 DNR field report 09/16/90 identifies (AP,CV,CT,OP,OR)	Y Y	* *
*	BA006	C *	R R	90 ASAP identifies (RS,CT,MS,TB,SH) 90 ASAP identifies (RS,CT,MS,TB,SH)	* *	* *
*	BA007	A *	R R	90 ASAP identifies (MS,RS,CT,TB,OR,SH) 90 ASAP identifies (MS,RS,CT,TB,OR,SH)	Y Y	* *
*	BA008	A *	R R	90 ASAP identifies (MS,RS,TB,CT,OR,FL) 90 ASAP identifies (MS,RS,TB,CT,OR,FL)	Y Y	* *
*	BC002	A B *	R R R	90 ASAP identifies (OP,MS,RS,FL,CT) 90 ASAP identifies (MS,CV,CT,AP) 90 ASAP identifies (OP,MS,RS,CV,CT,AP,FL)	Y Y Y	* * *
*	BL012	A *	R R	90 ASAP identifies (RS,CT,AP,PO,CV,ST) 90 ASAP identifies (RS,PO,CV,CT,AP,ST)	Y Y	* *
*	BM005	A *	R R	90 ASAP identifies (MS,RS,TB,AP) 90 ASAP identifies (MS,RS,TB,AP)	Y Y	* *
*	BM006					

[* no data]

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	DRAFT	ENTIRE SEGMENT	STATE CATEG.
		A *	R R	90 ASAP identifies (OR,MS,RS,CT) 90 ASAP identifies (OR,MS,RS,CT)		Y Y	* *
*	BP004	A *	R R	90 ASAP identifies (CT,ST,RS,MS,SH,TB,AP,OR,OP) 90 ASAP identifies (CT,ST,RS,MS,SH,TB,AP,OP,OR)		Y Y	* *
*	CB001	A *	R R	90 ASAP identifies (OP,MS,CV,AP,FL) 90 ASAP identifies (OP,MS,CV,AP,FL)		Y Y	* *
*	CB002	A *	R R	90 ASAP identifies (MS,AP,CV,FL) 90 ASAP identifies (MS,AP,CV,FL)		Y Y	* *
*	CB003	A B C *	R R R R	90 ASAP identifies (MS,RS,TB) 90 ASAP identifies (OP,MS,RS,CT,AP,CV) 90 ASAP identifies (MS,RS,CV,PO,ST) 90 ASAP identifies (MS,RS,OP,CT,CV,TB,PO,ST,AP)		Y Y Y Y	* * * *
*	CB004	A B C D E *	R R R R R R	90 ASAP identifies (MS,CT,AP,ST,TB,) 90 ASAP identifies (MS,RS,AP,CT,FL,CV,ST,TB) 90 ASAP identifies (OR,TB) 90 ASAP identifies (MS,RS,TB) 90 ASAP identifies (MS,AP,FL) 90 ASAP identifies (MS,CT,RS,OR,TB,AP,FL,ST)		Y Y Y Y Y Y	* * * * * *
*	CH002	A B *	R R R	90 ASAP identifies (RS,AP) 90 ASAP identifies (RS,AP) 90 ASAP identifies (RS,AP)		Y Y Y	* * *
*	CH008	A *	R R	90 ASAP identifies (OF,RS,CT,OR) 90 ASAP identifies (OF,RS,CT,OR)		Y Y	* *
*	CH009	B *	R R	90 ASAP identifies (MS,RS,CT,ST,OR,AP) 90 ASAP identifies (CT,ST,RS,MS,OR,AP)		* *	* *
*	CH010	A B C *	R R R R	90 ASAP identifies (RS,ST,OR,OF,AP) 90 ASAP identifies (CT,ST,AP,OR,FL) 90 ASAP identifies (OR,RS,CV,CT,ST) 90 ASAP identifies (RS,ST,OF,CT,OR,AP,FL)		Y Y Y Y	* * * *
*	CH011	A *	R R	90 ASAP identifies (OP,OR,RS,ST) 90 ASAP identifies (OP,OR,RS,ST)		Y Y	* *
*	CH012	A *	R R	90 ASAP identifies (OR,RS,CT,ST,FL) 90 ASAP identifies (OR,RS,CT,ST,FL)		Y Y	* *
*	CH013	A *	R R	90 ASAP identifies (OR,RS,CV,CT,ST,TB) 90 ASAP identifies (OR,RS,CV,CT,ST,TB)		Y Y	* *
*	CH020	A *	R R	90 ASAP identifies (CT,ST,AP,MS) 90 ASAP identifies (CT,ST,AP,MS)		Y Y	* *
*	CH021	A *	R R	90 DNR field report 10/09/90 identifies (CV,CT,TB,OR,MS) 90 DNR field report 10/09/90 identifies (MS,CV,CT,TB,OR)		Y Y	* *
*	CH023	A *	R R	90 DNR field report 10/09/90 identifies (CT,ST) 90 DNR field report 10/09/90 identifies (ST,CT)		Y Y	* *

[* no data]

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
*	C1001	A B *	R R R	90 ASAP identifies (MS,AP,CT,ST) 90 SSAT identifies (MS,CV,CT) 90 ASAP identifies (MS,AP,CV,CT,ST)	Y Y Y	* * *
*	CP001	A *	R R	90 DNR field report 09/24/90 identifies (MS,AP) 90 DNR field report 09/24/90 identifies (AP,MS)	Y Y	* *
*	CR001	A *	R R	90 DEC field report dated 06/05/90 identifies (OR,OF) 90 DEC field report 06/05/90 identifies (OR,OF)	Y Y	* *
*	CR004	A B C *	R R NF R	90 DNR field report 10/10/90 identifies (AP,CV,CT,TB) 90 DNR field report 10/10/90 identifies (CV,CT,AP,TB) 90 SSAT - No treatment recommended 90 DNR field report 10/10/90 identifies (AP,CT,CV)	Y Y Y Y	* * * *
*	CR005	A B *	R R R	90 ASAP identifies (OF,RS,CT,TB,OR,AP,ST,FL) 90 ASAP identifies (OF,OR,RS,CT,AP,CV,TB,FL) 90 ASAP identifies (OF,OR,RS,CT,TB,AP,CV,ST,FL)	* * *	* * *
*	CU003	A *	R R	90 ASAP identifies (MS,AP) 90 ASAP identifies (MS,AP)	Y Y	* *
*	CU004	A *	R R	90 DNR field report 09/30/90 identifies (CT,CV,MS,) 90 DNR field report 09/30/90 identifies (CV,CT,MS)	Y Y	* *
*	CU006	A *	R R	90 DNR field report 09/30/90 identifies (AP,CV,CT,OR) 90 DNR field report 09/30/90 identifies (AP,CV,CT,OP)	Y Y	* *
*	CU007	A *	R R	90 ASAP identifies (RS,CT,AP,OR,TB) 90 ASAP identifies (RS,CT,AP,OR,TB)	Y Y	* *
*	CU010	A *	R R	90 LRP 10/04/90 identifies (AP,RS,CV,CT,ST,MS,TB) 90 LRP 10/04/90 identifies (AP,RS,CV,CT,ST,MS,TB)	Y Y	* *
*	CU011	A *	R R	90 ASAP identifies (CT,RS,MS) 90 ASAP identifies (CT,RS,MS)	Y Y	* *
*	CU014	A *	R R	90 ASAP identifies (RS,ST,AP,CT,MS,CV,TB) 90 ASAP identifies (RS,ST,AP,CT,MS,CV,TB)	Y Y	* *
*	CU017	A *	R R	90 ASAP identifies (CV,CT,OR) 90 ASAP identifies (CV,CT,OR)	Y Y	* *
*	DA001	A *	R R	90 ASAP identifies (OP,OR,MS,RS,CT) 90 ASAP identifies (OP,OR,MS,RS,CT,AP,OF)	Y Y	* *
*	DE001	A *	R R	90 DNR field report 10/09/90 identifies (TB,CV) 90 DNR field report 10/09/90 identifies (TB,CV)	Y Y	* *
*	DI062	A *	R R	90 ASAP identifies (OF,OR,MS,RS,CV,CT,AP,FL) 90 ASAP identifies (OF,OR,MS,RS,CV,CT,AP,FL)	* *	* *
*	DI063	A	R	90 ASAP identifies (OR,RS,CT)	Y	*

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
		*	R	90 ASAP identifies (OR,RS,CT)	Y	*
*	DI064	A B *	R R R	90 ASAP identifies (RS,CT) 90 ASAP identifies (CV,CT,RS,FL) 90 ASAP identifies (RS,CT,CV,FL)	Y Y Y	* * *
*	DI065	A *	R R	90 ASAP identifies (OF,MS,RS) 90 ASAP identifies (OF,MS,RS)	Y Y	* *
*	DI066	A *	R R	90 ASAP identifies (OR,RS,CT) 90 ASAP identifies (OR,RS,CT)	* *	* *
*	DI067	A *	R R	90 ASAP identifies (OP,OR,RS,CV,CT,AP,ST,TB) 90 ASAP identifies (OP,OR,RS,CV,CT,AP,ST,TB)	Y Y	* *
*	DI069	A *	R R	90 ASAP identifies (RS,CV,CT,OR) 90 ASAP identifies (RS,CV,CT,OR)	* *	* *
*	EB004	A *	R R	90 ASAP identifies (MS,RS,CT,AP) 90 ASAP identifies (MS,RS,CT,AP)	Y Y	* *
*	EB005	A *	R R	90 DNR field report 10/12/90 identifies (CT) 90 DNR field report 10/12/90 identifies (CT)	Y Y	* *
*	EB006	A *	R R	90 ASAP identifies (CT,TB,AP) 90 ASAP identifies (CT,TB,AP)	Y Y	* *
*	EB007	A *	R R	90 DNR field report 10/13/90 identifies (CT,TB) 90 DNR field report 10/13/90 identifies (CT,TB)	Y Y	* *
*	EB009	A *	R R	90 DNR field report 09/20/90 identifies (TB) 90 DNR field report 09/20/90 identifies (TB)	Y Y	* *
*	EB010	A *	R R	90 ASAP identifies (MS,ST,AP,TB) 90 ASAP identifies (MS,ST,AP,TB)	Y Y	* *
*	EB011	A *	R R	90 ASAP identifies (OP,OR,MS,CV,CT,ST,AP) 90 ASAP identifies (OP,OR,MS,CV,CT,ST,AP)	Y Y	* *
*	EB013	A *	R R	90 LRP 10/29/90 identifies (AP,RS) 90 LRP 10/29/90 identifies (AP,RS,)	Y Y	* *
*	EB015	A *	R R	90 LRP 10/29/90 identifies (RS,CV,CT) 90 LRP 10/29/90 identifies (RS,CV,CT)	Y Y	* *
*	E1001	A *	R R	90 ASAP identifies (MS,CV,CT,AP,TB) 90 ASAP identifies (MS,CV,CT,AP)	Y Y	* *
*	EL010	A *	R R	90 ASAP identifies (PO,CV,CT,ST,AP) 90 ASAP identifies (PO,CV,CT,ST,AP)	Y Y	* *
*	EL011	A *	R R	90 ASAP identifies (OR,RS,CT,AP,CV) 90 ASAP identifies (OR,RS,CT,AP,CV)	Y Y	* *

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
*	EL013	A *	R R	90 ASAP identifies (OR,RS,CV,CT,AP) 90 ASAP identifies (OR,MS,RS,CV,CT,AP)	* *	* *
*	EL015	A *	R R	90 ASAP identifies (CV,RS,CT,AP,RS,CT,AP) 90 ASAP identifies (CV,RS,CT,AP)	Y Y	* *
*	EL052	A B *	R R R	90 ASAP identifies (OP,OR,CT,ST,SH,FL) 90 ASAP identifies (OP,OF,OR,RS,CV,CT,ST,FL) 90 ASAP identifies (OP,OF,OR,CT,ST,CV,RS,FL,SH)	Y Y Y	* * *
*	EL053	A B *	R R R	90 ASAP identifies (OR,CT,CV,RS,AP,ST,OF) 90 ASAP identifies (OP,OR,RS,CV,CT) 90 ASAP identifies (OP,OR,RS,CV,CT,AP,ST,)	Y Y Y	* * *
*	EL054	A *	R R	90 ASAP identifies (OF,OR,CT,OP,AP,CV,ST) 90 ASAP identifies (OF,OR,CT,OP,AP,CV,ST)	Y Y	* *
*	EL055	A B C *	R R R R	90 ASAP identifies (OP,OF,OR,CV,CT,FL) 90 ASAP identifies (RS,CT,ST,CV,OR,OF) 90 ASAP identifies (OP,OR,CT,ST) 90 ASAP identifies (OP,OF,OR,CV,CT,RS,ST,FL)	Y Y Y Y	* * * *
*	EL056	A B C D *	R R R R R	90 ASAP identifies (OR,CV,CT,FL) 90 ASAP identifies (CV,CT,ST) 90 ASAP identifies (OF,OR,RS,CV,CT,AP,FL) 90 ASAP identifies (OR,CT,CV) 90 ASAP identifies (OF,OR,RS,CV,CT,ST,FL,AP)	Y Y Y Y Y	* * * * *
*	EL057	A *	R R	90 ASAP identifies (OR,RS,CV,CT,ST,FL) 90 ASAP identifies (OR,RS,CV,CT,ST,FL)	Y Y	* *
*	EL058	A B C D *	R R R R R	90 ASAP identifies (MS,RS,CT,ST) 90 ASAP identifies (OP,RS,CV,CT,ST,OR,OF) 90 ASAP identifies (OP,OR,RS,CT,CV) 90 ASAP identifies (OP,OR,RS,CV,CT,) 90 ASAP identifies (OP,OR,RS,CT,CV,ST,MS,OF)	Y Y Y Y Y	* * * * *
*	EL102	B *	R R	90 ASAP identifies (OR,RS,CV,CT) 90 ASAP identifies (OR,RS,CV,CT)	* *	* *
*	EL104	B C *	R R R	90 ASAP identifies (RS,CT,CV,OP,OR) 90 ASAP identifies (OP,OR,RS,CV,CT) 90 ASAP identifies (OP,OR,RS,CV,CT)	* * *	* * *
*	EL106	A B C *	NF R R R	90 SSAT - No treatment recommended 90 ASAP identifies (OF,OR,RS,CV,CT,ST,AP,FL) 90 ASAP identifies (OR,CT,ST,AP,RS,CV,OP) 90 ASAP identifies (OF,OR,RS,CV,CT,ST,AP,FL,OP)	Y Y Y Y	* * * *
*	EL107	A B C *	R R R R	90 ASAP identifies (OP,OR,CT,SH,AP,RS,CV,FL) 90 ASAP identifies (OP,OF,RS,CT,ST,FL) 90 ASAP identifies (RS,CV,CT,ST,OP,OF) 90 ASAP identifies (OP,OF,OR,CT,RS,ST,CV,FL,AP,SH)	Y Y Y Y	* * * *
*	EL108	A B C	R NF R	90 ASAP identifies (RS,CV,CT,ST) 90 SSAT - No treatment recommended 90 ASAP identifies (MS,PO,CV,CT,ST,AP,FL)	Y Y Y	* * *

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
		*	R	90 ASAP identifies (MS,PO,CV,CT,ST,RS,AP,FL)	Y	*
*	EL109	A *	R R	90 ASAP identifies (OF,OR,RS,CT,ST,AP,PO,OP,CV) 90 ASAP identifies (OF,OR,RS,CT,ST,AP,PO,OP,CV)	Y Y	* *
*	EN045	A *	R R	90 DEC field report dated 06/21/90 identifies (OR,OF) 90 DEC field report 06/21/90 identifies (OR,OF)	Y Y	* *
*	ER002	A B *	R R R	90 DNR field report 09/13/90 identifies (RS,CT) 90 DNR field report 09/13/90 identifies (RS,CT) 90 DNR field report 09/13/90 identifies (RS,CT)	Y Y Y	* * *
*	ER004	A B *	R R R	90 DEC field report 06/22/90 identifies (OP,OR) 90 DEC field report 06/21/90 identifies (OP,OR,) 90 DEC field report 06/21/90 identifies (OP,OR,)	Y Y Y	* * *
*	ER005	A *	R R	90 ASAP identifies (RS,CT,TB,AP) 90 ASAP identifies (RS,CT,TB,AP)	Y Y	* *
*	ER007	A *	R R	90 ASAP identifies (CT,AP,TB) 90 ASAP identifies (CT,AP,TB)	Y Y	* *
*	ER008	A *	R R	90 ASAP identifies (OR,AP,MS,CV,RS,CT,TB) 90 ASAP identifies (OR,AP,MS,RS,CV,CT,TB)	Y Y	* *
*	ER009	A *	R R	90 ASAP identifies (OR,RS,CV,CT,TB,AP,FL) 90 ASAP identifies (OR,RS,CV,CT,TB,AP,FL)	Y Y	* *
*	ER010	A *	R R	90 ASAP identifies (MS,CT,RS,AP,) 90 ASAP identifies (MS,CT,RS,AP,CV)	Y Y	* *
*	ER011	A *	R R	90 ASAP identifies (OR,RS,CV,CT,ST,AP,TB) 90 ASAP identifies (OR,RS,CV,CT,ST,TB,AP)	Y Y	* *
*	ER012	B *	R R	90 ASAP identifies (RS,CT,ST,OR) 90 ASAP identifies (RS,CT,ST,OR)	* *	* *
*	ER020	A B C *	R R R R	90 ASAP identifies (RS,CV,CT,OR,MS) 90 DEC field report 09/09/90 identifies (CV,CT,AP) 90 DEC field report 08/29/90 identifies (MS,CV,CT,ST,OR) 90 ASAP identifies (RS,CV,CT,MS,ST,AP,OR)	Y Y Y Y	* * * *
*	ER028	A *	R R	90 DNR field report 09/15/90 identifies (OR,RS,CT,ST) 90 DNR field report 09/15/90 identifies (OR,RS,CT,ST)	Y Y	* *
*	EV001	A *	R R	90 DEC field report 02/07/90 identifies (OP,OR,) 90 DEC field report 02/07/90 identifies (OP,OR)	Y Y	* *
*	EV003	A *	R R	90 ASAP identifies (RS,CT,ST,AP,OP,OR,MS) 90 ASAP identifies (RS,CT,ST,AP,OP,OR,MS)	Y Y	* *
*	EV005	A B C *	R R NF R	90 ASAP identifies (OP,OR,MS,RS,CV,ST,AP) 90 ASAP identifies (OP,OF,OR,MS,CT,ST) 90 ASAP - No treatment recommended 90 ASAP identifies (OP,OR,MS,RS,CV,ST,CT,AP,OF)	Y Y Y Y	* * * *

[* no data]

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	DRAFT		ENTIRE SEGMENT	STATE CATEG.
*	EV007	A *	R R	90 DNR field report 09/17/90 identifies (AP,TB, 90 DNR field report 09/17/90 identifies (AP,TB,	))		Y Y	* *
*	EV008	A B C *	NF R R R	90 SSAT - No treatment recommended 90 DNR field report 09/17/90 identifies (TB 90 DNR field report 09/17/90 identifies (TB, 90 DNR field report 09/17/90 identifies (TB,	))))		Y Y Y Y	* * * *
*	EV012	A *	R R	90 ASAP identifies (OR,RS,CV,ST,AP 90 ASAP identifies (OR,RS,CV,ST,AP	))		Y Y	* *
*	EV014	A *	R R	90 ASAP identifies (MS,CT,ST,AP,OP,OR 90 ASAP identifies (MS,CT,ST,AP,OP,OR	))		Y Y	* *
*	EV015	A *	R R	90 ASAP identifies (OP,OR,MS,CT,ST,AP 90 ASAP identifies (OP,OR,MS,CT,ST,AP	))		Y Y	* *
*	EV017	A *	R R	90 ASAP identifies (OR,ST,OP,AP,MS,RS 90 ASAP identifies (OR,ST,OP,AP,MS,RS	))		* *	* *
*	EV018	A *	R R	90 ASAP identifies (OR,CT,ST,FL 90 ASAP identifies (OR,CT,ST,FL	))		Y Y	* *
*	EV020	A *	R R	90 ASAP identifies (RS,CT,ST,AP 90 ASAP identifies (RS,CT,ST,AP	))		Y Y	* *
*	EV021	A *	R R	90 ASAP identifies (OF,OR,RS,CT,ST,AP 90 ASAP identifies (OF,OR,RS,CT,ST,AP	))		Y Y	* *
*	EV023	A *	R R	90 ASAP identifies (OF,RS,AP,FL 90 ASAP identifies (OF,RS,AP,FL	))		Y Y	* *
*	EV024	A *	R R	90 ASAP identifies (RS,CV,CT,ST,FL,OF 90 ASAP identifies (RS,CV,CT,ST,FL,OF	))		Y Y	* *
*	EV025	A *	R R	90 ASAP identifies (OF,CT,ST,AP 90 ASAP identifies (OF,CT,ST,AP	))		Y Y	* *
*	EV026	A *	R R	90 ASAP identifies (RS,CT,ST,AP 90 ASAP identifies (RS,CT,ST,AP	))		Y Y	* *
*	EV036	A *	R R	90 LRP 10/16/90 identifies (TB 90 LRP 10/16/90 identifies (TB	))		Y Y	* *
*	EV037	A *	R R	90 ASAP identifies (CV,CT,ST,AP,OR,OP,OF,TB 90 ASAP identifies (CV,CT,ST,AP,OP,OR,OF,TB	))		Y Y	* *
*	EV038	A *	R R	90 LRP 10/21/90 identifies (MS,AP 90 LRP 10/21/90 identifies (AP,MS	))		Y Y	* *
*	EV039	A *	R R	90 ASAP identifies (OF,OR,CV,CT,ST,AP,OP,TB 90 ASAP identifies (OF,OR,CV,CT,ST,AP,OP,TB	))		Y Y	* *

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
*	EV050	C *	R R	90 LRP 10/22/90 identifies (AP) 90 LRP 10/22/90 identifies (AP)	* *	* *
*	EV051	A *	R R	90 DEC field report 08/31/90 identifies (AP,RS,CT,ST) 90 DEC field report 08/31/90 identifies (AP,RS,CT,ST)	Y Y	* *
*	EV053	B D *	R R R	90 DEC field report 08/07/90 identifies (OR,ST,OF,CV) 90 ASAP identifies (OP,OR,RS,CV,CT) 90 ASAP identifies (OP,OR,RS,CV,CT)	* * *	* * *
*	EV054	A *	R R	90 ASAP identifies (OR,RS,CV,CT,AP,MS) 90 ASAP identifies (OR,RS,CV,CT,AP,M)	Y Y	* *
*	EV060	A B *	R R R	90 ASAP identifies (MS,RS,CT,ST,AP,TB) 90 ASAP identifies (OP,OR,RS,CT,MS) 90 ASAP identifies (MS,RS,CT,ST,OP,OR,AP,TB)	Y Y Y	* * *
*	EV066	A B *	R R R	90 DNR field report 09/17/90 identifies (AP,FL,CT,MS,OP) 90 DNR field report 09/17/90 identifies (AP,FL,CT,MS,OP) 90 DNR field report 09/17/90 identifies (AP,FL,CT,MS,OP)	Y Y Y	* * *
*	EV070	D F G *	R R R R	90 ASAP identifies (RS,CT,OR,FL,TB) 90 ASAP identifies (MS,RS,CV,CT,TB,SH) 90 ASAP identifies (MS,RS,CV,CT,SH,ST,TB,FL) 90 ASAP identifies (OF,MS,RS,CV,CT,OR,FL,TB,SH,ST)	* * * *	* * * *
*	EV071	A B C *	R NF R R	90 DNR field report 09/17/90 identifies (ST,TB,AP,) 90 LRP 10/08/90 - Indicates treatment completed 90 DNR field report 09/17/90 identifies (AP,ST,FL,CT) 90 ASAP identifies (RS,AP,CT,ST,OR,FL,TB,ST)	Y Y Y Y	* * * *
*	EV072	A *	R R	90 ASAP identifies (CT,ST,OF) 90 ASAP identifies (CT,ST,OF)	Y Y	* *
*	EV900	A *	R R	90 DNR field report 10/05/90 identifies (TB,CT) 90 DNR field report 10/05/90 identifies (TB,CT)	Y Y	* *
*	FA002	A *	R R	90 ASAP identifies (RS,CT,AP,OR) 90 ASAP identifies (RS,CT,AP,OR)	Y Y	* *
*	FL001	A *	R R	90 ASAP identifies (CV,CT,ST,AP,OR) 90 ASAP identifies (CV,CT,ST,AP,OR)	Y Y	* *
*	FL002	A *	R R	90 ASAP identifies (CT,AP) 90 ASAP identifies (CT,AP)	Y Y	* *
*	FL004	A B *	R R R	90 ASAP identifies (RS,CT,ST,AP,OR,FL) 90 ASAP identifies (OR,RS,CT,ST,AP,OP,FL) 90 ASAP identifies (RS,CT,ST,OR,AP,OP,FL)	Y Y Y	* * *
*	FL005	A B *	R R R	90 DNR field report 10/06/90 identifies (CV,CT,AP) 90 DNR field report 10/06/90 identifies (CV,CT,AP) 90 DNR field report 10/06/90 identifies (CV,CT,AP)	Y Y Y	* * *
*	GR001	A	R	90 ASAP identifies (OR,RS,CV,CT,ST,AP)	Y	*

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
		*	R	90 ASAP identifies (OR,RS,CT,CV,ST,OF,AP)	Y	*
*	GR001B	A *	R R	90 ASAP identifies (OR,RS,CT,OF,AP) 90 ASAP identifies (OR,RS,CT,OF,AP)	Y Y	* *
*	GR002	A *	R R	90 ASAP identifies (CT,ST,OR) 90 ASAP identifies (CT,ST,OR)	Y Y	* *
*	GR005	A *	R R	90 ASAP identifies (OR,RS,CT,AP) 90 ASAP identifies (OR,RS,CT,AP)	Y Y	* *
*	GR007	A *	R R	90 ASAP - Pending completion of work order 90 ASAP - Pending completion of work order	Y Y	* *
*	GR008	A *	R R	90 ASAP identifies (RS,CV,CT,AP) 90 ASAP identifies (RS,CV,CT,AP)	Y Y	* *
*	GR009	A *	R R	90 ASAP identifies (CV,CT,AP,ST) 90 ASAP identifies (CV,CT,AP,ST)	Y Y	* *
*	GR010	A *	R R	90 ASAP identifies (OP,CT,ST,AP) 90 ASAP identifies (OP,CT,ST,AP)	Y Y	* *
*	GR101	A B *	R R R	90 ASAP identifies (RS,CT,AP,FL) 90 ASAP identifies (CT,ST) 90 ASAP identifies (RS,CT,ST,AP,FL)	Y Y Y	* * *
*	GR103	A B C *	R R R R	90 ASAP identifies (PO,CV,CT,AP,RS,ST,FL) 90 ASAP identifies (RS,CV,CT,AP,ST) 90 ASAP identifies (RS,CV,CT,ST,AP,PO,OP,OR) 90 ASAP identifies (RS,CV,CT,ST,OR,PO,OP,AP,FL)	Y Y Y Y	* * * *
*	GR301	B *	R R	90 ASAP identifies (MS,AP,RS,CT) 90 ASAP identifies (MS,AP,RS,CT)	* *	* *
*	GR302	A *	R R	90 ASAP identifies (CT,AP) 90 ASAP identifies (AP,CT)	Y Y	* *
*	IN021	A *	R R	90 ASAP identifies (CV,CT,RS,MS,ST,FL,OR) 90 ASAP identifies (CV,CT,RS,MS,ST,FL,OR)	Y Y	* *
*	IN022	A B C *	R R NF R	90 ASAP identifies (MS,RS,CV,CT,ST,OR,SH,AP,FL,OF) 90 ASAP identifies (RS,CT,AP,FL) 90 SSAT - No treatment recommended 90 ASAP identifies (MS,RS,CV,CT,ST,OR,SH,AP,FL,OF)	Y Y Y Y	* * * *
*	IN023	A *	R R	90 ASAP identifies (OR,RS,CV,CT,AP,ST,MS) 90 ASAP identifies (OR,RS,CV,CT,AP,ST,MS)	Y Y	* *
*	IN024	A B C *	NF R R R	90 SSAT - No treatment recommended 90 ASAP identifies (OR,RS,CV,OF) 90 DEC field report 09/08/90 identifies (CV,CT) 90 ASAP identifies (CV,OF,RS,OR,CV,CT)	Y Y Y Y	* * * *
*	IN029	A	R	90 ASAP identifies (CV,CT,ST,OF,RS)	Y	*

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
		*	R	90 ASAP identifies (CV,CT,ST,OF,RS)	Y	*
*	IN030	A *	R R	90 ASAP identifies (CT,ST,RS,FL,OR) 90 ASAP identifies (CT,ST,RS,FL,OR)	* *	* *
*	IN031	A B *	R R R	90 ASAP identifies (RS,CT) 90 ASAP identifies (RS,CV,CT,ST,AP,TB) 90 ASAP identifies (RS,CV,CT,ST,AP,TB)	Y Y Y	* * *
*	IN032	A *	R R	90 ASAP identifies (RS,CV,CT,AP,MS,FL,OR) 90 ASAP identifies (RS,CV,CT,AP,MS,FL,OR)	Y Y	* *
*	IN033	A B *	R R R	90 ASAP identifies (RS,CV,ST,OF,MS,AP,OP,CT,OR) 90 ASAP identifies (ST,CT,MS,OF,RS) 90 ASAP identifies (RS,CV,ST,CT,MS,OF,AP,OR,OR)	Y Y Y	* * *
*	KN0004	A *	R R	90 ASAP identifies (OP,OR,MS,RS,CV,CT,ST,AP) 90 ASAP identifies (OP,OR,MS,RS,CV,CT,ST,AP)	Y Y	* *
*	KN0005	B *	R R	90 ASAP identifies (OF,OR,MS,RS,CT,ST,AP,OP,CV,FL) 90 ASAP identifies (OF,OR,MS,RS,CT,ST,AP,OP,CV,FL)	* *	* *
*	KN0007	A *	R R	90 ASAP identifies (MS,RS,CT,ST,AP,OP,OR,OF) 90 ASAP identifies (MS,RS,CT,ST,AP,OR,OP,OF)	Y Y	* *
*	KN0008	A *	R R	90 ASAP identifies (OP,OR,MS,CT,ST,AP) 90 ASAP identifies (OP,OR,MS,CT,ST,AP)	Y Y	* *
*	KN0009	A *	R R	90 ASAP identifies (OP,OR,MS,CT,ST,AP) 90 ASAP identifies (OP,OR,MS,CT,ST,AP)	Y Y	* *
*	KN0011	A *	R R	90 ASAP identifies (OP,RS,CV,CT) 90 ASAP identifies (OP,RS,CV,CT)	Y Y	* *
*	KN0014	A *	R R	90 ASAP identifies (OP,OF,MS,ST) 90 ASAP identifies (OP,OF,MS,ST)	Y Y	* *
*	KN0015	A *	R R	90 ASAP identifies (OF,MS,CT,ST,AP,CV,OP,RS) 90 ASAP identifies (OF,MS,CT,ST,AP,CV,OR,RS)	Y Y	* *
*	KN0016	A *	R R	90 ASAP identifies (RS,CT,CV,ST) 90 ASAP identifies (RS,CT,CV,ST)	Y Y	* *
*	KN0019	A *	R R	90 ASAP identifies (RS,CT,CV) 90 ASAP identifies (RS,CT,CV)	Y Y	* *
*	KN0024	A *	R R	90 ASAP identifies (OF,OR,RS,CT,ST,AP,OP,MS,FL) 90 ASAP identifies (OF,OR,RS,CT,ST,AP,OP,MS,FL)	Y Y	* *
*	KN0026	A *	R R	90 ASAP identifies (OF,OR,CT,ST,AP) 90 ASAP identifies (OF,OR,CT,ST,AP)	Y Y	* *
*	KN0101	A *	R R	90 DEC field report 09/01/90 identifies (OR,CT) 90 DEC field report 09/01/90 identifies (OR,CT)	Y Y	* *

[* no data]

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
*	KN0102	A *	R R	90 ASAP identifies (AP,RS,CT,OR) 90 ASAP identifies (AP,RS,CT,OR)	Y Y	* *
*	KN0103	A *	R R	90 ASAP identifies (RS,CT,TB,FL,OR) 90 ASAP identifies (RS,CT,TB,FL,OR)	Y Y	* *
*	KN0104	A B *	R R R	90 ASAP identifies (OF,RS,CV,CT,AP,ST,OR) 90 ASAP identifies (OF,MS,RS,CV,CT,AP,ST) 90 ASAP identifies (OF,RS,CV,CT,MS,AP,ST,OR)	Y Y Y	* * *
*	KN0105	A B *	R R R	90 ASAP identifies (MS,CT) 90 ASAP identifies (RS,CT,ST) 90 ASAP identifies (RS,CT,ST,MS)	Y Y Y	* * *
*	KN0106	A B *	R R R	90 ASAP identifies (MS,RS,CV,CT,OR) 90 ASAP identifies (RS,CT) 90 ASAP identifies (MS,RS,CV,CT,OR)	* * *	* * *
*	KN0107	A B *	R R R	90 ASAP identifies (RS,CV,CT,FL) 90 ASAP identifies (RS,CT,FL) 90 ASAP identifies (RS,CV,CT,FL)	Y Y Y	* * *
*	KN0108	A *	R R	90 ASAP identifies (OF,RS,CV,CT,ST,FL,OR) 90 ASAP identifies (OF,RS,CV,CT,ST,FL,OR)	Y Y	* *
*	KN0109	A *	R R	90 ASAP identifies (CV,CT,ST,RS,OR,OF) 90 ASAP identifies (CV,CT,ST,OR,RS,OF)	Y Y	* *
*	KN0110	A *	R R	90 ASAP identifies (OF,OR,CT,ST) 90 ASAP identifies (OF,OR,CT,ST)	Y Y	* *
*	KN0111	A *	R R	90 ASAP identifies (OF,OR,RS,CT,ST,PO,CV,FL) 90 ASAP identifies (OF,OR,RS,CT,ST,PO,CV,FL)	Y Y	* *
*	KN0112	A B *	R R R	90 ASAP identifies (OR,RS,CT) 90 ASAP identifies (OR,CT) 90 ASAP identifies (OR,RS,CT)	Y Y Y	* * *
*	KN0113	A B *	R R R	90 ASAP identifies (OR,RS,CV,CT,ST) 90 ASAP identifies (OR,RS,CT) 90 ASAP identifies (OR,RS,CV,CT,ST)	Y Y Y	* * *
*	KN0114	A *	R R	90 ASAP identifies (OF,OR,RS,CV,CT,ST) 90 ASAP identifies (OF,OR,RS,CV,CT,ST)	Y Y	* *
*	KN0115	A *	R R	90 ASAP identifies (OR,CT,ST,RS,MS,CV,OF) 90 ASAP identifies (OR,CT,ST,RS,MS,CV,OF)	Y Y	* *
*	KN0116	A *	R R	90 ASAP identifies (OR,CT) 90 ASAP identifies (OR,CT)	Y Y	* *
*	KN0117	A *	R R	90 ASAP identifies (OR,RS,CV,CT,SH,FL) 90 ASAP identifies (OR,RS,CV,CT,SH,FL)	Y Y	* *

[* no data]

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
*	KN0118	A *	R R	90 ASAP identifies (RS,CT) 90 ASAP identifies (RS,CT)	Y Y	* *
*	KN0119	A *	R R	90 ASAP identifies (OR,RS,CV,CT) 90 ASAP identifies (OR,RS,CV,CT)	Y Y	* *
*	KN0121	A *	R R	90 ASAP identifies (OF,RS,CV,CT,OR) 90 ASAP identifies (OF,RS,CV,CT,OR)	Y Y	* *
*	KN0122	A *	R R	90 ASAP identifies (RS,CT,FL,OR,OF) 90 ASAP identifies (RS,CT,FL,OR,OF)	Y Y	* *
*	KN0123	A B *	R R R	90 LRP 10/11/90 identifies (CV,CT,DB) 90 LRP 10/10/90 identifies (RS,CV,CT) 90 LRP 10/10/90 identifies (CV,CT,DB,RS)	Y Y Y	* * *
*	KN0124	A *	R R	90 LRP 10/10/90 identifies (RS,CT,ST) 90 LRP 10/10/90 identifies (RS,CT,ST)	Y Y	* *
*	KN0125	A *	R R	90 DEC field report 05/31/90 identifies (CT,ST,FL,SH) 90 DEC field report 05/31/90 identifies (CT,ST,FL,SH)	Y Y	* *
*	KN0126	A *	R R	90 ASAP identifies (FL,MS,RS,CT,SH) 90 ASAP identifies (MS,RS,CT,FL,SH)	Y Y	* *
*	KN0127	A B C *	R R NF R	90 ASAP identifies (RS,CV,CT) 90 ASAP identifies (RS,CT,CV) 90 DEC field report 05/29/90 - No treatment recommended 90 ASAP identifies (RS,CV,CT,)	Y Y Y Y	* * * *
*	KN0128	A *	R R	90 ASAP identifies (RS,CT,MS,FL,OR) 90 ASAP identifies (RS,CT,MS,FL,OR)	Y Y	* *
*	KN0129	A B *	R R R	90 ASAP identifies (OF,OR,RS,CT,SH,FL) 90 ASAP identifies (RS,CT) 90 ASAP identifies (OF,OR,RS,CT,SH,FL)	Y Y Y	* * *
*	KN0131	A *	R R	90 ASAP identifies (OF,CT,RS,CV,TB,OR) 90 ASAP identifies (OF,CT,RS,CV,TB,OR)	Y Y	* *
*	KN0132	A B C D *	R R R R R	90 LRP 10/08/90 identifies (RS,CT,ST) 90 ASAP identifies (OR,RS,CV,CT,FL) 90 LRP 10/08/90 identifies (CV,ST,TB) 90 ASAP identifies (RS,CV,CT,FL,OR) 90 ASAP identifies (OR,RS,CV,CT,FL,OR,TB)	Y Y Y Y Y	* * * * *
*	KN0133	A *	R R	90 ASAP identifies (RS,CT,ST,FL,OR) 90 ASAP identifies (RS,CT,ST,FL,OR)	Y Y	* *
*	KN0134	A *	R R	90 ASAP identifies (OR,RS,CV,CT,ST,AP,OP,MS,FL) 90 ASAP identifies (OR,RS,CV,CT,ST,AP,OP,MS,FL)	Y Y	* *
*	KN0135	A B *	R R R	90 ASAP identifies (OR,MS,RS,CV,CT,ST,AP,OP,FL) 90 ASAP identifies (OF,OR,MS,RS,CT,ST,CV,AP,OP) 90 ASAP identifies (OF,OR,MS,RS,CV,CT,ST,AP,OP,FL)	Y Y Y	* * *

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ACE 1950703

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
*	KN0136	A *	R R	90 ASAP identifies (OR,MS,RS,CT,ST,AP,OV,OP) 90 ASAP identifies (OR,MS,RS,CT,ST,AP,CV,OP)	Y Y	* *
*	KN0141	A B *	R R R	90 ASAP identifies (OF,OR,RS,CT,SH,FL) 90 LRP 10/10/90 identifies (CV,CT,ST) 90 ASAP identifies (OF,OR,RS,CT,SH,FL,ST,)	Y Y Y	* * *
*	KN0144	A B *	R R R	90 LRP 10/11/90 identifies (CV,CT,ST) 90 LRP 10/11/90 identifies (CV,CT,MS,FL,OP) 90 LRP 10/10/90 identifies (CV,CT,MS,FL,TB,OP,)	Y Y Y	* * *
*	KN0145	A *	R R	90 LRP identifies (RS,CT,ST,TB,) 90 LRP identifies (RS,CT,ST,TB,OP)	Y Y	* *
*	KN0200	A *	R R	90 ASAP identifies (OF,CT,ST,AP) 90 ASAP identifies (OF,CT,ST,AP)	Y Y	* *
*	KN0201	A *	R R	90 ASAP identifies (MS,CT,ST,AP,OP,OR,TB) 90 ASAP identifies (MS,CT,ST,AP,OP,OR,TB)	Y Y	* *
*	KN0204	A *	R R	90 ASAP identifies (MS,ST) 90 ASAP identifies (MS,ST)	Y Y	* *
*	KN0205	B *	R R	90 ASAP identifies (OF,RS,CT,ST,AP,OR,FL) 90 ASAP identifies (OF,RS,CT,ST,AP,OR,FL)	* *	* *
*	KN0206	A *	R R	90 ASAP identifies (MS,CT,ST,AP,OR,OF,RS) 90 ASAP identifies (MS,CT,ST,AP,OR,OF,RS)	Y Y	* *
*	KN0208	A *	R R	90 ASAP identifies (OR,RS,CV,CT) 90 ASAP identifies (OR,RS,CV,CT)	Y Y	* *
*	KN0209	A B C D *	R R R R R	90 ASAP identifies (OR,CV,CT,ST) 90 ASAP identifies (OR,CT) 90 ASAP identifies (FL,ST) 90 ASAP identifies (OP,RS,CV,ST,AP,OR,MS,CT) 90 ASAP identifies (OP,RS,CV,ST,OR,CT,FL,AP,MS)	Y Y Y Y Y	* * * * *
*	KN0211	A B C D E F *	NF R R NF R NF R	90 SSAT - No treatment recommended 90 ASAP identifies (OP,OF,OR,MS,CV,CT,AP) 90 ASAP identifies (CT) 90 SSAT - No oil observed 90 ASAP identifies (CT,AP,OP,MS,RS,CV,ST,FL,OR,OF) 90 SSAT - No treatment recommended 90 ASAP identifies (OP,OF,OR,MS,CV,CT,AP,RS,ST,FL)	Y Y Y Y Y Y	* * * * * * *
*	KN0212	A *	R R	90 ASAP identifies (OP,OF,OR,CV,CT,ST,AP) 90 ASAP identifies (OP,OF,OR,CV,CT,ST,AP)	* *	* *
*	KN0213	A B C D E *	NF R NF NF R R	90 SSAT - No oil observed 90 ASAP identifies (OR,RS,CV,CT,AP,ST) 90 SSAT - No treatment recommended 90 SSAT - No treatment recommended 90 ASAP identifies (OP,CV,CT,ST,MS,AP) 90 ASAP identifies (OP,CV,CT,ST,MS,AP)	Y Y Y Y Y Y	* * * * * *

[* no data]

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ACE 1950704

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
*	KN0300	A *	R R	90 ASAP identifies (OR,RS,CV,CT,FL) 90 ASAP identifies (FL,OR,RS,CV,CT)	Y Y	* *
*	KN0301	A B *	R R R	90 DEC field report 07/01/90 identifies (OR,OF,CT,ST) 90 DEC field report 07/01/90 identifies (OR,OF,CT,ST) 90 DEC field report 07/01/90 identifies (OR,OF,CT,ST)	Y Y Y	* * *
*	KN0400	A *	R R	90 ASAP identifies (MS,RS,CT,CV,AP) 90 ASAP identifies (MS,RS,CV,CT,AP)	Y Y	* *
*	KN0401	A B *	R R R	90 ASAP identifies (MS,CT,AP,RS,OP) 90 ASAP identifies (OR,MS,RS,ST,AP,TB) 90 ASAP identifies (MS,CT,OR,RS,ST,AP,OP,TB)	Y Y Y	* * *
*	KN0402	A *	R R	90 ASAP identifies (OR,MS,RS,CT,AP) 90 ASAP identifies (OR,MS,RS,CT,AP)	Y Y	* *
*	KN0403	A B *	R R R	90 ASAP identifies (MS,CT,AP,CV,OP,OR) 90 DEC field report 07/28/90 identifies (TB,CV,OR) 90 ASAP identifies (MS,CT,TB,CV,OR,OP,AP)	Y Y Y	* * *
*	KN0404	A B *	R NF R	90 ASAP identifies (OP,OF,OR,OL,ST) 90 SSAT - No treatment recommended 90 ASAP identifies (OP,OF,OR,OL,ST)	Y Y Y	* * *
*	KN0405	A *	R R	90 ASAP identifies (OF,OR,CV,CT,ST) 90 ASAP identifies (OF,OR,CV,CT,ST)	Y Y	* *
*	KN0408	A *	R R	90 ASAP identifies (OF,OR,MS,AP,CT,ST) 90 ASAP identifies (OF,OR,AP,CV,CT,ST)	Y Y	* *
*	KN0410	A *	R R	90 ASAP identifies (OF,MS,ST) 90 ASAP identifies (OF,MS,ST)	Y Y	* *
*	KN0413	A *	R R	90 ASAP identifies (CT,ST) 90 ASAP identifies (CT,ST)	Y Y	* *
*	KN0500	A B *	R R R	90 ASAP identifies (RS,CT,OR,FL,OF) 90 ASAP identifies (OF,OR,RS,FL) 90 ASAP identifies (RS,CT,OF,OF,FL)	Y Y Y	* * *
*	KN0501	A *	R R	90 ASAP identifies (OR,CT) 90 ASAP identifies (OR,CT)	Y Y	* *
*	KN0502	A *	R R	90 ASAP identifies (OR,RS,CT,FL,OF) 90 ASAP identifies (OR,RS,CT,FL,OF)	Y Y	* *
*	KN0503	A *	R R	90 ASAP identifies (RS,CT,OR) 90 ASAP identifies (RS,CT,OR)	Y Y	* *
*	KN0505	A *	R R	90 ASAP identifies (RS,CV,CT,OF,OR) 90 ASAP identifies (RS,CV,CT,OR,OF)	Y Y	* *
*	KN0506	A	R	90 ASAP identifies (RS,CT,CV,OR)	Y	*

[* no data]

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
		*	R	90 ASAP identifies (RS,CT,CV,OR)	Y	*
*	KN0508	A *	R R	90 ASAP identifies (OF,OR,RS,CV,CT,OP,FL) 90 ASAP identifies (OF,OR,RS,CV,CT,OP,FL)	Y Y	* *
*	KN0576	A B C *	R R R R	90 DNR field report 09/20/90 identifies (CT,AP,OR,RS) 90 DNR field report 09/20/90 identifies (CT,AP,OR,RS) 90 DNR field report 09/20/90 identifies (CT,AP,OR,RS) 90 DNR field report 09/20/90 identifies (CT,AP,OR,RS)	Y Y Y Y	* * * *
*	KN0577	B *	R R	90 ASAP identifies (RS,CT,AP,OR) 90 ASAP identifies (RS,CT,AP,OR)	* *	* *
*	KN0578	A *	R R	90 DNR field report 09/20/90 identifies (AP,MS,DB,) 90 DNR field report 09/20/90 identifies (MS,AP,DB,)	Y Y	* *
*	KN0700	A *	R R	90 ASAP identifies (OR,RS) 90 ASAP identifies (OR,RS)	Y Y	* *
*	KN0701	A B C *	NF R R R	90 ASAP - No treatment recommended 90 ASAP identifies (OF,CV,CT,ST,AP,OR) 90 ASAP identifies (AP,CT,ST) 90 ASAP identifies (OF,CV,CT,ST,AP,OR)	Y Y Y Y	* * * *
*	KN0702	A B *	R R R	90 ASAP identifies (OF,OR,MS,RS,CT,ST,CV,AP,FL) 90 ASAP identifies (OF,MS,CV,CT,ST,AP,OP,FL,OR) 90 ASAP identifies (OF,MS,CV,CT,ST,OR,RS,AP,OP,FL)	Y Y Y	* * *
*	KN0703	A *	R R	90 ASAP identifies (OP,OF,OR,MS,CT,CV,AP,ST) 90 ASAP identifies (OP,OF,OR,MS,CT,CV,AP,ST)	Y Y	* *
*	KN0704	A *	R R	90 ASAP identifies (ST,CT,AP,RS,MS,TB,OP,OR) 90 ASAP identifies (ST,CT,AP,RS,MS,TB,OP,OR)	Y Y	* *
*	KN5000	A *	R R	Bio test site - Not treated Bio test site - Not treated	Y Y	* *
*	KN5002	A B C *	R R R R	90 DEC field report 07/10/90 identifies (OP,OR,CT,ST,OF) 90 DEC field report 07/10/90 identifies (IP,OR,OF,CT,ST) 90 DEC field report 07/10/90 identifies (OP,OR,OF,CT,ST) 90 DEC field report 07/10/90 identifies (OR,OF,OP,CT,ST)	Y Y Y Y	* * * *
*	KN5012	A *	R R	90 DEC field report 07/10/90 identifies (OR,OF) 90 DEC field report 07/10/90 identifies (OR,OF)	Y Y	* *
*	LA015	A B C D E *	NF R R R R R	90 SSAT - No oil observed 90 DEC field report 08/26/90 identifies (OR,MS,CV,CT,ST) 90 DEC field report 09/09/90 identifies (MS,OP,PO) 90 DEC field report 09/01/90 identifies (OR,RS,AP,CV,CT) 90 DEC field report 09/18/90 - Exxon study site - NTR 90 DEC field reports (OR,MS,CV,CT,ST,RS,AP,OP,PO)	Y Y Y Y Y Y	* * * * * *
*	LA016	A *	R R	90 ASAP identifies (OR,MS,CT,ST,AP,TB,OP) 90 ASAP identifies (OR,MS,CT,ST,AP,TB,OP)	Y Y	* *
*	LA017	A	R	90 ASAP identifies (MS,CT,ST,AP)	Y	*

[* no data]

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ACE 1950706

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KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
		*	R	90 ASAP identifies (MS,CT,ST,AP)	Y	*
*	LA018	A	R	90 ASAP identifies (OP,OR,MS,RS,CV,CT,ST,TV,AP)	Y	*
		*	R	90 ASAP identifies (OP,OR,MS,RS,CV,CT,ST,TB,AP)	Y	*
*	LA019	A	R	90 DEC field report 09/13/90 identifies (MS,OR,OF)	Y	*
		*	R	90 DEC field report 09/13/90 identifies (MS,OR,OF)	Y	*
*	LA020	A	R	90 ASAP identifies (OP,OR,MS)	Y	*
		B	R	90 ASAP identifies (OP,OR,MS,CV,CT,AP)	Y	*
		C	R	90 DEC field report 08/31/90 identifies (PO,MS,RS,OR)	Y	*
		D	R	90 ASAP identifies (OP,OR,MS,RS,CV,CT,ST,AP)	Y	*
		*	R	90 ASAP identifies (OP,OR,MS,RS,CV,CT,ST,AP)	Y	*
*	LA021	A	R	90 ASAP identifies (OP,OR,MS,RS,CT,ST,AP)	Y	*
		B	R	90 ASAP identifies (MS,RS,ST,AP,OR,OF)	Y	*
		*	R	90 ASAP identifies (OP,OR,MS,RS,CT,ST,AP,OF)	Y	*
*	LA022	A	R	89 Segment Inspection Record 07/16/89 IDENTIFIES (CT,ST)	Y	*
		*	R	89 Segment Inspection Record 07/13/89 IDENTIFIES (CT,ST)	Y	*
*	LA023	A	R	90 ASAP identifies (AP)	Y	*
		*	R	90 ASAP identifies (AP)	Y	*
*	LA024	A	R	90 ASAP identifies (RS,CT,ST,FL,AP)	Y	*
		*	R	90 ASAP identifies (RS,CT,ST,FL,AP)	Y	*
*	LA025	A	R	90 DNR field report 10/02/90 identifies (CT,ST,AP,RS)	Y	*
		B	R	90 DNR field report 10/02/90 identifies (CT,ST,AP,RS)	Y	*
		*	R	90 DNR field report 10/02/90 identifies (CT,ST,OR,RS)	Y	*
*	LA026	A	R	90 DNR field report 10/02/90 identifies (CT,AP,CV,ST)	Y	*
		*	R	90 DNR field report 10/02/90 identifies (CV,CT,ST,AP)	Y	*
*	LA032	A	R	90 DNR field report 09/18/90 identifies (MS,OP,FL,AP,CT)	Y	*
		*	R	90 DNR field report 09/18/90 identifies (MS,OP,FL,AP,CT)	Y	*
*	LA033	A	R	90 ASAP identifies (RS,CV,CT,ST,TB)	Y	*
		*	R	90 ASAP identifies (TB,RS,CV,CT,ST)	Y	*
*	LA037	A	R	90 DEC field report 09/14/90 identifies (OP,OR,OF,AP,MS)	Y	*
		*	R	90 DEC field report 09/14/90 identifies (OP,OR,MS,AP,OF)	Y	*
*	LA038	A	R	90 ASAP identifies (OF,AP,CT,ST)	Y	*
		*	R	90 ASAP identifies (OF,AP,CT,ST)	Y	*
*	LA039	A	R	90 ASAP identifies (OF,MS,CT,AP)	Y	*
		*	R	90 ASAP identifies (OF,MS,CT,AP)	Y	*
*	LA042	A	R	90 DNR field report 10/14/90 identifies (AP,RS,TB,OF,CT)	Y	*
		*	R	90 DNR field report 10/04/90 identifies (RS,AP,TB,CT,OF)	Y	*
*	LN001	A	R	90 ASAP identifies (OR,CT,AP)	Y	*
		*	R	90 ASAP identifies (OR,CT,AP)	Y	*

[* no data]

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ACE 1950707

DRAFT

KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
*	LN002	A *	R R	90 ASAP identifies (MS,RS,PO,CV,CT,OP) 90 ASAP identifies (MS,RS,PO,CV,CT,OP)	Y Y	* *
*	LN004	A *	R R	90 LRP 10/06/90 identifies (RS,CT) 90 LRP 10/06/90 identifies (RS,CT)	Y Y	* *
*	LN005	A *	R R	90 DEC field report 06/28/90 identifies (OR,OF,CT,CV) 90 DEC field report 06/28/90 identifies (OR,OF,CT,CV)	Y Y	* *
*	LN006	A *	R R	90 ASAP identifies (OP,MS,PO,CV,CT,ST,AP) 90 ASAP identifies (OP,MS,PO,CV,CT,ST,AP)	Y Y	* *
*	LN007	A *	R R	90 DEC field report 08/01/90 identifies (OR,CV,CT) 90 DEC field report 08/01/90 identifies (OR,CV,CT)	Y Y	* *
*	LN008	A *	R R	90 ASAP identifies (RS,CT,ST,OP,OR,FL) 90 ASAP identifies (RS,CT,ST,OP,OR,FL)	Y Y	* *
*	LS060	A *	R R	90 DEC field report 05/11/90 identifies (MS,CV) 90 DEC field report 05/11/90 identifies (MS,CV)	Y Y	* *
*	MA001	A *	R R	90 DNR field report 10/01/90 identifies (OF,CV,CT,ST,MS) 90 DNR field report 10/01/90 identifies (OF,CV,CT,ST,MS)	Y Y	* *
*	MA002	A *	R R	90 DEC field report 06/09/90 identifies (OR,OF,AP,CT,RS) 90 DEC field report 06/09/90 identifies (OR,OF,AP,RS,CT)	Y Y	* *
*	MA004	A *	R R	90 DEC field report 06/04/90 identifies (RS,OP) 90 DEC field report 06/04/90 identifies (RS,OP)	Y Y	* *
*	MA005	A *	R R	90 ASAP identifies (MS,RS) 90 ASAP identifies (MS,RS)	Y Y	* *
*	MA009	A *	R R	90 ASAP identifies (MS,CT,AP,OR,RS) 90 ASAP identifies (MS,CT,AP,RS,OR)	Y Y	* *
*	MA010	A *	R R	90 ASAP identifies (OF,RS,AP,CT,MS) 90 ASAP identifies (OF,RS,AP,CT,MS)	Y Y	* *
*	MN001	A *	R R	90 DEC field report 07/23/90 identifies (AP,TB,OP) 90 DEC field report 07/23/90 identifies (AP,TB,OP)	Y Y	* *
*	MN002	A *	R R	90 ASAP identifies (OP,MS,CV,CT,ST,OR,AP) 90 ASAP identifies (OP,MS,CV,CT,ST,OR,AP)	Y Y	* *
*	MN003	A *	R R	90 ASAP identifies (MS,RS,CT) 90 ASAP identifies (MS,RS,CT)	Y Y	* *
*	MN007	B *	R R	90 DEC field report 08/16/90 identifies (RS,OF,MS) 90 DEC field report 08/16/90 identifies (RS,OF,MS)	* *	* *
*	MN500	B *	R R	90 ASAP identifies (MS,CT,ST,OP,TB) 90 ASAP identifies (MS,CT,ST,TB)	* *	* *

[* no data]

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ACE 1950708

DRAFT

KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
*	MR001	A B C *	R R NF R	90 ASAP identifies (PO,MS,RS,CV) 90 ASAP identifies (PO,MS,RS,CV) 90 SSAT - No treatment recommended 90 ASAP identifies (MS,PO,RS,CV)	Y Y Y Y	* * * *
*	MU001	A B C *	R R NF R	90 SSAT identifies (CT,AP,CV,TB) 90 ASAP identifies (RS,CT) 90 DEC field report 06/26/90 - No treatment recommended 90 ASAP identifies (CT,RS)	Y Y Y Y	* * * *
*	MU002	A B *	R R R	90 ASAP identifies (RS,CT) 90 ASAP identifies (MS,RS,CT) 90 ASAP identifies (RS,CT,MS)	Y Y Y	* * *
*	MU003	A *	R R	90 DEC field report 06/29/90 identifies (RS,OF,CT,CV) 90 DEC field report 06/29/90 identifies (RS,OF,CT,CV)	Y Y	* *
*	MU900	A *	R R	90 DEC report 07/13/90 identifies (RS,OF) 90 DEC field report 07/13/90 identifies (RS,OF)	Y Y	* *
*	NA006	A B C *	R NF R R	90 ASAP identifies (RS,ST) 90 DEC field report 07/10/90 - No treatment recommended 90 ASAP identifies (OP,OF,OR,OL,MS,CV,CT,ST,AP) 90 ASAP identifies (RS,ST,OP,OR,MS,CV,CT,ST,AP OF)	Y Y Y Y	* * * *
*	NA021	B *	R R	90 ASAP identifies (MS,ST,AP,CT) 90 ASAP identifies (MS,ST,AP,CT)	* *	* *
*	NA024	F *	R R	90 ASAP identifies (PO,CV,CT) 90 ASAP identifies (PO,CV,CT)	* *	* *
*	NA027	A *	R R	90 ASAP - Unable to locate 90 ASAP - Unable to locate	Y Y	* *
*	NJ002	A *	R R	90 ASAP identifies (RS,CT) 90 ASAP identifies (RS,CT)	Y Y	* *
*	NK001	A *	R R	90 ASAP identifies (RS,AP,MS) 90 ASAP identifies (RS,AP,MS)	Y Y	* *
*	NK002	A *	R R	90 ASAP identifies (MS,RS,AP,SH,CT,CV) 90 ASAP identifies (MS,RS,AP,SH,CT,CV)	* *	* *
*	PD001	A B *	R R R	90 ASAP identifies (OR,MS,RS,AP,TB,CT,ST) 90 ASAP identifies (AP,TB) 90 ASAP identifies (OR,RS,TB,AP,MS,CT,ST)	Y Y Y	* * *
*	PD002	A *	R R	90 ASAP identifies (MS,TB) 90 ASAP identifies (MS,TB)	Y Y	* *
*	PD003	A *	R R	90 ASAP identifies (MS,CT) 90 ASAP identifies (MS,CT)	Y Y	* *
*	PD004	A	R	90 ASAP identifies (MS,RS,CV,OR,AP)	Y	*

[* no data]

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Print Time: 11:05

ACE 1950709

DRAFT

KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
		B *	R R	90 ASAP identifies (MS,RS) 90 ASAP identifies (MS,RS,CV,OR,AP)	Y Y	* *
*	PD008	A *	R R	90 ASAP identifies (CV,MS) 90 ASAP identifies (CV,MS)	* *	* *
*	PD010	A *	R R	90 ASAP identifies (OF,MS,AP,CT,CV,ST) 90 ASAP identifies (OF,MS,AP,CT,CV,ST)	Y Y	* *
*	PE001	A *	R R	90 SSAT identifies (AP,CT,OP,PO,ST,OL,) 90 SSAT identifies (OP,OL,CT,ST,AP,PO)	Y Y	* *
*	PN001	A *	R R	90 ASAP identifies (OP,OR,MS,CV,CT,ST,AP) 90 ASAP identifies (OP,OR,MS,CV,CT,ST,AP)	Y Y	* *
*	PP001	A *	R R	90 LRP 09/06/90 identifies (MS,CT,ST,CV,RS,TB) 90 LRP 09/06/90 identifies (MS,CT,ST,CV,RS,TB)	Y Y	* *
*	PR002	A *	R R	90 ASAP identifies (OP,OF,OR,ST,CT) 90 ASAP identifies (OP,OF,OR,ST,CT)	Y Y	* *
*	PR003	A B C D *	R R R R R	90 ASAP identifies (OP,OR,MS,RS,PO,CV,AP) 90 ASAP identifies (OP,OR,MS,RS,CV) 90 ASAP identifies (RS,CV) 90 ASAP identifies (RS,CV,CT) 90 ASAP identifies (OP,OR,MS,RS,PO,CV,OP,OR,AP,CT)	Y Y Y Y Y	* * * * *
*	PR004	A *	R R	90 ASAP identifies (CT,OP,OR,RS,OF) 90 ASAP identifies (CT,OP,OR,RS,OF)	Y Y	* *
*	PR005	A B C *	R R R R	90 ASAP identifies (OP,OF,OR,MS,RS,CV,CT,) 90 ASAP identifies (OP,OF,OR,MS,CT,AP,RS) 90 ASAP identifies (OP,OR,CT,RS) 90 ASAP identifies (OP,OF,OR,MS,RS,CV,CT,AP,RS)	Y Y Y Y	* * * *
*	PR006	A *	R R	90 LRP 10/06/90 identifies (CT,DB,) 90 LRP 10/06/90 identifies (CT,DB,)	Y Y	* *
*	PR007	A *	R R	90 ASAP identifies (OF,OR,RS,CT,CV,ST,FL) 90 ASAP identifies (OF,OR,RS,CT,CV,ST,FL)	Y Y	* *
*	PR008	A B C *	R R R R	90 ASAP identifies (OR,CT,ST) 90 ASAP identifies (CV,CT,ST,SH,RS,OR) 90 ASAP identifies (OP,OR,CV,CT,ST,OF) 90 ASAP identifies (CV,CT,ST,OP,OR,ST,SH,RS,OR,OF)	Y Y Y Y	* * * *
*	PR012	A *	R R	90 LRP 10/05/90 identifies (CV,CT,ST,MS,TB,DB,) 90 LRP 10/05/90 identifies (CV,CT,ST,MS,TB,DB,)	Y Y	* *
*	PR013	A *	R R	90 ASAP identifies (CT,RS,CV,OP,OR) 90 ASAP identifies (CT,RS,CV,OP,OR)	Y Y	* *
*	PR016	A *	R R	90 ASAP identifies (OP,OF,OR,RS,CT,ST) 90 ASAP identifies (OP,OF,OR,RS,CT,ST)	Y Y	* *
*	PY002					

[* no data]

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ACE 1950710

DRAFT

KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
		A *	R R	90 ASAP identifies (MS,PO,CV,AP,ST,TB) 90 ASAP identifies (MS,PO,CV,AP,ST,TB)	Y Y	* *
*	PY006	A B C D *	R NF NF NF R	90 ASAP identifies (PO,CV,ST,AP) 90 SSAT - No treatment recommended 90 SSAT - No oil observed 90 SSAT - No oil observed 90 ASAP identifies (PO,CV,ST,AP)	Y Y Y Y Y	* * * * *
*	PY007	A B C *	NF R NF R	90 SSAT - No treatment recommended 90 ASAP identifies (PO,CV,CT,ST) 90 SSAT - No treatment recommended 90 ASAP identifies (PO,CV,CT,ST)	Y Y Y Y	* * * *
*	PY008	A B C D E F *	NF R R NF R NF R	90 SSAT - No oil observed 90 ASAP identifies (MS,CT,ST,PO) 90 ASAP identifies (MS,CT,ST,TB,AP) 90 SSAT - No treatment recommended 90 ASAP identifies (MS,CT,ST,AP) 90 DEC field report 07/28/90 - No treatment recommended 90 ASAP identifies (MS,CT,ST,PO,TB,AP)	Y Y Y Y Y Y Y	* * * * * * *
*	PY011	A B C *	NF R NF R	90 SSAT - No treatment recommended 90 ASAP identifies (OP,OF,MS,RS,ST) 90 SSAT - No treatment recommended 90 ASAP identifies (OP,OF,MS,RS,ST)	Y Y Y Y	* * * *
*	PY012	A B C *	NF R NF R	90 SSAT - No oil observed 90 ASAP identifies (CV,CT,TB,MS) 90 SSAT - No treatment recommended 90 ASAP identifies (CV,CT,TB,MS)	Y Y Y Y	* * * *
*	PY015	A B C D *	NF R NF R R	90 SSAT - No treatment recommended 90 ASAP identifies (RS,PO,CV,TB,MS) 90 SSAT - No treatment recommended 90 ASAP identifies (MS,RS,CV,CT,TB,MS,CT) 90 ASAP identifies (RS,PO,CV)	Y Y Y Y Y	* * * * *
*	RB001	A *	R R	90 ASAP identifies (OF,MS,CT,TB,AP,FL,ST) 90 ASAP identifies (OF,MS,CT,AP,FL)	* *	* *
*	RB003	A *	R R	90 DNR field report 08/24/90 identifies (PO,CT,ST,OP,OR) 90 DNR field report 08/24/90 identifies (PO,CT,ST,OP,OR)	Y Y	* *
*	RB005	A B *	R R R	90 ASAP identifies (OP,MS,CV,TB) 90 ASAP identifies (OF,MS,CT,FL) 90 ASAP identifies (OP,MS,CV,TB,CT,FL,OF)	Y Y Y	* * *
*	SE041	A *	R R	90 DEC field report 05/13/90 identifies (OP,OR) 90 DEC field report 05/13/90 identifies (OP,OR)	Y Y	* *
*	SE042	A *	R R	90 SSAT identifies (OR,CV,CT) 90 SSAT identifies (OR,CV,CT)	Y Y	* *
*	SL001	A B C D E	NF R R R R	90 SSAT - No treatment recommended 90 ASAP identifies (OR,RS,CT,AP) 90 ASAP identifies (MS,RS,CT,SH,OR,OF) 90 ASAP identifies (OF,RS,CV,CT,AP) 90 ASAP identifies (OR,MS,RS,CV,CT,AP,SH,OF)	Y Y Y Y Y	* * * * *

[* no data]

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ACE 1950711

KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
		*	R	90 ASAP identifies (OR,MS,RS,CV,CT)	Y	*
*	SM005	A B *	R R R	90 SSAT identifies (CT,OP,OR,FL) 90 ASAP identifies (OF,OR,CT,ST,OF) 90 ASAP identifies (OF,OR,CT,FL,OP,FL,ST)	Y Y Y	* * *
*	SM006	A B C *	R R R R	90 ASAP identifies (OF,OR,MS,CT,ST,FL) 90 ASAP identifies (OP,OF,OR,MS,CT,ST,FL) 90 ASAP identifies (OP,OR,CV,CT,ST,OF) 90 ASAP identifies (OP,OR,CV,CT,ST,FL,OF,MS)	Y Y Y Y	* * * *
*	SM007	A *	R R	90 SSAT identifies (OR,CT,ST) 90 SSAT identifies (OR,CT,ST)	Y Y	* *
*	SP019	A *	R R	90 ASAP identifies (OR,CT,ST,FL) 90 ASAP identifies (OR,CT,ST,FL)	Y Y	* *
*	SP043	A *	R R	90 ASAP identifies (MS,CT,AP) 90 ASAP identifies (MS,CT,AP)	* *	* *
*	SQ002	A *	R R	90 DEC field report 07/16/90 identifies (OR,OF,CT) 90 DEC field report 07/16/90 identifies (OR,OF,CT)	Y Y	* *
*	SQ005	A *	R R	90 ASAP identifies (RS,CV,CT) 90 ASAP identifies (RS,CV,CT)	* *	* *
*	TB001	A *	R R	90 DEC field report 09/05/90 identifies (MS,CV,CT,ST) 90 DEC field report 09/05/90 identifies (MS,CV,CT,ST)	Y Y	* *
*	TB002	A *	R R	90 ASAP identifies (MS,CV,AP,RS,OF,CT,ST) 90 ASAP identifies (MS,CV,AP,RS,OR,CT,ST)	Y Y	* *
*	TB003	A *	R R	90 ASAP identifies (RS,ST,AP,CT,MS,FL,OR,TB,CV) 90 ASAP identifies (RS,ST,AP,CT,MS,FL,OR,TB,CV)	Y Y	* *
*	TB004	A *	R R	90 ASAP identifies (MS,RS,ST,AP) 90 ASAP identifies (MS,RS,ST,AP)	Y Y	* *
*	TB005	A B *	R R R	90 SSAT identifies (OR,CT,ST,AP,MS,ST) 90 ASAP identifies (OP,OF,RS,CV,AP) 90 ASAP identifies (OP,OF,RS,CV,AP,OR,ST,CT)	Y Y Y	* * *
*	TB006	A *	R R	90 ASAP identifies (RS,SH,AP,FL,OR,OP) 90 ASAP identifies (RS,SH,AP,FL,OP,OR)	Y Y	* *
*	TB007	A *	R R	90 ASAP identifies (MS,CV) 90 ASAP identifies (MS,CV)	Y Y	* *
*	US001	A *	R R	90 ASAP identifies (MS,RS,CV,CT,ST,TB) 90 ASAP identifies (MS,RS,CV,CT,ST,TB)	Y Y	* *
*	US002	A *	R R	90 ASAP identifies (CT,ST,RS,OR,CV) 90 ASAP identifies (CT,ST,RS,OR,CV)	Y Y	* *
*	US005					

[* no data]

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ACE 1950712

DRAFT

KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
		A B *	R R R	90 DEC field report 06/03/90 identifies (TB, 90 ASAP identifies (MS,RS,ST,TB 90 ASAP identifies (MS,RS,ST,TB	Y Y Y	* * *
*	US007	A *	R R	90 ASAP identifies (RS,CT,ST,MS,SH 90 ASAP identifies (RS,CT,ST,MS,SH	Y Y	* *
*	US008	A *	R R	90 ASAP identifies (MS,RS,CV,TB,OR 90 ASAP identifies (MS,RS,CV,TB,OR	Y Y	* *
*	US009	A *	R R	90 ASAP identifies (MS,CT,ST 90 ASAP identifies (MS,CT,ST	Y Y	* *
*	US010	A *	R R	90 DEC field report 06/06/90 identifies (MS,OR,AP,TB,CV 90 DEC field report 06/06/90 identifies (MS,OR,AP,TB,CV	Y Y	* *
*	US011	A *	R R	90 DNR field report 09/18/90 - re-oiling from US-10 90 DNR field report 09/18/90 - re-oiling from US-10	Y Y	* *
*	US012	A *	R R	90 ASAP identifies (MS,CV 90 ASAP identifies (MS,CV	Y Y	* *
*	WA001	A *	R R	90 ASAP identifies (MS,PO,CV,CT,ST 90 ASAP identifies (MS,PO,CV,CT,ST	* *	* *
*	WA002	A *	R R	90 DEC field report 08/10/90 identifies (MS,AP,OP,RS) 90 DEC field report 08/10/90 identifies (MS,AP,OP,RS)	Y Y	* *
*	WB001	A B *	R R R	90 ASAP identifies (AP,RS,ST,MS,CT 90 ASAP identifies (MS 90 ASAP identifies (MS,RS,ST,CT	Y Y Y	* * *
*	WB002	A B C D E F *	R R R R R R R	90 ASAP identifies (MS,RS,ST,OR,TB 90 ASAP identifies (RS,MS,OP,OR,AP 90 ASAP identifies (MS,CV,AP,OP 90 ASAP identifies (OP,MS,RS,ST,AP 90 ASAP identifies (OP,MS,RS,ST,AP 90 ASAP identifies (CT,TB 90 ASAP identifies (MS,RS,ST,CT,CV,OP,AP,OR	Y Y Y Y Y Y Y	* * * * * * *
*	WB003	A B C D E *	R R R R R R	90 ASAP identifies (RS,CT 90 ASAP identifies (MS,RS,FL 90 ASAP identifies (MS,RS 90 ASAP identifies (MS,RS,AP,TB,OR 90 ASAP identifies (RS 90 ASAP identifies (MS,RS,CT,FL,AP,TB,OR	Y Y Y Y Y Y	* * * * * *
*	WB004	A *	R R	90 ASAP identifies (RS 90 ASAP identifies (RS	Y Y	* *
*	WB006	A *	R R	90 ASAP identifies (RS,CT,ST,MS 90 ASAP identifies (RS,CT,ST,MS	Y Y	* *
*	WB007	A *	R R	90 ASAP identifies (MS,AP 90 ASAP identifies (MS,AP	Y Y	* *
*	WB008					

[* no data]

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ACE 1950713

KodKunit	Segment	SUBDIV	ADEC Status	Justification	ENTIRE SEGMENT	STATE CATEG.
		A *	R R	90 ASAP identifies (MS) 90 ASAP identifies (MS)	Y Y	* *
*	WB009	A *	R R	90 ASAP identifies (OF,MS,RS,CV,AP,FL,TB,CT,ST) 90 ASAP identifies (OF,MS,RS,CV,AP,FL)	Y Y	* *
*	WH501	A *	R R	89 Beachwalk identifies (TB,AP,ST) 89 Beachwalk identifies (TB,AP,ST)	Y Y	* *
*	WH502	A *	R R	89 Beachwalk identifies (TB,ST) 89 Beachwalk identifies (TB,ST)	Y Y	* *
*	YG002	A *	R R	90 ASAP identifies (OR,AP,RS,CT,ST) 90 ASAP identifies (OR,AP,RS,CT,ST)	Y Y	* *
*	YG004	A *	R R	90 SSAT identifies (OR,MS,CV) 90 SSAT identifies (OR,MS,CV)	Y Y	* *
*	YP004	A *	R R	90 ASAP identifies (OR,MS,SH) 90 ASAP identifies (OR,MS,SH)	Y Y	* *

[* no data]

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End of List

H:\OILSPILL:SIGNOFF:PRIOREP

ACE 1950714-15

262-70-10010

Helen Creek, Puale Bay

ACE 1950832

1K 10-07
Helen Crk.
Puale Bay

1500 CAK

WORK PLAN ADDENDUM

Segment K10-7
PB-16 Subdivision _____ Dated 7/9/90
ANAD. STREAM # 262-70-10010 (HELEN CREEK)

MODIFICATION

1. REASON FOR MODIFICATION

ANAD SCAT RECOMMENDED NO TREATMENT. REASSESSMENT
ON 29 JUNE 90 LOCATED A LAYER OF MOUSSE.

2. ADJUSTMENT TO WORK PLAN

WORK PLAN SHOULD BE CHANGED FROM "NO TREATMENT
RECOMMENDED" TO "MANUAL PICKUP" AS INDICATED ON
THE ATTACHED SKETCH MAP.

SHPO APPROVAL NEEDED YES X SHPO SIGNATURE _____
NO _____

TAG APPROVAL DATE 7/9/90

ADEC Ray Morris R. Hoffman

EXXON ANDY TEAL

NOAA Burl Wescott

USCG G.A. REITER

FOSC _____ DATE _____

ACE 1950833

+1FF

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K10-07-PB-016 STREAM NO: 262-70-10010 DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: Rachel Jean Oue DATE: 5/22/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

X No Treatment Recommended

 Treatment Recommended

 Manual Pickup

 Bioremediation

 Tarmat Removal

 Snare/Absorbent Booms

 Oil Snares (pom poms)

 Absorbents (pads, rolls, etc)

 Spot Washing: Wands

 Beach Cleaner

 Other (see comments)

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 5/18/90

ADEC Art Wower Art Wower

EXXON Andy Ten Andy Ten

NOAA Gary Settee Gary Settee

USCG G.A. Reiter G.A. Reiter

FOSC: [Signature]

DATE: MAY 27 1990

ACE 1950834

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

STEVE COWPER, GOVERNOR

Rapifax 349-1723

333 RASPBERRY ROAD
ANCHORAGE, ALASKA 99518-1699
PHONE: (907) 344-0541

RAPIFAX TRANSMITTAL SHEET

TO: Ken Middleton

DATE: 5/7/90

No. Pages: 10
(including this page)

FROM: _____

K10-07

MESSAGE:

Helen Creek, Foul Bay, Alaska Peninsula
segment PB016
262-70-10010

ALASKA DEPT. OF
FISH & GAME

MAY 07 1990

REGION II
HABITAT DIVISION

ACE 1950835+/S

10/38

OPERATIONS FIELD NOTES

(See Back for Instructions)

SEGMENT ID ANAD PB-016.
 STREAM ID # 262-70-10010
 ANNOTATED MAP INCLUDED Y/N

DATE 5-2-90
 NAME GARCIA
 TEAM # 15

SURFACE OIL	Quantities in Meters			Treatment Recommendation						
				None	Bioremediation		Tilling		Spot Hot Water	
	Length	Width	Area		Y/N	% Treat	Y/N	% Treat	Y/N	% Treat
Wide Band										
Medium Band										
Narrow Band										
Very Light										
TOTAL MANDAYS					0		0		0	

SUBSURFACE OIL - NONE

Other (Describe)?	

TARMATS	Quantities in Meters			Treatment Rec			# of Bags	Mandays Required	
	Length	Width	Thick(cm)	None	Breakup	Remove		Breakup	Remove
Area #1									
Area #2									
Area #3									
Area #4									
Sporadic Mats									

MANUAL PICKUP	Type of Debris			In Meters		# of Bags	Pickup Y/N	Manday Estimate
	Mousse Tarballs	Oiled Veget	Cleanup Debris	Length	Width			
Pocket #1								
Pocket #2								
Pocket #3								
Random/Continuous								

OILED LOGS Y/N	OILING H/M/L	QUANTITY L/M/S	BURN Y/N
----------------	--------------	----------------	----------

Is there Other Debris on the Beach? Y/N How Many Bags? — Is it mingled with the Oiled Debris Y/N

GENERAL

Snow covering 0 % of the Supratidal Zone?

Wave Exposure H/M/L

Access Limitations: NONESnare Boom/Pom Poms Recommended? NO

Would the production Craft have to be relocated to complete work on this subdivision? Y/N # of Times —

COMMENTS:

NO TREATMENT RECOMMENDED ON THIS STREAM.

ACE 1950836

11/38 #2

FIELD SHORELINE COMMENT SHEET

RB 16
~~11/38 #2~~
SEGMENT ST / ~~11/38 #2~~ SUBDIVISION: _____ DATE _____USCG NAME CWO McMASTON SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

ADFG

ADFC

NAME JEFFREY BARNHART SIGNATURE [Signature]☒ NO TREATMENT RECOMMENDED☐ TREATMENT SUGGESTEDCOMMENTS Very little oil located in this anadromous fish stream.
The four T/B's located do not justify a cleanup.

LAND MANAGER

NAME _____ SIGNATURE _____

☐ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

ACE 1950837

12/38

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMS PTA2 REGION: PWS KP,CI K_{AP}METHOD: Aerial Ground Boat3 DATE: 5/2/9015 HIGH TIDE TIMES: 8:52 AM / 10:16 PM21 TEAM RECORDER: JEFFREY BARNHART4 START TIME: 1:15 PM16 HIGH TIDE HTS: 14.1 / 14.822 OBSERVERS: John M. Mahoney, Mike Fane5 STOP TIME: 1:35 PM17 LOW TIDE TIMES: 3:11 PM / 3:50 PM23 AGENCY: ADFG/Env./USCG/WWC/WW6 SEGMENT #: P801618 LOW TIDE HTS: 5.4 / 1.924 PHOTOS TAKEN: Y N7 STATION #: 262-70-10010

19 TIDE HT AT SURVEY: _____

Roll #: _____ Frame: _____

8 K-UNIT: K10-07Ebb Slack Flood Slack25 VIDEO TAKEN: Y N TAPE#: _____9 STAT AREA: 262-7020 USCG QUAD: Karluk D-5

Start: _____ End: _____

10 LAT: 57° 45' 20" N11 LONG: 155° 29' 9" W26 SAMPLES TAKEN Y N Number12 SOURCE: Map Loran Annuat

Oil _____

13 LOCATION: Helen Creek, Puget Bay

Sediment _____

14 DESCRIPTION: S 885 38W 22

Biological _____

Water _____

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M	H	L	W	M	H
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION	Ø							

36 CATALOGED ANAD. FISH STREAM? Y N37 CATALOG #: 262-70-1001038 STREAM NAME: Helen Creek39 OIL IN STREAM BED? Y N40 OIL ON STREAM BANKS? Y N41 OIL ON BEACH ADJACENT TO MOUTH? Y N
(within 50 meters)

42 OIL WITHIN 1 MILE OF STREAM? Y N

30 OVERALL OIL IMPACT: N L L M H31 OIL TYPE: Pooled Mousse Tan Asphalt Sticky Stain32 OILED DEBRIS? Y N

Where: _____

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh43 ANADROMOUS FISH PRESENT? Y N34 WAVE EXPOSURE: High Beach Moderate Low Stream

44 ANADROMOUS FISH OBSERVATION

35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble _____

Species Aerial Ground

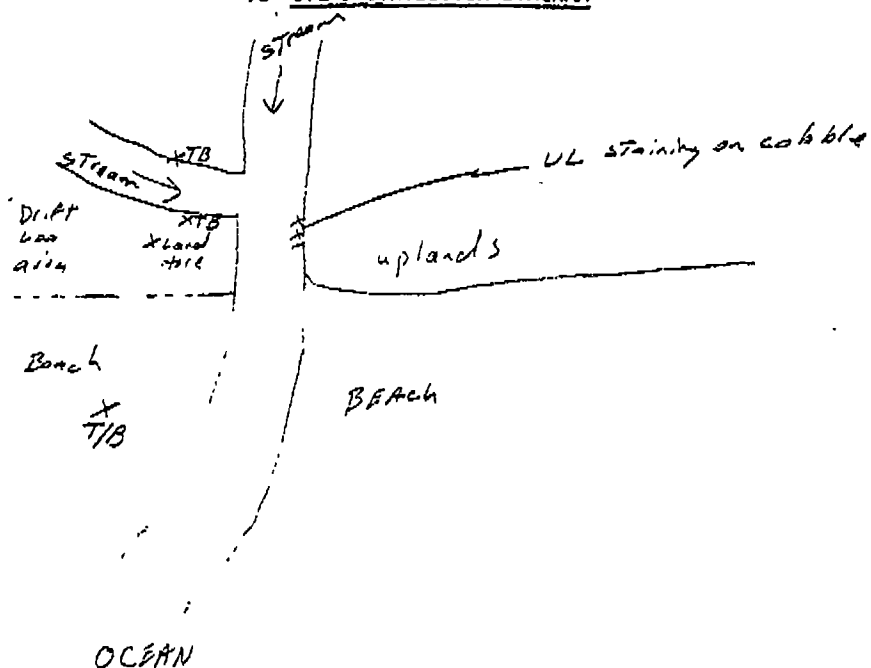
Gravel 20 Sand 80 Mud/silt _____

Species	Aerial	Ground

COMMENTS: Forced only 4 T/B's. NO cleaning recommended.*Jeff Barnhart*I agree with recommendation. M. H. Farnett

FRAME(S)

DESCRIPTION

48 OIL DISTRIBUTION DIAGRAM

Sample taken
Photo frame # and
shot direction.

ACE 1950839

MAY 07 '90 14:22 DEPTAAAAAAAAAAAAAAAA

SHORELINE OILING SUMMARY (ANAD.)

P. 6-10 REVISION NO. 0

OG WILLIAM LEID USCG McMAHON SEGMENT ST/ PB016
 BIO MICHAEL FAWCETT LAND REP STREAM 252-70-10001 OF
 EXXON GUS GARCIA ADFG MARK WILCOXER / EFF BEANHART TIME 13:05 to
 TEAM NO. 15 TIDE LEVEL 4 FT DATE 2 / MAY / 90
 EST. SUBDIVISION LENGTH: 80 m ☐ Sun ☐ Clouds ☐ Fog ☒ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 100 % B 0 % C 10 % P 20 % G 70 % S 0 % M 0 % V
 SLOPE: Lang 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 20 m VL 20 m NO 40

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR										IMPACTED ZONES			
	C	S	P	R	BR	BL	GR	GY	OR	PK	RD	SL	TR	WH	SU	U	M	L
ASPHALT PAVEMENT																		
POOLED																		
COVER																		
COAT																		
STAIN				X				X							X			
MOUSSE																		
PATTIES																		
TARBALLS			X							X					X			
FILM																		
NO OIL																		

PAVEMENT H F S 0 sq. m by 0PATTIES / TARBALLS 0 BANEAR SHORE SHEEN? ☒ NO BR RW SL T

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

Did You Collect

DEBRIS

☐ YES ☒ NOTYPE 0#BAGS 0

Photographs:

Roll No. A5-15-8Frames 4-7

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM)	BELOW		OIL / FILM COLOR										PIT ZONE	A N A	SHEEN (Y/N)	DEPTH (cm)	SURFACE SUBSURFACE SEDIMENT
		OP	OR	CL	OF	NO		UO	UC	BR	BL	GR	GY	OR	PK	RD	SL	TR	WH					
1	40					X	0													X			35	S/C
2	35					X	0													X			30	S/G
							0																	
							0																	
							0																	
							0																	
							0																	

COMMENTS

REVIEWED 0 DATE 0

ACE 1950840

62455

MAY 07 '90 14:23 DEPTA000000000000

Segment PB016
Helen Creek
Stream 262-70-10010
Ecological Summary

5/2/90
Michael Fawcett

This medium-large stream has a dynamic intertidal delta composed mostly of sand channels and berms, with some cobbles and boulders, in a high energy wave environment. As a consequence of the beach instability, there is no attached intertidal macro-biota. No oil was found except for some very light stains on some cobble, and 3 or 4 tar balls. Cleanup is not recommended. Four caribou were seen crossing the delta when we arrived. River otter tracks were seen along the stream banks.

M H Fawcett

17/38

SSAT DATA ENTRY FORM

PAGE 1 OF 2

GENERAL DATA

262-70
SEG ID: PB016 SUBDIV: 10010 TEAM: AS-15 SURVEY DATE: 5/2/90
PAVEMENT: CHAR — AREA 0 THICKNESS 0 TARBALLS 0
OILED: LGS — VEG — TRH — DBR — WAVE EXP: LW X MD — HG —
FAX RCVD: — DT: — AGENCY DISAGREE: —
EST SUBDIV LGTH: 80 OIL CATEGORY: W 0 M 0 N 20 VL 20 NO 40 U 0

SURFACE DATA

SURFACE SEDIMENT: BRK 0 BLD 0 COB 10 PEB 0 GRN 20 SAN 70 MUD 0 VEG 0

CHAR #: 1 OIL CHAR: ST OIL DIST: CONT — BRKN — PTCH — SPLH X
OIL CLR: GY FILM CLR: — TIDAL ZONE: SU — UI X MI — LI —

CHAR #: 2 OIL CHAR: TB OIL DIST: CONT — BRKN — PTCH X SPLH —
OIL CLR: DBR FILM CLR: — TIDAL ZONE: SU — UI X MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

ACE 1950843

18/38

SSAT DATA ENTRY FORM

SUBSURFACE DATA

PAGE 2 OF 2SEGMENT ID: PB016 SUBDIV: 262-70-10010

PIT # 1 PIT DEPTH 40 OIL CHARACTER — OIL INTVAL: FROM 0 TO 0
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI X MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB X PEB — GRN — SAN X MUD — VEG —

PIT # 2 PIT DEPTH 35 OIL CHARACTER — OIL INTVAL: FROM 0 TO 0
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI X MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN X SAN X MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PROBLEMS: —

ACE 1950844-18

jam
5/18/90

RECEIVED
MAY 15 1990

DEPT. OF
ENVIRONMENTAL CONSERVATION

ANADROMOUS FISH STREAM ASSESSMENT

REGION: KODIAK

SEGMENT: K10-07-PB-016

SUBDIVISION: A

STREAM NO: 262-70-10010

Helen Creek
Duale Bay

Agree = NO treatment
K12M
5/17/90

ACE 1950845+1/2

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K10-07-PB-016 STREAM NO: 262-70-10010 DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: _____ DATE: _____

Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

<u>X</u> No Treatment Recommended	_____ Snare/Absorbent Booms
_____ Treatment Recommended	_____ Oil Snares (pom poms)
_____ Manual Pickup	_____ Absorbents (pads, rolls, etc)
_____ Bioremediation	_____ Spot Washing: _____ Wands
_____ Tarmat Removal	_____ Beach Cleaner
	_____ Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

ACE 1950846

KODIAK ECOLOGICAL CONSTRAINTS

- 1A **Salmon stream mouth - fry outmigration (4/15 to 7/31)**
 1B **Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)**
 No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G prior to treatment for consultation and/or permit application.
 AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299
- 1C **Salmon fry nursery area (4/31 to 7/31)**
 No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
 AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1D **Kotoi Bay Hatchery release**
 Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
- 1H **Remote release site**
 No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G for confirmation and authorization.
 AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1I **Gill net area**
 1J **Purse seine area**
 Mainland, West side Kodiak, Shuyak & Moser/Olga Bay (6/9 to 10/1)
 East side Kodiak, East side Afognak (7/4 to 10/1)
- 1K **Purse seine hook-off**
 1L **Set net sites**
 Contact ADF&G for confirmation - dates and locations may vary. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
 AGENCY CONTACT PERSON: ADF&G Larry Nicholson 424-4791
- 2M **Herring spawning (4/15 to 6/30)**
 Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to uncoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
 AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791
- 3N, 3P **Harbor seal and sea lion pupping (5/10 to 7/1)**
 3O, 3Q **Harbor seal and sea lion molting (8/15 to 9/15)**
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
 AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
 ADF&G Don Calkins 267-2403
- 5R **Seabird colony (5/1 to 9/1)**
 Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S **Shorebird/waterfowl concentration (4/1 to 5/15)**
 Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
 ADF&G Tom Roth 267-2206
- 5T **All Bald Eagle nests (3/1 to 6/1)**
Active Bald Eagle nests (3/1 to 9/1)
 Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U **Recreation: Tent sites (6/1 to 9/15)**
 6V **Anchorage (6/1 to 9/15)**
 6W **Forest Service cabins (6/1 to 9/15)**
 6X **Lodge (6/1 to 9/15)**
 6Y **Special use destination**
- 7Z **Subsistence area: Salmon harvesting (6/1 to 9/30)**
 7HH **Finfish harvesting**
 7II **Deer harvesting (8/1 to 1/7)**
 7JJ **Invertebrate harvesting**
 7KK **Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)**
 Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
 AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

ACE 1950847

RB 16 PB-16 **FIELD SHORELINE COMMENT SHEET**

SEGMENT ST ~~1/10/00~~ SUBDIVISION: _____ DATE _____

USCG
NAME CWO McMASTON SIGNATURE *[Signature]*

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

ADFG
ADEC
NAME JEFFREY BARNHART SIGNATURE *[Signature]*

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS very little oil located in this anadromous fish stream.
The four T/B's located do not justify a cleanup.

LAND MANAGER
NAME _____ SIGNATURE _____

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

ACE 1950848

OG WILLIAM REID USCG McMAHON SEGMENT ST/ PB016
 BIO MICHAEL FAWCETT LAND REP STRAH 262-70-10001 OF 1
 EXXON GUS GARCIA ADFG MIKE WOODRUFF JEFF BERNHART TIME 13:0510
 TEAM NO. 15 TIDE LEVEL 4 FT DATE 2 / MAY / 90
 EST. SUBDIVISION LENGTH: 80 m ☐ Sun ☐ Clouds ☐ Fog ☒ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 10 % B 10 % C 10 % P 20 % G 20 % S 70 % M 10 % V
 SLOPE: Lang 100 % Hang 100 % Vert 100 % WAVE EXPOSURE: ☒ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 20 m VL 20 m NO AD

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	TC	FB	FP	FS	BR	OR	OL	OF	NO	TL	LR	LR	SU	U	M	U
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN																
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL																

PAVEMENT H F S 0 sq. m by 6PATTIES / TARBALLS 0 B/NEAR SHORE SHEEN? ☒ NO BR RW SL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

Did you COLLECT DEBRIS
☐ YES ☒ NOTYPE 6#BAGS 0

Photographs:

Roll No. AS-15-8Frames 4-7

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SHEEN (Y/N)	DEPTH (cm)	SURFACE SUBSURF SEDIMENT
		OP	OR	OL	OF	NO		UO	UC	BR	OR	OL	OF	NO	TL	LR	LR	SU	U	M	U				
1	40					X	.											X					X	35	S/C
2	35					X	.											X					X	30	S/G
							.																		
							.																		
							.																		
							.																		

COMMENTS

ACE 1950849

REVIEWED 7WDATE 5/8/90

OG WILLIAM REID

F11M 11

SKETCH MAP

15/38 SEGMENT ST/ PBO16

STREAM 262-70-10010

DATE 2/1/90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Endry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est HWL/LWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pli Location(s)
- ☐ Photo Location(s)

LEGEND

1 ▲

Pli - No Subsurface Oil

2 ▲

Pli - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

eee

Oiled Vegetation

1 ➡

Photo location, direction,
and number

ACE 1950850

Oil Character Length (m): AP PO CV CT ST MS PT TB FL NO

REVISION: 03/24/90

12/38

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMS PTA

2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 5/2/96

16 HIGH TIDE TIMES: 8:52 AM / 10:16 PM

21 TEAM RECORDER: JEFFREY BARNHART

4 START TIME: 1:15 PM

18 HIGH TIDE HTS: 14.1 / 14.8

22 OBSERVERS: Cus Garcia, William Reid, John M. Mahoney, Mike Fane

5 STOP TIME: 1:35 PM

17 LOW TIDE TIMES: 3:11 PM / 3:50 PM

23 AGENCY: ADFG/ESA/USCG/WWC/WW

6 SEGMENT #: 28016

19 LOW TIDE HTS: 5.4 / 1.9

24 PHOTOS TAKEN: Y (N)

7 STATION #: 262-70-10010

10 TIDE HT AT SURVEY: _____

Roll #: _____ Frames: _____

8 K-UNIT: K10-07

Ebb: Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPE#: _____

9 STAT AREA: 262-70

20 USCG QUAD: Karluk D-5

Start: _____ End: _____

10 LAT: 57° 45' 26" N

11 LONG: 155° 29' 9" W

26 SAMPLES TAKEN? Y (N) Number _____

12 SOURCE: Map Loran AnnuLat

Oil _____

13 LOCATION: Helen Creek, Puget Bay

Sediment _____

14 DESCRIPTION: 5885 38W22

Biological _____

Water _____

EXTENT OF OIL

	SHORELINE				STREAM			
	L	V	M ²	%	L	V	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N (L) L M H

31 OIL TYPE: Pooled Mousse (Tar) Asphalt Sticky Stain

32 OILED DEBRIS? Y (N)

33 SHORELINE TYPE: Headland Low-lying Rocks (Beach) Cove
Lagoon Marsh

34 WAVE EXPOSURE: (High) Beach Moderate (Low) Stream

35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble _____
Gravel 20 Sand 80 Mud/silt _____

36 CATALOGED ANAD. FISH STREAM? (Y) N

37 CATALOG #: 262-70-10010

38 STREAM NAME: Helen Creek

39 OIL IN STREAM BED? Y (N)

40 OIL ON STREAM BANKS? (Y) N

41 OIL ON BEACH ADJACENT TO MOUTH? Y (N)
(within 50 meters)

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: _____

43 ANADROMOUS FISH PRESENT? Y (N)

44 ANADROMOUS FISH OBSERVATION

Species Aerial Ground

COMMENTS: Found only 4 T/B's. NO cleanup recommended.

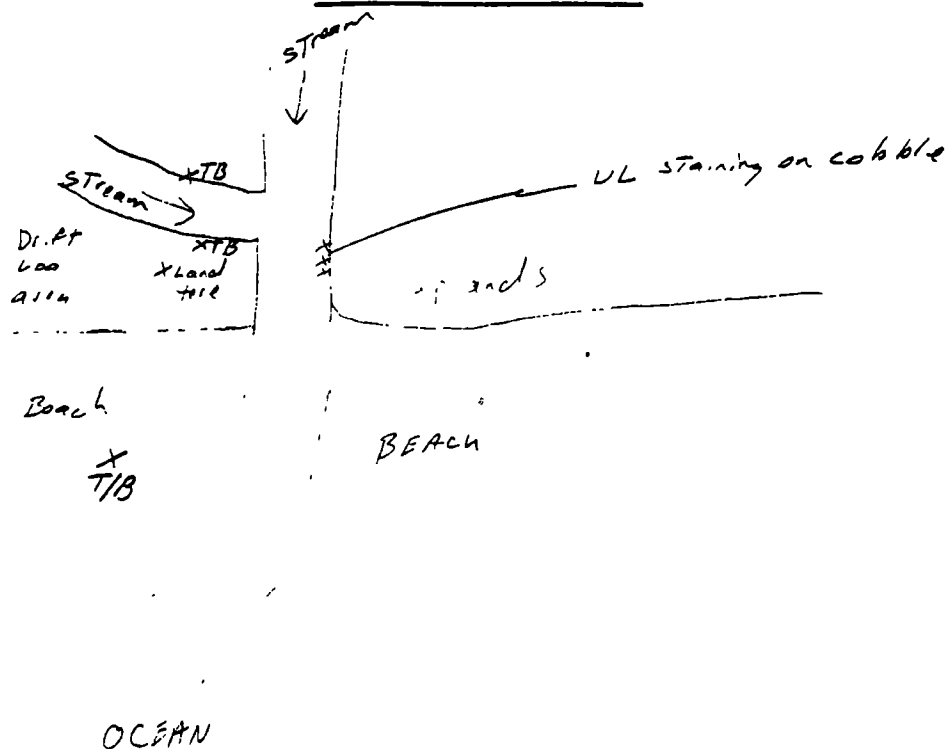
I agree with recommendation of Jeff Barnhart

ACE 1950851

FRAME(S)

DESCRIPTION

48 OIL DISTRIBUTION DIAGRAM



Sample taken
Photo frame # and
shot direction.

ACE 1950852-18

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K10-07-PB-016 STREAM NO: 262-70-10010 DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: Rachel Jean Owe DATE: 5/22/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

<u>X</u> No Treatment Recommended	<u> </u> Snare/Absorbent Booms
<u> </u> Treatment Recommended	<u> </u> Oil Snares (pom poms)
<u> </u> Manual Pickup	<u> </u> Absorbents (pads, rolls, etc)
<u> </u> Bioremediation	<u> </u> Spot Washing: <u> </u> Wands
<u> </u> Tarmat Removal	<u> </u> Beach Cleaner
	<u> </u> Other (see comments)

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 5/18/90

ADEC Art Wouwer Art Wouwer

EXXON Andy Ten

NOAA Gary Petrac

USCG G.A. Reiter

FOSC: [Signature]

DATE: MAY 27 1990

ACE 1950853 +/S

OG WILLIAM REID

15/38 SEGMENT ST/ P3016

STREAM 262-70-1000

DATE 7/1/90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HWL/LWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Plt Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ

Plt - No Subsurface Oil

2 Δ

Plt - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

lll

Oiled Vegetation

1 →

Photo location, direction,
and number

ACE 1950854 -13

SKETCH MAP

Oil Character Length (m): AP PO CV CT ST MS PT TB FL NO

REVISION: 03/24/91

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K10-07-PB-016 STREAM NO: 262-70-10010 DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: Rachel Jean Orr DATE: 5/22/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

X No Treatment Recommended

 Treatment Recommended

 Manual Pickup

 Bioremediation

 Tarmat Removal

 Snare/Absorbent Booms

 Oil Snares (pom poms)

 Absorbents (pads, rolls, etc)

 Spot Washing: Wands

 Beach Cleaner

 Other (see comments)

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 5/18/90

ADEC ART WOLVER Art Wolver

EXXON ANDY TEAL Andy Teal

NOAA Gary Petrac Gary Petrac

USCG G.A. REITER G.A. Reiter

FOSC: [Signature]

DATE: MAY 27 1990

ACE 1950855 + 13

OG WILLIAM REID

15/38 SEGMENT ST/ PBR16

STREAM 262-70-1000

DATE 2/1/90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est HWL/LWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pli Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ

Pli - No Subsurface Oil

2 ▲

Pli - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

lll

Oiled Vegetation

1 →

Photo location, direction,
and number

ACE 1950856

1/1/3/FF/HE

SKETCH MAP

Oil Character Length (m): AP PO CV CT ST MS PT TB FL NO

REVISION 03/24/88

ADF&G MULTI-ASSESSMENT FORM
1991 GENERAL ENTRY CHECKLIST



STREAM#: 2627010010
SEGMENT: PB016

PAGE 50

DATE PRINTED: 06/21/91

LOCATION: PUALE BAY

SURVEY TYPE: 91 MAYSAP - SS

METHOD: GROUND

DATE: 05/19/91

TEAM RECORDER: BARNHART

START TIME: 0950

OBSERVERS: SPURR HEROLDSON HARDISTER

END TIME: 1045

OG/HAB DISCREPANCIES: -

AGENCY: FG USCG EXX USFWS

PHOTOS TAKEN: N

STATION: 2627010010

ROLL#: -0-

FRAME: -0-

VIDEO TAKEN: N

TAPE#: -0-

START: -0-

END: -0-

SAMPLES TAKEN: N

SAMPLE NUMBERS: -0-

-0-

-0-

-0-

-0-

-0-

OIL IN STREAM BED: Y

OVERALL OIL IMPACT: L

OIL ON BEACH BY MOUTH: Y

WAVE EXPOSURE: HIGH

SHORELINE TYPE: BEACH

SUBSTRATE TYPE: BEDROCK -0- BOULDER -0- COBBLE 85 VEGETAT -0-

GRAVEL 10 SAND 5 MUD/SILT -0- GRANULE -0-

ANADROMOUS FISH PRESENT: N

SPECIES: -0-

COUNT: -0-

-0-

-0-

-0-

-0-

-0-

-0-

-0-

-0-

ADF&G MULTI-ASSESSMENT FORM
1991 OILING ENTRY CHECKLIST

PAGE 58

DATE PRINTED: 06/21/91

STREAM# : 2627010010
SEGMENT#: PB016

SURVEY TYPE : 91 MAYSAP - SS

LOCATION: PUALE BAY

DATE: 05/19/91

TIMES: 0950 - 1045

TEAM RECORDER: BARNHART

-- OILING EXTENT --

SITE#	SITE TYPE	DEPTH (cm)	LENGTH (m)	WIDTH (m)	AREA (m)	%	THICK (cm)	PEN (cm)	OIL TYPE CODES
1	-0-	-0-	12	5	60	2	1.5	-0-	SOR MS
2	-0-	-0-	10	1	10	20	5	-0-	SOR MS

COMMENTS:

SITE #2 IS LOCATED AT THE CONFLUENCE OF THE SOUTH FORK AND HELEN CREEK
PROPER. IT WAS NOT DISCOVERED LAST YEAR BECAUSE IT WAS COVERED WITH SAND,
WHICH WAS ERODED AWAY OVER THE WINTER OF 90-91. THE OIL CLEANED AT SITE #1
WAS 'SOR' FROM THE 1990 CLEANUP. BROWN BEAR TRACKS OBSERVED.

ADF&G MULTI-ASSESSMENT DATA FORM

- 1) SURVEY TYPE: BS SS 2) REGION: PWS KP, CI K, AP
- 3) METHOD: Aerial Ground Boat
- 4) DATE: 5-19-91 16) HIGH TIDE TIME: 0653/2004 22) TEAM RECORDER: J. Barnhart
- 5) START TIME: 0950 17) HIGH TIDE HTS: 17.3/16.4 23) OBSERVERS: D. Spurr, R. Herddson, J. Hardister and others.
- 6) STOP TIME: 1045 18) LOW TIDE TIMES: 051/1327 24) AGENCY: ADF&G, USCG, Exxon, USF&WS
- 7) SEGMENT #: PB-016 19) LOW TIDE HTS: 3.2/-1.4 25) PHOTOS TAKEN: Y N
- 8) K-UNIT: K10-07 20) TIDE HT AT SURVEY: _____ ROLL #: _____ FRAMES: _____
- 9) LAT: _____ Ebb Slack Flood Slack 26) VIDEO TAKEN: Y N
- 10) LONG: _____ 21) USCG QUAD: _____ TAPE # _____
- 11) ASC #: 262-70-10010 START: _____ STOP: _____
- 12) STREAM NAME: Helen Creek 27) SAMPLES TAKEN? Y N
- 13) LOCATION: Puale Bay, Alaska Peninsula SAMPLE I.D. _____
- 14) WAVE EXPOSURE: High Moderate Low _____
- 15) SHORELINE TYPE: Headland Low-lying Rocks Beach _____
- Cove Lagoon Marsh _____

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>12</u>	<u>5</u>	<u>60</u>	<u>2</u>	<u>1.5</u>	<u>Ø</u>	<u>SOR-ms</u>
SITE 2	<u>10</u>	<u>1</u>	<u>10</u>	<u>20</u>	<u>5</u>	<u>Ø</u>	<u>SOR-ms</u>
SITE 3							
SITE 4							
SITE 5							

29) OVERALL OIL IMPACT:

H = >6m band with $\geq 50\%$ oil coverageM = >6m band with $\leq 50\%$ oil coverage or $\geq 3m$ to $\leq 6m$ with $\geq 10\%$ oil coverageØ = <3m band with >10% oil coverageVL = $\leq 10\%$ oil coverage regardless of band width

N = No oil observed

30) OIL IN STREAMBED: Y N31) OIL ON BEACH ADJACENT TO MOUTH: Y N

32) SUBSTRATE TYPE (PERCENT):

Bedrock _____ Boulder _____ Gravel 10 Sand 5 Cobble 85 Mud/Silt _____35) COMMENTS: Site 1 is located at the confluence of the South Fork and Helen Creek proper.

It was not discovered last year because it was covered with sand, which was eroded away over the winter of 90-91. The oil cleaned at site 1 was SOR from the 1990 cleanup.

Brown Bear tracks observed

33) ANADROMOUS FISH PRESENT: Y N

34) WILDLIFE OBSERVATION

Species _____ Number _____

Brown Bear Tracks



1991 MAYSAP EVALUATION

SEGMENT: K1007PB016 SUB: A REGION: KOD SURVEY DATE: 5/19/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN 5/1 - 7/10; RESTRICTED 7/10 - 9/15

Ecological/Constraints (see page two for details) Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: _____ Date: _____

RECOMMENDATIONS:

INITIAL

TAG

FOSC

TREATMENT REQUIRED (Y or N)

N

Manual Pickup (Check as Req.)

Spot Washing

Bio-Customblen Only

Bio-Inipol/Customblen

Other

Other

COMMENTS:

INITIAL:

NTR - Agree STAG 5/30/91 KM

TAG: _____

FOSC: _____

TAG APPROVAL DATE: _____

FOSC APPROVAL DATE: _____

ADEC _____

FOSC _____

EXXON _____

USCG _____

NOAA _____

**ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES**

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

262-70-10010

ADEC

NAME J. BARNHART of ADFGSIGNATURE Jiff Barnhart

Nancy,

N is enough
for state
communities.☒ NTR ☐ Treatment Suggested

A few widely scattered SOR-TB's were located and removed along the bank of Helen Creek 262-70-10010. The oiled area along the stream that was cleaned SOR-TB's around and under cobble, in an area approx 12m x 5m. This was pick. The second area occurs at the confluence of the tributary stream and Helen Creek. This area is 10m long x 1m wide, SOR-TB's. This was not detected in 1990 because it was covered with sand. The VECO crew removed as much oil as possible.

EXXON

NAME R. HANDELSONSIGNATURE RC Handel

☒ NTR All readily accessible oiled material has been removed from this area. No further treatment is required.

LANDMANAGER

NAME J. HANDISTEROF USFWSSIGNATURE John P. Handister

☒ NTR Consistent with ADFG representative. The area along the meandering stream that I observed in 1990 had been cleaned and the residual SOR-TB's were removed during the current survey by the VECO crew. No further cleanup is recommended.

USCG/NOAA

NAME CWO SPURK / C. SHIGEMURASIGNATURE R. P. Spurr / C. Shigemura

☒ NTR SOR-TB's were removed by VECO workers during survey

SURVEYED PORTION OF THE SEGMENT CONSISTED OF A WIDE SAND BEACH BORDERED TO THE EAST BY ROCKY CLIFFS AND TO THE WEST BY AN ANAEROBIC STREAM. TO THE NORTH, ABOVE THE SUPRATIDAL REGION OF THE BEACH, WAS AN AREA OF SALT GRASS. DRIFTWOOD LOGS WERE ABUNDANT IN THE SUPRATIDAL ZONE. THE SAND BEACH APPEARED TO BE ACTIVELY SHIFTING, AND MATS OF BEACHED SEAWEED MATERIAL WERE NOTED IN THE UPPER MITE. ALTHOUGH SOME SOR WAS FOUND ALONG THE BEACH PROPER, MOST OF THE OILING OBSERVED OCCURRED ALONG THE BANKS OF THE STREAM TO THE WEST. MOUSSE WAS FOUND IN AND UNDER COBBLE ALONG THE EASTERN SHORE. SOME RESIDUE WAS ALSO FOUND IN THE SUPRATIDAL IN THE SALT FLATS. ON THE WEST SIDE OF THE STREAM, AN APPROXIMATELY 2x4m BANK WHERE SOR/TAR MATS WERE FOUND IN SANDY SUBSTRATE WAS DOCUMENTED. IN THE SUPRA-VEGETATION OF THE STREAM, STAIN WAS FOUND ON DRIFTWOOD LOGS. THE MOST SUBSTANTIAL OF THE RESIDUES FOUND WERE RECOVERED BY THE VECO CREW.

262-70-10010

ADEC

NAME J. BARNHART of ADFGSIGNATURE Jiff Barnhart☒ NTR ☐ Treatment Suggested

A few widely scattered SOR-TB's were located and removed along the beach north of the stream Helen Creek 262-70-10010. The oiled area along the stream that was cleaned in 1990 exhibited SOR-TB's around and under cobble, in an area approx 12m x 5m. This was picked up by the VECO crew. The second area occurs at the confluence of the tributary stream and Helen creek. The approx size is 10m long x 1m wide, SOR-TB's. This was not detected in 1990 because it was covered with sand. The VECO crew removed as much oil as possible.

EXXON

NAME R. HANDELSONSIGNATURE RC Handel

☒ NTR All readily accessible oiled material has been removed from this area. No further treatment is required.

LANDMANAGER

NAME J. HANDISTEROF USFWSSIGNATURE John P. Handister

☒ NTR Concur with ADFG representative. The area along the anadromous stream that I observed in 1990 had been cleaned and the residual SOR-TB's were removed during the current survey by the VECO crew. No further cleanup is recommended.

USCG/NOAA

NAME CWO SPURK / C. SHEGEMKASIGNATURE R. P. Spurr / Gary Shegemka

☒ NTR SOR-TB's were removed by VECO workers during survey

SURVEYED PORTION OF THE SEGMENT CONSISTED OF A WIDE SAND BEACH BORDERED TO THE EAST BY ROCKY CLIFFS AND TO THE WEST BY AN ANADROMOUS STREAM. TO THE NORTH, ABOVE THE SUPRA-TIDAL REGION OF THE BEACH, WAS AN AREA OF SALT GRASS. WHITWOOD LOGS WERE ABUNDANT IN THE SUPRA-TIDAL AREA. THE SAND BEACH APPEARED TO BE ACTIVELY SHIFTING, AND MATS OF BEACHED SEAWEED MATERIAL WERE RULED IN THE UPPER MITE. ALTHOUGH SOME SOR WAS FOUND ALONG THE BEACH PROPER, MOST OF THE OILINGS OBSERVED OCCURRED ALONG THE BANKS OF THE STREAM TO THE WEST. MOUSSE WAS FOUND IN AND UNDER COBBLE JAGGLES ON THE EASTERN SHORE. SOME RESIDUE WAS ALSO FOUND IN THE SUPRA-TIDAL IN THE SALT GRASS. ON THE WEST SIDE OF THE STREAM, AN APPROXIMATELY 2X4M BAND WHERE SOR/TB MATS WERE FOUND IN SANDY SUBSTRATE WAS DOCUMENTED. IN THE SUPRA-TIDAL OF THE STREAM, STAIN WAS FOUND ON WHITWOOD LOGS. THE MOST SUBSTANTIAL OF THE RESIDUES FOUND WERE RECOVERED BY THE VECO CREW.

TEAM NO. 6-Helo

OG D Fitzgerald

BIO H. DAVIS

SEGMENT K10-7-PB-16

ADEC J BARNHART

LANDMANAGER J HARDISTEK for USFWS

SUBDIVISION A

EXXON R HALL/SON

USCG/NOAA CWO SPILL / G. SHIGENAKA

DATE 19 / MAY / 91

TIME 10:00 to 11:00

TIDE LEVEL 47 ft. to 22 ft.

ENERGY LEVEL: ☐ H ☒ M ☐ L

SURVEYED FROM: ☒ FOOT ☐ BOAT ☐ HELO

WEATHER: ☒ SUN ☒ CLOUDS ☐ FOG ☐ RAIN ☐ SNOW

TOTAL LENGTH SHORELINE SURVEYED: 500 m

NEAR SHORE SHEEN: ☐ BR ☐ RB ☐ SL ☒ NONE

EST. OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 135 m NO 365 m US 0 m

[illegible]

DISTRIBUTION: C = 91-100%; B = 61-90%; P = 11-50%; S = 1-10%; T = <1%

SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE

PHOTO ROLL # MAYSAP-

6 - 17 FRAMES 1-6

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER							OILED ZONE cm-cm	CLEAN BELOW Y/N	H2O LEVEL (cm)	SHEEN COLOR B R S N	PIT ZONE				SURFACE-SUBSURFACE SEDIMENTS	NOTES
		OP	HOR	MOR	LOR	OF	TR	NO					S	UI	MI	LI		
1	25							X	-	15				X		Sand	Beachface	
2	25							X	-	15				X		Sand	"	
3	20							x	-	15				X		Sand	Side of Creek Chan	
4	20							X	-	15				X		Sand	Side of Creek Chan	
									-									
									-									
									-									
									-									
									-									

SHEEN COLOR: B - BROWN; R - RAINBOW; S - SILVER; N - NONE

OG COMMENTS: This segment is a sandy pocket beach between two rock headlands with an Anad. Stream # 262-70-10010 on the east side of Puale Bay. The oiling of this segment consists of 1) tarballs scattered along 100m length of beach on the southeast side of the creek, 2) a region of SDR/TB/CT around and under boulders & cobbles along the Anad. Stream Bank, 3) SDR/TB on a point bar at the juncture of two creeks, and some stained logs. The VECO workers removed all observed and accessible oil amounting to 1 1/2 bags.

REVIEWED: MC 5/23/91
REVIEWED: F.W. 5/29/91

- ↓ ↓ GRASSY AREA
- LOGS & Driftwood
- YYY BUSHES
- Boulders AND Cobble
- PHOTO Sites

Sketch MAP (OC)
K10-7-PB-16-A
D. FITZGERALD
19 MAY 1991
1000 - 1100

ALASKA PENINSULA

* VECO WORKERS RETRIEVED
ALL ACCESSIBLE AND OBSERVED
OIL IN THIS SEGMENT (2 BAGS
OF OILED SEGMENT).

C. SOR/TB
2 by 7m, < 1%
ON SAND BAR AT
JUNCTION OF 2 STREAMS

PU

PARTIAL

ANADU STREAM
262-70-10010

B. SOR/TB/CT
6 by 25m, < 1%
I/U AROUND B+C

PU

PARTIAL

A. ST
20 by 10m < 1%
STAINED
Driftwood

D. TB
10 x 100m < 1%
Widely SCATTERED
ALONG THE BEACH

PU

PARTIAL

SEAWEED LINE

DUNE SCARP

WRACK LINE - SEAWEED ACCUMULATION

MLW

MLW

0 50
METERS

Puale Bay

REVIEWED: E.W. 5/23/91
REVISOR: M.C. 5/13/91

- ↓ ↓ GRASSY AREA
- ≡≡ LOGS & DRIFTWOOD
- YYY BUSHES
- Boulders AND Cobbles
- Photo Sites

PHOTO SITES, K10-7-PB-16A
ROLL 6-17, FRAMES 1 THRU 6

Sketch MAP (OG)
K10-7-PB-16-A
D. FITZGERALD
19 MAY 1991
1000-1100

ALASKA PENINSULA

* VECO WORKERS RETRIEVED
ALL ACCESSIBLE AND OBSERVED
OIL IN THIS SEGMENT (2 BAGS
OF OILED SEGMENT).

C. SOR/TB
2 by 7m, < 1%
ON SAND, 30% AT
JUNCTION OF 2 STREAMS

ANADU STREAM
262-70-10010

B. SOR/TB/CT
6 by 25m, < 1%
I/U AROUND B+C

A. ST
10 by 20m, < 1%
STAINED
DRIFTWOOD

D. TB
10 x 100m < 1%
Widely SCATTERED
ALONG THE BEACH

SEAWEED LINE

DUNE SCARP

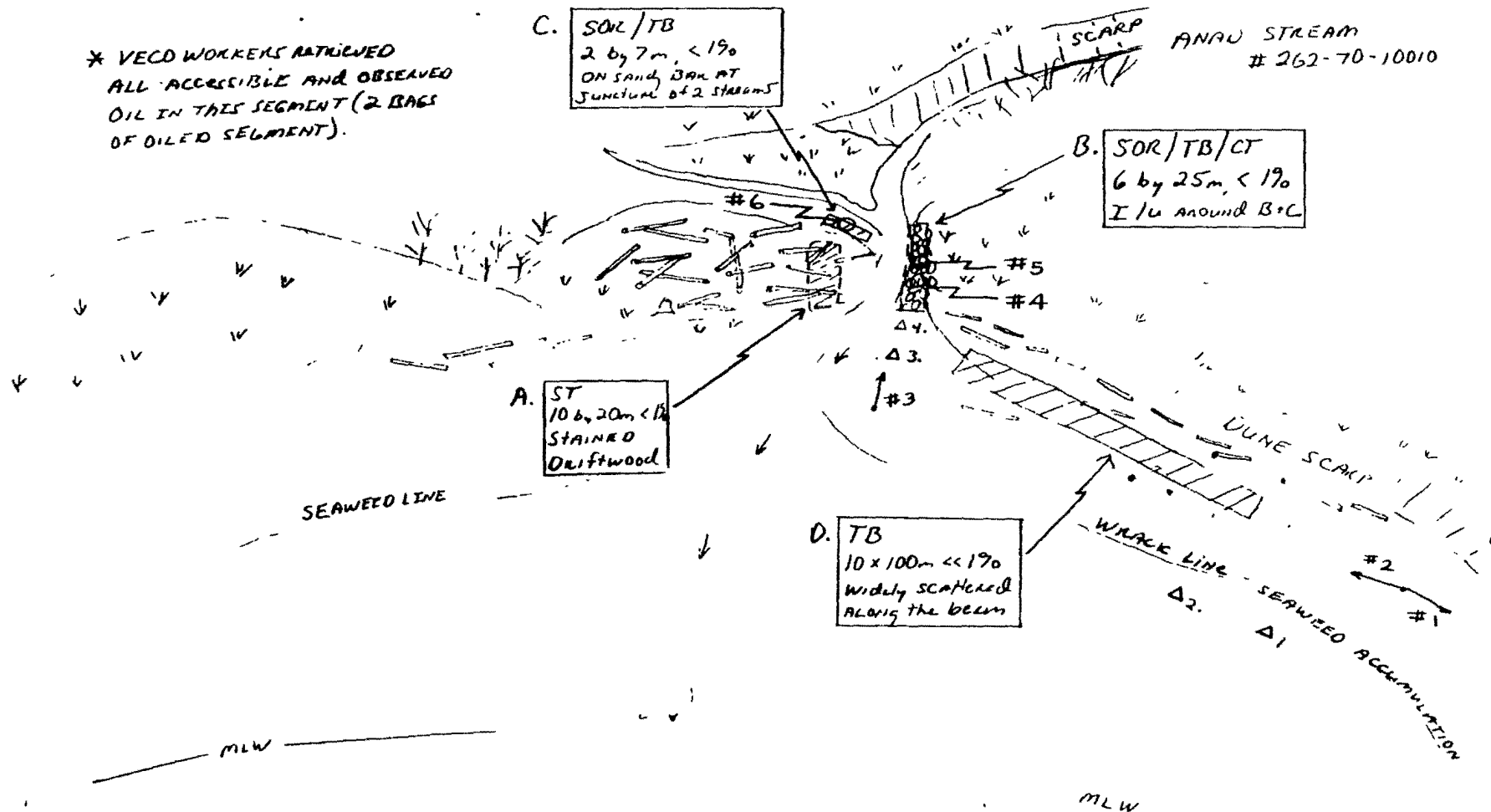
WRAKE LINE - SEAWEED ACCUMULATION

MLW

MLW

0 50
METERS

PuALE BAY



MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 6 Helo

DATE May 19 1991

SEGMENT # PB-16

TIDAL HEIGHT(Range) 4.7ft - 2.2ft (10⁰⁰ - 11⁰⁰)

SUBDIVISION A

BIOLOGIST H. Davis

SEA STATE 2 ft

WIND SPEED/DIRECTION 10-20 KT NW

PHOTOGRAPHS: ROLL # 6-17

FRAME # 1-6

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

The segment of Pinn Bay was a sandy beach with rocky cliffs at each end. There is an anadromous stream (#262-70-10010) near the center of the segment. On the western cliffs there was an eagle on a nest. Two adult eagles were soaring over the eastern end. The eagle on the nest stayed there during the survey.

A. This area in the SITZ is a debris swath with no live biota. Above and to the east it is bounded by the anadromous stream. There is a thick (2-4 ft) kelp wrack below Site A. Amphipods, enchytraeus (annelids) and kelp flies were making use of the wrack. Sparrows were on the kelp feeding. Willows, Dune grass (Elymus) are the dominate vegetation on the slopes above the beach.

B. This site had a few barnacles attached to the rocks. Above the area is a field of Dune grass (ammophila/Elymus?) Below this area is the stream. Pinks run up the stream.

D. This area was between the kelp wrack line and the logs piled against the Dune scarp. The kelp wrack is mostly Nereocystis, Laminaria, Fucus, Alaria and agarum. Common shells on the beach were saxidomus, siliqua and mytilus.

Scoter sp (10-20) Pipit (1) Cormorant (1)

Eagles (3) Kittiwake (5/10) Glaucous-winged Gull (5) Mew (2) Sparrows (Savannah) (3)

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS	# OF SPECIES	TOTAL BIRDS	FISH OBSERVED SPECIES PRESENT
Eagles	1	(1 on nest 12 soaring) (3)	0
Seabirds	1	1	
Waterfowl	1	10-20	
Gulls/Kittiwakes	3	17	
Shorebirds	1	1	
Corvids	0		
Other Birds sparrow	1	3	

LAND MAMMALS

MARINE MAMMALS	# OBSERVED	SPECIES	# OBSERVED
Sea Otters	0	Caribou	3 (on uplands)
Pinnipeds (specify)	0		
Whales (specify)	0		

Shoreline subdivision map showing important biological features attached.

Rev'd 5/13/91

- ↓ ↓ GRASSY AREA
- ≡ LOGS & DRIFTWOOD
- Y Y Y BUSHES
- ● ● BOULDERS AND COBBLES
- PHOTO SITES

BIO Map
H. Davis

Sketch MAP (OG)
K10-7-PB-16-A
D. Fitzgerald
19 MAY 1991
1000-1100

ALASKA PENINSULA

* VECO WORKERS RETRIEVED
ALL ACCESSIBLE AND OBSERVED
OIL IN THIS SEGMENT (2 BAGS
OF OILED SEDIMENT).

C. SOR/TB
2 by 7m, < 1%
ON SANDY BANK AT
JUNCTION OF 2 STREAMS

ANAD STREAM
262-70-10010

B. SOR/TB/CT
6 by 25m, < 1%
I/U AROUND B+C

Willows

Sandy Bank

Dune grasses

DUNE SCARP

WRACK LINE - SEAWEED ACCUMULATION

D. TB
10 x 100m < 1%
Widely scattered
ALONG the beach

A. ST
10 by 20m < 1%
STAINED
DRIFTWOOD

All four sites were above the kelp wrack line. The majority of the kelp in the wrack is *Nereocystis*, *Laminaria*, *Fucus*, *pilayella*, and *Ulva*. Amphipod, annelids and flies were in the kelp. Sparrows were feeding on the insects in the kelp. Common shells on the beach were *Saxidomus*, *Mytilus* and a few *S. ligna*. All four sites are not in direct contact with any shoreline biota but they are close to the anadromous stream

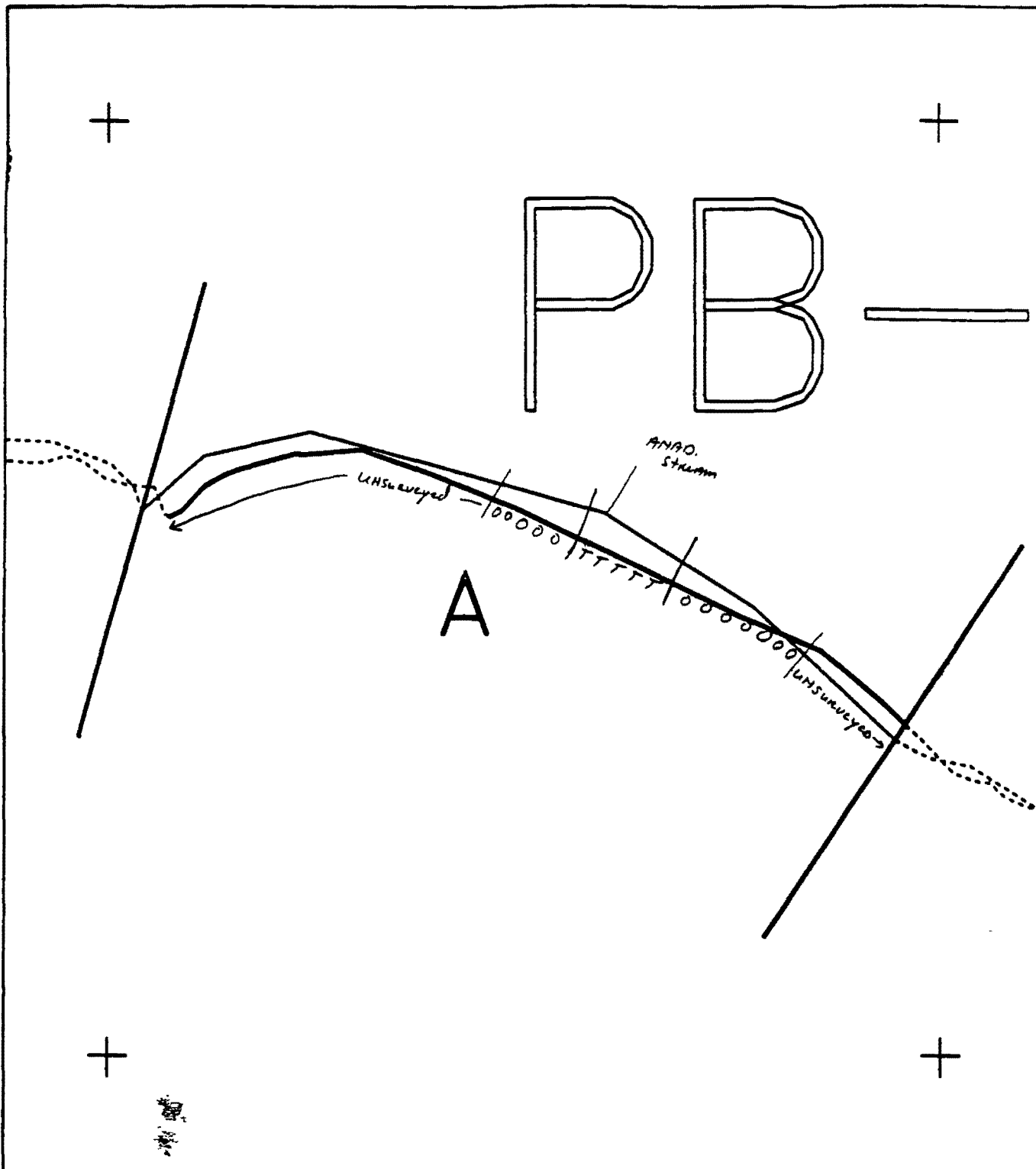
MLW

MLW

Puale Bay

10-20
scuders
Nereocystis beds

0 50
METERS



XXXX Wide
 //// Medium
 ---- Narrow
 TTTT Very Light
 0000 No Oil

K1007 PB016 A
 ADEC Subsegment Length: 1178m
 METERS

0 200 400

AK State Plane Zone 4
 81007pb016a- . . .



Subdivision Field Map

Map Key: 00AK1007PB016A

Name: D. F. FITZGERALD

Date: 19 MAY 1991

Date Entered:

REVIEWED: MC 5/15/91
 REVIEWED: F.W. 5/23/91

ADF&G MULTI-ASSESSMENT DATA FORM

Copy

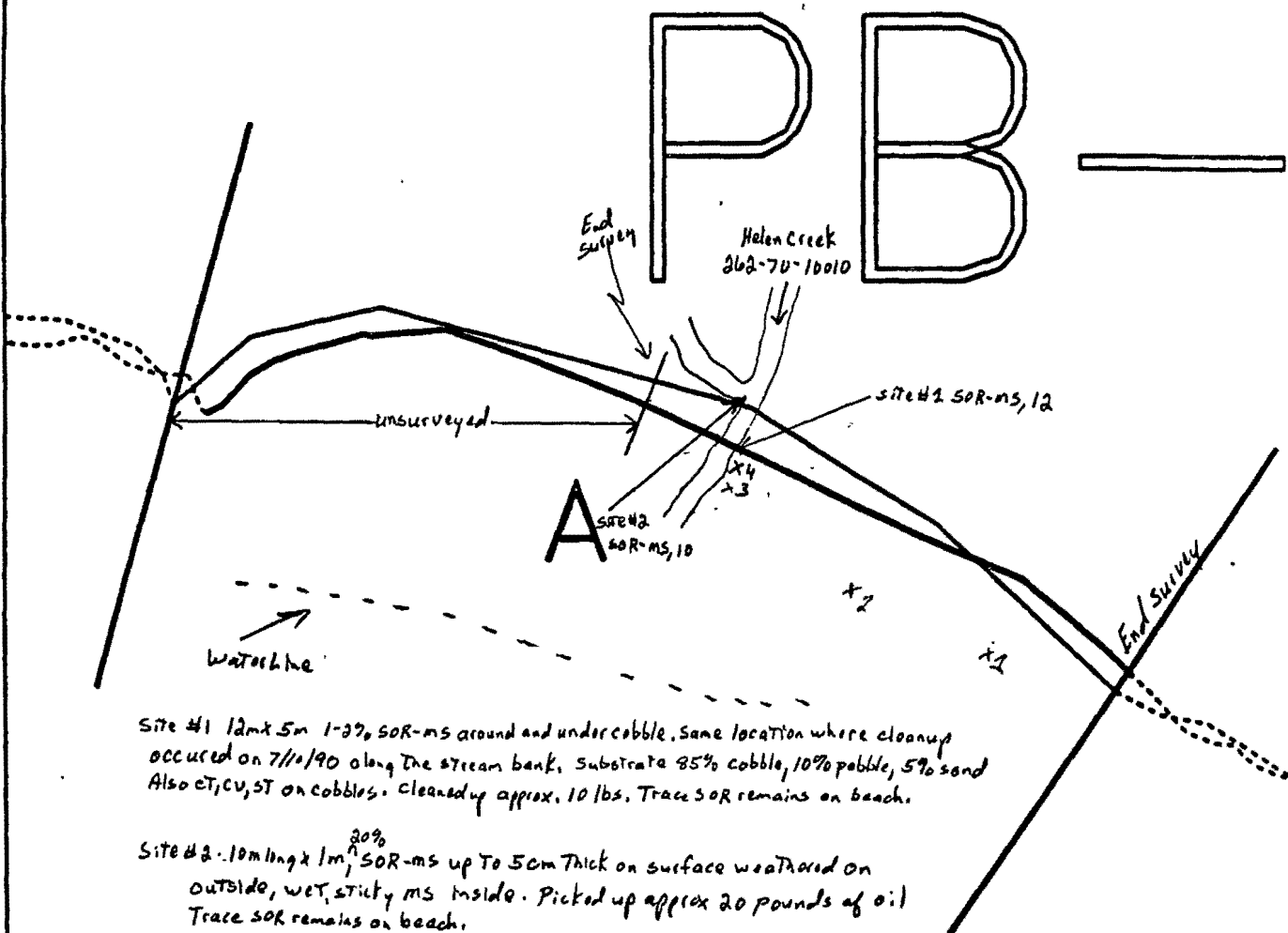
- 1) SURVEY TYPE: BS SS 2) REGION: PWS KP, CI K, AP
- 3) METHOD: Aerial Ground Boat
- 4) DATE: 5-19-91 16) HIGH TIDE TIME: 0653/2004 22) TEAM RECORDER: J. Barnhart
- 5) START TIME: 0950 17) HIGH TIDE HTS: 17.3/16.4 23) OBSERVERS: D. Spurr, R. Herdson, J. Hardin, and others.
- 6) STOP TIME: 1045 18) LOW TIDE TIMES: 051/1327 24) AGENCY: ADF&G, USCG, Exxon, USF&WS
- 7) SEGMENT #: PB-016 19) LOW TIDE HTS: 3.2/-1.4 25) PHOTOS TAKEN: Y N
- 8) K-UNIT: K10-07 20) TIDE HT AT SURVEY: _____ ROLL #: _____ FRAMES: _____
- 9) LAT: _____ Ebb Slack Flood Slack 26) VIDEO TAKEN: Y N
- 10) LONG: _____ 21) USCG QUAD: _____ TAPE #: _____
- 11) ASC #: 262-70-10010 START: _____ STOP: _____
- 12) STREAM NAME: Helen Creek 27) SAMPLES TAKEN? Y N
- 13) LOCATION: Puget Bay, Alaska Peninsula SAMPLE I.D. _____
- 14) WAVE EXPOSURE: High Moderate Low _____
- 15) SHORELINE TYPE: Headland Low-lying Rocks Beach _____
- Cove Lagoon Marsh _____

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>12</u>	<u>5</u>	<u>60</u>	<u>2</u>	<u>1.5</u>	<u>Ø</u>	<u>SOR-ms</u>
SITE 2	<u>10</u>	<u>1</u>	<u>10</u>	<u>20</u>	<u>5</u>	<u>Ø</u>	<u>SOR-ms</u>
SITE 3							
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT: 33) ANADROMOUS FISH PRESENT: Y N
- H = >6m band with ≥50% oil coverage
- M = >6m band with ≤50% oil coverage or ≥3m to ≤6m with ≥10% oil coverage
- Ø = <3m band with >10% oil coverage
- VL = ≤10% oil coverage regardless of band width
- N = No oil observed
- 30) OIL IN STREAMBED: Y N
- 31) OIL ON BEACH ADJACENT TO MOUTH: Y N
- 32) SUBSTRATE TYPE (PERCENT):
- Bedrock _____ Boulder _____ Gravel 10 Sand 5 Cobble 85 Mud/Silt _____
- 34) WILDLIFE OBSERVATION
- Species _____ Number _____
- Brown Bear Tracks

35) COMMENTS: Site 2 is located at the confluence of the South Fork and Helen Creek proper. It was not discovered last year because it was covered with sand, which was eroded away over the winter of 90-91. The oil cleaned at site 1 was SOR from the 1990 cleanup.



PIT NOTES.

- 1 30cm No oil
- 2 30cm No oil
- 3 30cm No oil
- 4 20cm No oil

XXXX Wide
 //// Medium
 ---- Narrow
 TTTT Very Light
 0000 No Oil

K1007 PB016 A
 ADEC Subsegment Length: 1178m
 2mm = 8 meters METERS
 0 200 400
 AK State Plane Zone 4
 1007pb016a- . . .

Subdivision Field Map
 Map Key: 00AK1007PB010A
 Memo: _____
 Date: _____
 Date Entered: _____



ADEC Comments Continued

Segment/Subdivision, Name, Date

DIRECTIONS FOR ADEC SUPPLEMENTAL COMMENT SHEET

- 1) Before going to the beach make an enlarged copy of the subdivision maps showing the Exxon and ADEC shoreline. Label this map with the following: "ADEC Comments Continued", subdivision, your name, and date.
- 2) While in the field, draw a line showing the water level in relation to the ADEC shoreline at the time of the survey. This line will only roughly parallel the ADEC shoreline and will always be seaward of the ADEC high-tide shoreline.
- 3) Place x's where pits were dug and number the pits as the OG does.
- 4) If the OG only numbers some of the pits and does not enter them on the OG sheet give the remaining pits a number, beginning with number 1, followed by an upper case "A."
- 5) On the map describe the oil in the unlogged pits and note any oiling classification controversies concerning the pits that were logged.
- 6) Place tick marks along the ADEC shoreline that separates the subsurface oiling types found in the inter and supratidal. Use three "tick groups" as follows:

Group 1: M (MOR), H (HOR), P (OP)

Group 2: T (TR), F (OF), L (LOR)

Group 3: N - None, indicates no oil observed

Group 4: ? - indicates no oil observed but you think the survey was inadequate.

Consider only the highest level of subsurface oil found in the inter and supra tidal zones along the beach. In other words, if you found HOR in the upper intertidal zone but MOR in the mid-intertidal zone along a stretch of beach the oiling category would be HOR.

The groups are only criteria used for making tick marks. Go ahead and list all the high-level oiling types observed between the ticks.

Use arrows for isolated areas of oiling groups that are too small to delineate with ticks. Note the alongshore length of the oiling type in meters. Arrows may appear within any type of "tick group."

The entire subdivision should be ticked-off.

*This does not go in with TAO forms. (Confidential)
Local Response reports - only in when phase is completed*

Pit Notes

1A - HOR 10-30cm

2A - HOR 10-40cm

→ 1 - had MOR not LOR

3A - None 30cm

P,5

L,F

N,10

H,P

N,H

Water Line

N

x3A

x7

x9

x8

x6

x5

x2A

x3

x4

x11

x1A

x2

x1

x12



Date: 5/19/91 No. 931

Title: PB016A K10-7





Segment No PB-16 Subdivision A
Date 5/19/91 Log Frame No 2
Photographer GARY SHIGENAKA
Location PUALE BAY K10-7
Comments VIEW FROM SAME LOCATION AS #1,
PIVOTED TO LOOK DOWN THE BEACH TO THE EAST -
NORTHEAST.

Roll No MAYSAP-6-17 Neg. No 1
Control No 931 (Office Use Only)



Segment No PB-16 Subdivision A
Date 5/19/91 Log Frame No 4
Photographer GARY SHIGENAKA
Location PUALE BAY K10-7
Comments WEATHERED MOUSSE UNDER BOULDERS
COBBLE AND SAND ON EASTERN BANK OF STREAM
AND NORTHWESTERN CORNER OF SURVEYED PORTION
OF THE BEACH.
Roll No MAYSAP-6-17 Neg. No 3
Control No 931 (Office Use Only)



Segment No PB-16 Subdivision A
Date 5/19/91 Log Frame No 1
Photographer GARY SHIGENAKA
Location FUALE BAY K10-7
Comments VIEW FROM EASTERN END OF SURVEYED
PORTION OF THE SEGMENT, TO THE WEST-SOUTHWEST
LOOKING TOWARD BEDROCK CLIFFS

Roll No MAYSAP-6-17 Neg. No 0
Control No 931 (Office Use Only)

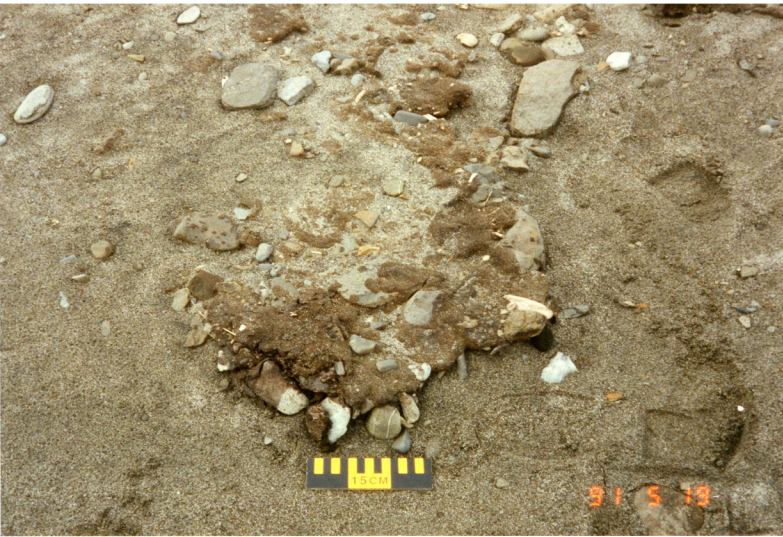


Segment No PB-16 Subdivision A
Date 5/19/91 Log Frame No 3
Photographer GARY SHIGENAKA
Location PUALE BAY K10-7
Comments VIEW AT ANADROMOUS STREAM AT WESTERN
END OF SURVEYED PORTION OF SEGMENT, FACING
UPSTREAM (NORTH) ON THE EASTERN BANK, SHOWING
PIT-DIGGING ACTIVITIES.

Roll No MAYSAP-6-17 Neg. No 2
Control No 931 (Office Use Only)

Date: 5/19/91 No. 931

Title: PB016A K10-7





91519

Segment No PB-16 Subdivision A

Roll No MAYSAP-6-17 Neg. No 5



Segment No PB-16 Subdivision A
Date 5/19/91 Log Frame No 5
Photographer GARY SHIGENAKA
Location PUALE BAY K10-7
Comments ANOTHER SHOT OF WEATHERED MOUSSE
UNDER COBBLE SUBSTRATE.

Roll No MAYSAP-6-17 Neg. No 4
Control No 931 (Office Use Only)

MAYSAP - Y
1991 MAYSAP EVALUATION

262-70-10010

SEGMENT: K1007PB016 SUB: A REGION: KOD SURVEY DATE: 5/19/91

ENVIRONMENTAL SENSITIVITIES:

Work Window(s) OPEN 5/1 - 7/10; RESTRICTED 7/10 - 9/15

Ecological/Constraints (see page two for details) Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: Timothy O Smith Date: 6/03/91

RECOMMENDATIONS:

INITIAL

TAG

FOSC

TREATMENT REQUIRED (Y or N)

N

N

N

Manual Pickup (Check as Req.)

Spot Washing

Bio-Customblen Only

Bio-Inipol/Customblen

Other

Other

COMMENTS:

INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: MAY 31 1991

FOSC APPROVAL DATE: 6/5/91

ADEC

FOSC

EXXON

E. E. PAGE, CDR, USCG
CHIEF OF STAFF, FOSC

USCG

NOAA



maysap - 4

2627010010

1991 STATE WORK ORDER
EXXON VALDEZ OIL SPILL PROJECT
STATE OF ALASKA

KODIAK REGION

SEGMENT: PB016

SUBDIVISION: A

SITE:

RECOMMENDED TREATMENT:

No treatment required at this time.

ENVIRONMENTAL SENSITIVITIES:

WORK WINDOW: -

CLEANUP PLAN AND COST ESTIMATE DUE:

DATE SUBMITTED: 05/30/91

STATE ON SCENE COORDINATOR:

[Signature] C. A. P. per

H:\SHORELIN\WORKORD:WORKORD:KODORD

ADF&G MULTI-ASSESSMENT DATA FORM

- 1) SURVEY TYPE: BS SS 2) REGION: PWS KP, CI K, AP
- 3) METHOD: Aerial Ground Boat
- 4) DATE: 5-19-91 16) HIGH TIDE TIME: 0653/2004 22) TEAM RECORDER: J. Barnhart
- 5) START TIME: 0950 17) HIGH TIDE HTS: 17.3/16.4 23) OBSERVERS: D. Spurr, R. Heroldson, J. Hardister and others.
- 6) STOP TIME: 1045 18) LOW TIDE TIMES: 051/1327 24) AGENCY: ADF&G, USCG, Exxon, USF&WS
- 7) SEGMENT #: PB-016 19) LOW TIDE HTS: 3.2/-1.4 25) PHOTOS TAKEN: Y N
- 8) K-UNIT: K10-07 20) TIDE HT AT SURVEY: _____ ROLL #: _____ FRAMES: _____
- 9) LAT: _____ Ebb Slack Flood Slack 26) VIDEO TAKEN: Y N
- 10) LONG: _____ 21) USCG QUAD: _____ TAPE #: _____
- 11) ASC #: 262-70-10010 START: _____ STOP: _____
- 12) STREAM NAME: Helen Creek 27) SAMPLES TAKEN? Y N
- 13) LOCATION: Puale Bay, Alaska Peninsula SAMPLE I.D. _____
- 14) WAVE EXPOSURE: High Moderate Low _____
- 15) SHORELINE TYPE: Headland Low-lying Rocks Beach _____
- Cove Lagoon Marsh _____

28) EXTENT OF OIL

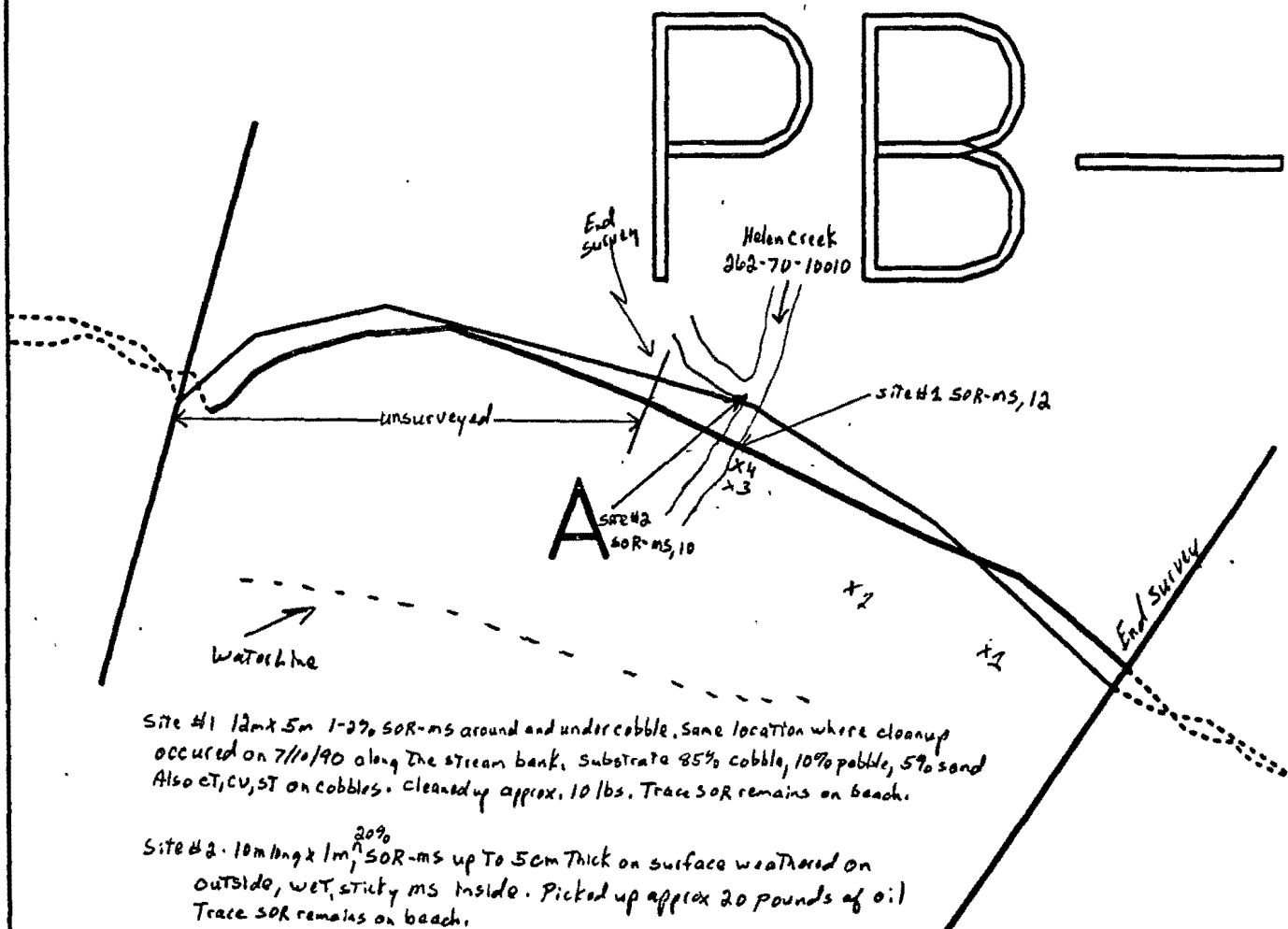
	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>12</u>	<u>5</u>	<u>60</u>	<u>2</u>	<u>1.5</u>	<u>Ø</u>	<u>SOR-ms</u>
SITE 2	<u>10</u>	<u>1</u>	<u>10</u>	<u>20</u>	<u>5</u>	<u>Ø</u>	<u>SOR-ms</u>
SITE 3							
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT: 33) ANADROMOUS FISH PRESENT: Y N
- H = >6m band with $\geq 50\%$ oil coverage
- M = >6m band with $\leq 50\%$ oil coverage or $\geq 3\text{m}$ to $\leq 6\text{m}$ with $\geq 10\%$ oil coverage
- Ø = <3m band with >10% oil coverage
- VL = $\leq 10\%$ oil coverage regardless of band width
- N = No oil observed
- 34) WILDLIFE OBSERVATION
- Species _____ Number _____
- Brown Bear Tracks
- _____
- _____
- _____

- 30) OIL IN STREAMBED: Y N
- 31) OIL ON BEACH ADJACENT TO MOUTH: Y N
- 32) SUBSTRATE TYPE (PERCENT):

Bedrock _____ Boulder _____ Gravel 10 Sand 5 Cobble 85 Mud/Silt _____

- 35) COMMENTS: Site 2 is located at the confluence of the South Fork and Helen Creek proper. It was not discovered last year because it was covered with sand, which was eroded away over the winter of 90-91. The oil cleaned at site 2 was SOR from the 1990 cleanup.
- _____
- _____
- _____



- P.T. Notes.
- 1 30cm No oil
 - 2 30cm No oil
 - 3 20cm No oil
 - 4 20cm No oil

XXXX Wide
 //// Medium
 ---- Narrow
 TTTT Very Light
 0000 No Oil

K1007 PB016 A
 ADEC Subsegment Length: 1178m
 4mm = 8 meters METERS
 0 200 400
 AK State Plane Zone 4
 1007pb016a

Subdivision Field Map
 Map Key: 60AK1007PB016A
 Name: _____
 Date: _____
 Date Entered: _____



AM NO. 6-Helo SEGMENT PB-16 SUBDIVISION A DATE 19 May 1991

ADEC

NAME J. BARNHART of ADFGSIGNATURE Jiff Barnhart☒ NTR ☐ Treatment Suggested

A few widely scattered SOR-TB's were located and removed along the beach north of the stream, Helen Creek 862-78-10010. The oiled area along the stream that was cleaned in 1990 exhibited 1-2% SOR-TB's around and under cobble, in an area approx 12m x 5m. This was picked up by the VECO crew. The second area occurs at the confluence of the tributary stream and Helen creek. The approx. size is 10m long x 1m wide, SOR-TB's. This was not detected in 1990 because it was covered with sand. The VECO crew removed as much oil as possible.

EXXON

NAME R. HARRISONSIGNATURE RC Harrison

☒ NTR All readily accessible oiled material has been removed from this area. No further treatment is required.

LANDMANAGER

NAME J. HARDISTEROF USFWSSIGNATURE John P. Hardister

☒ NTR Concur with ADEC representative. The area along the anadromous stream that I observed in 1990 had been cleaned and the residual SOR-TB's were removed during the current survey by the VECO crew. No further cleanup is recommended.

USCG/NOAA

NAME CWO SPURR / G. SHEGHEKASIGNATURE R.P. Spurr / Gary Shegheka

☒ NTR SOR-TB's were removed by VECO workers during survey

SURVEYED PORTION OF THE SEGMENT CONSISTED OF A WIDE SAND BEACH BORDERED TO THE EAST BY ROCKY CLIFFS AND TO THE WEST BY AN ANADROMOUS STREAM. TO THE NORTH, ABOVE THE SUPRATIDAL MARGIN OF THE BEACH, WAS AN AREA OF SALT GRASS. DRIFTWOOD LOGS WERE ABUNDANT IN THE SUPRATIDAL ZONE. THE SAND BEACH APPEARED TO BE ACTIVELY SHIFTING, AND MATS OF BEACHED SEAWEED MATERIAL WERE BURIED IN THE UPPER MIB. ALTHOUGH SOME SOR WAS FOUND ALONG THE BEACH PROPER, MOST OF THE OILING OBSERVED OCCURRED ALONG THE BANKS OF THE STREAM TO THE WEST. MOUSSE WAS FOUND IN AND UNDER COBBLE SUBSTRATE ON THE EASTERN SHORE. SOME RESIDUE WAS ALSO FOUND IN THE SUPRATIDAL IN THE SALT GRASS. ON THE WEST SIDE OF THE STREAM, AN APPROXIMATELY 2x4 m BAND WHERE SOR/TAR MATS WERE FOUND IN SANDY SUBSTRATE WAS DOCUMENTED. IN THE SUPRA WEST OF THE STREAM, STAIN WAS FOUND ON DRIFTWOOD LOGS. THE MOST SUBSTANTIAL OF THE RESIDUES FOUND WERE RECOVERED BY THE VECO CREW.

1991 STREAM FILE LOG HABITAT

STREAM CATALOG # : 262-70-10010
STREAM NAME : Helen Creek

LOCATION : Kodiak
SEGMENT : PB-16A

[illegible]

K10-7 PB-16 AFS 262-70-10010
1990 Helen Creek. Second Strm. Survey. Monitoring.

1990

ACE 1950787

ASC NUMBER: LOCATION: STREAM NAME: KODIAK K-UNIT: USGS QUADRANGLE: SHORELINE TYPE: *BEACH*

SEGMENT NUMBER: LOCAL STREAM #: LATITUDE: LONGITUDE: LEGAL: WAVE EXPOSURE: *M*

YR CATALOGED:

ASC NUMBER: *262-70-10010*
 SURVEY TYPE: *PA*
 METHOD: *F*
 DATE: *04/10/90*
 START TIME: *1107*
 STOP TIME: *1130*

TEAM RECORDER: *JEFFREY P. BARNHART*
 OBSERVERS: *J. PEELE*

AGENCY(IES): *ADFG, EXXON*

PHOTOS TAKEN? *N*
 Roll #: Frames:
 VIDEO TAKEN? *N* Tape Number: */*
 Counter Start: */*

SAMPLES TAKEN? *N*

SAMPLE I.D. NUMBERS: 1. 2. 3.
 4. 5. 6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1							<i>MS, AT</i>
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: *VL*

OIL IN STREAM CHANNEL? *Y*

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? *Y*

SUBSTRATE

Bedrock Granule
 Boulder Sand *90*
 Cobble Silt
 Pebble *10* Veget.

SPECIES					
COUNT					

COMMENTS: *Found two mouse ratties, 6 inch size on west side stream bank. Also located three 4 inch mouse ratties on beach west of stream mouth, surveyed 30 yds of west side stream bank and 50 yds of beach west of stream. No survey on east side stream bank or beach area. No subsurface observations made. Recommend AnasSAT.*

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMHS PTA2 REGION: PWS KP, CI K, APMETHOD: Aerial Ground Boat3 DATE: 4/15/9015 HIGH TIDE TIMES: 121 TEAM RECORDER: JEFF BARNHART4 START TIME: 110716 HIGH TIDE HTS: 122 OBSERVERS: John Pever5 STOP TIME: 113017 LOW TIDE TIMES: 1216 123 AGENCY: ADF&G / Exxon6 SEGMENT #: PB01618 LOW TIDE HTS: 1.4 124 PHOTOS TAKEN: Y N7 STATION #: 262-70-10010

19 TIDE HT AT SURVEY: _____

Roll #: _____ Frame: _____

8 K-UNIT: K10-07Ebb Slack Flood Slack25 VIDEO TAKEN: Y N TAPE#: _____9 STAT AREA: 262-7020 USCG QUAD: Karluk D-5

Start: _____ End: _____

10 LAT: 57°45'20" N11 LONG: 155°29'9" W26 SAMPLES TAKEN? Y N Number _____12 SOURCE: Map Loran Anadromous Fish Catalog

Oil _____

13 LOCATION: Helen Creek, Puale Bay

Sediment _____

14 DESCRIPTION: S 28S 38W22

Biological _____

EXTENT OF OIL

Water _____

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH SREAM? Y N37 CATALOG #: 262-70-1001038 STREAM NAME: Helen Creek39 OIL IN STREAM BED? Y N40 OIL ON STREAM BANKS? Y N

30 OVERALL OIL IMPACT: N VL L M H

41 OIL ON BEACH ADJACENT TO MOUTH? Y N
(within 50 meters)31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

42 OIL WITHIN 1 MILE OF STREAM? Y N

32 OILED DEBRIS? Y N

Where: _____

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh

43 ANADROMOUS FISH PRESENT? Y N

34 WAVE EXPOSURE: High Moderate Low44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble _____

Gravel 10% Sand 90% Mud/silt _____

Species	Aerial	Ground

COMMENTS: Found Two mousse patties, 6 inch sized on west side stream bank.
Also located Three, four inch mousse patties on beach west of stream
mouth. Surveyed 30 yards of west side stream bank and 50 yards of
beach west of stream. No survey on East side stream bank or beach
area. No subsurface observations made.

Recommend ANADSSAT Jeff Barnhart

ACE 1950728 →

45 PHOTOLOG

FRAME(S)	DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

= Sample taken
 = Photo frame # and
 shot direction.

ACE 1950729 -/5

90 ANAD88AT

ASC NUMBER:	SEGMENT NUMBER:	YR CATALOGED:
LOCATION:		
STREAM NAME:		LATITUDE:
KODIAK K-UNIT:	LOCAL STREAM #:	LONGITUDE:
USGS QUADRANGLE:		LEGAL:
SHORELINE TYPE: BEACH		WAVE EXPOSURE: HIGH

ASC NUMBER: 262-70-10010
SURVEY TYPE: AN
METHOD: F
DATE: 05/02/90
START TIME: 18:15
STOP TIME: 18:35

TEAM RECORDER: JEFFREY A. BARNHART
OBSERVERS: G. GARCIA, W. RIED, J. MAMAHON
M. FAWCETT.
AGENCY(IES): ADFG, EXXON, USCG, WWC
PHOTOS TAKEN? N
Roll #: Frames:
VIDEO TAKEN? N Tape Number:
Counter Start:

SAMPLES TAKEN? N
SAMPLE I.D. NUMBERS: 1. 2. 3.
4. 5. 6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1					Ø	Ø	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? Y

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? N

SUBSTRATE	
Bedrock	Granule
Boulder	Sand - 80
Cobble	Silt
Pebble - 20	Veget.

SPECIES	CARIBOU	RIVER			
		OTER			
COUNT	4	Tracks			

COMMENTS: FOUND ONLY 4 TB. NO CLEANUP
RECOMMENDED

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMHS PTA2 REGION: PWS KP,CI K, APMETHOD: Aerial Ground Boat3 DATE: 5/2/9015 HIGH TIDE TIMES: 8:52 AM / 10:16 PM21 TEAM RECORDER: JEFFREY BARNHARTCus Garcia / William Reiel4 START TIME: 1:15 PM16 HIGH TIDE HTS: 14.1 / 14.822 OBSERVERS: John Mc Mahon / Mike Fawcett5 STOP TIME: 1:35 PM17 LOW TIDE TIMES: 3:11 AM / 3:50 PM23 AGENCY: ADF&G / Exxon / USCG / WWC / WWC6 SEGMENT #: PB01618 LOW TIDE HTS: 5.4 / 1.924 PHOTOS TAKEN: Y N7 STATION #: 262-70-10010

19 TIDE HT AT SURVEY: _____

Roll #: _____ Frame: _____

8 K-UNIT: K10-07Ebb Slack Flood Slack25 VIDEO TAKEN: Y N TAPE#: _____9 STAT AREA: 262-7020 USCG QUAD: Karluk D-5

Start: _____ End: _____

10 LAT: 57° 45' 20" N11 LONG: 155° 29' 9" W26 SAMPLES TAKEN? Y N Number12 SOURCE: Map Loran Anadissat

Oil _____

13 LOCATION: Helen Creek, Puget Bay

Sediment _____

14 DESCRIPTION: S 285 38 W 22

Biological _____

Water _____

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION	<u>φ</u>							

36 CATALOGED ANAD. FISH SREAM? Y N37 CATALOG #: 262-70-1001038 STREAM NAME: Helen Creek39 OIL IN STREAM BED? Y N40 OIL ON STREAM BANKS? Y N30 OVERALL OIL IMPACT: N VL L M H41 OIL ON BEACH ADJACENT TO MOUTH? Y N
(within 50 meters)31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain42 OIL WITHIN 1 MILE OF STREAM? Y N32 OILED DEBRIS? Y N

Where: _____

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh43 ANADROMOUS FISH PRESENT? Y N34 WAVE EXPOSURE: High Beach Moderate Low Stream44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble _____
Gravel 20 Sand 80 Mud/silt _____

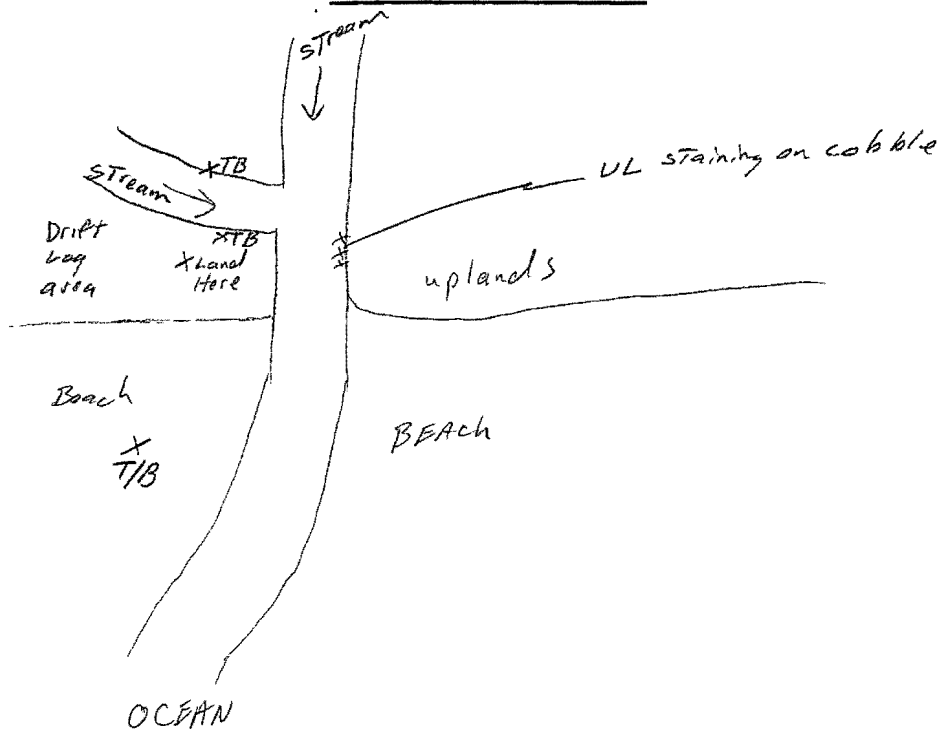
Species	Aerial	Ground

COMMENTS: Found only 4 T/B's. No cleanup recommended.

ACE 1950731

FRAME(S)

DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM

= Sample taken
 = Photo frame # and
 shot direction.

ACE 1950732

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

STEVE COWPER, GOVERNOR

Rapifax 349-1723

333 RASPBERRY ROAD
ANCHORAGE, ALASKA 99518-1599
PHONE: (907) 344-0541

RAPIFAX TRANSMITTAL SHEET

TO: Ken Middleton

DATE: 5/7/90

No. Pages: 10
(including this page)

FROM: _____

MESSAGE: Helen creek, Puale Bay, Alaska Peninsula
segment PB016
262-70-10010

ACE 1950733 +/s

10/38

OPERATIONS FIELD NOTES

See Back for Instructions

SEGMENT ID ANAD PB-016
 STREAM ID # 262-70-10010
 ANNOTATED MAP INCLUDED Y/N

DATE 5-2-90
 NAME GARCIA
 TEAM # 15

SURFACE OIL	Quantities in Meters			Treatment Recommendation						
	Length	Width	Area	None	Bioremediation		Tilling		Spot Hot Water	
					Y/N	% Treat	Y/N	% Treat	Y/N	% Treat
Wide Band										
Medium Band										
Narrow Band										
Very Light										
TOTAL MANDAYS						0		0		0

SUBSURFACE OIL - NONE

Other (Describe)?	

TARMATS	Quantities in Meters			Treatment Rec			# of Bags	Mandays Required	
	Length	Width	Thick(cm)	None	Breakup	Remove		Breakup	Remove
Area #1									
Area #2									
Area #3									
Area #4									
Sporadic Mats									

MANUAL PICKUP	Type of Debris			In Meters		# of Bags	Pickup Y/N	Manday Estimate
	Mousse Tarballs	Oiled Veget	Cleanup Debris	Length	Width			
"Pocket" #1								
"Pocket" #2								
"Pocket" #3								
Random/Continuous								

OILED LOGS <u>Y/N</u>	OILING <u>H/M/L</u>	QUANTITY <u>L/M/S</u>	BURN <u>Y/N</u>
-----------------------	---------------------	-----------------------	-----------------

Is there Other Debris on the Beach? Y/N How Many Bags? — Is it mingled with the Oiled Debris Y/N

GENERAL

Snow covering 0 % of the Supratidal Zone?

Wave Exposure H/M/L

Access Limitations: NONE

Snare Boom/Pom Poms Recommended? NO

Would the production Craft have to be relocated to complete work on this subdivision? Y/N # of Times —

COMMENTS:

NO TREATMENT RECOMMENDED ON THIS STREAM.

ACE 1950734

11/38 #2

FIELD SHORELINE COMMENT SHEET

RB 16
~~11/20~~

SEGMENT ST / ~~11/20~~ SUBDIVISION: _____ DATE _____

USCG NAME CWO MCMASTON SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

ADFG

ADEC NAME JEFFREY BARNHART SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

Very little oil located in this anadromous fish stream.
The four T/B's located do not justify a cleanup.

LAND MANAGER

NAME _____ SIGNATURE _____

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

ACE 1950735

12/38

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS (SS) DS TS AVS SCHA MMS PTA

2 REGION: PWS KP, CI K, (AP)

METHOD: Aerial (Ground) Boat

3 DATE: 5/3/90

15 HIGH TIDE TIMES: 8:52 AM / 10:16 PM

21 TEAM RECORDER: JEFFREY BARNHART

4 START TIME: 1:15 PM

16 HIGH TIDE HTS: 14.1 / 14.8

22 OBSERVERS: Chris Garcia, William Reid

5 STOP TIME: 1:35 PM

17 LOW TIDE TIMES: 3:11 AM / 3:50 PM

23 AGENCY: ADF&G/Environ/USCG/WWC/WR

6 SEGMENT #: PB016

18 LOW TIDE HTS: 5.4 / 1.9

24 PHOTOS TAKEN: Y (N)

7 STATION #: 262-70-10010

19 TIDE HT AT SURVEY: _____

Roll #: _____ Frame: _____

8 K-UNIT: K10-07

(Ebb) Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPE #: _____

9 STAT AREA: 262-70

20 USCG QUAD: Karluk D-5

Start: _____ End: _____

10 LAT: 57° 45' 26" N

11 LONG: 155° 29' 9" W

26 SAMPLES TAKEN? Y (N) Number _____

12 SOURCE: Map Loran AnadLat

Oil _____

13 LOCATION: Helen Creek, Puget Bay

Sediment _____

14 DESCRIPTION: 5285 38W22

Biological _____

Water _____

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH STREAM? (Y) N

37 CATALOG #: 262-70-10010

38 STREAM NAME: Helen Creek

39 OIL IN STREAM BED? Y (N)

40 OIL ON STREAM BANKS? (Y) N

41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: _____

30 OVERALL OIL IMPACT: N (L) L M H

31 OIL TYPE: Pooled Mousse (Tar) Asphalt Sticky Stain

32 OILED DEBRIS? Y (N)

33 SHORELINE TYPE: Headland Low-lying Rocks (Beach) Cove
Lagoon Marsh

34 WAVE EXPOSURE: (High) Beach Moderate (Low) Stream

35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble _____
Gravel 20 Sand 80 Mud/silt _____

44 ANADROMOUS FISH OBSERVATION

Species Aerial Ground

COMMENTS: Found only 4 T/B's. No cleanup recommended.

Jeff Barnhart

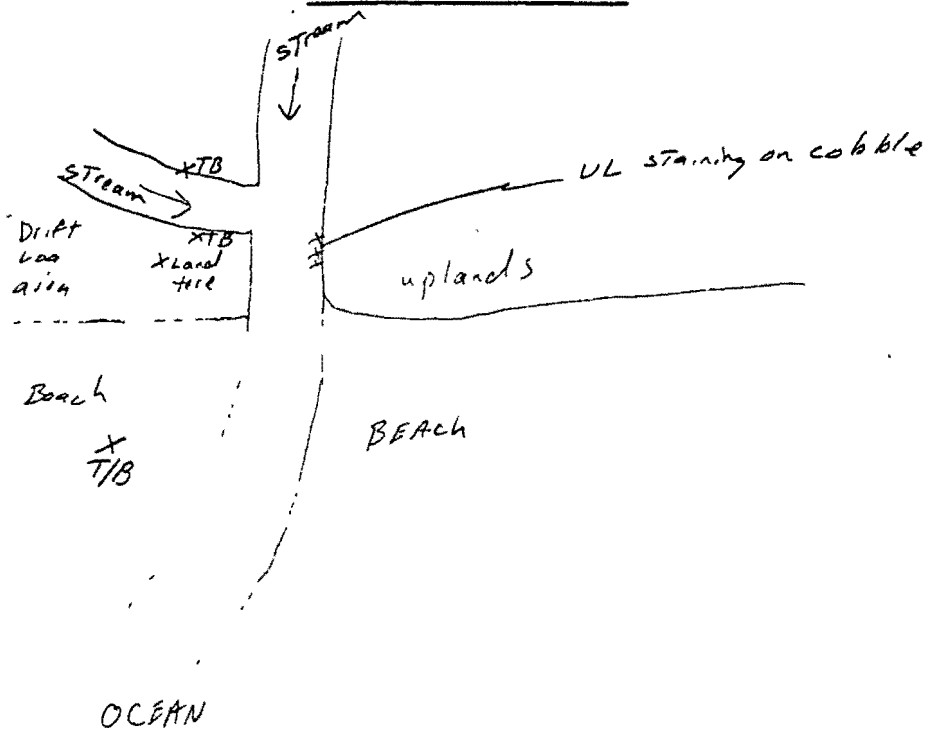
I agree with recommendation. M. H. Farwell

ACE 1950736

FRAME(S)

DESCRIPTION

48 OIL DISTRIBUTION DIAGRAM



Sample taken
Photo frame # and
shot direction.

ACE 1950737

OG WILLIAM LEID USCG McMAHON SEGMENT ST/ PB016
 BIO MICHAEL FAWCETT LAND REP STREAM 262-70-10000 (OF)
 EXXON CUS GARCIA ADFG MADE WEDDER JEFF BEANHART TIME 13:05 to 13:05
 TEAM NO. 15 TIDE LEVEL 4 FT DATE 2 / MAY / 1990
 EST. SUBDIVISION LENGTH: 80 m ☐ Sun ☐ Clouds ☐ Fog ☒ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 10 % B 20 % C 70 % P 0 % G 0 % S 0 % M 0 % V 0 %
 SLOPE: Lang 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☒ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 20 m VL 20 m NO 40 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	C	B	P	S	BR	BL	FW	GY	SL	DR	TL	LR	SU	U	M	L
ASPHALT																
PAVEMENT																
POOLED																
COVER																
COAT																
STAIN																
MOUSSE																
PATTIES																
TARBALLS																
FILM																
NO OIL																

PAVEMENT H F S 0 sq. m by 0 m

PATTIES / TARBALLS 0 BAGS

NEAR SHORE SHEEN? ☒ NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

Did you collect DEBRIS
☐ YES ☒ NO

TYPE 0

#BAGS 0

Photographs:

Roll No. 45-15-8

Frames 4-7

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CL)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SHEEN (Y/N)	! DEPTH	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UD	UC	BR	BL	FW	GY	SL	DR	TL	LR	SU	U	M	L				
1	40					X	.										X						X	35	S/C
2	35					X	.										X						N	30	S/G
							.																		
							.																		
							.																		
							.																		
							.																		
							.																		

COMMENTS

REVIEWED 0 DATE 0

ACE 1950738

Film AS-15-8

OG WILLIAM REID

SKETCH MAP

12/18/88 SEGMENT ST/ PBO16

STREAM 262-70-10010

DATE 2/1/MAR 90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HWL/LWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pit Location(s)
- ☐ Photo Location(s)

LEGEND

1 ▲

Pit - No Subsurface Oil

2 ▲

Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

eee

Oiled Vegetation

1 ➡

Photo location, direction, and number

Oil Character Length (m): AP PO CV CT ST MS PT TB FL NO

ACE 1950739

REVISION: 03/24/90

16/38

Segment PB016

Helen Creek

Stream 262-70-10010

Ecological Summary

5/2/90

Michael Fawcett

This medium-large stream has a dynamic intertidal delta composed mostly of sand channels and berms, with some cobbles and boulders, in a high energy wave environment. As a consequence of the beach instability, there is no attached intertidal macro-biota. No oil was found except for some very light stains on some cobble, and 3 or 4 tar balls. Cleanup is not recommended. Four caribou were seen crossing the delta when we arrived. River otter tracks were seen along the stream banks.

M H Fawcett

ACE 1950740

17/38

SSAT DATA ENTRY FORM

PAGE 1 OF 2

GENERAL DATA

262-70
SEG ID: PB016 SUBDIV: 10010 TEAM: AS-15 SURVEY DATE: 5/2/90
PAVEMENT: CHAR — AREA 0 THICKNESS 0 TARBALLS 0
OILED: LGS — VEG — TRH — DBR — WAVE EXP: LW X MD — HG —
FAX RCVD: — DT: — AGENCY DISAGREE: —
EST SUBDIV LGTH: 80 OIL CATEGORY: W 0 M 0 N 20 VL 20 NO 40 U 0

SURFACE DATA

SURFACE SEDIMENT: BRK 0 BLD 0 COB 10 PEB 0 GRN 20 SAN 70 MUD 0 VEG 0

CHAR #: 1 OIL CHAR: ST OIL DIST: CONT — BRKN — PTCH — SPLH X
OIL CLR: GY FILM CLR: — TIDAL ZONE: SU — UI X MI — LI —

CHAR #: 2 OIL CHAR: TB OIL DIST: CONT — BRKN — PTCH X SPLH —
OIL CLR: DBR FILM CLR: — TIDAL ZONE: SU — UI X MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

SSAT DATA ENTRY FORM

SUBSURFACE DATA

PAGE 2 OF 2

SEGMENT ID: PB016 SUBDIV: 262-70-10010

PIT # 1 PIT DEPTH 40 OIL CHARACTER - OIL INTVAL: FROM 0 TO 0
QUANT: - OIL CLR: - FLM CLR: - ZONE: SU - UI X MI - LI -
SUBSURF SEDIMENT: BRK - BLD - COB X PEB - GRN - SAN X MUD - VEG -

PIT # 2 PIT DEPTH 35 OIL CHARACTER - OIL INTVAL: FROM 0 TO 0
QUANT: - OIL CLR: - FLM CLR: - ZONE: SU - UI X MI - LI -
SUBSURF SEDIMENT: BRK - BLD - COB - PEB - GRN X SAN X MUD - VEG -

PIT # _____ PIT DEPTH _____ OIL CHARACTER _____ OIL INTVAL: FROM _____ TO _____
 QUANT: _____ OIL CLR: _____ FLM CLR: _____ ZONE: SU _____ UI _____ MI _____ LI _____
 SUBSURF SEDIMENT: BRK _____ BLD _____ COB _____ PEB _____ GRN _____ SAN _____ MUD _____ VEG _____

PIT # PIT DEPTH OIL CHARACTER OIL INTVAL: FROM TO
QUANT: OIL CLR: FLM CLR: ZONE: SU UI MI LI
SUBSURF SEDIMENT: BRK BLD COB PEB GRN SAN MUD VEG

PIT # PIT DEPTH OIL CHARACTER OIL INTVAL: FROM TO
QUANT: OIL CLR: FLM CLR: ZONE: SU UI MI LI
SUBSURF SEDIMENT: BRK BLD COB PEB GRN SAN MUD VEG

PIT # _____ PIT DEPTH _____ OIL CHARACTER _____ OIL INTVAL: FROM _____ TO _____
 QUANT: _____ OIL CLR: _____ FLM CLR: _____ ZONE: SU _____ UI _____ MI _____ LI _____
 SUBSURF SEDIMENT: BRK _____ BLD _____ COB _____ PEB _____ GRN _____ SAN _____ MUD _____ VEG _____

PIT # _____ PIT DEPTH _____ OIL CHARACTER _____ OIL INTVAL: FROM _____ TO _____
QUANT: _____ OIL CLR: _____ FLM CLR: _____ ZONE: SU _____ UI _____ MI _____ LI _____
SUBSURF SEDIMENT: BRK BLD COB PEB GRN SAN MUD VEG

PIT # PIT DEPTH OIL CHARACTER OIL INTVAL: FROM TO
QUANT: OIL CLR: FLM CLR: ZONE: SU UI MI LI
SUBSURF SEDIMENT: BRK BLD COB PEB GRN SAN MUD VEG

PROBLEMS:

ACE 1950742-1S/SG

ANADROMOUS FISH STREAM EVALUATION ✓SEGMENT ST/K10-07-PB-016 STREAM NO: 262-70-10010 DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: Lucille Jean Ose DATE: 5/22/90Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

X No Treatment Recommended Treatment Recommended Manual Pickup Bioremediation Tarmat Removal Snare/Absorbent Booms Oil Snares (pom poms) Absorbents (pads, rolls, etc) Spot Washing: Wands Beach Cleaner Other (see comments)COMMENTS:

 TAG COMMENTS:

 TAG APPROVAL DATE: 5/18/90ADEC Art Wenger Art WengerEXXON Andy Tsch Andy TschNOAA Gary Patcoe Gary PatcoeUSCG G.A. Reiter G.A. ReiterFOSC DATE: MAY 27 1990

ACE 1950758+18

OG WILLIAM REID

SKETCH MAP

12/30 SEGMENT ST/ 83/16

STREAM 262-70-1000

DATE 2/1/89 90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ Oil Dist
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HW/LA/WL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ

PH - No Subsurface Oil

2 Δ

PH - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

lll

Oiled Vegetation

1 ●

Photo location, direction, and number

ACE 1950759 -/S/P

Oil Character Length (m): AP PO CV CT ST MS PT TB FL NO

NEWSON-03/24/01

POST PANAS SAT SURVEY

In season survey

ASC NUMBER:	SEGMENT NUMBER: PB-016	YR CATALOGED:
LOCATION:		
STREAM NAME:		LATITUDE:
KODIAK K-UNIT:	LOCAL STREAM #:	LONGITUDE:
USGS QUADRANGLE:		LEGAL:
SHORELINE TYPE: BEACH		WAVE EXPOSURE: HIGH

ASC NUMBER: 262-70-10010
 SURVEY TYPE: 55
 METHOD: F
 DATE: 06/29/90
 START TIME: 1140
 STOP TIME: 1250

TEAM RECORDER: JEFFREY P. BARNHART
 OBSERVERS: A. SMITH, W. JANICEK, J. CARLSON
 A. ELIASON, Dick Munoz, Tony Martin
 AGENCY(IES): ANS, USCG, NOAA, ADEC,
 NPS, USFWS
 PHOTOS TAKEN? Y
 Roll #: 90JPB003K Frames: 22-27
 VIDEO TAKEN? N Tape Number: _____
 Counter Start: _____

SAMPLES TAKEN? Y
 SAMPLE I.D. NUMBERS: 1. 90JPB003K 2. 3.
 4. 5. 6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
* SITE 1	20 m	3 m	60 m	60	22 cm	15 cm	MS, OP PO, OL
SITE 2	105 m	5 m	525	1		1 cm	TB
SITE 3	100 m	6 m	600 m	17		1 cm	TB, AT
SITE 4	48 m	4 m	192 m	1		1 cm	TB, AT
SITE 5							

OVERALL OIL IMPACT: H

OIL IN STREAM CHANNEL? Y

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? Y

SUBSTRATE	
Bedrock	Granule
Boulder	Sand 80
Cobble 5	Silt
Pebble 15	Veget.

SPECIES					
COUNT					

ACE 1950743 + 1/5/96

* SITE 1: Thickness represents: The 7cm on the surface extending another 15cm into the substrate for a total of 22cm.

COMMENTS: INTERAGENCY INSPECTION OF OIL IN STREAM AS REPORTED
 BY USFWS. TIME CONSTRAINTS PERMITTED ONLY A PARTIAL
 SURVEY. OIL IN AND AROUND THE STREAM AND BEACH WAS
 UNCOVERED BY STORM ACTION SINCE MAY 2, 1990 ANASAT.
 IT IS LOCATED IN THE MIA BANK AREA OF THE STREAM
 AND EXTENDS TO THE STREAM BED. 20 M X 3 M MS/B, PO/B
 WITH 60 % SURFACE COVERAGE. AVERAGE THICKNESS 5-8 CM.
 SUBSURFACE MOUSSE PRESENT TO A MINIMUM DEPTH OF 15 CM,
 OP/UC, OL/UC. TEST PITS DUG AT EDGE OF STREAM BED
 REVEAL MOUSSE/SHEENING. TB AND AT/B OCCUR IN U1T2
 FROM STREAM MOUTH NORTH ALONG BEACH <1% TO 30% →

1022 0411.99 120.1
1312:12 1982 0411.99 120.1

(cont)

COVERAGE. COMPLETE SURVEY NEEDS TO BE DONE AT
TIME OF TREATMENT.

ACE 1950744

Second Stream survey,
after oil discovered by
USF&WS. Due To Time
Constraints The survey
is not as complete as
it could be.

1 SURVEY TYPE: BS SS DS TS AVS

METHOD: Aerial Ground

3 DATE: 6/29/90 154 START TIME: 1140 hours 165 STOP TIME: 1250 hours 176 SEGMENT #: PB-016 18

7 STATION #: 19

8 K-UNIT: K10-079 STAT AREA: 262-70 2010 LAT: 57°45'20"N 11LONG: 155°29'9"W12 SOURCE: Map Loran Anadocat13 LOCATION: Helen Creek, Puget Bay14 DESCRIPTION: S 285 38 W 22

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								

28 SURFACE THICKNESS								
----------------------	--	--	--	--	--	--	--	--

29 PENETRATION								
----------------	--	--	--	--	--	--	--	--

30 OVERALL OIL IMPACT: N VL L M H31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain32 OILED DEBRIS? Y N33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh34 WAVE EXPOSURE: High Moderate Low35 SUBSTRATE TYPE: Bedrock Boulder Cobble 5Gravel 15 Sand 80 Mud/silt

KP, CI

K APRECORDER: JEFF BARNHART ADF&G
CDR Archie Smith, Walt JanicekRVERS: Julie Carlson, Alan EliasonDick Munoz, Tony MartinCY: USCG/NOAA/DEC/NPS/USF&WS/USCGOS TAKEN: Y N90-JPB-002K#: 22, 23, 24, 25, 26, 2725 VIDEO TAKEN: Y N TAPE#:

Start: End:

26 SAMPLES TAKEN? Y N NumberOil 90-JPB003K

Sediment

Biological

Water

36 CATALOGED ANAD. FISH STREAM? Y N37 CATALOG #: 262-70-1001038 STREAM NAME: Helen Creek39 OIL IN STREAM BED? Y N40 OIL ON STREAM BANKS? Y N41 OIL ON BEACH ADJACENT TO MOUTH? Y N
(within 50 meters)

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where:

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species Aerial Ground

ACE 1950761

COMMENTS: Interagency inspection of oil in stream as reported by USF&WS. Time constraintsPermitted only a partial survey. Oil in and around the stream and beach was uncovered by stormaction since May 2, 1990 Anadocat. It is located in the mid bank area and extends to thestream bed. 20m x 3m MS/B, PO/B 60% surface coverage, Avg thickness 5-8 cm. Subsurfacemousse present, To a minimum depth of 15 cm. OP/UC, PL/UC. Test pits dug at edge of streambed reveal mousse/sheening. TB and PT/B occur in UFTZ from stream mouthNorth along Beach 41% to 30% coverage. Complete survey needs to be done at time of treatment.

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS (SS) DS TS AVS SCHA MMHS PTA 2 REGION: PWS KP, CI KAP

METHOD: Aerial Ground Boat

3 DATE: 6/29/90 15 HIGH TIDE TIMES: 0805 1 2034 21 TEAM RECORDER: JEFF BARNHART ADF&G
CPR Archie Smith, Walt Janicek

4 START TIME: 1140 hours 16 HIGH TIDE HTS: 14.2 1 16.1 22 OBSERVERS: Julie Carlson, Alan Eliason
Pick Munoz, Tony Martin

5 STOP TIME: 1250 hours 17 LOW TIDE TIMES: 0204 1 1407 23 AGENCY: USCG/NOAA/DEL/NPS/USFWS/USCG

6 SEGMENT #: PB-016 18 LOW TIDE HTS: 3.2 1 2.6 24 PHOTOS TAKEN: (Y) N
90-5PB-coak

7 STATION #: 19 TIDE HT AT SURVEY: Roll #: 22, 23, 24, 25, 26, 27

8 K-UNIT: K10-07 (Ebb) Slack Flood Slack 25 VIDEO TAKEN: Y (N) TAPE#: 90-5PB-003K
Start: End:

9 STAT AREA: 262-70 20 USCG QUAD: Karluk D-5

10 LAT: 57° 45' 20" N 11 LONG: 155° 24' 9" W 26 SAMPLES TAKEN? (Y) N Number

12 SOURCE: Map Loran Anadcat Oil 90-5PB003K

13 LOCATION: Helen Creek, Puale Bay Sediment

14 DESCRIPTION: S 28 S 38 W 22 Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M (H)

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y (N)

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock Boulder Cobble 5
Gravel 15 Sand 80 Mud/silt

36 CATALOGED ANAD. FISH SREAM? (Y) N

37 CATALOG #: 262-70-10010

38 STREAM NAME: Helen Creek

39 OIL IN STREAM BED? (Y) N

40 OIL ON STREAM BANKS? (Y) N

41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where:

43 ANADROMOUS FISH PRESENT? Y (N)

44 ANADROMOUS FISH OBSERVATION

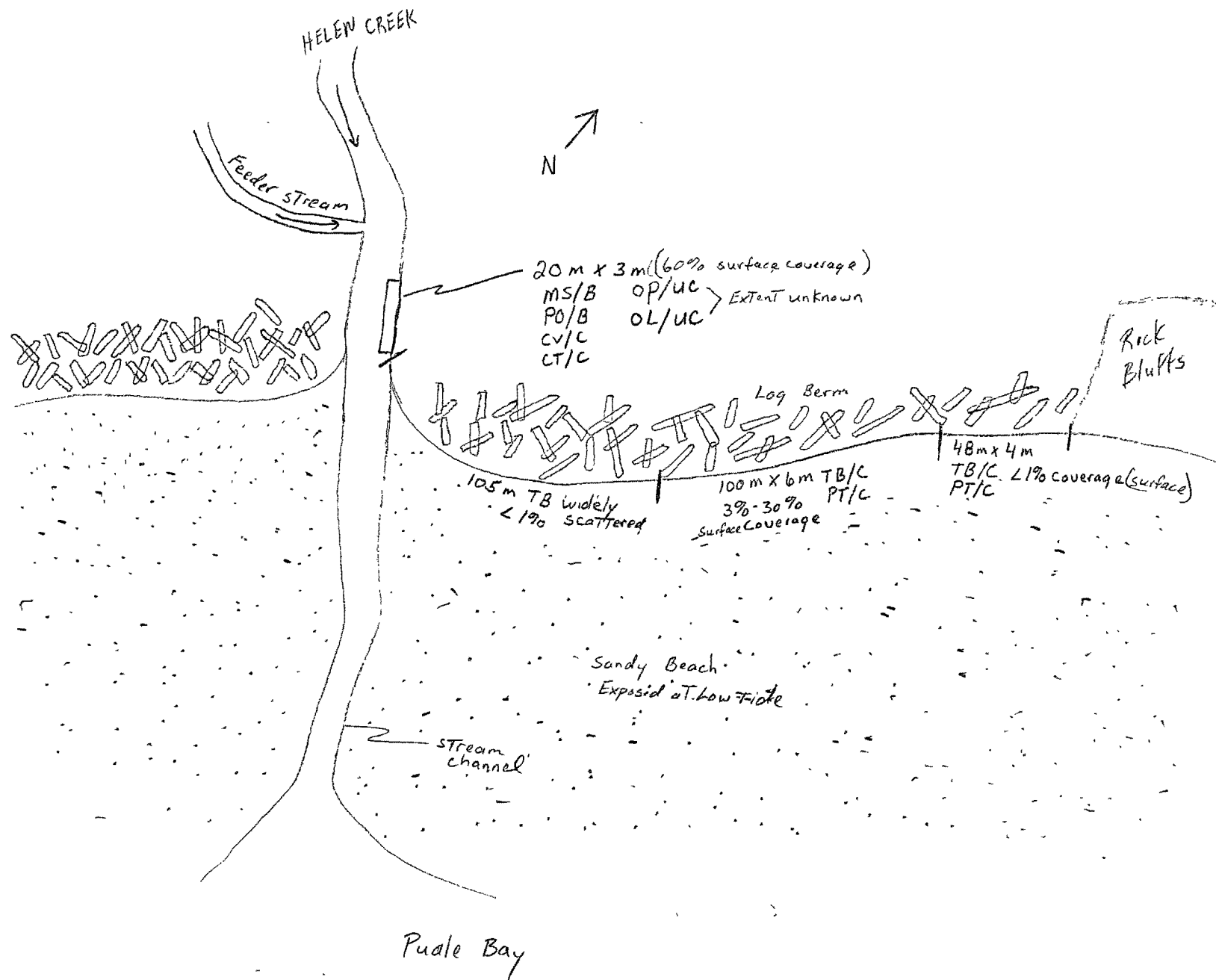
Species	Aerial	Ground

ACE 1950761

COMMENTS: Interagency inspection of oil in stream as reported by USFWS. Time constraints
Permitted only a partial survey. Oil in and around the stream and beach was uncovered by storm
action since May 2, 1990 Anadcat. It is located in the mid bank area and extends to the
stream bed. Area 3m MS/B, PO/B 60% surface coverage, Avg thickness .5-8cm. Subsurface
mousse present, To a minimum depth of 15cm. OP/UC PL/UC. Test pits dug at edge of stream
bed reveal mousse/shredding. TB and PT/B occur in UETZ from stream mouth
North along Beach 41% to 30% coverage. Complete survey needs to be done at time of treatment.

FRAME(S)	DESCRIPTION
22	Oil mousse on stream bank
23	Sheeping in Test pit dug at edge of stream
24	Julie Carlson, ADFC Taking sample of mousse from stream bank
25	Tar patties on beach North of Stream mouth
26	View looking upstream. Heavily oiled area between sample sampling box and stream
27	Test pit sheening. Sand, mousse and pebble substrate removed from test pit.

46 OIL DISTRIBUTION DIAGRAM



= Sample taken
 = Photo frame # and
 shot direction.

90 CLEANUP INSPECTION/MONITORING

ASC NUMBER:	SEGMENT NUMBER: <i>PB-016</i>	YR CATALOGED:
LOCATION:		
STREAM NAME:		LATITUDE:
KODIAK K-UNIT:	LOCAL STREAM #:	LONGITUDE:
USGS QUADRANGLE:		LEGAL:
SHORELINE TYPE: <i>Beach</i>		WAVE EXPOSURE: <i>High</i>

ASC NUMBER: *262-70-10010*
 SURVEY TYPE: *CL*
 METHOD: *F*
 DATE: *7/10/90*
 START TIME: *1430*
 STOP TIME: *1500*

TEAM RECORDER: *JEFFREY P. BARNHART*
 OBSERVERS: *J. DAVIS, F. BYRNE, J. CARLSON*
D. WYDOSKI, Ken Middleton
 AGENCY(IES): *ADFG, USCG, EXXON, ADEC*
USFWS
 PHOTOS TAKEN? *N*
 Roll #: *✓* Frames: *✓*
 VIDEO TAKEN? *✓* Tape Number: *✓*
 Counter Start: *✓*

SAMPLES TAKEN? *N*

SAMPLE I.D. NUMBERS: 1. *✓* 2. *✓* 3. *✓*
 4. *✓* 5. *✓* 6. *✓*

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1	<i>20 m</i>	<i>3 m</i>	<i>60</i>	<i>60</i>		<i>15 cm</i>	<i>MS, PO</i>
SITE 2	<i>105 m</i>	<i>5 m</i>	<i>525</i>	<i>1</i>		<i>1 cm</i>	<i>TB, AT</i>
SITE 3	<i>100 m</i>	<i>6 m</i>	<i>600</i>	<i>10</i>		<i>1 cm</i>	<i>TB, AT</i>
SITE 4	<i>48 m</i>	<i>4 m</i>	<i>192</i>	<i>1</i>		<i>1 cm</i>	<i>TB, AT</i>
SITE 5							

OVERALL OIL IMPACT: *M*

OIL IN STREAM CHANNEL? *Y*

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? *Y*

SUBSTRATE

Bedrock	Granule
Boulder	Sand <i>80</i>
Cobble <i>5</i>	Silt
Pebble <i>15</i>	Veget.

SPECIES					
COUNT					

ACE 1950776 *+S/SG*

COMMENTS: *5 MAN HELICOPTER BASED CREW WORKED 3 HOURS (15 MAN HOURS) AND REMOVED 56 BAGS (2,240 POUNDS OF OIL/OILED SEDIMENT). TREATMENT WAS MANUAL REMOVAL ONLY. I WAS NOT PRESENT DURING ACTUAL CLEANUP PROCEDURE. K. MIDDLETON AND I ARRIVED AFTER CLEANUP WAS COMPLETE. THE HELO WORK SQUAD WAS STILL ON SITE. THE HEAVY OILING ON THE NORTH STREAM BANK (SITE 1) WAS REMOVED TO A SATISFACTORY LEVEL. THE WORK PLAN MODIFICATION DID NOT ALLOW FOR CLEANUP OF THE OIL ON THE BEACH FROM THE STREAM MOUTH NORTH. THE ADEC AND USFWS MONITORS CLEANED THIS AREA.*

04/20/91 15:00:00 4:11:30 0P

I SUSPECT THE TARBALLS PRESENT ON THE BEACH MAY BE BREAKING OFF LARGER DEPOSITS OF SUBSURFACE OIL ON THE BEACHFRONT. ENTIRE SEGMENT SHOULD BE SURVEYED DURING 1991 WITH SPECIAL EMPHASIS PLACED ON LOCATING AND DETERMINING EXTENT OF SUBSURFACE OILING.

2,240 pounds of oil/oiled sediment removed.

EVOS CLEANUP MONITORING, 1990.

REGION: Alaska Peninsula

REPRESENTATIVES

K-UNIT: K10-07

Exxon: Fred Byars

SEGMENT: PB-016

USCG: Jim Davis

LOCATION: Paule Bay

DEC: Julie Carlson

STREAM NAME: Helen Creek

NPS: Howard Overton

ANAD. STREAM CAT. #: 262-70-10010

USFWS: Dick Wydoski

ANAD. FISH STREAM PERMIT ISSUED: 7/10/90

ADFG: Jeff Barnhart

DATE(S) WORKED: 7/10/90

OTHER:

SQUAD #: 9 Hdo

HOURS WORKED: 3.0

SQUAD SIZE: 5

TOTAL MAN HOURS WORKED: 15.0

NUMBER OF BAGS COLLECTED: 56

Work order Issued modification 6-29-90

POUNDS OF OIL/OILED SEDIMENT REMOVED: 2,240

TREATMENT TECHNIQUES: MANUAL REMOVAL X BIOREMEDIATION

OTHER

OIL BANDS

DEMOS DATE: 7/16/90

L 20m W 3m D 15cm m² 60 % oil cover 60 V

OIL SAMPLE # 90JPB003K

L 105m W 5m D 1cm m² 525 % oil cover 41 V

OIL TYPE: Mousse/TB/PT

L 100m W 6m D 1cm m² 600 % oil cover 10 V

SUBSTRATE TYPE: Sand 80%

L 48m W 4m D 1cm m² 192 % oil cover 41 V

Gravel 15% Cobble 5%

L _____ W _____ D _____ m² _____ % oil cover _____ V

PHOTOLOG

Roll #

FRAME #

DESCRIPTION

No photos Taken during cleanup.

Monitoring packet
of info.

PROBLEMS: I conducted an anadssat survey of this stream on 5/2/90. Only four small tarballs were found. No cleanup was recommended. On 6/24/90 53 days after the anadssat survey ^{was conducted} a oil was discovered in Helen Creek by the USFWS.

I was not present during the cleanup as I was with an Interagency group conducting a follow-up survey on the treatment of Douglas Creek.

OBSERVATIONS: Ken Middleton and I arrived at Helen Creek after the cleanup was complete. The hole work squad was still on site. The heavy oiling on the North stream bank was removed to "satisfactory level."

The work plan modification did not allow for cleanup of the oil on the beach from the stream mouth north. The ADEC and USFWS monitors cleaned this area.

I suspect the tarballs present on the beach may be breaking off larger ^{subsurface} deposits of oil on the beach front.

SIGNED: Jeffery P. Barnhart

Monitoring
Cleanup Data packet.

State of Alaska
Department of Fish and Game
Habitat Division

Page 1 of 1

Field Inspection Report

Date 7/10/90 Time 1430

Location: (Logging unit/Road/Waterbody) K10-07 - PB16 Paule Bay,
Alaska Peninsula, Anadromous Fish Stream 262-70-10010 Helen creek

Operator/Contractor: Exxon Corporation, EVOS

Individuals present at time of inspection:

<u>Name</u>	<u>Representing</u>
<u>Ken Middleton</u>	<u>ADF+G Habitat Division</u>
<u>Jim Davis</u>	<u>USCG</u>
<u>Julie Carlson</u>	<u>ADEC</u>
<u>Dick Wydoski</u>	<u>USFWS</u>
<u>Fred Byars</u>	<u>Exxon</u>

Activity/Situation Observed: Land Helen creek via helo 1430 depart 1500. work was
completed when Ken and I arrived. The heavy oiling on the north stream
bank was removed to satisfactory standards. I dug six test pits on the
south stream bank along the stream bed. No subsurface oil was observed.

Pertinent Statutes/Regulations: _____

Recommended/Required Action (Specify): The tar balls/patties located on the
beach from the stream mouth north may be breaking off larger deposits of
subsurface oil on the beachfront. The entire segment should be surveyed during
1991 with special emphasis placed on locating and determining the extent of
the subsurface oiling.

By (date) _____ (if applicable)

Please note: This is not a final inspection report. It is intended to provide the operator/contractor with a notice of problems or concerns which require immediate attention. If necessary, a final inspection report will be issued at a subsequent date.

Jeffrey P. Barnhart F.B.I.
Fish and Game Representative/Title

Company Representative/Title

-156/FF/HF
ACE 1950786

State of Alaska
Department of Fish and Game
Habitat Division

Page 1 of 1

Field Inspection Report

Date 7/10/90 Time 1430

Location: (Logging unit/Road/Waterbody) K10-07 - PB16 Paula Bay,
Alaska Peninsula. Anadromous Fish Stream 262-70-10010 Helen creek

Operator/Contractor: Exxon Corporation. EVOS

Individuals present at time of inspection:

<u>Name</u>	<u>Representing</u>
<u>Ken Middleton</u>	<u>ADF+G Habitat Division</u>
<u>Jim Davis</u>	<u>USCG</u>
<u>Julie Carlson</u>	<u>ADEC</u>
<u>Dick Wydoski</u>	<u>USFWS</u>
<u>Fred Byars</u>	<u>Exxon</u>

Activity/Situation Observed: Land Helen creek via helo 1430 depart 1500. work was
completed when Ken and I arrived. The heavy oiling on The north stream
bank was removed to satisfactory standards. I dug six test pits on The
south stream bank along The stream bed. No subsurface oil was observed.

Pertinent Statutes/Regulations: _____

Recommended/Required Action (Specify): The tar balls/patties located on The
beach from The stream mouth north may be breaking off larger deposits of
subsurface oil on The beach front. The entire segment should be surveyed during
1991 with special emphasis placed on locating and determining the extent of
The subsurface oiling.

By (date) _____ (if applicable)

Please note: This is not a final inspection report. It is intended to provide the operator/contractor with a notice of problems or concerns which require immediate attention. If necessary, a final inspection report will be issued at a subsequent date.

Jeffrey P. Barnhart F.B.I.
Fish and Game Representative/Title

Company Representative/Title

12/10/90/BEING

State of Alaska
Department of Fish and Game
Habitat Division

Page 1 of 1

Field Inspection Report

Date 7/10/90 Time 1430

Location: (Logging unit/Road/Waterbody) K10-07 - PB16 Paula Bay,
Alaska Peninsula. Anadromous Fish Stream 262-70-10010 Helen Creek

Operator/Contractor: Exxon Corporation. EVOS

Individuals present at time of inspection:

<u>Name</u>	<u>Representing</u>
<u>Ken Middleton</u>	<u>ADF+G Habitat Division</u>
<u>Jim Davis</u>	<u>USCG</u>
<u>Julie Carlson</u>	<u>ADEC</u>
<u>Dick Wydoski</u>	<u>USFWS</u>
<u>Fred Byars</u>	<u>Exxon</u>

Activity/Situation Observed: Land Helen Creek via helo 1430 depart 1500. Work was
completed when Ken and I arrived. The heavy oiling on the north stream
bank was removed to satisfactory standards. I dug six test pits on the
south stream bank along the stream bed. No subsurface oil was observed.

Pertinent Statutes/Regulations: _____

Recommended/Required Action (Specify): The tar balls/patties located on the
beach from the stream mouth north may be breaking off larger deposits of
subsurface oil on the beach front. The entire segment should be surveyed during
1991 with special emphasis placed on locating and determining the extent of
the subsurface oiling.

By (date) _____ (if applicable)

Please note: This is not a final inspection report. It is intended to provide the operator/contractor with a notice of problems or concerns which require immediate attention. If necessary, a final inspection report will be issued at a subsequent date.

Alfred P. Barnhart F.B.I.
Fish and Game Representative/Title

Company Representative/Title

State of Alaska
Department of Fish and Game
Habitat Division

Page 1 of 1

Field Inspection Report

Date 7/10/90 Time 1430

Location: (Logging unit/Road/Waterbody) K10-07 - PB16 Paula Bay,
Alaska Peninsula. Anadromous Fish Stream 342-70-10010 Helen Creek

Operator/Contractor: Exxon Corporation. EVOS

Individuals present at time of inspection:

<u>Name</u>	<u>Representing</u>
<u>Ken Middleton</u>	<u>ADF+G Habitat Division</u>
<u>Jim Davis</u>	<u>USCG</u>
<u>Julie Carlson</u>	<u>ADFG</u>
<u>Dick Wydoski</u>	<u>USFWS</u>
<u>Fred Byars</u>	<u>Exxon</u>

Activity/Situation Observed: Land Helen Creek via boat 1430 depart 1500. Work was
completed when Ken and I arrived. The heavy oiling on the north stream
bank was removed to satisfactory standards. I dug six test pits on the
south stream bank along the stream bed. No subsurface oil was observed.

Pertinent Statutes/Regulations: _____

Recommended/Required Action (Specify): The Tar balls / pellets located on the
beach from the stream mouth north may be breaking off larger deposits of
subsurface oil on the beach front. The entire segment should be surveyed during
1991 with special emphasis placed on locating and determining the extent of
the subsurface oiling.

By (date) _____ (if applicable)

Please note: This is not a final inspection report. It is intended to provide the operator/contractor with a notice of problems or concerns which require immediate attention. If necessary, a final inspection report will be issued at a subsequent date.

Ally P. Barnhart F.B.I. _____
Fish and Game Representative/Title Company Representative/Title

GPB

7/10/00

Tues. ^{Fred} Start 7:15 AM. ~~Fred~~ Dyer's called, Re:

8:00 departure to Helen creek. Drive to Airport. called Ken. will go with flight to Douglas. Crew: see Manifest

Boarded Aircraft 9:00 AM Burn off excess fuel.

10:10 Earlyly depart Kodiak. Land Douglas

River 11:13 AM walked Beach. Some mouse

patties remain along with scattered Tar balls

+ patties. will clean. Depart 12:15 PM

Land Big Bay, Shuyak Island For Fuel

12:40 PM. Depart 1:15 PM. [Land Holenack

2:25 PM. work looks good. Depart 3 PM]

Land Sturgeon Lagoon 5:15 3:15

Holen creek 57 total bags - 1 ^{bag} Oiled Tyvek = 56

- 8 off beach. = 48 From Stream

5:15

Sturgeon Lagoon 10 bags oil + sediment

20 pound bags. + 3 bags of pom-pom

plastic bags. Depart Sturgeon Lagoon 5 PM.

Land Airport Kodiak 3:47 PM. Crew From

Holen creek to Sturgeon to Kodiak was.

Fred Brane (Estraw) myself, Julie Carlson (Dec)

Howard Overton (NPS) Jim Davis USCG

128755 Dick Wydoski 357 EH

Dave 6:15 PM. Dick Hansen arrived today

No Lunch break.

Info on oil found
surfaced at Helen Creek after
The Anadssat survey on 5/14/90

1 SURVEY TYPE: BS (SS) DS TS AVS

KP, CI

K (AP)

METHOD: Aerial Ground

3 DATE: 6/29/90

4 START TIME: 1140 hours

5 STOP TIME: 1250 hours

6 SEGMENT #: PB-016

7 STATION #:

8 K-UNIT: K10-07

9 STAT AREA: 262-70

10 LAT: 57°45'20"N

12 SOURCE: Map Loran

13 LOCATION: Helen Creek, Puale Bay

14 DESCRIPTION: S 28 S 38 W 22

20 USCG QUAD: Karluk D-5

11 LONG: 155°29'9"W

(Anadssat)

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	(H)			
31 OIL TYPE:	Pooled	Mousse	Tar	Asphalt	Sticky	Stain		
32 OILED DEBRIS?	Y	(N)						
33 SHORELINE TYPE:	Headland	Low-lying Rocks	Lagoon	Marsh	(Beach)	Cove		
34 WAVE EXPOSURE:	(High)	Moderate	Low					
35 SUBSTRATE TYPE:	Bedrock	Boulder	Cobble	5				
	Gravel	15	Sand	80	Mud/silt			

WM RECORDER: JEFF BARNHART ADF&C
CDR Archie Smith, Walt Janicek

SERVERS: Julie Carlson, Alan Eliason

Dick Munoz, Tony Martin

ENCY: USCG/NOAA/BEL/NPS/USFWS/USCG

DTOS TAKEN: (Y) N

11 #: 90-JPB-000k

Frame: 22, 23, 24, 25, 26, 27

DEO TAKEN: Y (N) TAPE#:

Start: End:

26 SAMPLES TAKEN? (Y) N Number

011 90-JPB003K

Sediment

Biological

Water

36 CATALOGED ANAD. FISH SREAM? (Y) N

37 CATALOG #: 262-70-10010

38 STREAM NAME: Helen Creek

39 OIL IN STREAM BED? (Y) N

40 OIL ON STREAM BANKS? (Y) N

41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where:

43 ANADROMOUS FISH PRESENT? Y (N)

44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

ACE 1950746 +1/5

COMMENTS: Interagency inspection of oil in stream as reported by USFWS. Time constraints

Permitted only a partial survey. Oil in and around the stream and beach was uncovered by storm

action since my May 2, 1990 Anadssat. It is located in the mid bank area and extends to the

stream bed. 20m x 3m MS/B, PO/B 60% surface coverage, Avg thickness 5-8 cm. Subsurface

mousse present, to a minimum depth of 15 cm. DP/UC, PL/UC. Test pits dug at edge of stream

bed reveal mousse/sheening. TB and PT/B occur in UFTZ from stream mouth

North along Beach 41% to 30% coverage. Complete survey needs to be done at time of treatment.

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS (SS) DS TS AVS SCHA MMS PTA

2 REGION: PWS KP, CI KAP

METHOD: Aerial Ground Boat

3 DATE: 6/29/90

15 HIGH TIDE TIMES: 0805, 12039

21 TEAM RECORDER: JEFF BARNHART ADF&G
CPR Archie Smith, Walt Janicek

4 START TIME: 1140 hours

16 HIGH TIDE HTS: 14.2, 16.1

22 OBSERVERS: Julie Carlson, Alan Eliason
Dick Munoz, Tony Martin

5 STOP TIME: 1250 hours

17 LOW TIDE TIMES: 0204, 11407

23 AGENCY: USCG/NOAA/BEC/NPS/USFWS/USCG

6 SEGMENT #: PB-016

18 LOW TIDE HTS: 3.2, 2.6

24 PHOTOS TAKEN: (Y) N

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: 90-JPB-002K
Frame: 22, 23, 24, 25, 26, 27

8 K-UNIT: K10-07

(Ebb) Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPE#:

9 STAT AREA: 262-70

20 USCG QUAD: Karluk D-5

Start: End:

10 LAT: 57°45'20"N

11 LONG: 155°29'9"W

26 SAMPLES TAKEN? (Y) N Number

12 SOURCE: Map Loran Anadcat

011 90-JPB003K

13 LOCATION: Helen creek, Puale Bay

Sediment

14 DESCRIPTION: S 28 S 38 W 22

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M (H)

36 CATALOGED ANAD. FISH STREAM? (Y) N

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

37 CATALOG #: 262-70-10010

32 OILED DEBRIS? Y (N)

38 STREAM NAME: Helen Creek

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh

39 OIL IN STREAM BED? (Y) N

34 WAVE EXPOSURE: (High) Moderate Low

40 OIL ON STREAM BANKS? (Y) N

35 SUBSTRATE TYPE: Bedrock Boulder Cobble 5
Gravel 15 Sand 80 Mud/silt41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where:

43 ANADROMOUS FISH PRESENT? Y (N)

44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

ACE 1950746 +18

COMMENTS: Interagency inspection of oil in stream as reported by USF&WS. Time constraints

Permitted only a partial survey. Oil in and around the stream and beach was uncovered by storm

action since my May 2, 1990 Anadcat. It is located in the mid bank area and extends to the

stream bed. 20m x 3m MS/B, PO/B 60% surface coverage, Avg thickness 5-8 cm. Subsurface

mousse present, To a minimum depth of 15 cm. OP/UC OL/UC. Test pits dug at edge of stream

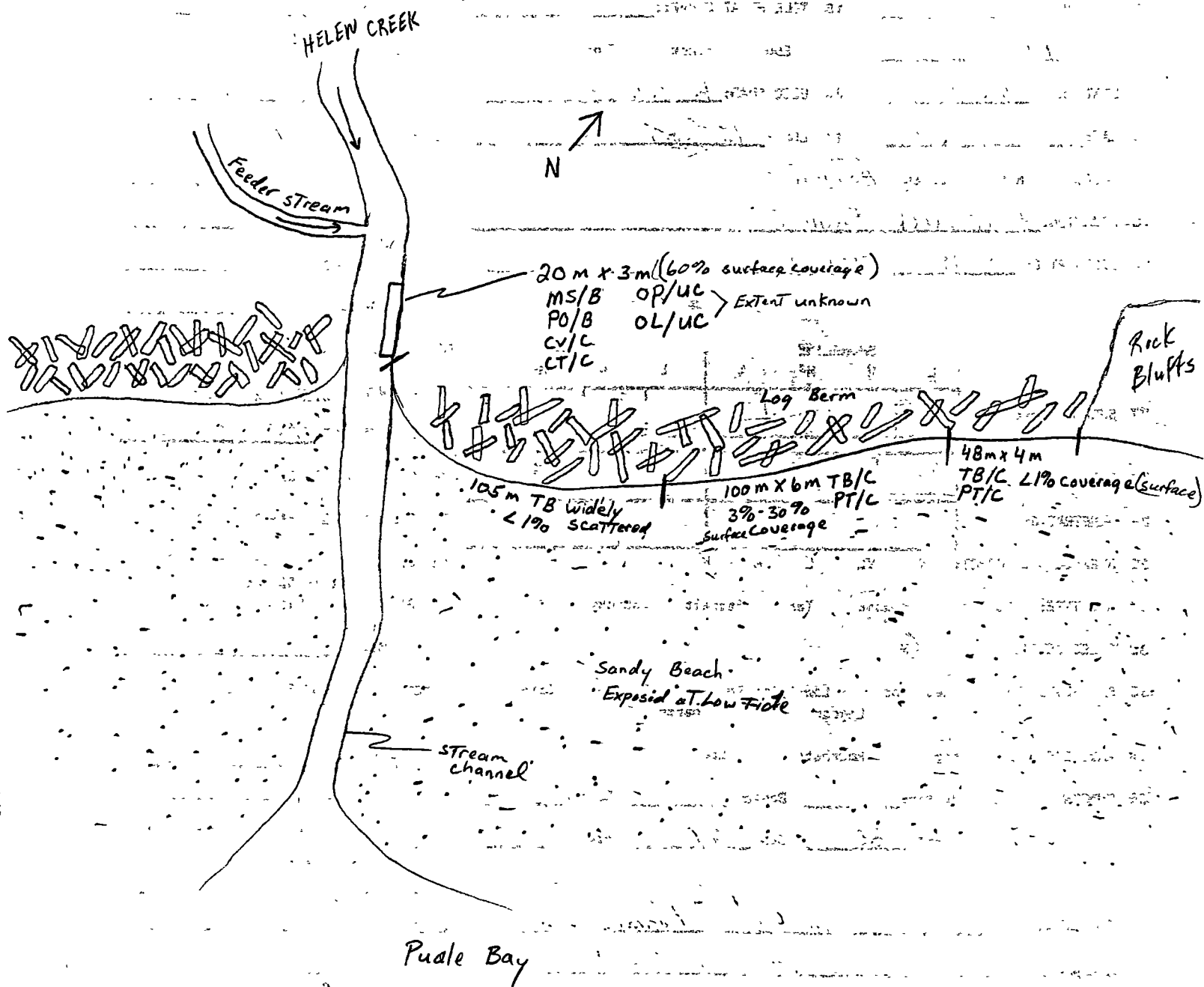
bed reveal mousse/sheening. TB and PT/B occur in LITZ from stream mouth

North along Beach 41% to 30% coverage. Complete survey needs to be done at time of treatment.

FRAME(S)

DESCRIPTION

22	Mousse located at stream bed
23	Sheening in Test pit
24	Julie Carlson, ADEC taking sample of mousse from low stream bank. Helen creek in background
25	Tar patties on beach North of stream mouth
26	Looking upstream, Helen Creek. Heavily oiled area located between sampling box and stream
27	Test pit at stream bed, sheen visible. Sand, pebble and mousse substrate removed from test pit.

46 OIL DISTRIBUTION DIAGRAM

= Sample taken
= Photo frame # and
shot direction.

ACE 1950747-1/3

Helen Creek

JPB

~~Picked up Tracking form. Returned to
office. Did a minimum of paper work to
keep my head above water. Finally
charged radio etc etc. Done 8:45 pm~~

6/29 0630 Drive to JCP. Provided Fred Byers with
corrections to streams numbers on work orders.
Found out Kashvik Bay is fegged in.
Call USFWS (John Hardister) requesting
They allow me to represent them during
The real Fox stream cleanup. Found out from
John that a survey currently under way
on the Alaska Peninsula by USFWS
(Ronald E. Hood) discovered oil in & around
Helen creek that requires immediate cleanup.
I was not notified by Exxon or USCG.
Spoke to Commander Smith asking why I was
not contacted. He told me he spoke to
Mike Gordon and Gordon was to speak
to me. Sounds phony to me. Anyhow I got

Helen Creek JPB.

a seat on the ship to fly to Helen Creek

10:00 AM Today

work on Time Sheet, photocopy paperwork necessary
for trip to Helen Creek. 10:22 AM in helicopter, briefing.

ERA 412. Photocopy of manifest. Depart 10:40 AM
from Kodiak Airport. Land Helen Creek 362-70-10010

11:40 AM. 20 yd x 3m 60% coverage
choc. mousse, bands. Located in stream bed.

Penetration down to 6" as evidenced by test
pits. A portion of this band is still covered by
sand. Test pits indicate a band of mousse

3-6 inches thick mixed with the sands
from the beach/stream interface with the first 105
yards widely scattered. TB C12. This is followed by an area

99 yards x 6 yards wide the heaviest HT area is
2 m wide 80-90% coverage. The remainder is

3% coverage. Surface Tar balls/patties. Some
of it is under 1" of sand. I located it with my
fingers. The last 48 yds x 4 yds 61% coverage.

T/B mixed with sand. I walked to the point where
the Rock bluffs start. I suspect the Tar balls
may be breaking off a larger deposit on the
beach front. Area should be fully assessed
at time of clean up. Time did not permit a
survey of the south side of the stream.

Depart Helen Creek 12:20 pm. Land Karluk 1:00 pm

~~7:00 pm. Depart Karluk 3:20 pm. Land TAP 3:40 pm~~

~~work on needs sent ok.~~

Photo #'s Roll 90-SPB-002-K

#22. 11:50 AM Helen Creek chocolate mousse at
stream bed. #23 12 noon sheening in test pit.

#24. 13:01 pm Helen Creek. Julie (DEC) Taking sample of mousse
from low stream bank, stream in background.

#25 13:15 pm Tar patties North of stream mouth

#26 13:45 pm Looking up stream Helen Creek. Heavily oiled area
between Tackle Box & stream

#27 12:46 pm Test pit with sand, mousse, pebble substrate
removed, sheening.

oil sample # 90-SPB-003K

~~Planning for stream cleanup areas with P.E.U.~~

~~Byair. Unit 1 S.H.S. Drive to office. work~~

~~paperwork done 8 pm~~

ACE 1950774

ACE 1950775 - 15/56

FIELD SHORELINE COMMENT SHEET

K10-07 PB-016

SEGMENT ST Stream 262-70-10010 SUBDIVISION: _____ DATE 6/29/90**ADFG**NAME JEFFREY P BARNHART

SIGNATURE

Jeffrey P Barnhart☐ NO TREATMENT RECOMMENDED
COMMENTS☒ TREATMENT SUGGESTED

Helen Creek, Puale Bay, Alaska Peninsula.

- ① Removal of all surface oil in and around the stream.
- ② Removal of all subsurface oil and oiled sediment (sand, Gravel, cobble)
This may necessitate the removal of the top 6-10 inches of sediment along the stream bank and possibly the stream bed.
- ③ Monitors to assess stream bed & stream banks on both sides for surface and subsurface oil. Oil discovered during assessment will be removed.
- ④ TB, PT occurring from stream mouth northward along beach should be removed. Approx. distance is 175 meters.
- ⑤ Beach face both north and south from stream mouth requires assessment by the monitors for the presence of subsurface oil. Oil discovered during assessment should be removed.

Date: Jun 29, 1990 4:37 PM Message ID:
From: Supervisor/CGKICP
To: FOSC/OPS
Copies:
Attach:
Subject: OIL DISCOVERED ON K10-7-PB016 PUALE BAY

OPS:

WORK PLAN MODIFICATION RECOMMENDATION

REF: (a) WORK ORDER DTD 2 MAY 90; TAG APPROVED 18 MAY 90; SIGNED 27 MAY 90

SEGMENT: K10-7-PB016 SUBDIVISION: HELEN CREEK DATED: 29 JUN 90

STREAM NUMBER: 262-70-10010

MODIFICATION

1. REASON FOR MODIFICATION: WORK ORDER, REFERENCE (a), RECOMMENDED NO TREATMENT OF ANAD. STREAM 262-70-10010. THIS STREAM WAS REASSESSED ON 2 MAY 90 WITHOUT THE DISCOVER OF OILING. A REPORT WAS RECEIVED FOR USF&WS OF OIL UNCOVERED BY STORM ACTIVITY. A INSPECTION FLIGHT TO K10-7-PB016 29 JUN 90 SHOWED MODERATE OILING ALONG THE UPPER BANK AREA OF HELEN CREEK. THE AREA OF OILING IS APPROXIMATELY 3 METERS WIDE BY 20 METERS LONG ON THE NORTH SIDE OF THE CREEK APPROXIMATELY 100 METERS FROM THE MOUTH OF THE CREEK. THERE IS SURFACE MOUSSE UP TO 2 INCHES THICK AND A LAYER OF MOUSSE MIXED WITH SEDIMENT UP TO 1 INCH THICK 4 TO 6 INCHES BELOW THE SAND SURFACE.

2. SUGGESTED ADJUSTMENT TO WORK PLAN: WORK ORDER SHOULD BE MODIFIED FROM NO TREATMENT RECOMMENDED TO MANUAL PICKUP WITH SEDIMENT REMOVAL TO GET THE SUBSURFACE LAYER.

3. TIMING ISSUES: ANAD STREAM-SALMON STREAM MOUTH-SPAWNING 7/10 TO 8/31

USCG _____

ADEC _____

* ADF&G *Jeffrey Burnhart*

* Will make recommendation To ADF+G Hab.Tat Div. in Anchorage To include in Modifizat
The pickup of Tur patties from Stream mouth North.

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

①
STEVE COWPER, GOVERNOR

Rapifax 349-1723

333 RASPBERRY ROAD
ANCHORAGE, ALASKA 99518-1599
PHONE: (907) 344-0541

RAPIFAX TRANSMITTAL SHEET

TO: Ken Middleton

ADF&G Habitat Division Anch

DATE: 7/1/90

No. Pages: 4
(including this page)

FROM: Jeff Barnhart

ADF&G Habitat Division Kodiak

MESSAGE:

Recent discovery of oil in Helen creek.
A work order needs to be issued ASAP, before
the oil is covered again. Perhaps we could have
a work order in 2-3 days?!

This fax contains my partial survey, plus Recommendations.

ACE 1950750 +/5

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMS PTA 2 REGION: PWS KP, CI KAP

METHOD: Aerial Ground Boat

3 DATE: 6/29/90 15 HIGH TIDE TIMES: 0805 12034 21 TEAM RECORDER: JEFF BARNHART ADF&G
CDR Archie Smith, Walt Janicek

4 START TIME: 1140 hours 16 HIGH TIDE HTS: 14.2 16.1 22 OBSERVERS: Julie Carlson, Alan Eliason
Dick Munoz, Tony Martin

5 STOP TIME: 1250 hours 17 LOW TIDE TIMES: 0204 11407 23 AGENCY: USCG/NOAA/BEL/NPS/USFWS/USCG

6 SEGMENT #: PB-016 18 LOW TIDE HTS: 3.2 12.6 24 PHOTOS TAKEN: (Y) N

7 STATION #: 19 TIDE HT AT SURVEY: Roll #: 90-JPB-002k Frame: 22,23,24,25,26,27

8 K-UNIT: K10-07 Ebb Slack Flood Slack 25 VIDEO TAKEN: Y (N) TAPE#: Start: End:

9 STAT AREA: 262-70 20 USCG QUAD: Karluk D-5 26 SAMPLES TAKEN? (Y) N Number

10 LAT: 57°45'20"N 11 LONG: 155°29'9"W 011 90-JPB003K

12 SOURCE: Map Loran Anadcat Sediment

13 LOCATION: Helen Creek, Puale Bay Biological

14 DESCRIPTION: S 28 S 38 W 22 Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M (H)

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y (N)

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
 Lagoon Marsh

34 WAVE EXPOSURE: High Moderate Low

35 SUBSTRATE TYPE: Bedrock Boulder Cobble 5
 Gravel 15 Sand 80 Mud/silt

36 CATALOGED ANAD. FISH STREAM? (Y) N

37 CATALOG #: 262-70-10010

38 STREAM NAME: Helen Creek

39 OIL IN STREAM BED? (Y) N

40 OIL ON STREAM BANKS? (Y) N

41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
 (within 50 meters)

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where:

43 ANADROMOUS FISH PRESENT? Y (N)

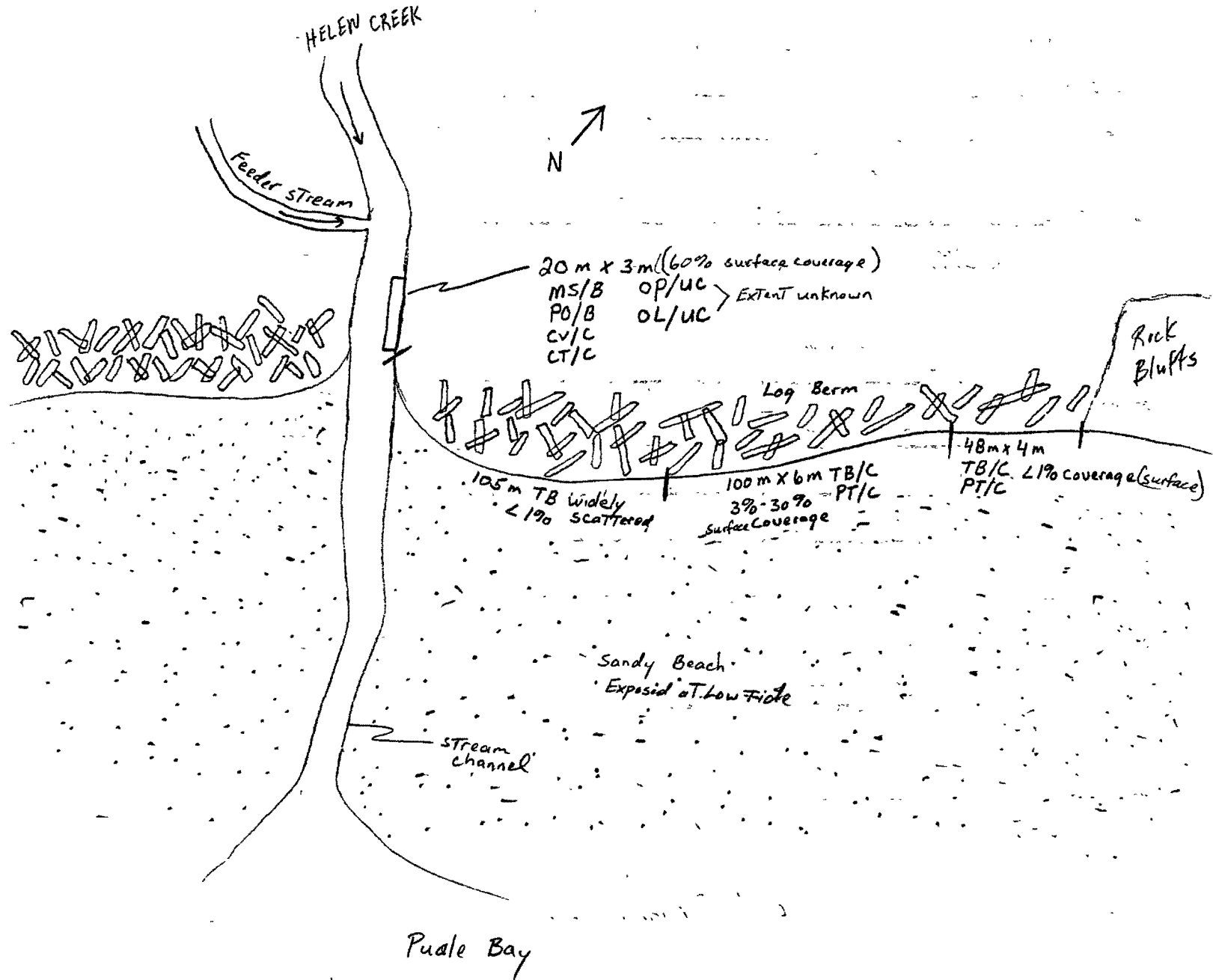
44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground
ACE 1950751		

COMMENTS: Interagency inspection of oil in stream as reported by USF&WS. Time constraints
Permitted only a partial survey. Oil in and around the stream and beach was uncovered by storm
action since my May 2, 1990 Anadcat. It is located in the mid bank area and extends to the
stream bed. 20m x 3m MS/B, PO/B 60% surface coverage, Avg thickness 5-8cm. Subsurface
mousse present, to a minimum depth of 15cm. OP/UC, OL/UC. Test pits dug at edge of stream
bed reveal mousse/sheening. TB and PT/B occur in U/TZ from stream mouth
North along Beach <1% to 30% coverage. Complete survey needs to be done at time of treatment.

FRAME(S)	DESCRIPTION
22	Mousse located at Stream bed
23	Sheening in Test pit
24	Julia Carlson, ADEC Taking sample of mousse from Low stream bank. Helen creek in background
25	Tar patties on beach North of Stream mouth
26	Looking upstream, Helen Creek. Heavily oiled area Located between sampling box and stream
27	Test pit at stream bed, sheen visible. Sand, pebble and mousse substrate removed from Test pit.

48 OIL DISTRIBUTION DIAGRAM



= Sample taken
 = Photo frame # and
 shot direction.

ACE 1950752

FIELD SHORELINE COMMENT SHEET

(4)

K10-07 PB-016

SEGMENT ST Stream 262-70-10010 SUBDIVISION: _____ DATE 6/29/90**ADEG**NAME JEFFREY P. BARNHART SIGNATURE Jeffrey P Barnhart☐ NO TREATMENT RECOMMENDED
COMMENTS☒ TREATMENT SUGGESTED

Helen Creek, Puale Bay, Alaska Peninsula.

- ① Removal of all surface oil in and around the stream.
- ② Removal of all subsurface oil and oiled sediment (sand, Gravel, cobble)
This may necessitate the removal of the top 6-10 inches of sediment along the stream bank and possibly the stream bed.
- ③ Monitors to assess stream bed & stream banks on both sides for surface and subsurface oil. Oil discovered during assessment will be removed.
- ④ TB, PT occurring from stream mouth northward along beach should be removed. Approx. distance is 175 meters.
- ⑤ Beach face both North and South from stream mouth requires assessment by the monitors for the presence of subsurface oil. Oil discovered during assessment should be removed.

ACE 1950753 -15

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K10-07-PB-016 STREAM NO: 262-70-10010 DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: Lucille Jean Owen DATE: 5/22/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

X No Treatment Recommended
 Treatment Recommended
 Manual Pickup
 Bioremediation
 Tarmat Removal

 Snare/Absorbent Booms
 Oil Snares (pom poms)
 Absorbents (pads, rolls, etc)
 Spot Washing: Wands
 Beach Cleaner
 Other (see comments)

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 5/18/90

ADEC Art Wenzel Art Wenzel

EXXON Andy Tera Andy Tera

NOAA Gary Petros Gary Petros

USCG G.D. BEITER G.D. BEITER

FOSC: [Signature] DATE: MAY 27 1990

Post-it™ brand fax transmittal memo 7671		# of pages > <u>12</u>
To <u>Loretta</u>	From <u>Patty</u>	
Co. <u> </u>	Co. <u> </u>	
Dept. <u> </u>	Phone # <u> </u>	
Fax # <u> </u>	Fax # <u> </u>	

Date: Jun 29, 1990 4:37 PM
From: Supervisor/CGKICP
To: FOSC/OPS
Copies:
Attach:
Subject: OIL DISCOVERED ON K10-7-PB016 PUALE BAY

Message ID:

OPS:

WORK PLAN MODIFICATION RECOMMENDATION

REF: (a) WORK ORDER DTD 2 MAY 90; TAG APPROVED 18 MAY 90; SIGNED 27 MAY 90

SEGMENT: K10-7-PB016 SUBDIVISION: HELEN CREEK DATED: 29 JUN 90

STREAM NUMBER: 262-70-10010

MODIFICATION

1. REASON FOR MODIFICATION: WORK ORDER, REFERENCE (a), RECOMMENDED NO TREATMENT OF ANAD. STREAM 262-70-10010. THIS STREAM WAS REASSESSED ON 2 MAY 90 WITHOUT THE DISCOVER OF OILING. A REPORT WAS RECEIVED FOR USF&WS OF OIL UNCOVERED BY STORM ACTIVITY. A INSPECTION FLIGHT TO K10-7-PB016 29 JUN 90 SHOWED MODERATE OILING ALONG THE UPPER BANK AREA OF HELEN CREEK. THE AREA OF OILING IS APPROXIMATELY 3 METERS WIDE BY 20 METERS LONG ON THE NORTH SIDE OF THE CREEK APPROXIMATELY 100 METERS FROM THE MOUTH OF THE CREEK. THERE IS SURFACE MOUSSE UP TO 2 INCHES THICK AND A LAYER OF MOUSSE MIXED WITH SEDIMENT UP TO 1 INCH THICK 4 TO 6 INCHES BELOW THE SAND SURFACE.

2. SUGGESTED ADJUSTMENT TO WORK PLAN: WORK ORDER SHOULD BE MODIFIED FROM NO TREATMENT RECOMMENDED TO MANUAL PICKUP WITH SEDIMENT REMOVAL TO GET THE SUBSURFACE LAYER.

3. TIMING ISSUES: ANAD STREAM-SALMON STREAM MOUTH-SPAWNING 7/10 TO 8/31

USCG

* ADEC *Gilman Coulson*

* ADF&G *Jeffrey Barrett*

* Will make recommendation To ADF&G Habitat Div. in Anchorage To include in Modification. The pickup of Tar patties from Stream mouth North.

** Concav with ADF&G

Forward to Exxon USA for Action

⊕

DD Roman, CDR, USCG

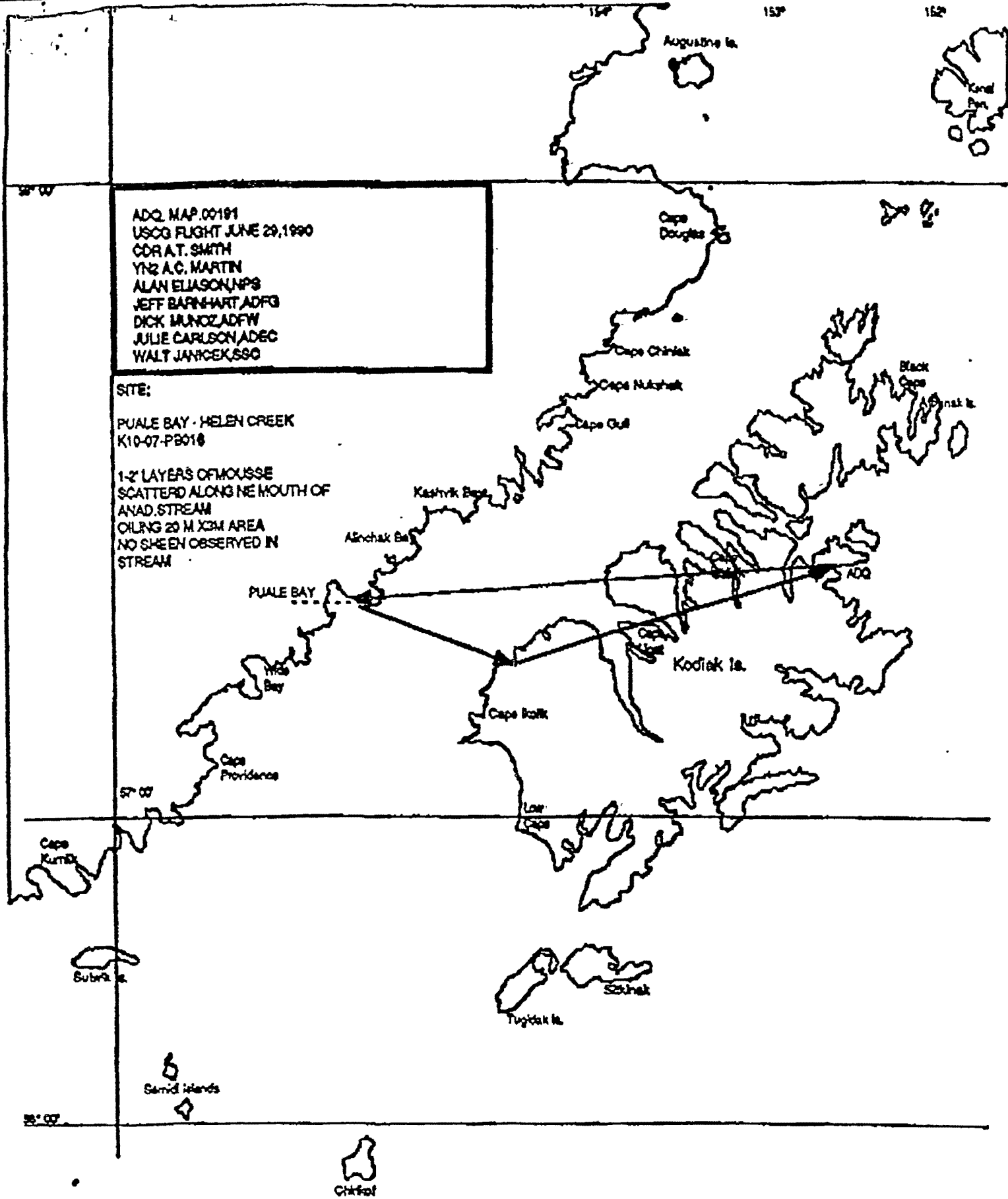
ACE 1950755

ADQ. MAP. 00191
USCG FLIGHT JUNE 20, 1990
CDR A.T. SMITH
YN2 A.C. MARTIN
ALAN ELIASON/NPS
JEFF BARNHART/ADFG
DICK MUNOZ/ADFW
JULIE CARLSON/ADFC
WALT JANICEK/SSO

SITE:

PUALE BAY - HELEN CREEK
K10-07-PB018

1-2" LAYERS OF MOUSSE
SCATTERED ALONG NE MOUTH OF
ANAD. STREAM
OILING 20 M X 30 M AREA
NO SHEEN OBSERVED IN
STREAM



Shoreline Assessment Survey

Segment K10-02-PB16 Survey Date: 6/29/80
HELEN LAKE; STREAM # 262-70-10010

Monitors:

W.S. JANICEK SSC
A.T. KNUTH, USCG
TONY MARTIN, USCG

UPPER TIDAL ZONE

Geological Sediment Type:

- Boulder ☒ Sand
☒ Cobble ☐ Mud
☒ Pebble ☐ Rock
☐ Gravel

Degree of Oiling:

3

0 = None

1 = Very light

2 = Light

3 = Moderate

4 = Heavy

Comments: Patches of Moose found under rocks in upper bank
of Helen Creek at the North East side of Mouth - Moose scattered
in patches along U.T.Z. forming Tarnets of sizes varying
Subsurface Oil Depth: 4 inches From 6" - 24".

INTERMEDIATE TIDAL ZONE

Geological Sediment Type:

- Boulder ☒ Sand
☒ Cobble ☐ Mud
☒ Pebble ☐ Rock
☐ Gravel

Degree of Oiling:

3

0 = None

1 = Very light

2 = Light

3 = Moderate

4 = Heavy

Comments: Test pits dug on the North East mouth of Helen Creek
revealed layers of Moose 1-2" thick at a penetration of depth
penetration of 4-6". Area affected 20 M X 3 M. The rest South West
Subsurface Oil Depth: 4-6 inches BANK showed no obvious degree of oiling.

LOWER TIDAL ZONE

Geological Sediment Type:

- Boulder ☒ Sand
☐ Cobble ☐ Mud
☐ Pebble ☐ Rock
☒ Gravel

Degree of Oiling:

0

0 = None

1 = Very light

2 = Light

3 = Moderate

4 = Heavy

Comments: NO OILING OBSERVED

Subsurface Oil Depth: — inches 0-6 INCHES HIGHER TO 16", NO
OILING OBSERVED

SHEEN ALONG SHORELINE

Sheen Size:

Length — feet
 Width — feet

Sheen Type:

L = Light
 M = Medium
 .. = ..

Sheen Color:

D = Dull
 B = Bright

NONE OBSERVED

FIELD SHORELINE COMMENT SHEET

K10-07 PB-016

SEGMENT ST Stream 262-70-10010 SUBDIVISION: _____ DATE 6/29/80

ADEG

NAME JEFFREY P. BARNHART SIGNATURE Jeffrey P Barnhart

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Helen Creek, Puale Bay, Alaska Peninsula.

- ① Removal of all surface oil in and around the stream.
- ② Removal of all subsurface oil and oiled sediment (sand, Gravel, cobble)
This may necessitate the removal of the top 6-10 inches of sediment along the stream bank and possibly the stream bed.
- ③ Monitors to assess stream bed & stream banks on both sides for surface and subsurface oil. Oil discovered during assessment will be removed.
- ④ TB, PT occurring from stream mouth northward along beach should be removed. Approx. distance is 175 meters.
- ⑤ Beach face both north and south from stream mouth requires assessment by the monitors for the presence of subsurface oil. Oil discovered during assessment should be removed.

PHOTO LOG ADF&G

OFFICE: KODIAK
DATE PRINTED: 09/06/90

PHOTOGRAPHER: J. Barnhart

ROLL #: 90JPB002K

FRAME#	DATE	TIME	SEGMENT#	STATION#	LOCATION	REASON FOR TAKING PHOTO
01	06/24/90	1040	PB-001	2627010025	Paule Creek-Paule Bay, Alaska Peninsula K10-07	Tarballs, patties removed from subsurface on beach north of stream mouth.
02	06/24/90	1040	PB-001	2627010025	Paule Creek-Paule Bay, Alaska Peninsula K10-07	Supersack containing bags of oil, on beach north of stream mouth.
03	06/24/90	1125	PB-001	2627010025	Paule Creek-Paule Bay, Alaska Peninsula K10-07	Bags of oil. 12m x 3m excavated area on beach north of stream mouth.
04	06/24/90	1200	PB-001	2627010025	Paule Creek-Paule Bay, Alaska Peninsula K10-07	Fred Byars (Exxon), John Hardister (USF&WS), and pilots.
05	06/24/90	1425	PB-001	2627010025	Paule Creek-Paule Bay, Alaska Peninsula K10-07	Slinging supersacks onto uplands. Beach north of stream mouth.
06	06/25/90	1300	KA-002	-0-	Kashvik Bay, Alaska Peninsula K09-35	Cobble turned over exposing unweathered mousse. Sheen evident in pool of water.
07	06/25/90	1320	KA-002	-0-	Kashvik Bay, Alaska Peninsula K09-35	Todd Skoglund (VECO) cleaning beach.
08	06/26/90	1030	KA-002	-0-	Kashvik Bay, Alaska Peninsula K09-35	Portion of excavation site necessary to remove subsurface mousse.
09	06/26/90	1605	KA-002	-0-	Kashvik Bay, Alaska Peninsula K09-35	Helicopter slinging supersacks of oil onto uplands.
10	06/27/90	1015	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	Tar patties along tidal flat, north side of stream channel.
11	06/27/90	1015	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	Tar patties along tidal flat, north side of stream channel.
12	06/27/90	1015	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	Tar patties along tidal flat, north side of stream channel.
13	06/27/90	1045	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	On tidal flats looking west toward oiled area and stream.
14	06/27/90	1045	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	On tidal flat looking north toward oiled area and work crew.
15	06/27/90	1100	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	Tarballs and oiled sediments on absorbent pad. Along tidal flat north of stream channel.
16	06/27/90	1400	KA-003	2626010040	Kashvik Creek, Alaska Peninsula K09-35	Oiled area along tidal flat north of stream channel as delineated by row of plastic bags.
17	06/28/90	1100	CD-020	2621010092	2 mi SW Cape Douglas, Alaska Peninsula K09-11	3m x 1m oiled area on stream bank, exposed after log was rolled away.
18	06/28/90	1220	CD-020	2621010092	2 mi SW Cape Douglas, Alaska Peninsula K09-11	Oiled area, north bank of stream/lagoon.
19-21	06/27/90	-0-	-0-	-0-	Glaciers	Miscellaneous photos. Not oil related.
22	06/29/90	1150	PB-016	2627010010	Helen Creek-Paule Bay, Alaska Peninsula K10-07	Oil mousse on stream bank.

FRAME#	DATE	TIME	SEGMENT#	STATION#	LOCATION	REASON FOR TAKING PHOTO
23	06/29/90	1200	PB-016	2627010010	Helen Creek-Paule Bay, Alaska Peninsula K10-07	Sheening in test pit dug at edge of stream.
24	06/29/90	1201	PB-016	2627010010	Helen Creek-Paule Bay, Alaska Peninsula K10-07	Julie Carlson of ADEC taking sample of mousse from stream bank.
25	06/29/90	1215	PB-016	2627010010	Helen Creek-Paule Bay, Alaska Peninsula K10-07	Tarballs and patties north of stream mouth.
26	06/29/90	1245	PB-016	2627010010	Helen Creek-Paule Bay, Alaska Peninsula K10-07	View looking upstream. Heavily oiled area between sample box and stream.
27	06/29/90	1246	PB-016	2627010010	Helen Creek-Paule Bay, Alaska Peninsula K10-07	Test pit sheening. Sand, mousse and pebble substrate removed from test pit.
28	07/03/90	1300	CC-002	2621510040	Chiniak Lagoon, Alaska Peninsula K09-17	Oil in tributary creek and adjacent area.
29	07/03/90	1300	CC-002	2621510040	Chiniak Lagoon, Alaska Peninsula K09-17	Oil in tributary creek and adjacent area.
30	07/03/90	1300	CC-002	2621510040	Chiniak Lagoon, Alaska Peninsula K09-17	Salmon fry rearing in oiled tributary creek.
31	07/03/90	1400	CC-002	2621510040	Chiniak Lagoon, Alaska Peninsula K09-17	Red fox at oiled tributary creek.
32	07/03/90	1400	CC-002	2621510040	Chiniak Lagoon, Alaska Peninsula K09-17	Red fox at oiled tributary creek.
33	07/03/90	1400	CC-002	2621510040	Chiniak Lagoon, Alaska Peninsula K09-17	Red fox at oiled tributary creek.
34	07/03/90	1520	CC-002	2621510040	Chiniak Lagoon, Alaska Peninsula K09-17	Oil band removed from lagoon.
35	07/05/90	1015	CD-018	2621010100	Douglas Creek, Alaska Peninsula K09-11	Band of oil along edge of island in lagoon.
36	07/05/90	1015	CD-018	2621010100	Douglas Creek, Alaska Peninsula K09-11	Vegetation and oil being removed from island in lagoon.
37	07/06/90	1105	CD-018	2621010100	Douglas Creek, Alaska Peninsula K09-11	Vegetation and oil removed from island in lagoon.

~~Picked up Tracking form. Returned to
office. Did a minimum of paper work to
keep my head above water. Edited,
charged radio etc etc. Done 8:45 pm~~

6/29 0630 Drive to JCP. Provided Fred Byers with
collections to streams numbers on work orders.
Found out Kaskwit Bay is foggied in.
Call USF&WS (John Hardister) requesting
They allow me to represent them during
The red Fox stream cleanup. Found out from
John that a survey currently under way
on the Alaska Peninsula by USF&WS
(Ronald E. Hood) discovered oil in & around
Helen creek that requires immediate cleanup.
I was not notified by Exxon or USCG.
Spoke to Commander Smith asking why I was
not contacted. He told me he spoke to
Mike Cardwin and Cardwin was to speak
to me. Sounds phony to me. Anyhow I got

a seat on the ship to fly to Helen Creek

10:00 AM Today

work on Time sheet, photocopy paperwork necessary

Ten Trip to Helen Creek. 10:20 AM in helicopter, briefing.

ERA 412 Photocopy of manifest. Depart 10:40 AM
from Kodiak Airport. Land Helen Creek 362-70-10010

11:40 AM. 20 yd x 3m 60% coverage

Clas. mousse, bands. Located in stream bed.

Penetration down to 6" as evidenced by TEST
PITS. A portion of this band is still covered by
sand. TEST pits indicate a band of mousse

3-6 inches thick mixed with the sand

From the beach/stream interface with the first 105
yards widely scattered TB & TB. This is followed by an area
99 yards x 6 yards wide the heaviest HT areas is

2 m wide 80-30% coverage. The remainder is

3% coverage. Surface Tar balls/patties. Some
of it is under 1" of sand. I located it with my
fingers. The last 48 yds x 4 yds 1% coverage.

T/B mixed with sand. I walked to the point where

The Rock bluffs start. I suspect The Tar balls
may be breaking off a larger deposit on the
beach front. Area should be fully assessed
at time of cleanup. Time did not permit a
survey of the south side of the stream.

ACE 1950767

Depart Helen Creek 12:50 pm. Land Karluk 1:20 pm

Fuels. Depart Karluk 2:20 pm. Land ICP 3:40 pm

Location needs SK-17 OK.

Photo #3 Roll 90-JPB-002-K

#22. 11:50 AM Helen Creek chocolate mousse at

Stream bed. #23 12 noon sheening in TEST pit.

#24. 12:01 pm Helen Creek. Julie (DEC) Taking sample of mousse
from low stream bank, stream in background.

#25 12:15 pm Tar patties North of stream mouth

#26 12:45 pm Looking up stream Helen Creek. Heavily oiled area
between Tackle Box & stream

#27 12:46 pm TEST pit with sand, mousse, pebble substrate
Removed, sheening.

oil sample # 90 JPB003 K

Planning for stream cleanup areas with CREW

Byers until 5:15. Drive to office. work on
paperwork Done 8 pm

ACE 1950768

-15



STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CHAIN-OF-CUSTODY LOG

Use one log for each sample. Enclose with shipping container.

The last person whose signature appears on this log certifies he/she has received the sample described below from the person whose signature immediately proceeds his/hers, and is according the sample proper custody by maintaining it in his/her physical possession or constant view or by storing in a secure tamper proof storage area. Transfers must be hand-to-hand, by registered mail, or other tamper proof means.

Sample No. 90JPBC03K Assigned Laboratory No. _____

Sample Description oil mousse

Container Description Precleaned glass jar w. Teflon lid

Location taken Helen Creek AFS 262-70-10010 K10-7 P8-16

Latitude 57° 45' 20"

Longitude 155° 29' 9"

Person taking sample JEFF BARNHART

Signature Jeff Barnhart

Title Fisheries Biologist I

Agency ADF&G Habitat Div.

Date collected 6/29/90

Time collected 1210 hours

Witness _____

Signature _____

Witness _____

Signature _____

1. Transferred to K.R. Middleton via hand

For purposes of Transfer to Anchorage Storage

Date 9-11-90

Time 1100

Received by K.R. Middleton

Signature K.R. Middleton

Disposition _____

2. Transferred to _____ via _____

For purposes of _____

Date _____

Time _____

Received by _____

Signature _____

Disposition _____

3. Transferred to _____ via _____

For purposes of _____

Date _____

Time _____

Received by _____

Signature _____

Disposition _____

4. Transferred to _____ via _____

For purposes of _____

Date _____

Time _____

Received by _____

Signature _____

Disposition _____

5. Transferred to _____ via _____

For purposes of _____

Date _____

Time _____

Received by _____

Signature _____

Disposition _____

6. Transferred to _____ via _____

For purposes of _____

Date _____

Time _____

Received by _____

Signature ACE 1950769

Disposition _____

This section to be completed by the laboratory Analyst:

Analyses completed _____

Summary results _____

Volume of sample remaining _____

Disposition of unused portion _____

Signature _____

Inspector's Seal Intact ☐ Yes ☐ No

Return this form to:
Sample Custodian: Environmental Technician
Department of Environmental Conservation
Douglas Laboratory Facility
750 St. Ann's Ave., Douglas, Alaska 99824
or
Sample Custodian:
Department of Environmental Conservation
510 South Alaska Street
P.O. Box 1088, Palmer, Alaska 99645

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

STEVE COWPER, GOVERNOR

Rapifax 349-1723

333 RASPBERRY ROAD
ANCHORAGE, ALASKA 99518-1599
PHONE: (907) 344-0541

RAPIFAX TRANSMITTAL SHEET

TO: Ken Middleton
Arch Habitat Division.

DATE: 6/29/90.

No. Pages: _____
(including this page)

FROM: JEFF BARNHART
Kodiak Habitat.

MESSAGE:

Surveyed Helen creek Today with Agencies.

The oil in the stream was uncovered since I conducted the Assessment. IT is located in the mid bank area and extends to the stream bed. Test pits dug at edge of stream bed show, mousse visible. My survey conducted today will be in your office by Monday morning, somehow.

The modification of the work order should include:

- ① Removal of all surface mousse
- ② Removal of all subsurface mousse and oiled sand/gravel
- ③ Assessment ^{by monitors} of stream bank and stream bed on both north & south side. Numerous test pits need to be dug. I suspect we will find additional subsurface oiling. To remove the subsurface oil we will probably need to remove the top 6-10 inches of sand/cobble mixture.
- ④ Tar patties from mouth extending north ^{along beach for} approx 175 meters should be removed.
- ⑤ beach face on both N & S side of mouth should be assessed by monitors for presence of subsurface oil.

ACE 1950770
#15

This FAX includes The USFWS survey and Commander Smith's Recommendation.

Tomorrow . . . I'll be working cleanup in Sturgeon Lagoon with the Helo squad. SL-08 calls for bio. This segment is in the low energy lagoon. Any suggestions?

The FAX copy of The USFWS survey is very poor. So... your copy will be ~~the~~ poor.

Also we need to have the ability to have ~~the~~ any oiled areas discovered ~~by the~~ by the monitors during the cleanup process treated as necessary.

EXXON FLIGHT PLAN

- AIRCRAFT TAIL NUMBER: 17A6H DATE: 6-29-90
- AIRCRAFT COLOR: RED/WHITE/BLACK TYPE AIRCRAFT: BH 412
- TOTAL NUMBER OF PEOPLE ON BOARD (INCLUDING CREW): 9
- DEPARTURE POINT: ADD ETD: 1815
- ROUTE OF FLIGHT (SHOW ALL WAYPOINTS): PUALE BAY / KARLAK
- FINAL DESTINATION: ADD ETA: 1500
- FUEL ON BOARD: 3 HRS + 30 MINUTES
- ANTICIPATED DELAYS (WAYPOINT/TIME): PUALE BAY 1HR
KARLAK 1HR
- COMPLETE MANIFEST AND ATTACH OR USE FORM BELOW: ✓ (check complete)
- DRAW ROUTE WITH DIRECTION ARROWS AND ATTACH: ✓ (check complete)
- EXECUTE IDEMNIFICATION AGREEMENT IF REQUIRED (reference page F-4) ATTACH. REQUIRED? YES NO ✓
- FAX (266-6471) COMPLETE FLIGHT PLAN AND ATTACHMENTS TO TRANSPORTATION FOLLOWING OR CALL (266-6582). IF DELAYED MORE THAN 30 MIN., AMEND ETD.

NAME	COMPANY	WEIGHT	BAG WT	DESTINATION
CDR SMITH	USCG	200	1	ADD
JEFF BARNHART	FRG	200		-
WALT JANICEK	NOAA	200		-
JULIE CARLSON	ADEC	150		✓
ALAN ELIASON	NPS	200		-
DICK MUNOZ	FRW	200		-
TONY MARTIN	USCG	200	1	✓

PILOTS NAMES:

P. SPALTY
M. CLAJNARIC

TOTALS	1350	30
TOTAL PASS & BAGGAGE	1000	

E-6.

ACE 1950772

Interagency Survey of
Holen creek.
Helo manifest.
JLB.

Date: Jun 29, 1990 4:37 PM
From: Supervisor/CGKICP
To: FOSC/OPS
Copies:
Attach:
Subject: OIL DISCOVERED ON K10-7-PB016 PUALE BAY

Message ID:

OPS:

WORK PLAN MODIFICATION RECOMMENDATION

REF: (a) WORK ORDER DTD 2 MAY 90; TAG APPROVED 18 MAY 90; SIGNED 27 MAY 90

SEGMENT: K10-7-PB016 SUBDIVISION: HELEN CREEK DATED: 29 JUN 90

STREAM NUMBER: 262-70-10010

MODIFICATION

1. REASON FOR MODIFICATION: WORK ORDER, REFERENCE (a), RECOMMENDED NO TREATMENT OF ANAD. STREAM 262-70-10010. THIS STREAM WAS REASSESSED ON 2 MAY 90 WITHOUT THE DISCOVER OF OILING. A REPORT WAS RECEIVED FOR USF&WS OF OIL UNCOVERED BY STORM ACTIVITY. A INSPECTION FLIGHT TO K10-7-PB016 29 JUN 90 SHOWED MODERATE OILING ALONG THE UPPER BANK AREA OF HELEN CREEK. THE AREA OF OILING IS APPROXIMATELY 3 METERS WIDE BY 20 METERS LONG ON THE NORTH SIDE OF THE CREEK APPROXIMATELY 100 METERS FROM THE MOUTH OF THE CREEK. THERE IS SURFACE MOUSSE UP TO 2 INCHES THICK AND A LAYER OF MOUSSE MIXED WITH SEDIMENT UP TO 1 INCH THICK 4 TO 6 INCHES BELOW THE SAND SURFACE.

2. SUGGESTED ADJUSTMENT TO WORK PLAN: WORK ORDER SHOULD BE MODIFIED FROM NO TREATMENT RECOMMENDED TO MANUAL PICKUP WITH SEDIMENT REMOVAL TO GET THE SUBSURFACE LAYER.

3. TIMING ISSUES: ANAD STREAM-SALMON STREAM MOUTH-SPAWNING 7/10 TO 8/31

USCG

* ADEC *Giliana Carlson*
* ADF&G *Jeffrey Barnhart*

* will make recommendation To ADF&G Habitat Div. in Anchorage To include in Modification The pickup of Tar patties from Stream mouth north.

** Concav with ADF&G

Forward to Exxon USA for Action

⊕

DDPuma, CDR, USCG

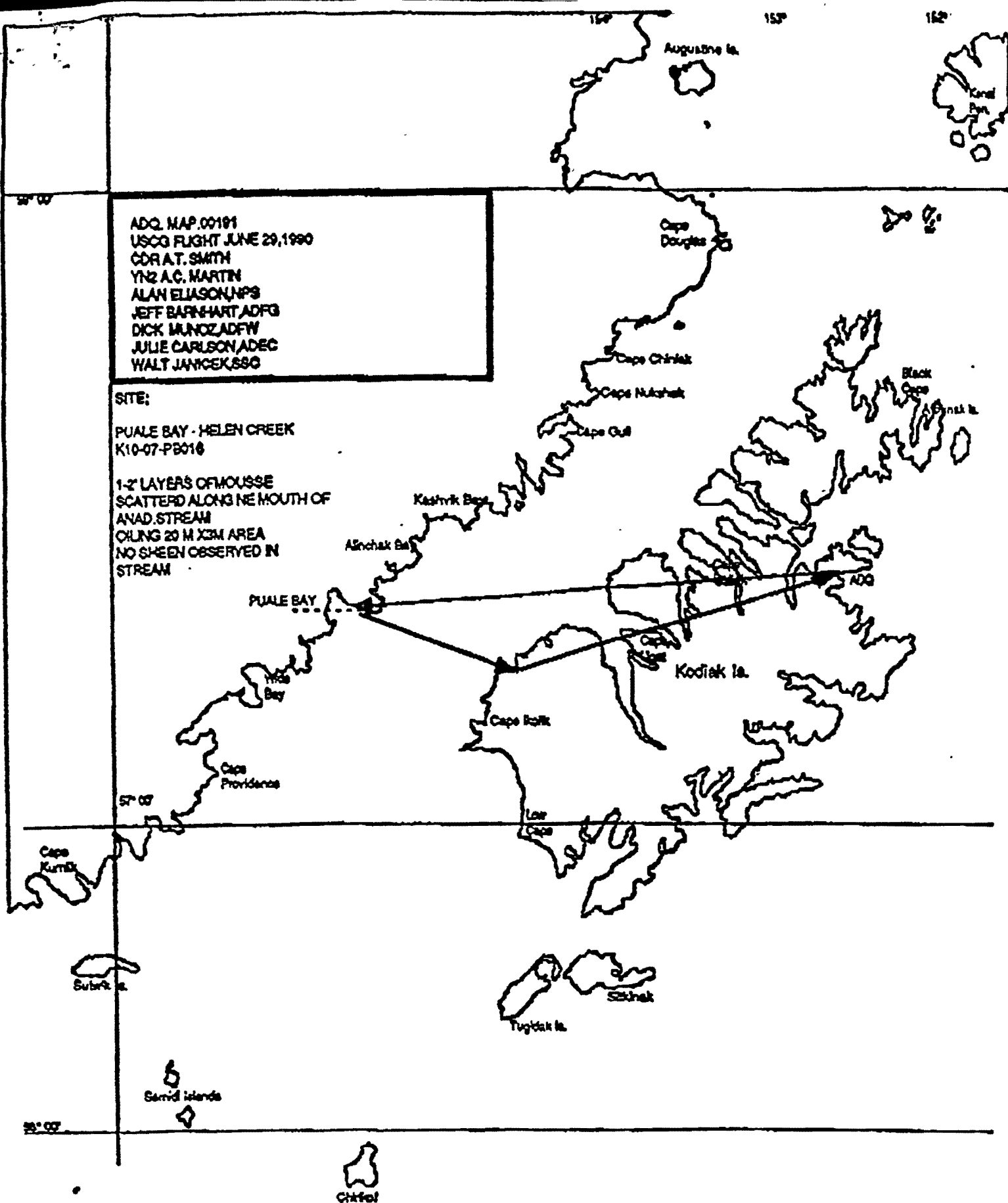
ACE 19507964/S/P

ADQ. MAP.00191
USCG FLIGHT JUNE 29, 1990
CDR A.T. SMITH
YN2 A.C. MARTIN
ALAN ELIASON/MP3
JEFF BARNHART/ADFG
DICK MUNOZ/ADFV
JULIE CARLSON/ADEC
WALT JANICEK/SSG

SITE:

PUALE BAY - HELEN CREEK
K10-07-P8018

1-2 LAYERS OF MOUSSE
SCATTERED ALONG NE MOUTH OF
ANAD. STREAM
OILING 20 M X 3M AREA
NO SHEEN OBSERVED IN
STREAM



ACE 1950797

Shoreline Assessment Survey

Segment K10-07-PBAN6 Survey Dates: 6/29/90

Monitors:

HELEN CREEK; STREAM # 262-70-10010

W.S. JAVIER SSC
A.T. SMITH, USCR

UPPER TIDAL ZONE

Geological Sediment Type:

☐ Boulder ☒ Sand
☒ Cobble ☐ Mud
☒ Pebble ☐ Rock
☐ Gravel

ONLY MUD, USCR

Degree of Oiling:

3

0 = None 3 = Moderate
1 = Very light 4 = Heavy
2 = Light

Comments: Patches of Mosses Found along rocks in upper BANK
of Helen Creek at the North East side of Mouth - Mosses scattered
in patches along U.T.Z. forming Tarnets of sizes VARYING
Subsurface Oil Depth: 6 inches FROM 6" - 24"

INTERMEDIATE TIDAL ZONE

Geological Sediment Type:

☐ Boulder ☒ Sand
☒ Cobble ☐ Mud
☒ Pebble ☐ Rock
☐ Gravel

Degree of Oiling:

3

0 = None 3 = Moderate
1 = Very light 4 = Heavy
2 = Light

Comments: Test pits dug on the North East Mouth of Helen Creek
revealed layers of Mosses 1-2" thick at a penetration of depth
penetration of 4-6". AREA affected = 20 M x 3 M. The head South West
Subsurface Oil Depth: 4-6 inches BANK showed no obvious degree of oiling.

LOWER TIDAL ZONE

Geological Sediment Type:

☐ Boulder ☒ Sand
☐ Cobble ☐ Mud
☐ Pebble ☐ Rock
☒ Gravel

Degree of Oiling:

0

0 = None 3 = Moderate
1 = Very light 4 = Heavy
2 = Light

Comments: NO OILING OBSERVED

Subsurface Oil Depth: inches 0-6 SEVERAL HICKS TO 16", NO
OILING OBSERVED

SHEEN ALONG SHORELINE

Sheen Size:

Length — feet
Width — feet

NONE OBSERVED

Sheen Type:

L = Light
M = Medium
H = Heavy

Sheen Color:

D = Dull
B = Bright

MEMORANDUM

State of Alaska

TO:

File

DATE *9/19/90*

FILE NO

TELEPHONE NO *486-5033*

FROM

JEFF Barnhart

SUBJECT. *Interagency inspection of Helen creek
AFS 262-70-10010*

On June 29, 1990 I arrived at The Kodiak ICP for a flight with The helo work squad to Kachvik Bay. While at The ICP I phoned John Hardister of The USFWS in Kodiak. During The course of our conversation he informed me Ronald E. Hoard of The USFWS discovered oil in Helen creek on 6/24/90. Additionally he informed me an interagency group was scheduled to survey The oil today.

Immediately I inquired of Commander Archie Smith of The USCG as to why I was not informed of The survey flight. He informed me he spoke to Mr. Mike Goodwin, Chairman of The KISCC, The evening of June 28, 1990 and that Mr. Goodwin was to inform me. In my opinion this was not the appropriate action for Commander Smith to take. It was only by chance I found out about The flight.

I was able to obtain a seat on The flight which departed Kodiak airport at 1040 hours.

ACE 1950799

MEMORANDUM

State of Alaska

TO *File, page 2*

DATE *9/19/90*

FILE NO.

TELEPHONE NO

FROM *Jeff Barnhart*

SUBJECT *Interagency inspection of Helen Creek*
AFS 262-70-10010 Con't

The work plan modification recommendation submitted by the supervisor / CG-KICP, Commander Archie Smith, is inaccurate as per the description of the oiling conditions. Furthermore the modification states "... Approximately 100 meters from the mouth of the creek." In actuality the oil was located approximately 100 meters upstream from the creek mouth at the current tidal stage at the time of the survey.

The shoreline assessment survey completed by Walt Janicek is inaccurate as per the description of the type of oil and oiling conditions.

ACE 1950800-1/p

U.S. Department
of Transportation
United States
Coast Guard



FROM THE
FEDERAL ON SCENE COORDINATOR
ANCHORAGE, ALASKA

FACSIMILE TRANSMISSION SHEET

TO: CMD. Smith
(Name)

DATE: 28 June '90

Tcp Kodrak
(Office)

PAGES: 9
(Including Cover Sheet)

(Phone)

FROM THE OFFICE:

Federal On Scene Coordinator
601 W. 5th. Avenue Suite 300
Anchorage, AK 99501
Phone: 907 277 3833
Fax: 907 263 1736

SUBJECT: _____

REMARKS:

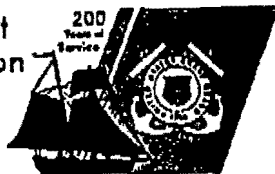
In spec for correctness
of Segment

USFWS Survey of Helen
Creek at the time the
oil surfaced.

gpb

ACE 1950801 +1/5

U.S. Department
of Transportation
United States
Forest Service



FROM THE
FEDERAL ON SCENE COORDINATOR
ANCHORAGE, ALASKA

FACSIMILE TRANSMISSION SHEET

TO: CmD. Smith
(Name)

DATE: 28 June '90

Tcp Kodrak
(Office)

PAGES: 9
(Including Cover Sheet)

(Phone)

FROM THE OFFICE:

Federal On Scene Coordinator
601 W. 5th. Avenue Suite 300
Anchorage, AK 99501
Phone: 907 277 3833
Fax: 907 263 1736

SUBJECT: _____

REMARKS:

Inspect for correctness
of Segment

ACE 1950801 +15

U.S. FISH AND WILDLIFE SERVICE
REGION 7
1011 E. TUDOR ROAD
ANCHORAGE, ALASKA 99503
FAX NUMBER: 907-562-2297

RECEIVED
28 JUN 1990

TO: *Conda Buzig Rome* DATE/TIME: *7/6/28/90 9:20*
FROM: *Paul Gertle* CALL _____ TO HAVE PICKED UP
SUBJECT: *Fish & Wildlife Service Shoreline Assessment K10-7-PR-1*

Per our Telecon.
Please call me at 786-3579
to confirm receipt of
its legibility. Thanks
PE Gertle

	INFO	ACT	COPY
FOSO			
COS			
OPS			
OPSS			
OPSS			
Shoring	<i>9/1</i>		

ACE 1950802

FIELD SHORELINE COMMENT SHEET

COMMENT ST/ K10-7

SUBDIVISION: P13-14

DATE 6/24/98

NAME

SIGNATURE

☒ NO TREATMENT RECOMMENDED☐ TREATMENT SUGGESTED

COMMENTS

NAME

SIGNATURE

☒ NO TREATMENT RECOMMENDED☐ TREATMENT SUGGESTED

COMMENTS

LAND MANAGER

NAME Ronald E. Hood

SIGNATURE

Ronald E. Hood

☒ NO TREATMENT RECOMMENDED☒ TREATMENT SUGGESTED

COMMENTS

An immediate Type A clean up of the area on Helen Creek and east of Helen Creek is requested. Care should be taken to avoid the eagle nest, but the clean up should not be delayed because of the nest.

SHORELINE OILING SUMMARY

REVISED VERSION

USCG
 LAND REP
 ADEC
 TIDE LEVEL: 10.63 to 11.06
 SEGMENT ST/ K10-7
 SUBDIVISION PB114
 TIME 15 154 1017 125
 DATE 6/24/98
 DIVISION LENGTH: 200 m
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☐ Rock
 SURFACES FROM: ☒ Foul ☐ Boal ☒ Herb
 SURFACE SEDIMENTS: R 5 % B 5 % O 5 % P 10 % G 10 % S 65 % M 0 % V 75 %
 WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W 10 m M 0 m N 0 m VL 50 m NO 150 m

SURFACE OIL

OIL CHARACTER	DISTRIBUTION				OIL / FILM COLOR					IMPACTED ZONES			
	2	3	4	5	6	7	8	9	10	SU	M	M	U
PAVEMENT													
PAVEMENT	X												✓
PAVEMENT	X												✓
PAVEMENT				X									✓
PAVEMENT				X									✓
PAVEMENT	X												✓
PAVEMENT				X									✓
PAVEMENT				X									✓
PAVEMENT				X									✓
PAVEMENT										X	X	X	

PAVEMENT: H # 8 94 m by

PATTIES / TARBALLS BAGS

NEAR SHORE SHEENT NO BR RW SL TL

OIL DEBRIS	AMOUNT
Logs	✓
Vegetation	
Trash	
Debris	

DEBRIS COLLECTED

☐ YES ☒ NO

TYPE

#BAGS

Photographs:

Roll No. _____

Frames _____

SUBSURFACE OIL

STATION	DEPTH	SUBSURFACE OIL CHARACTER					OILED INTERVAL (IN-OUT)	BELOW	OIL / FILM COLOR						PIT ZONE				AN A	SUBSURFACE SEDIMENTS				
		SP	OR	OC	GP	NO			NO	US	1	2	3	4	5	6	7	8			9	10	11	12
1	15					✓	0-0	✓										✓						(SGP) throughout
2	15					✓	0-0	✓										✓						(SGP) throughout
3	30			✓			10-13	✓			✓							✓						(SGP) throughout
4	15	✓					0-15	✓			✓		✓	✓				✓						(CPGS) throughout

ACE 1950804

ACE 1950804

Regarding pits

Pit 3 oil patty underlies surface UTZ sand and pebbles

encountered oil is dark brown and light brown w/ oiling of surface

SHORELINE ECOLOGICAL SUMMARY

STATION 15542125 Subdivision PB-16

Date (mo/day/yr) 6/24/92

Biologist K. Hankins / G/Y Ancho

(A) Substrate type and % of segments:

(1) Bedrock 5 (2) Boulder 5 (3) Cobble 5 (4) Pebble 10 (5) Sand 75 (6) Gr.

(B) Overall % cover of biota (% of segment): Dense

Moderate 75 Low

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low/dal-L); juveniles/adults (X), new settlement (S)

Photographs:

Roll No.

Frames

STATION 15542125

Dense
1U
2
3
4
5
6

1L
2
3
4
5
6

Moderate
1U
2
3
4
5
6

1L
2
3
4
5
6

Sparse
1U
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3
4
5
6

1L
2
3
4
5
6

Rare
1U
2
3
4
5
6

1L
2
3
4
5
6

NOT PRESENT

STATION 15542125

Dense
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5
6

Moderate
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1L
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Sparse
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Rare
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NOT PRESENT

STATION 15542125

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NOT PRESENT

STATION 15542125

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Rare
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NOT PRESENT

Specific Observations/General Comments:

Caribou and caribou tracks observed on beach, and solitary caribou observed in the upland area, 2 mature Bald Eagles and 2 Pigeon Guillemots were present.

Ecological Considerations:

Two Bald Eagles with downy chicks are in the immediate vicinity of the beach. The heavily oiled portion of the Helen Creek / upper tidal zone and the light brown pools of oil dripping into the drainage. The Helen Creek drainage encompasses an important salmon fishery.

SHORELINE ECOLOGICAL SUMMARY-- SUPPLEMENTAL FORM
WILDLIFE/AVIAN OBSERVATIONSSegment ST/ K10-7 Subdivision PB-16 Date
(no/day/yr) 6/24/90Time (24 hr) ISSH 1725 Biologist K. Harkin / G. Yonaga(A) Substrate type and % of segments:
Bedrock 5 Boulder 5 Cobble 5 Pebble 10 Sand 45 Silt(B) Write number of individuals observed/species or estimate
number and place an "E" (estimate) next to the number.Red-throated Loon _____
Pacific Loon _____
Common Loon _____
Horned Grebe _____
Shearwater spp. _____
Fk-tail Storm Petrel _____
Belt-crust cormorant _____
Pelagic Cormorant _____
Red-faced Cormorant _____Tundra Swan _____
Emperor Geese _____
Brant _____
Canada Geese _____
Mallard _____
Green-winged Teal _____
Northern Pintail _____
Scaup spp. _____
Common Eider _____
King Eider _____
Marlequin Ducks _____
Oldsquaw _____
Black Scoter _____
Surf Scoter _____
White-winged Scoter _____
Common Goldeneye _____
Common Merganser _____
Red-breasted Merganser _____
Rufflehead _____
Bald Eagle (Adlt) 2
_____ (Imm) _____
Northern Harrier _____
Rough-legged Hawk _____
Peregrine Falcon _____Black-bellied Plover _____
Lesser Golden Plover _____
Semi-palmated Plover _____
Black Oystercatcher _____Yellowlegs spp. _____
Solitary Sandpiper _____
Wandering Tattler _____
Bar-tailed Godwit _____
Marbled Godwit _____
Ruddy Turnstone _____
Black Turnstone _____
Surfbird _____
Western Sandpiper _____
Least Sandpiper _____
Rock Sandpiper _____
Dunlin _____Pomarine Jaeger _____
Parasitic Jaeger _____
Maw Gull _____
Glaucous-winged Gull _____
Blk-leg Kittiwake _____
Murre spp. _____
Pigeon Guillemot 2 _____
Marbled Murrelet _____
Kittlitz Murrelet _____
Ancient Murrelet _____
Tufted puffin _____
Horned puffin _____Blk-billed Magpie _____
Common Raven _____
Winter Wren _____
American Dipper _____
American Pipit _____
Savannah Sparrow _____
Song Sparrow _____
Golden-crowned Sparrow _____
White-crowned Sparrow _____
Lapland Longspur _____
Snow Bunting _____
Rosy Finch _____
Other _____

ACE 1950807

12

RECRUITMENT AND MORTALITY

1) Observations of recent settlement (S) or new growth (G):

a) Barnacles, less than 1mm (S), 1-3mm (G)

1. Vertical distribution (LTZ, HTZ, UTZ):

G HTZ

2. Substrate (Rock, Boulder, Cobble, etc. Note if oiled/unoiled):

Bedrock Boulder Cobble unoiled

3. Horizontal distribution (Dense, Sparse, Patchy, Cont., etc.):

Sparse

b) Mytilus less than 2mm (S), 2-5mm (G)

1. Vertical distribution:

2. Substrate (Note if oiled/unoiled):

Not present

3. Horizontal distribution:

c) Littorina, eggs or less than 2mm dia.

1. Vertical distribution:

HTZ

2. Substrate (Note if oiled/unoiled):

Bedrock Boulder cobble unoiled

3. Horizontal distribution:

Sparse

d) Fucus, other algae, seagrass (Note species and what type of growth)

1. Vertical distribution:

2. Substrate (Note if oiled/unoiled):

not present

3. Horizontal distribution:

e) Other (Describe):

2) Observations of mortality:

a) Barnacles (Describe as % dead individuals or scars) 10%

1. Vertical distribution:

LTZ

2. Substrate (Note if oiled/unoiled):

Bedrock Boulder cobble

3. Horizontal distribution:

Sparse

b) Mytilus (Describe as % Note if drilled or otherwise clearly

(oiled)

1. Vertical distribution:

2. Substrate (Note if oiled/unoiled):

not present

3. Horizontal distribution:

c) Other:

XG

SEGMENT ST/ K10-7

SUBDIVISION PB-16

DATE 6 12 90

CHECKLIST

- ☒ Major
- ☒ Segment Scale
- ☒ Segment Entry
- ☒ C/E
- ☒ W/L
- ☒ L/S
- ☒ T/C
- ☒ Substrate Character
- ☒ Ex. AREA
- ☒ S/L
- ☒ F/L
- ☒ F/L
- ☒ F/L
- ☒ F/L

LEGEND

1A
PB - No Substrate C/E

2A
PB - Substrate C/E

CT/C

CV/S

CT/P

CT/S

CT/S

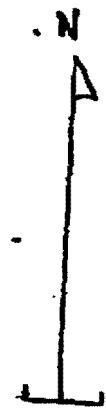
CT/S

CT/S

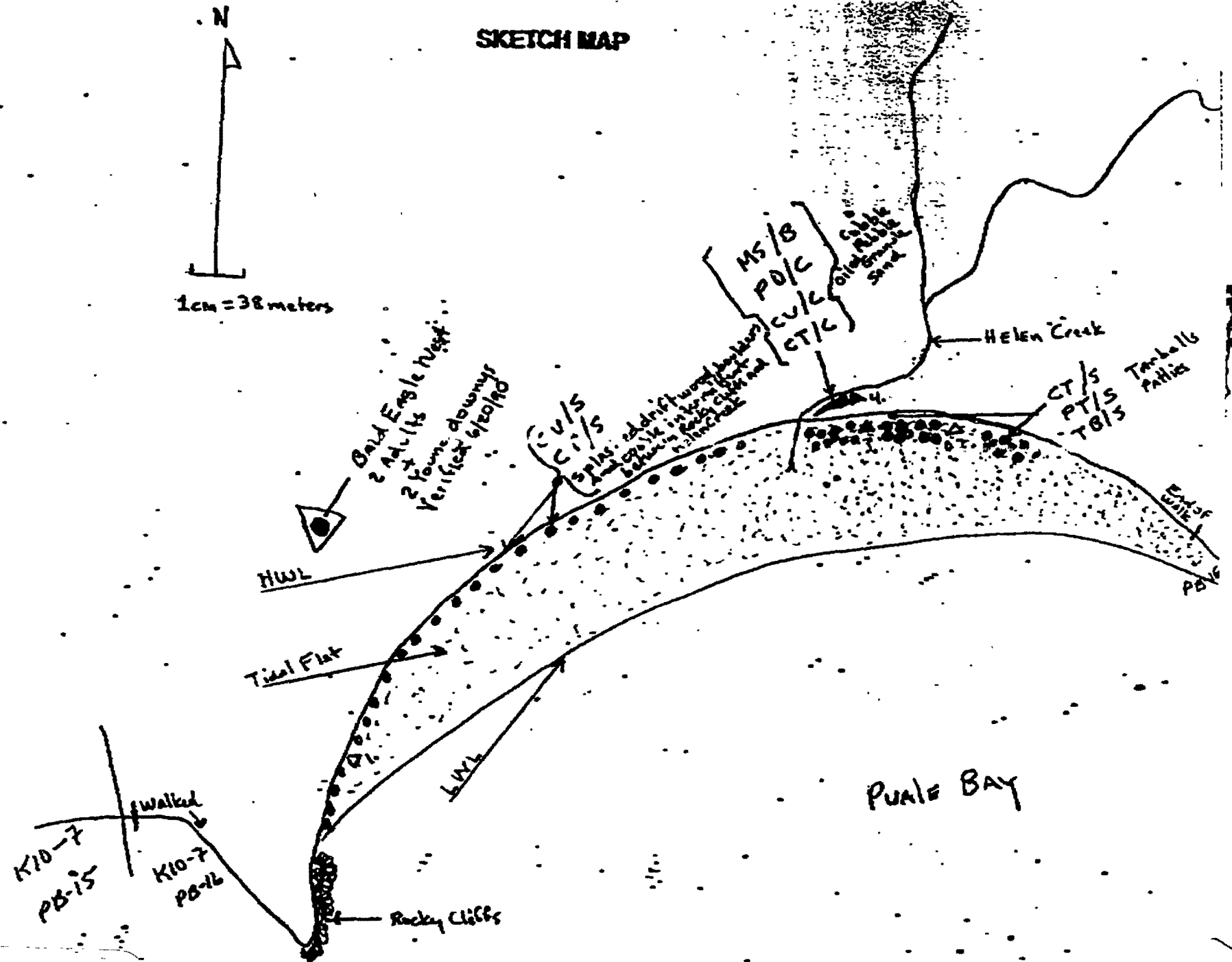
CT/S

CT/S

SKETCH MAP



1cm = 38 meters



ACE 1950809

Legend: AP - PB 20 CV 20 CT 40 ST MS 20 PT 100 TB 100 FL NO

REVISIONS

OG

SEGMENT ST/ K10-7

SUBDIVISION PB-16

DATE 6/24/90

CHECKLIST

- ☒ Name
- ☒ Approx. Scale
- ☒ Topographic Survey
- ☒ Contour
- ☒ Width
- ☒ Length
- ☒ T. Contour
- ☒ Substrate Character
- ☒ For MIRA/MS
- ☒ S/L
- ☒ Puddle Location(s)
- ☒ Puddle(s)
- ☒ Puddle Location(s)
- ☒ Puddle Location(s)

LEGEND

1A
Pb-16 Subdivision C1

2A
Pb-16 Subdivision C2

C1/C
Disturbance Distribution

C2/C
Disturbance Distribution

C1/P
Puddle Distribution

C2/P
Puddle Distribution

C1/S
Substrate Distribution

C2/S
Substrate Distribution

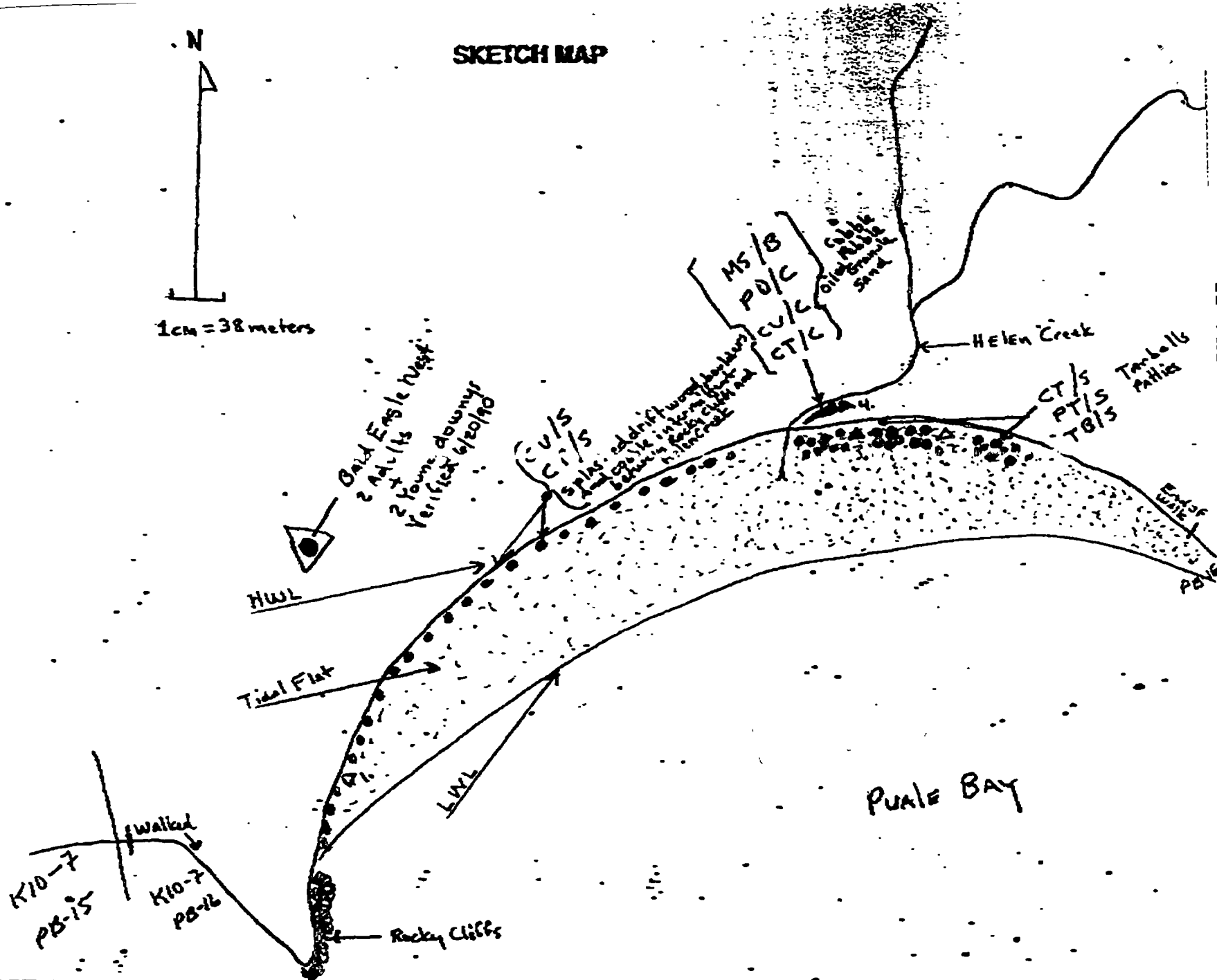
Flow direction, direction, and number

ACE 1950810-15

SKETCH MAP



1cm = 38 meters



Length: AP - PO 20 CV 20 CT 40 ST - MS 20 PT 100 TB 100 FL - NO

REVISIONS

Helen Creek

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K10-07-PB-016 STREAM NO: 262-70-10010 DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: Rachel Jean Owen DATE: 5/22/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

X No Treatment Recommended
 Treatment Recommended
 Manual Pickup
 Bioremediation
 Tarmat Removal

 Snare/Absorbent Booms
 Oil Snares (pom poms)
 Absorbents (pads, rolls, etc)
 Spot Washing: Wands
 Beach Cleaner
 Other (see comments)

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 5/18/90
ADEC Art Weller
EXXON Andy Ten
NOAA Gary Petros
USCG G.A. BEITER

FOSC: [Signature] DATE: MAY 27 1990

Post-It™ brand fax transmittal memo 7671		# of pages > <u>12</u>
To <u>Loretta</u>	From <u>Patty</u>	
Co. <u> </u>	Co. <u> </u>	
Dept. <u> </u>	Phone # <u> </u>	
Fax # <u> </u>	Fax # <u> </u>	

ACE 1950811 + 18/P

Date: Jun 29, 1990 4:37 PM
From: Supervisor/CGKICP
To: FOSC/OPS
Copies:
Attach:
Subject: OIL DISCOVERED ON K10-7-PB016 PUALE BAY

Message ID:

OPS:

WORK PLAN MODIFICATION RECOMMENDATION

REF: (a) WORK ORDER DTD 2 MAY 90; TAG APPROVED 18 MAY 90; SIGNED 27 MAY 90

SEGMENT: K10-7-PB016 SUBDIVISION: HELEN CREEK DATED: 29 JUN 90

STREAM NUMBER: 262-70-10010

MODIFICATION

1. REASON FOR MODIFICATION: WORK ORDER, REFERENCE (a), RECOMMENDED NO TREATMENT OF ANAD. STREAM 262-70-10010. THIS STREAM WAS REASSESSED ON 2 MAY 90 WITHOUT THE DISCOVER OF OILING. A REPORT WAS RECEIVED FOR USFWS OF OIL UNCOVERED BY STORM ACTIVITY. A INSPECTION FLIGHT TO K10-7-PB016 29 JUN 90 SHOWED MODERATE OILING ALONG THE UPPER BANK AREA OF HELEN CREEK. THE AREA OF OILING IS APPROXIMATELY 3 METERS WIDE BY 20 METERS LONG ON THE NORTH SIDE OF THE CREEK APPROXIMATELY 100 METERS FROM THE MOUTH OF THE CREEK. THERE IS SURFACE MOUSSE UP TO 2 INCHES THICK AND A LAYER OF MOUSSE MIXED WITH SEDIMENT UP TO 1 INCH THICK 4 TO 6 INCHES BELOW THE SAND SURFACE.

2. SUGGESTED ADJUSTMENT TO WORK PLAN: WORK ORDER SHOULD BE MODIFIED FROM NO TREATMENT RECOMMENDED TO MANUAL PICKUP WITH SEDIMENT REMOVAL TO GET THE SUBSURFACE LAYER.

3. TIMING ISSUES: ANAD STREAM-SALMON STREAM MOUTH-SPAWNING 7/10 TO 8/31

USCG

*ADEC *Jelkama Culeon*
#ADF&G *Jeffrey Barnhart*

* Will make recommendation To ADF&G Habitat Div. in Anchorage To include in Modification.
The pickup of Tar patties from Stream mouth North.

** Concav with ADF&G

Forward to Exxon USA for Action

⊕ *DD Rome, CDR, USCG*

ACE 1950812-13

JSM

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/K10-07-PB-016 STREAM NO: 262-70-10010 DATE 5/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: Rachel Jean Orr DATE: 5/22/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

X No Treatment Recommended
 Treatment Recommended
 Manual Pickup
 Bioremediation
 Tarmat Removal

 Snare/Absorbent Booms
 Oil Snares (pom poms)
 Absorbents (pads, rolls, etc)
 Spot Washing: Wands
 Beach Cleaner
 Other (see comments)

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 5/18/90
ADEC ART WEINER Art Weiner
EXXON ANDY TEAL Andy Teal
NOAA GARY PETROE Gary Petroe
USCG G.A. REITER G.A. Reiter

FOSC: [Signature] DATE: MAY 27 1990

KODIAK ECOLOGICAL CONSTRAINTS

- 1A Salmon stream mouth - fry outmigration (4/15 to 7/31)
 1B Salmon stream mouth - spawning (7/15 to 9/10; PEAK 8/15)
 No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G prior to treatment for consultation and/or permit application.
 AGENCY CONTACT PERSON: ADF&G Ken Middleton 267-2299
- 1C Salmon fry nursery area (4/31 to 7/31)
 No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
 AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1D Kotol Bay Hatchery release
 Pink salmon - late May, early June; Chum salmon - June; Sockeye salmon - early July.
- 1H Remote release site
 No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G for confirmation and authorization.
 AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1I Gill net area
 1J Purse seine area
 Mainland, West side Kodiak, Shuyak & Moser/Oiga Bay (6/9 to 10/1)
 East side Kodiak, East side Afognak (7/4 to 10/1)
- 1K Purse seine hook-off
 1L Set net sites
 Contact ADF&G for confirmation - dates and locations may vary. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
 AGENCY CONTACT PERSON: ADF&G Larry Nicholson 424-4791
- 2M Herring spawning (4/15 to 6/30)
 Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unopened intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
 AGENCY CONTACT PERSON: ADF&G Larry Nicholson 486-4791
- 3N, 3P Harbor seal and sea lion pupping (5/10 to 7/1)
 3O, 3Q Harbor seal and sea lion molting (8/15 to 9/15)
 Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
 AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
 ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)
 Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
 Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
 ADF&G Tom Roth 267-2206
- 5T All Bald Eagle nests (3/1 to 6/1)
 Active Bald Eagle nests (3/1 to 9/1)
 Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
 AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6U Recreation: Tent sites (6/1 to 9/15)
 6V Anchorages (6/1 to 9/15)
 6W Forest Service cabins (6/1 to 9/15)
 6X Lodge (6/1 to 9/15)
 6Y Special use destination
- 7Z Subistence area: Salmon harvesting (6/1 to 9/30)
 7H Finfish harvesting
 7I Deer harvesting (8/1 to 1/7)
 7J Invertebrate harvesting
 7K Bear harvesting (4/1 to 5/15 and 10/25 to 11/30)
 Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
 AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

ACE 1950814

11/28/20

FIELD SHORELINE COMMENT SHEET

RB 16 PB-16

SEGMENT ST 1/10/10 SUBDIVISION: _____ DATE _____

USCG NAME CWO MCMAHON SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

ADFG

ADEC

NAME JEFFREY BARNHART SIGNATURE [Signature]

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS Very little oil located in this anadromous fish stream.
The four T/B's located do not justify a cleanup.

LAND MANAGER

NAME _____ SIGNATURE _____

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS

OG WILLIAM LEID USCG McMAHON SEGMENT ST/ PB016
 BIO MICHAEL FAWCETT LAND REP STREACH 252-70-10001 OF
 EXXON GUS GARCIA ADFG MONTE WILDER JEFF BENNETT TIME 13:0510
 TEAM NO. 15 TIDE LEVEL 4 FT DATE 2 / MAY / 90
 EST. SUBDIVISION LENGTH: 80 m ☐ Sun ☐ Clouds ☐ Fog ☒ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☐ Forest ☐ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 10 % B 0 % C 10 % P 20 % G 70 % S 0 % M 0 % V
 SLOPE: Lang 100 % Hang 0 % Vert 0 % WAVE EXPOSURE: ☒ Low ☐ Med ☒ H
 OIL CATEGORY LENGTH: W 0 m M 0 m N 20 m VL 20 m NO 40

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR							IMPACTED ZONES				
	C	N	P	R	SP	DEL	FW	OL	SL	DR	TL	LR	SU	U	M	U
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN				X				X						X		
MOUSSE																
PATTIES																
TARBALLS			X							X				X		
FILM																
NO OIL													X		X	X

PAVEMENT H F S 0 sq. m by 0PATTIES / TARBALLS 0NEAR SHORE SHEEN? ☒ NO BR RW SL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

Did you collect DEBRIS

☐ YES ☒ NOTYPE 0#BAGS 0

Photographs:

Roll No. 45-15-8Frames 4-7

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SHEEN (Y/N)	▼	SURF SUBSURF SEDIM
		OP	OR	OL	OF	NO		VO	UC	SA OR	DEL	FW	GY	SL DR	TL	LR	EU	U	M	U					
1	40					X	.									X						X	35	S/C	
2	35					X	.									X						X	30	S/G	
							.																		
							.																		
							.																		
							.																		

COMMENTS

ACE 1950816

REVIEWED 7WDATE 5/8/90

OG WILLIAM REID

SKETCH MAP

15/38 SEGMENT ST/ P3016

STREAM 262-70-1000

DATE 2/1/90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Bndry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HWL/LWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pit Location(s)
- ☐ Photo Location(s)

LEGEND



Pit - No Subsurface Oil



Pit - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

Splashed Distribution

eee

Offed Vegetation



Photo location, direction, and number

ACE 1950817

Oil Character Length (m): AP PO CV CT ST MS PT TB FL NO

REVISION: 03/24/90

12/38

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMS PTA

2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 5/2/96

15 HIGH TIDE TIMES: 8:52 AM / 10:16 PM

21 TEAM RECORDER: JEFFREY BARNHART

4 START TIME: 1:15 PM

16 HIGH TIDE HTS: 14.1 / 14.8

22 OBSERVERS: John M. Mahoney, Mike Fawcett

5 STOP TIME: 1:35 PM

17 LOW TIDE TIMES: 3:11 PM / 3:50 PM

23 AGENCY: ADF&G/ES&P/USCG/WWC/WW

6 SEGMENT #: 05016

18 LOW TIDE HTS: 5.4 / 1.9

24 PHOTOS TAKEN: Y (N)

7 STATION #: 262-70-10010

19 TIDE HT AT SURVEY: _____

Roll #: _____ Frames: _____

8 K-UNIT: K10-07

Ebb: Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPES: _____

9 STAT AREA: 262-70

20 USCG QUAD: Karluk D-5

Start: _____ End: _____

10 LAT: 57° 45' 26" N

11 LONG: 155° 29' 9" W

26 SAMPLES TAKEN Y (N) Number

12 SOURCE: Map Loran Amudlat

Oil _____

13 LOCATION: Helen Creek, Puget Bay

Sediment _____

14 DESCRIPTION: SASS 38W12

Biological _____

Water _____

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

35 CATALOGED ANAD. FISH STREAM? (Y) N

37 CATALOG #: 262-70-10010

38 STREAM NAME: Helen Creek

39 OIL IN STREAM BED? Y (N)

40 OIL ON STREAM BANKS? (Y) N

41 OIL ON BEACH ADJACENT TO MOUTH? Y (N)
(within 50 meters)

42 OIL WITHIN 1 MILE OF STREAM? Y N

30 OVERALL OIL IMPACT: N (L) L M H

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y (N)

Where: _____

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh

43 ANADROMOUS FISH PRESENT? Y (N)

34 WAVE EXPOSURE: High Beach Moderate Low Stream

44 ANADROMOUS FISH OBSERVATION

Species Aerial Ground

35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble _____

Gravel 20 Sand 80 Mud/silt _____

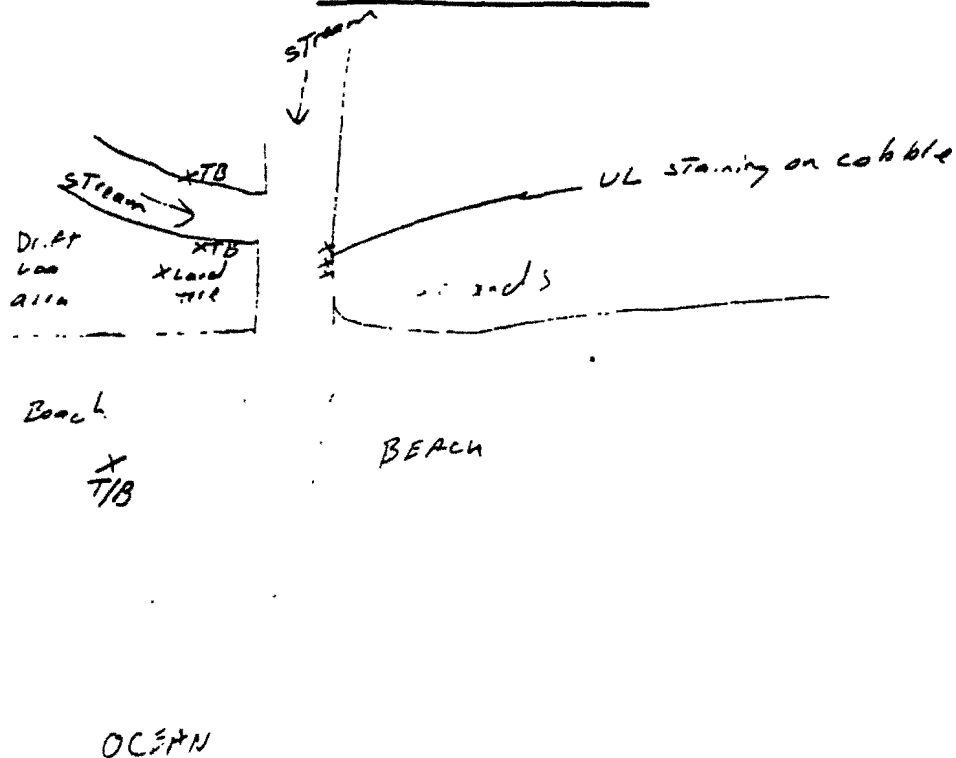
COMMENTS: Found only 4 T/B's NO cleanup recommended

I agree with recommendation Mike Fawcett

FRAME(S)

DESCRIPTION

48 OIL DISTRIBUTION DIAGRAM



ADF&G MULTI-ASSESSMENT DATA FORM

Partial Stream Survey

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMS PTA 2 REGION: PWS KP, CI KAP

METHOD: Aerial Ground Boat

3 DATE: 6/29/90 16 HIGH TIDE TIMES: 0805 12034 21 TEAM RECORDER: JEFF BARNHART ADF&G
c PR Archie Smith, Walt Janicek

4 START TIME: 1140 hours 18 HIGH TIDE HTS: 14.2 16.1 22 OBSERVERS: Julie Carlson, Alan Eliason
Dick Munoz, Tony Martin

6 STOP TIME: 1250 hours 17 LOW TIDE TIMES: 0204 11407 23 AGENCY: USCG/NOAA/BEC/NPS/USFWS/USCG

8 SEGMENT #: PB-016 18 LOW TIDE HTS: 3.2 12.6 24 PHOTOS TAKEN: (Y) N
90-SPB-000k

7 STATION #: 19 TIDE HT AT SURVEY: Roll #: 22, 23, 24, 25, 26, 27

8 K-UNIT: K10-07 (Ebb) Slack Flood Slack 25 VIDEO TAKEN: Y (N) TAPE#: Start: End:

9 STAT AREA: 262-70 20 USCG QUAD: Karluk D-5 26 SAMPLES TAKEN? (Y) N Number 90-SPB003K

10 LAT: 57°45'20"N 11 LONG: 155°29'9"W 011 90-SPB003K

12 SOURCE: Map Loran Anadcat Sediment Biological Water

13 LOCATION: Helen Creek, Puale Bay

14 DESCRIPTION: S 285 38 W 22

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M (H)

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

32 OILED DEBRIS? Y (N)

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh

34 WAVE EXPOSURE: (High) Moderate Low

35 SUBSTRATE TYPE: Bedrock Boulder Cobble 5
Gravel 75 Sand 80 Mud/silt

36 CATALOGED ANAD. FISH SREAM? (Y) N

37 CATALOG #: 262-70-10010

38 STREAM NAME: Helen Creek

39 OIL IN STREAM BED? (Y) N

40 OIL ON STREAM BANKS? (Y) N

41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)

42 OIL WITHIN 1 MILE OF STREAM? Y N

Where:

43 ANADROMOUS FISH PRESENT? Y (N)

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

ACE 1950820

COMMENTS: Interagency inspection of oil in stream as reported by USFWS. Time constraints
Permitted only a partial survey. Oil in and around the stream and beach was uncovered by storm
action since my May 2, 1990 Anadcat. It is located in the mid bank area and extends to the
stream bed. 20m x 3m MS/B, PO/B 60% surface coverage, Avg thickness 5-8 cm. Subsurface
mousse present, to a minimum depth of 15 cm. DP/UC, OL/UC. Test pits dug at edge of stream
bed reveal mousse/shoaling. TB and PT/B occur in UETZ from stream mouth
North along Beach 1% to 30% coverage. Complete survey needs to be done at time of treatment.

K10-07 PB-016

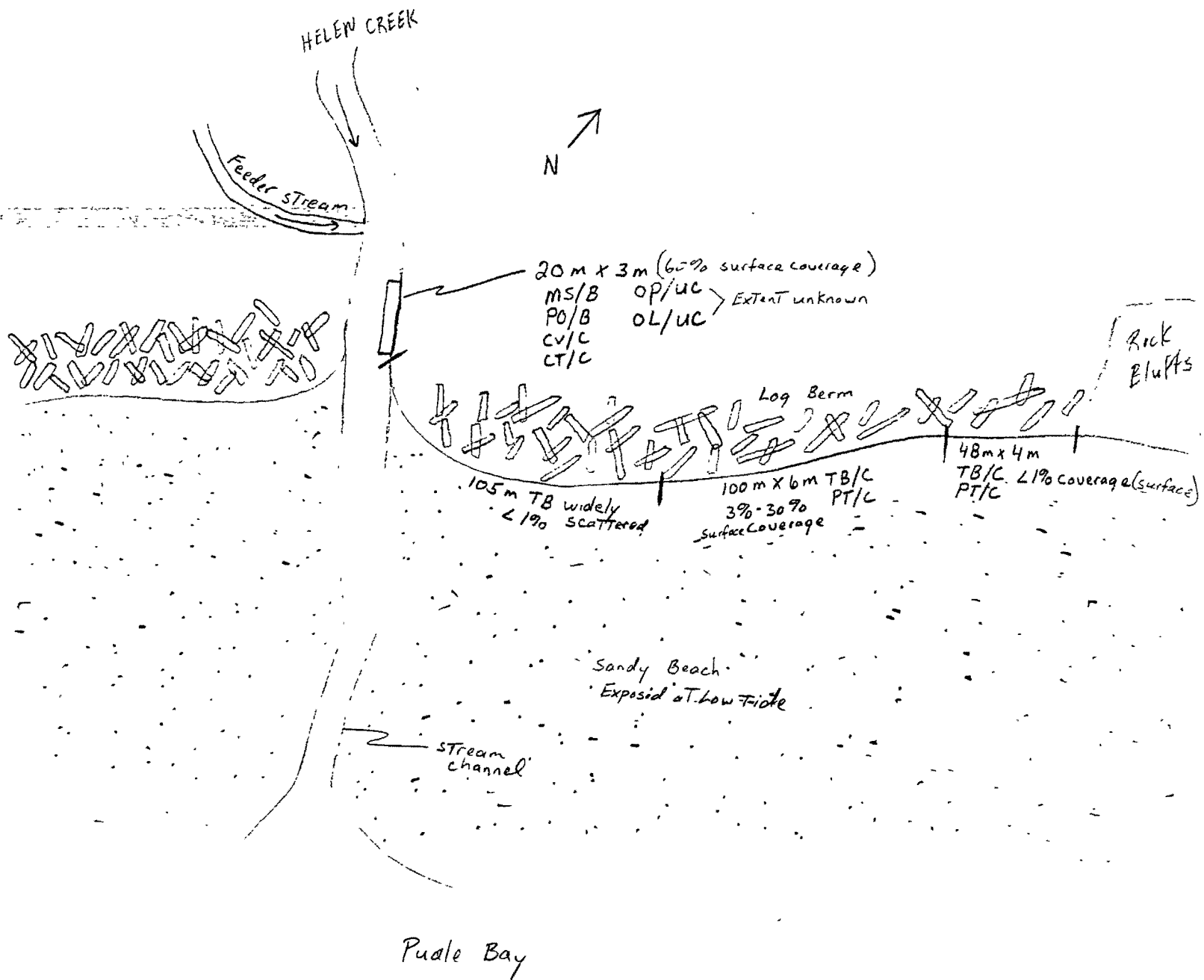
SEGMENT ST Stream 262-70-10010 SUBDIVISION: _____ DATE 6/29/90**ADFG**NAME JEFFREY T BARNHARTSIGNATURE Jeffrey P Barnhart☐ NO TREATMENT RECOMMENDED
COMMENTS☒ TREATMENT SUGGESTEDHelen Creek, Puale Bay, Alaska Peninsula.

- ① Removal of all surface oil in and around the stream.
- ② Removal of all subsurface oil and oiled sediment (sand, Gravel, Cobble)
This may necessitate the removal of the top 6-10 inches of sediment along the stream bank and possibly the stream bed.
- ③ Monitors to assess stream bed & stream banks on both sides for surface and subsurface oil. Oil discovered during assessment will be removed.
- ④ TB, PT occurring from stream mouth northward along beach should be removed. Approx. distance is 175 meters.
- ⑤ Beach face both north and south from stream mouth requires assessment by the monitors for the presence of subsurface oil. Oil discovered during assessment should be removed.

FRAME(S)

DESCRIPTION

22	Mousse located at stream bed
23	Sheening in Test pit
24	Julie Carlson, ADEC taking sample of mousse from low stream bank. Helen creek in background
25	Tarpotties on beach North of stream mouth
26	Looking upstream, Helen Creek. Heavily oiled area located between sampling box and stream
27	Test pit at stream bed, sheen visible. Sand, pebble and mousse substrate removed from test pit.

46 OIL DISTRIBUTION DIAGRAM

= Sample taken
 = Photo frame # and
 shot direction.

ACE 1950822-1p

STATUS OF OPEN WORK AREAS

SQUAD 9 - HELICOPTER

DATE OF WORK: 7/10/90

WORK HOURS: START 0730

MANUAL AND MECHANICAL OPERATIONS

Segment	Sub Div	Date Work Started	Date Demob Approved *	WORK STATUS						Other Describe
				Manual Pickup	Termet Asphalt Removal	Spot Wash	Tilling /Raking	Bio	Anad Streams	
K10-7PB16		7/10/90	7/10/90	100%						
K6-34SL15		7/10/90	7/10/90	100%						

DAI		# of Supers / Supersac			
Oiled Mat	Oiled Sediments				
	.50				
	.01				

Cleanup / Inspection
1990

SEGMENT	SUB DIV	DEMOB DATE	DEMOBILIZATION ACKNOWLEDGMENT *		
			USCG	ADEC	EXXON
K10-7PB16		7/10/90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
K6-34SL15		7/10/90	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

* The date that the Manual/Mechanical portion of the Work Order has been completed and acknowledged. A separate acknowledgement will be made for the Bioremediation portion of the Work Order.

** 1 Supersack = 45 CF, report in tenths of sack (i.e. 0.1)

STATUS CODES

- NA Not Applicable/Recommended for this segment division
- N Recommended but not started
- W Stated and Working
- #% Percentage complete (used on large work scopes)
- C Work complete

OPERATIONS DAILY REPORT SQUAD 9 - SEATRADER/HELICOPTER

FROM: Fred BYARS
TO: VESSEL COMMAND NETWORK
FAX No: (907) 266-6490

DATE OF WORK: 7/10/90 WORK HOURS: START 0730 TO: 1830

WEATHER CONDITIONS: Wind Speed (Knts) _____ Wave Height (Ft) _____ GENERAL _____
TIDES: HIGH _____ Time _____ HIGH _____ Time _____
LOW _____ Time _____ LOW _____ Time _____
GENERAL LOCATION: Puale Bay, Sturgeon Lagoon

SAFETY INCIDENTS	For Day
Fatality	
Lost Time	
Restricted	
Medical Treatment	
Total Recordable	

(Transmit Details Separately)

SCHEDULED WORK DAY HOURS (ex Break) =	Vessel	Helo
Working	<u>12</u>	<u>12</u>
Weather Downtime	<u>9</u>	
Transit Time	<u>2</u>	
Mechanical Downtime		
Other:		

VESSEL REPRESENTATIVES NAMES
ADEC _____
Exxon _____
USCG _____
OOPS _____
Other _____

MANPOWER AND BILLETING STATUS (# of People)

Berthing Vessel	PAX * Beds	Exxon Reqs	OOPS	Agency Reqs	Other	Beach Wkrs Wkg	Idle	Open Beds
Sea Trader	16							

Helicopter # of Workers
<u>5</u>

* COI Passenger Beds (Includes Service Personnel)

	Boat Crews
Berthing Vessels	
LCV/Production	
Work Boats	
TOTALS	

HELICOPTER REPRESENTATIVES NAMES
ADEC <u>Julie Carl</u>
Exxon <u>Fred BYARS</u>
USCG <u>Jim Davis</u>
Other <u>Jeff Danahart ADITL</u> <u>Dick Wydoski USFw</u> <u>Howard Overton NPS</u>

Helicopter Tail #'s
<u>507 357EH</u>
<u>511 EH</u>
Work Areas
<u>K10-7 PB16</u>
<u>K6-34 SL15</u>

VESSEL STATUS (# of Vessels)

Vessel Type	Total Asignd	In Transit	Total Working	Not Used	Mech Down	Weath Down
Berthing						
LCV/Production						
Work Boat						
TOTALS						

VESSELS ASSIGNED:

Vessel Name	Vessel Type	# People Berthed
Sea Trader	Berthing	

NEXT SQUAD MOVE: LOCATION K9-17 CC100 K9-17 CC001 DATE OF MOVE 7/11/90

DATE OF LAST CREW CHANGE _____ SCHEDULED DATE FOR NEXT CREW CHANGE _____
PORT FOR CREW CHANGE _____ PORT FOR CREW CHANGE _____

VISITORS (Name/Affiliation) _____

STATUS OF SUPPLIES/STORAGE CAPACITIES: _____

NUMBER OILED/DEAD BIRDS FOUND _____ # Alive _____ NUMBER OILED/DEAD MAMMALS FOUND _____ # Alive _____
OTHER: _____

* Such as discovery of dead oiled birds/mammals, Archeological Artifacts, Wildlife incidents, etc.

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

STEVE COWPER, GOVERNOR

333 RASPBERRY ROAD
ANCHORAGE, ALASKA 99518-1599
PHONE: (907) 344-0541

EXXON Valdez Oilspill Cleanup

Anadromous Fish Stream Authorization

Date 7/10/90

EXXON Authorized Representative

Fred D. BYARS

Shoreline Segment K10-07-PB16

Anadromous Fish Stream Number(s) 262-70-10010 Helen Creek

Approved Cleanup Techniques Manual removal of all oil
of any form within the stream channel and bottom substrate
and on the stream banks. Minimize removal of stream
bank substrate and surface components to that required
for removing oiled materials.

Approved Cleanup Period 7/10 - 7/12/90

Alaska Department of Fish and Game

Jeffrey I. Barnhart
Authorized Officer

Fred D. Byars
Permittee's Signature

ACE 1950784

EXXON FLIGHT PLAN

1. AIRCRAFT TAIL NUMBER: N357EH DATE: 7-10-90
2. AIRCRAFT COLOR: R/B/W TYPE AIRCRAFT: B212
3. TOTAL NUMBER OF PEOPLE ON BOARD (INCLUDING CREW): 8
4. DEPARTURE POINT: ADQ ETD: 0800
5. ROUTE OF FLIGHT (SHOW ALL WAYPOINTS): ADQ → PUALE BAY →
(possible CHINIAK LAGOON) → (possible Surgeon) → ADQ
6. FINAL DESTINATION: ADQ ETA: 1900
7. FUEL ON BOARD: 2 HRS + 10 MINUTES
8. ANTICIPATED DELAYS (WAYPOINT/TIME): PUALE MOST OF DAY, 1FTIME,
will go to CHINIAK first priority, SURGEON second priority, return ADQ
9. COMPLETE MANIFEST AND ATTACH OR USE FORM BELOW: ☒ (check complete)
10. DRAW ROUTE WITH DIRECTION ARROWS AND ATTACH: ☒ (check complete)
11. EXECUTE IDEMNIFICATION AGREEMENT IF REQUIRED (reference page F-4) AN ATTACH. REQUIRED? YES ☐ NO ☒
12. FAX (266-6471) COMPLETE FLIGHT PLAN AND ATTACHMENTS TO TRANSPORTATION FOLLOWING OR CALL (266-6582). IF DELAYED MORE THAN 30 MIN., AMEND ETD...

NAME	COMPANY	WEIGHT	BAG WT	DESTINATION
FRED BYAKS	EXXON	235	INCL	
JEFF BARNHART	ADF#G	"	"	
JULIE CARLSEN	ADEC	"	"	
DICK WYDOSKI	USF#W	"	"	
HOWARD OVERTON	NPS	"	"	
JIM DAVIS	USCG	"	"	

PILOTS NAMES:

LARRY FULKERSON

KEN STRAIN

TOTALS

1410

ACE 1950782

TOTAL PASS & BAGGAGE

1410

worked Paula Bay PBA6

Helen Creek Then Flow To

Sturgeon Lagoon 0615

1 Did not go to chinick

HP.

XON FLIGHT PLAN - CHANGE # 1

11EH

DATE: 7/10/90

1/B

TYPE AIRCRAFT: B-212

N BOARD (INCLUDING CREW): 87

2 ETD: 08:00

L WAYPOINTS: Puale Bay → Kukak →

ADQ

6. FINAL DESTINATION: ADQ ETA: 18:00

7. FUEL ON BOARD: 02+ HRS + 15 MINUTES

8. ANTICIPATED DELAYS (WAYPOINT/TIME): Puale Bay (1/2 day)

CHINIAK BAY (1/2 DAY) KUKAK (30 MINS, REFUEL)

9. COMPLETE MANIFEST AND ATTACH OR USE FORM BELOW: ☒ (check complete)

10. DRAW ROUTE WITH DIRECTION ARROWS AND ATTACH: ☒ (check complete)

11. EXECUTE IDEMNIFICATION AGREEMENT IF REQUIRED (reference page F-4) AN ATTACH. REQUIRED? YES ☐ NO ☒

12. FAX (266-6471) COMPLETE FLIGHT PLAN AND ATTACHMENTS TO TRANSPORTATION FOLLOWING OR CALL (266-6582). IF DELAYED MORE THAN 30 MIN., AMEND ETD...

NAME	COMPANY	WEIGHT	BAG WT	DESTINATION
Todd Skoglund	VECO	195	200	ADQ
CRAIG Caldwell		200		
ROBERT STEPHAN		195		
John ANDERSON		190		
JAKE VERSTEEG		180		
BILL PARKS	↓	300	↓	↓
RON AREMAS	↓	210	↓	↓

ILOTS NAMES:

J. ZANIS

T. Ridley

TOTALS

1075
1260

200

TOTAL PASS & BAGGAGE

1275
1460

EXXON FLIGHT PLAN - CHANGE # 1

1. AIRCRAFT TAIL NUMBER: 511EH DATE: 7/10/90
2. AIRCRAFT COLOR: R/W/B TYPE AIRCRAFT: B-212
3. TOTAL NUMBER OF PEOPLE ON BOARD (INCLUDING CREW): 87
4. DEPARTURE POINT: ADQ ETD: 08:00
5. ROUTE OF FLIGHT (SHOW ALL WAYPOINTS): Puale Bay → Kufak →
Chiniak Bay → ADQ
6. FINAL DESTINATION: ADQ ETA: 18:00
7. FUEL ON BOARD: 02+ HRS + 15 MINUTES
8. ANTICIPATED DELAYS (WAYPOINT/TIME): Puale Bay (1/2 day)
Chiniak Bay (1/2 day) Kufak (30 mins, refuel)
9. COMPLETE MANIFEST AND ATTACH OR USE FORM BELOW: ☒ (check complete)
10. DRAW ROUTE WITH DIRECTION ARROWS AND ATTACH: ☒ (check complete)
11. EXECUTE IDEMNIFICATION AGREEMENT IF REQUIRED (reference page F-4) AN ATTACH. REQUIRED? YES ☐ NO ☒
12. FAX (266-6471) COMPLETE FLIGHT PLAN AND ATTACHMENTS TO TRANSPORTATION FOLLOWING OR CALL (266-6582). IF DELAYED MORE THAN 30 MIN., AMEND ETD...

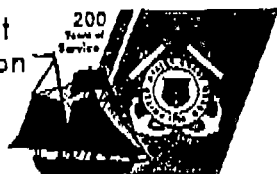
NAME	COMPANY	WEIGHT	BAG WT	DESTINATION
Todd Skoglund	VECO	195	200	ADQ
Craig Caldwell		200		
Robert Stephan		195		
John Anderson		190		
Jake Versteeg		180		
Bill Parks		300		
Ron Aremas		210		

ILOTS NAMES:

J. Zanis

T. Ridley

TOTALS	<u>1075</u> <u>1260</u>	200
TOTAL PASS & BAGGAGE	<u>1275</u> <u>1460</u>	

U.S. Department
of TransportationUnited States
Forest Service

FROM THE

FEDERAL ON SCENE COORDINATOR

ANCHORAGE, ALASKA

FACSIMILE TRANSMISSION SHEET

TO:

Cmd. Smith
(Name)

DATE:

28 June 90Tcp Kodrak
(Office)

PAGES:

9

(Including Cover Sheet)

(Phone)

FROM THE OFFICE:

Federal On Scene Coordinator
601 W. 5th. Avenue Suite 300
Anchorage, AK 99501
Phone: 907 277 3833
Fax: 907 263 1736

SUBJECT:

REMARKS:

Inspect for correctness
of Segment

ACE 1950823+1/5

U.S. FISH AND WILDLIFE SERVICE
REGION 7
1011 E. TUDOR ROAD
ANCHORAGE, ALASKA 99503
FAX NUMBER: 907-562-2297

RECEIVED
28 JUN 1990

TO: *Cinda Buzg Bone* DATE/TIME: *7/6/28/90 9:20am*
FROM: *Paul Gertle* CALL TO HAVE PICKED UP
SUBJECT: *Fish & Wildlife Service Shoreline Assessment K10-7 - PR-16*

*Per our Telecon.
Please call me at 786-3579
to confirm receipt of
the eligibility. Thanks
P. Gertle*

	INFO	ACT	COPY
FOSC			
COS			
OPB			
OPS2			
OPS3			
Shipping	<i>9/2/90</i>		

ACE 1950824

FIELD SHORELINE COMMENT SHEET

COMMENT ST 1 K10-7

SUBDIVISION: 13-14

DATE 6/24/90

NAME

SIGNATURE

☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

NAME

SIGNATURE

☒ NO TREATMENT RECOMMENDED
COMMENTS☐ TREATMENT SUGGESTED

LAND MANAGER

NAME Ronald E. Hood

SIGNATURE

Ronald E. Hood

☒ NO TREATMENT RECOMMENDED
COMMENTS☒ TREATMENT SUGGESTED

An immediate Type A clean up of the area on Helen Creek and out of Helen Creek is requested. Care should be taken to avoid the eagle nest, but the clean up should not be delayed because of the nest.

RECEIVED: 2003 5 24

THE

Frame _____

ACE 1950826

11. encountered oil: dark brown and light brown w/ oiling of seabirds

SEGMENT 27/ K10-7 SUBDIVISION P 8-14

[illegible]

BROOKLINE ECOLOGICAL SUMMARY

W. 1ST, K10-7 Subdivision PO-16

Date (mo/day/yr) 6/24/90

155321325 Biologist K. Hankins / G/Y/Amiga

(A) Substrate type and % of segments:

(1) Bedrock 5 (2) Boulder 5 (3) Cobble 5 (4) Pebble 10 (5) Sand 75 (6) Gr(B) Overall % cover of biota (% of segment): Dense Moderate 75 Low

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low-l; L); Juveniles/adults (X), new settlement (3)

Photographs:
Roll No. Frames

155321325

1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

Moderate		
1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

Sparse		
1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

Rare		
1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

NOT PRESENT

155321325

1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

Moderate		
1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

Sparse		
1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

Rare		
1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

NOT PRESENT

155321325

1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

Moderate		
1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

Sparse		
1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

Rare		
1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

NOT PRESENT

155321325

1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

Moderate		
1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

Sparse		
1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

Rare		
1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

1U	1M	1L
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6

NOT PRESENT

Specific Observations/General Comments:

Shorebirds and caribou tracks observed on beach, and solitary caribou observed in the upland area. 2 mature Bald Eagles and 2 pigeon Guillemots were present in the area.

Biological Considerations:

Two Bald Eagles with downy chicks are in the immediate vicinity of the beach. The heavily oiled portion of the Helen Creek / upper tidal zone and the light brown pools of oil dripping into the drainage. The Helen Creek drainage encompasses an important salmon fishery.

SHORELINE ECOLOGICAL SUMMARY-- SUPPLEMENTAL FORM
WILDLIFE/AVIAN OBSERVATIONSSegment ST/ K10-7 Subdivision P13-16 Date
(mo/day/yr) 6/24/90Time (24 hr) ISSH → 1725 Biologist K. Hawkins / G. Young(A) Substrate type and % of segments:
Bedrock 5 Boulder 5 Cobble 5 Pebble 10 Sand 65 Silt 15(B) Write number of individuals observed/species or estimate
number and place an "E" (estimate) next to the number.Red-throated Loon _____
Pacific Loon _____
Common Loon _____
Horned Grebe _____
Shearwater spp. _____
Puffin _____
Black-crowned night heron _____
Pelagic Cormorant _____
Red-faced Cormorant _____Tundra Swan _____
Emperor Goose _____
Brant _____
Canada Goose _____
Mallard _____
Green-winged Teal _____
Northern Pintail _____
Scaup spp. _____
Common Eider _____
King Eider _____
Marbled Murrelet _____
Oldsquaw _____
Black Scoter _____
Surf Scoter _____
White-winged Scoter _____
Common Goldeneye _____
Common Merganser _____
Red-breasted Merganser _____
Pufflehead _____
Bald Eagle (Adlt) 2
(Imm) _____
Northern Harrier _____
Rough-legged Hawk _____
Peregrine Falcon _____Black-bellied Plover _____
Lesser Golden Plover _____
Semi-palmated Plover _____
Black Oystercatcher _____Yellowlegs spp. _____
Solitary Sandpiper _____
Wandering Tattler _____
Bar-tailed Godwit _____
Marbled Godwit _____
Ruddy Turnstone _____
Black Turnstone _____
Surf-bird _____
Western Sandpiper _____
Least Sandpiper _____
Rock Sandpiper _____
Dunlin _____Pomarine Jaeger _____
Parasitic Jaeger _____
Haw Gull _____
Glaucous-winged Gull _____
Blk-leg Kittiwake _____
Murre spp. _____
Pigeon Guillemot 1 _____
Marbled Murrelet _____
Kittlitz Murrelet _____
Ancient Murrelet _____
Tufted puffin _____
Horned puffin _____Blk-billed Magpie _____
Common Raven _____
Winter Wren _____
American Dipper _____
American Pipit _____
Savannah Sparrow _____
Song Sparrow _____
Golden-crowned Sparrow _____
White-crowned Sparrow _____
Lapland Longspur _____
Snow Bunting _____
Rosy Finch _____
Other _____
Other _____

ACE 1950829

RECRUITMENT AND MORTALITY

1) Observations of recent settlement (S) or new growth: (G):

a) Barnacles, less than 1mm (S), 1-3mm (G)

1. Vertical distribution (LTZ, HTZ, UTZ):

2. Substrate (Rock, Boulder, Cobble, etc. Note if oiled/unoiled):

3. Horizontal distribution (Dense, Sparse, Patchy, Cont., etc.):

b) Mytilus, less than 2mm (S), 2-5mm (G)

1. Vertical distribution:

2. Substrate (Note if oiled/unoiled):

3. Horizontal distribution:

c) Littorina, eggs or less than 2mm dia.

1. Vertical distribution:

2. Substrate (Note if oiled/unoiled):

3. Horizontal distribution:

d) Fucus, other algae, seagrass (Note species and what type of growth)

1. Vertical distribution:

2. Substrate (Note if oiled/unoiled):

3. Horizontal distribution:

e) Other (Describe)

2) Observations of mortality:

a) Barnacles (Describe as % dead individuals or scars)

1. Vertical distribution:

2. Substrate (Note if oiled/unoiled):

3. Horizontal distribution:

b) Mytilus (Describe as % Note if drilled or otherwise clearly affected)

1. Vertical distribution:

2. Substrate (Note if oiled/unoiled):

3. Horizontal distribution:

c) Others:

1. Name
 2. Age, Sex
 3. Date of Birth
 4. Date of Death
 5. Date of Burial
 6. Date of Cremation
 7. Date of Interment
 8. Date of Exhumation
 9. Date of Reinterment
 10. Date of Final Disposition

GEN

1. Name
 2. Age, Sex
 3. Date of Birth
 4. Date of Death
 5. Date of Burial
 6. Date of Cremation
 7. Date of Interment
 8. Date of Exhumation
 9. Date of Reinterment
 10. Date of Final Disposition

1. Name
 2. Age, Sex
 3. Date of Birth
 4. Date of Death
 5. Date of Burial
 6. Date of Cremation
 7. Date of Interment
 8. Date of Exhumation
 9. Date of Reinterment
 10. Date of Final Disposition

1. Name
 2. Age, Sex
 3. Date of Birth
 4. Date of Death
 5. Date of Burial
 6. Date of Cremation
 7. Date of Interment
 8. Date of Exhumation
 9. Date of Reinterment
 10. Date of Final Disposition

1. Name
 2. Age, Sex
 3. Date of Birth
 4. Date of Death
 5. Date of Burial
 6. Date of Cremation
 7. Date of Interment
 8. Date of Exhumation
 9. Date of Reinterment
 10. Date of Final Disposition

1. Name
 2. Age, Sex
 3. Date of Birth
 4. Date of Death
 5. Date of Burial
 6. Date of Cremation
 7. Date of Interment
 8. Date of Exhumation
 9. Date of Reinterment
 10. Date of Final Disposition

1. Name
 2. Age, Sex
 3. Date of Birth
 4. Date of Death
 5. Date of Burial
 6. Date of Cremation
 7. Date of Interment
 8. Date of Exhumation
 9. Date of Reinterment
 10. Date of Final Disposition

1. Name
 2. Age, Sex
 3. Date of Birth
 4. Date of Death
 5. Date of Burial
 6. Date of Cremation
 7. Date of Interment
 8. Date of Exhumation
 9. Date of Reinterment
 10. Date of Final Disposition

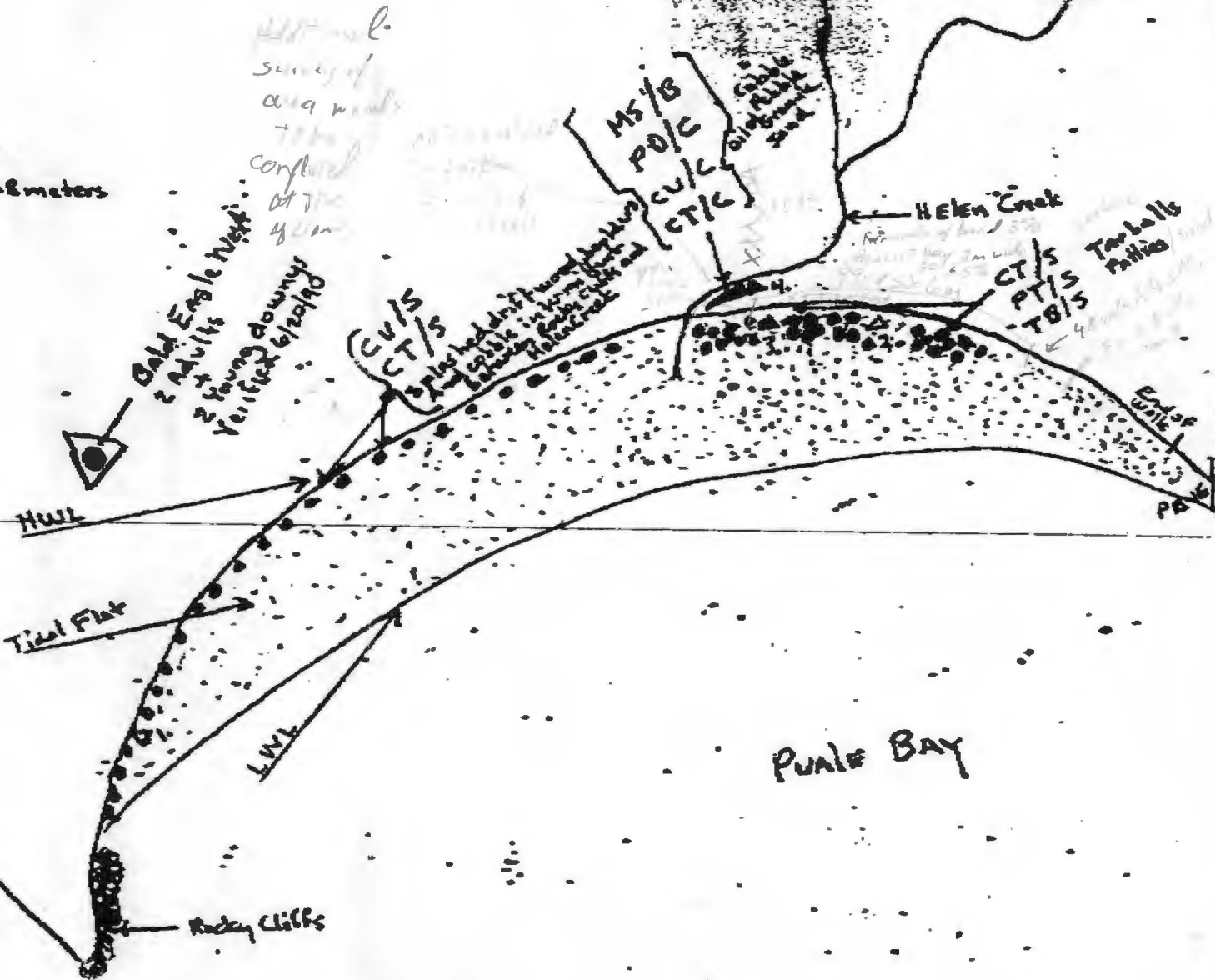
1. Name
 2. Age, Sex
 3. Date of Birth
 4. Date of Death
 5. Date of Burial
 6. Date of Cremation
 7. Date of Interment
 8. Date of Exhumation
 9. Date of Reinterment
 10. Date of Final Disposition

1. Name
 2. Age, Sex
 3. Date of Birth
 4. Date of Death
 5. Date of Burial
 6. Date of Cremation
 7. Date of Interment
 8. Date of Exhumation
 9. Date of Reinterment
 10. Date of Final Disposition

ACE 1950831
 -15/FF

1cm = 38 meters

K10-7
 PB-15
 K10-7
 PB-16



FIELD SHORELINE COMMENT SHEET

ASAP

K-10-07

SEGMENT AS / PB-16 SUBDIVISION: A SITE: 1 DATE 12/AUG/90USCGNAME Jerry Drubitz SIGNATURE Jerry Drubitz☐ YES☒ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

ADECNAME No one present SIGNATURE _____☐ YES☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

LAND MANAGERNAME John Hardister SIGNATURE John P. Hardister☒ YES☐ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

This site is a prime candidate for reassessment in 1991 because it is a sandy beach that may contain buried oil mousse / tarballs and because of its proximity to an ~~onshore~~ stream.

EXXONNAME Sommy Samblin SIGNATURE Sommy Samblin☐ YES☒ NO

PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:

ALL TARBALLS RECOVERED

+151FF
ACE 1950788

FIELD SHORELINE COMMENT SHEET

K-10-07
SEGMENT AS / PB-16 SUBDIVISION: A SITE: 2 DATE 12/Aug/90

USCG

NAME Jerry Drubitz SIGNATURE Jerry Schultz

☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:

ADEC

NAME No one present SIGNATURE _____

☐ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:

LAND MANAGER

NAME John Hudister SIGNATURE John P. Hudister

☒ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:

This site should be a priority site for reassessment in 1991 because it is located on an anad. stream and is a sandy beach that could contain buried oil residue/tarballs. A SAP Team did not ~~visit~~ the area that was cleaned 100 meters upstream from the mouth, this part of area was not viewed.

EXXON

NAME Sammy Samblin SIGNATURE Sammy Samblin

☐ YES ☒ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:

ALL TARBALLS RECOVERED

ACE 1950789

TEAM NO Kodiak #5 EXXON T. Tomblin SEGMENT AS PB-16
OG D. Fitzgerald USCG J. Schultz SUBDIVISION A
ADEC Not present LAND REP J. Hardister TOTAL NO. SITES 2
DATE 12 Aug 90 TIME 14:00 to 14:25 TIDE LEVEL 90 to 120 cm ABOVE MLLW
TOTAL EST LENGTH OF SHORELINE SURVEYED: 200 m
SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WEATHER: ☒ Sun ☒ Clouds ☐ Fog ☐ Rain ☐ Snow
OIL CATEGORY LENGTH: W m M m N m VL 135 m NO 65 m US m

SURFACE OIL

SITE 1

SITE 2

ANAD.
STREAM

SITE 3

CHARACTER	DISTRIBUTION				OILED ZONES			
	/C	/B	/P	/S	SU	UI	MI	LI
ASPHALT								
S.O.R.								
POOLED								
COVER								
COAT								
STAIN								
MOUSSE								
PATTIES/T.B.				X	X			
FILM								
NO OIL						X	X	X
EST. SITE LENGTH					120m			

DISTRIBUTION				OILED ZONES			
/C	/B	/P	/S	SU	UI	MI	LI
			I/u	X			
			I/u	X			
					X	X	X
				15m			

[illegible]

SUBSURFACE OIL

[illegible]

Photographs:

Roll No. *ASAP-06-04*

Frames #27-29

COMMENTS There are two oiled areas within this subdivision: ¹⁾ the outer beach that has tan balls and patties and ²⁾ along the east side of the inner stream channel that contains mousse and silt between and under boulders and cobbles lining the UETZ bank.

OG Acton

SKETCH MAP

SEGMENT ST/ K10-7-PD-16

SUBDIVISION K10-7-PD-16A

DATE 5 / 2 / 90

CHECKLIST

- ☐ N Arrow
- ☐ Approx. Scale
- ☐ Seg/Sub Endry
- ☐ Oil Dist.
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HWW/LWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pti Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ
Pti - No Subsurface Oil

2 Δ
Pti - Subsurface Oil

CT/C
Continuous Distribution

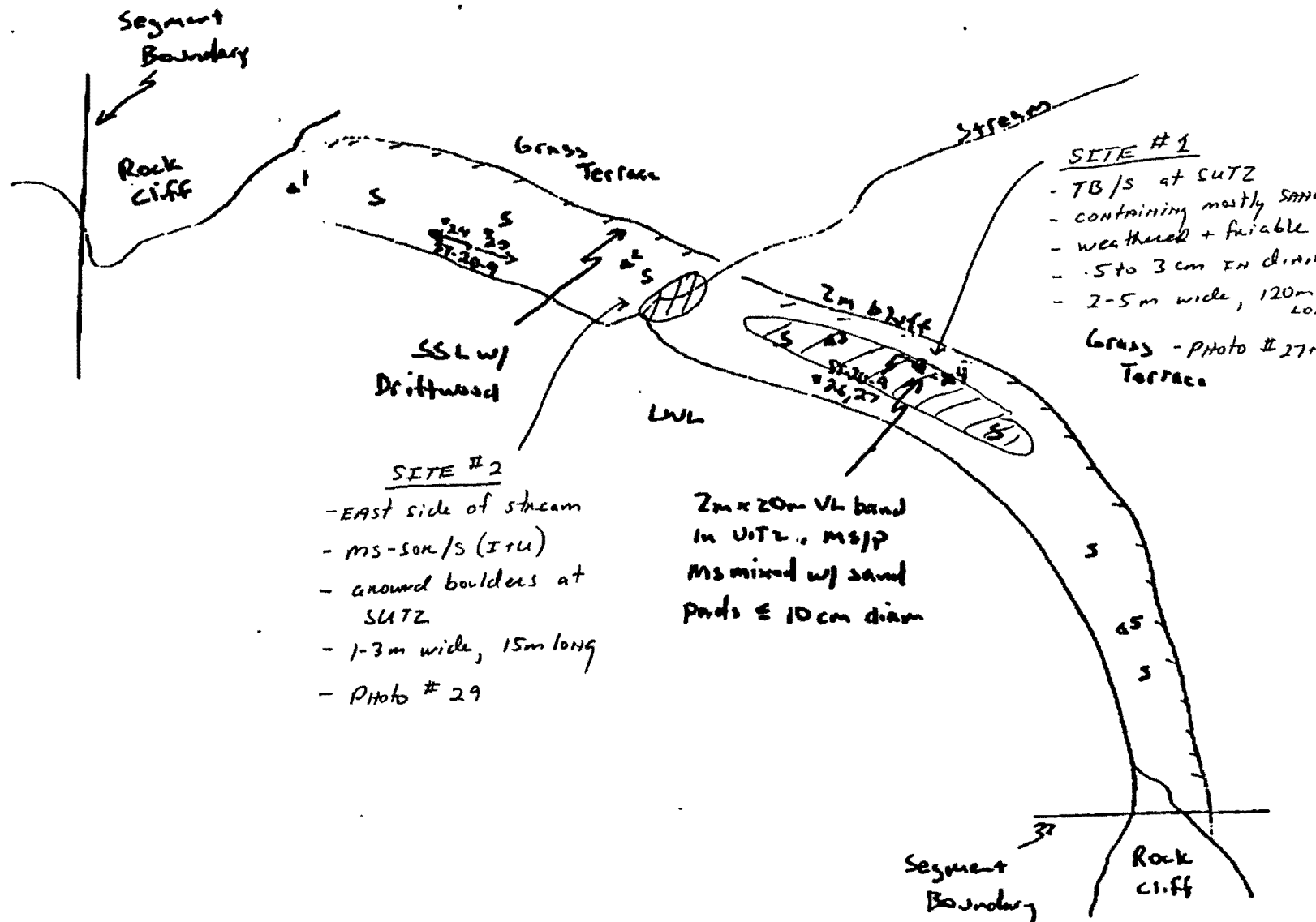
CT/D
Broken Distribution

CT/P
Patchy Distribution

CT/S
Splashed Distribution

Oiled Vegetation

1 $\Rightarrow$
Photo location, direction, and number



ACE 1950791

Oil Character Length (m): AP ☐ PO ☐ CV ☐ CT ☐ ST ☐ MS ☒ PT ☐ TB ☐ FL ☐ NO ☒ 213

REVISION: 03/24/90

15/98
SEGMENT ST/ 88016
STREAM 262-70-1000

SKETCH MAP

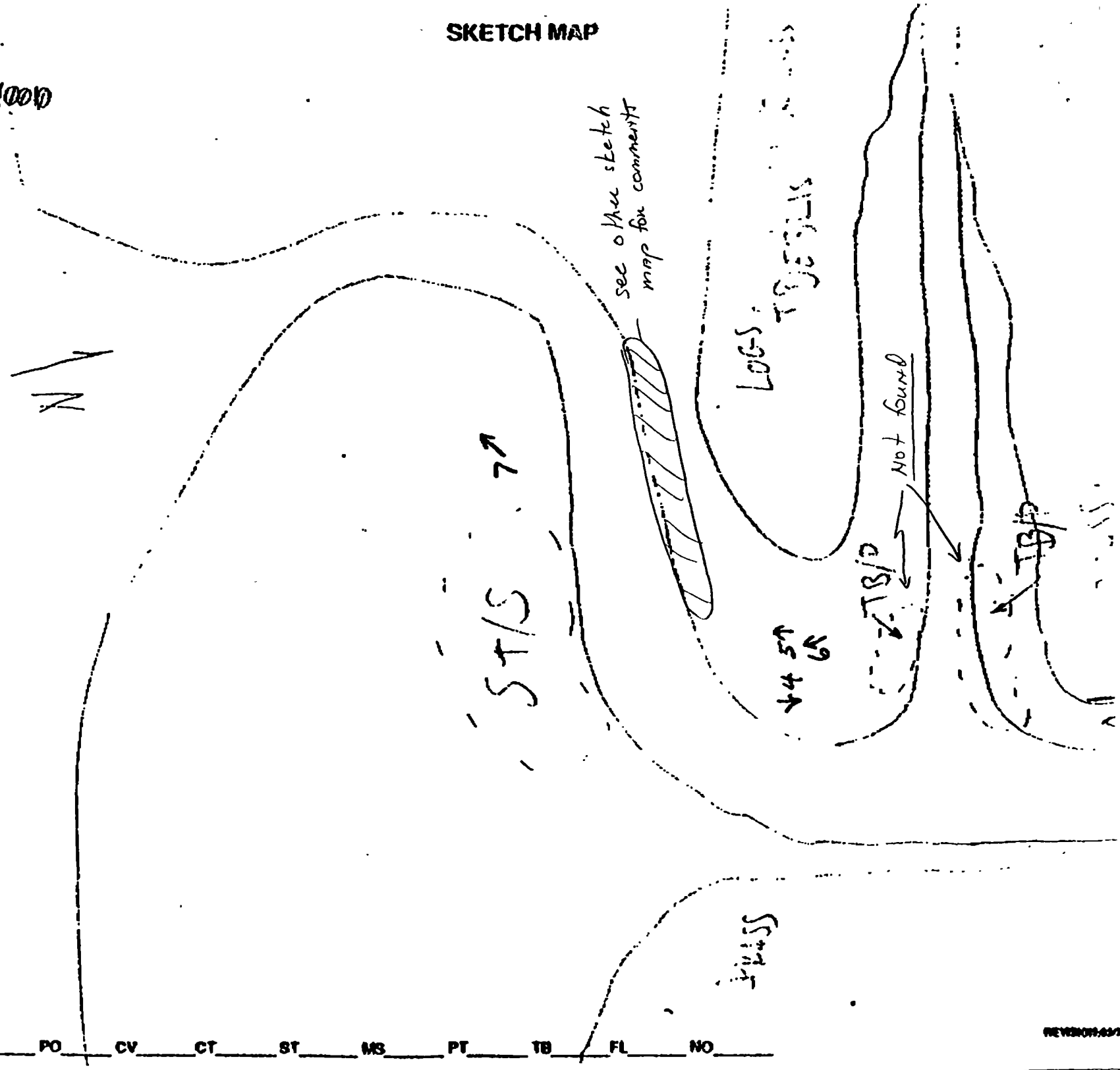
DATE 2/1/90

CHECKLIST

- N Arrow
- Approx. Scale
- Seg/Sub Entry
- Oil Dist.
- Width
- Length
- % Cover
- Substrate Character
- Est. HW/LA/WL
- SSL
- Profile Location(s)
- Profile(s)
- PR Location(s)
- Photo Location(s)

LEGEND

- 1 Δ
NI - No Subsurface Oil
- 2 Δ⁺
RI - Subsurface Oil
- CT/C
Continuous Distribution
- CT/B
Broken Distribution
- CT/P
Patchy Distribution
- CT/S
Splashed Distribution
- eee
Oiled Vegetation
- 1 →
Photo location, direction, and number

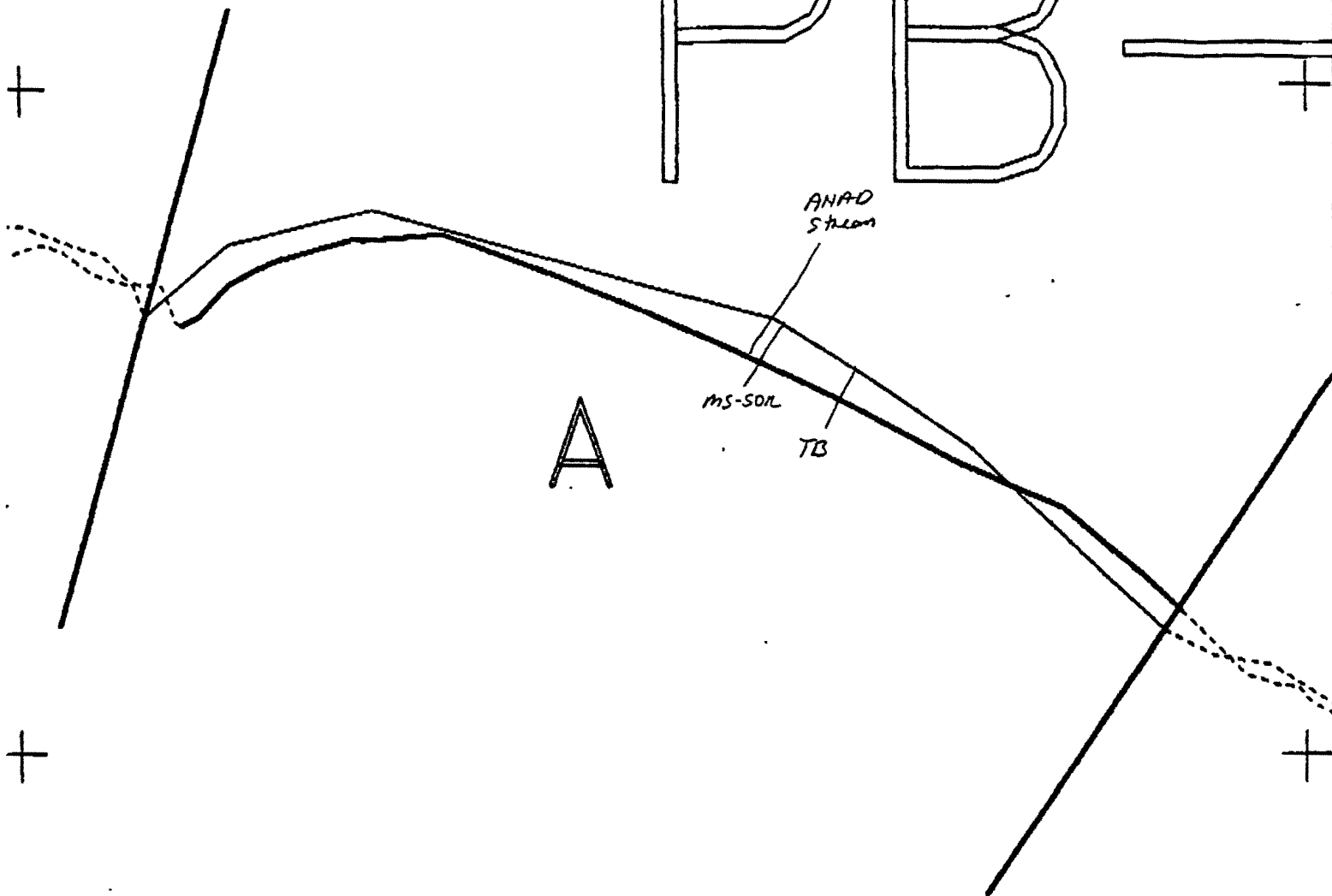


ACE 1950792

Oil Character Length (m): AP PO CV CT ST MS PT TB FL NO

REVISION 03/1

PB



ACE 1950793

XXXX Wide
 //// Medium
 ---- Narrow
 TTTT Very Light
 0000 No Oil

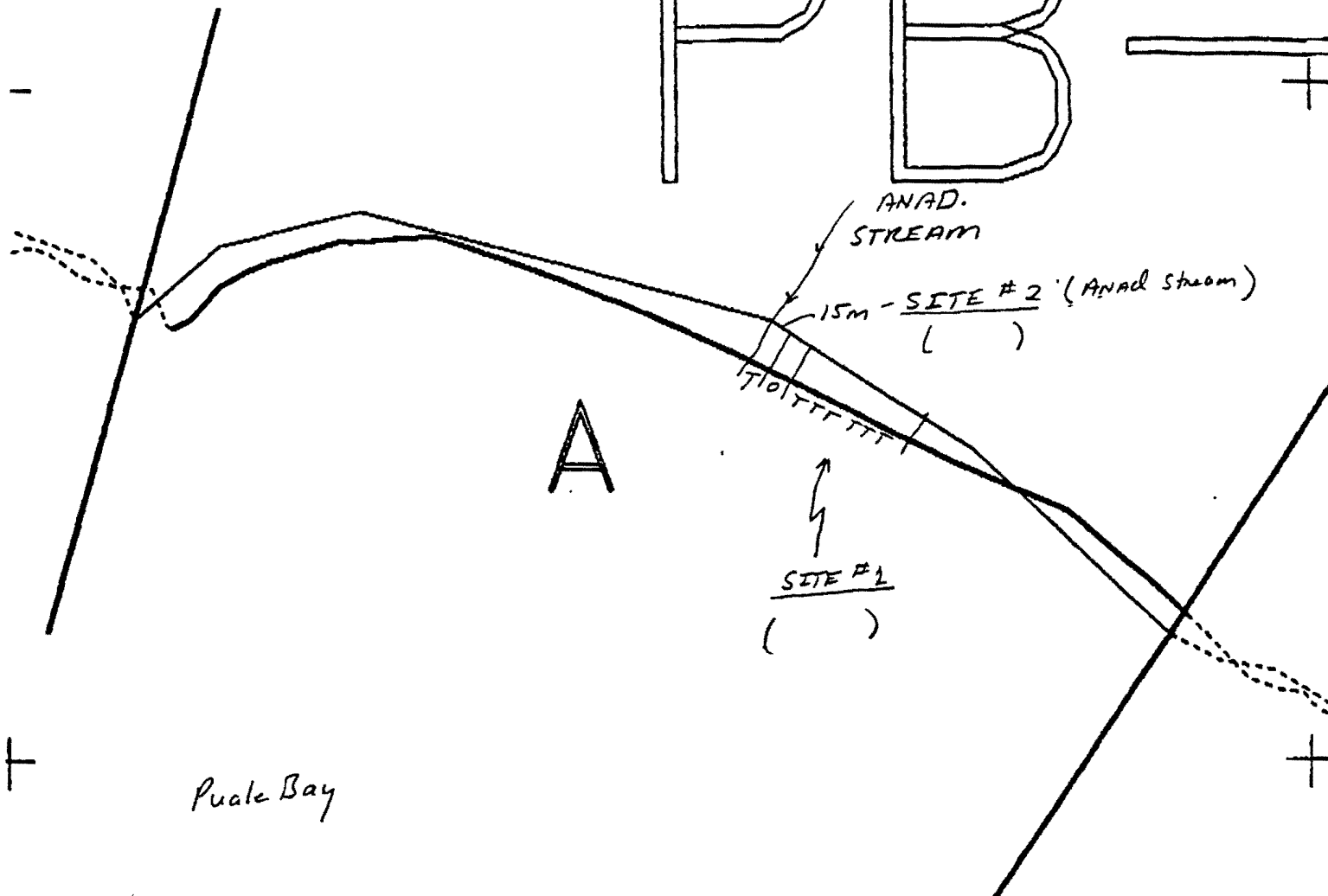
K10-7 PB-16 A
 ADEC Subsegment Length: 1179m
 METERS

0 176 353
 AK State Plane Zone 4 1:6042
 a10-7pb16a



Subdivision Field Map
 Map Key: AKPK10-7PB-16A
 Name: D. Fitzgerald
 Date: 12 Aug 90
 Data Entered:

PB



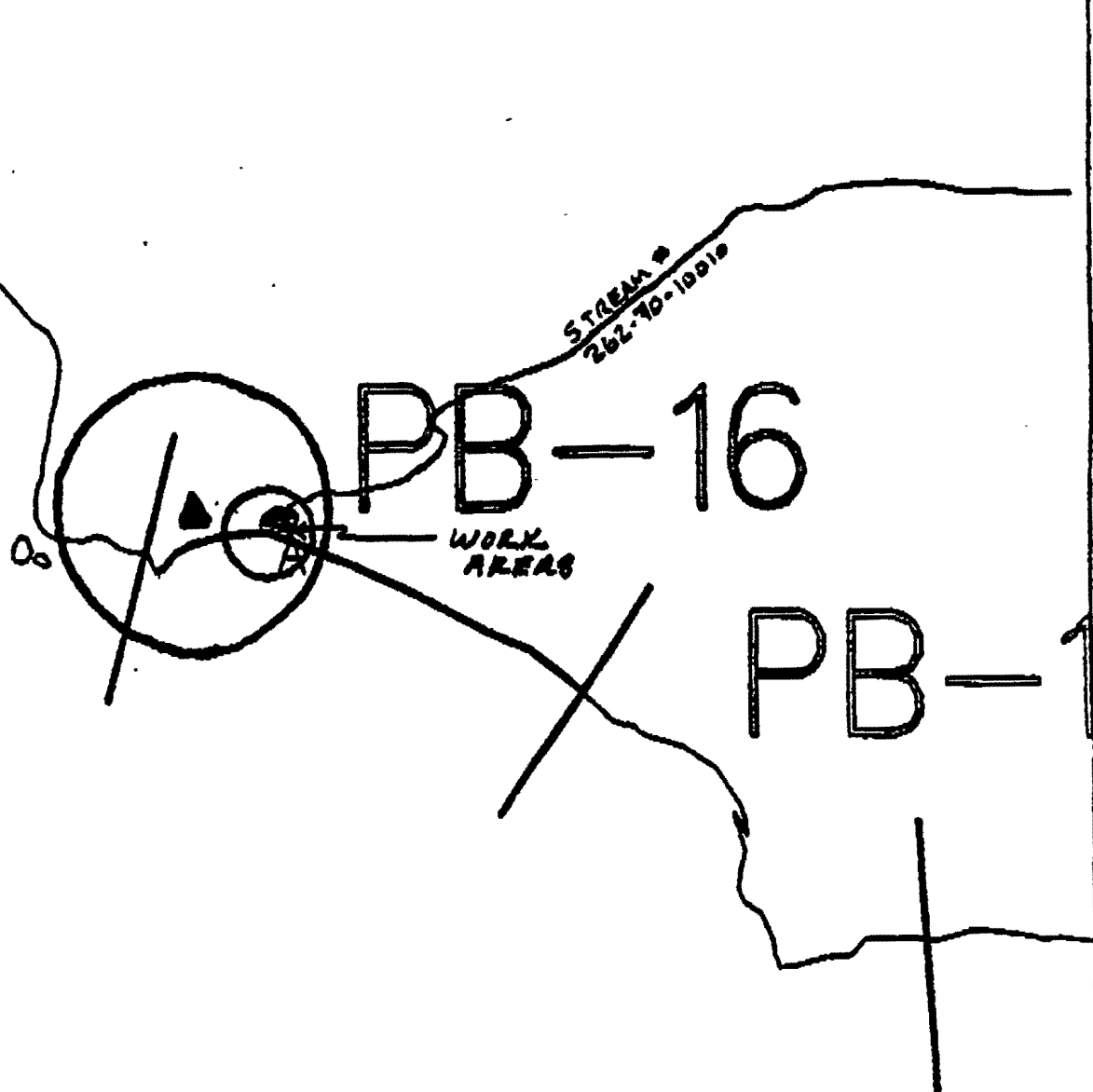
ACE 1950794

XXXX Wide
 //// Medium
 ---- Narrow
 TTTT Very Light
 0000 No Oil

K10-7 PB-16 A
 ADEC Subsegment Length: 1179m
 METERS
 0 170 353
 AK State Plane Zone 4 1:8042
 a10-7pb16a

Subdivision Field Map
 Map Key: AKPK10-7PB-16A
 Name: D. FITZGERALD
 Date: 12 Aug 90
 Data Entered:





ACE 1950795-13



Exxon Company, USA



ECOLOGY MAP
SEGMENT K10-7 PB-16
SUBDIVISION A (1 of 1)

- ★ Seabird Colony
- ▲ Active Eagle Nest
- △ Inactive Eagle Nest

ADF&G MULTI-ASSESSMENT DATA FORM

- 1) SURVEY TYPE: BS SS 2) REGION: PWS KP, CI K, AP
- 3) METHOD: Aerial Ground Boat
- 4) DATE: 5-19-91 16) HIGH TIDE TIME: 0653/2004 22) TEAM RECORDER: J. Barnhart
- 5) START TIME: 0950 17) HIGH TIDE HTS: 17.3/16.4 23) OBSERVERS: D. Spurr, R. Heroldson, J. Hardaker and others.
- 6) STOP TIME: 1045 18) LOW TIDE TIMES: 0251/1327 24) AGENCY: ADF&G, USCG, Exxon, USF&WS
- 7) SEGMENT #: PB-016 19) LOW TIDE HTS: 3.2/-1.4 25) PHOTOS TAKEN: Y N
- 8) K-UNIT: K10-07 20) TIDE HT AT SURVEY: _____ ROLL #: _____ FRAMES: _____
- 9) LAT: _____ Ebb Slack Flood Slack 26) VIDEO TAKEN: Y N
- 10) LONG: _____ 21) USCG QUAD: _____ TAPE # _____
- 11) ASC #: 262-70-10010 START: _____ STOP: _____
- 12) STREAM NAME: Helen Creek 27) SAMPLES TAKEN? Y N
- 13) LOCATION: Puale Bay, Alaska Peninsula SAMPLE I.D. _____
- 14) WAVE EXPOSURE: High Moderate Low _____
- 15) SHORELINE TYPE: Headland Low-lying Rocks Beach _____
- Cove Lagoon Marsh _____

28) EXTENT OF OIL

	LENGTH m	WIDTH m	M2	%	THICK cm	PEN cm	OIL TYPE
SITE 1	<u>12</u>	<u>5</u>	<u>60</u>	<u>2</u>	<u>1.5</u>	<u>0</u>	<u>SOR-ms</u>
SITE 2	<u>10</u>	<u>1</u>	<u>10</u>	<u>20</u>	<u>5</u>	<u>0</u>	<u>SOR-ms</u>
SITE 3							
SITE 4							
SITE 5							

- 29) OVERALL OIL IMPACT: 33) ANADROMOUS FISH PRESENT: Y N
- H = >6m band with $\geq 50\%$ oil coverage
- M = >6m band with $\leq 50\%$ oil coverage or $\geq 3\text{m}$ to $\leq 6\text{m}$ with $\geq 10\%$ oil coverage
- L = <3m band with $> 10\%$ oil coverage
- VL = $\leq 10\%$ oil coverage regardless of band width
- N = No oil observed
- 34) WILDLIFE OBSERVATION
- Species _____ Number _____
- Brown Bear Tracks
- 30) OIL IN STREAMBED: Y N
- 31) OIL ON BEACH ADJACENT TO MOUTH: Y N
- 32) SUBSTRATE TYPE (PERCENT):

Bedrock _____ Boulder _____ Gravel 10 Sand 5 Cobble 85 Mud/Silt _____

- 35) COMMENTS: Site 1 is located at the confluence of the South Fork and Helen Creek proper. It was not discovered last year because it was covered with sand, which was eroded away over the winter of 90-91. The oil cleaned at site 1 was SOR from the 1990 cleanup.

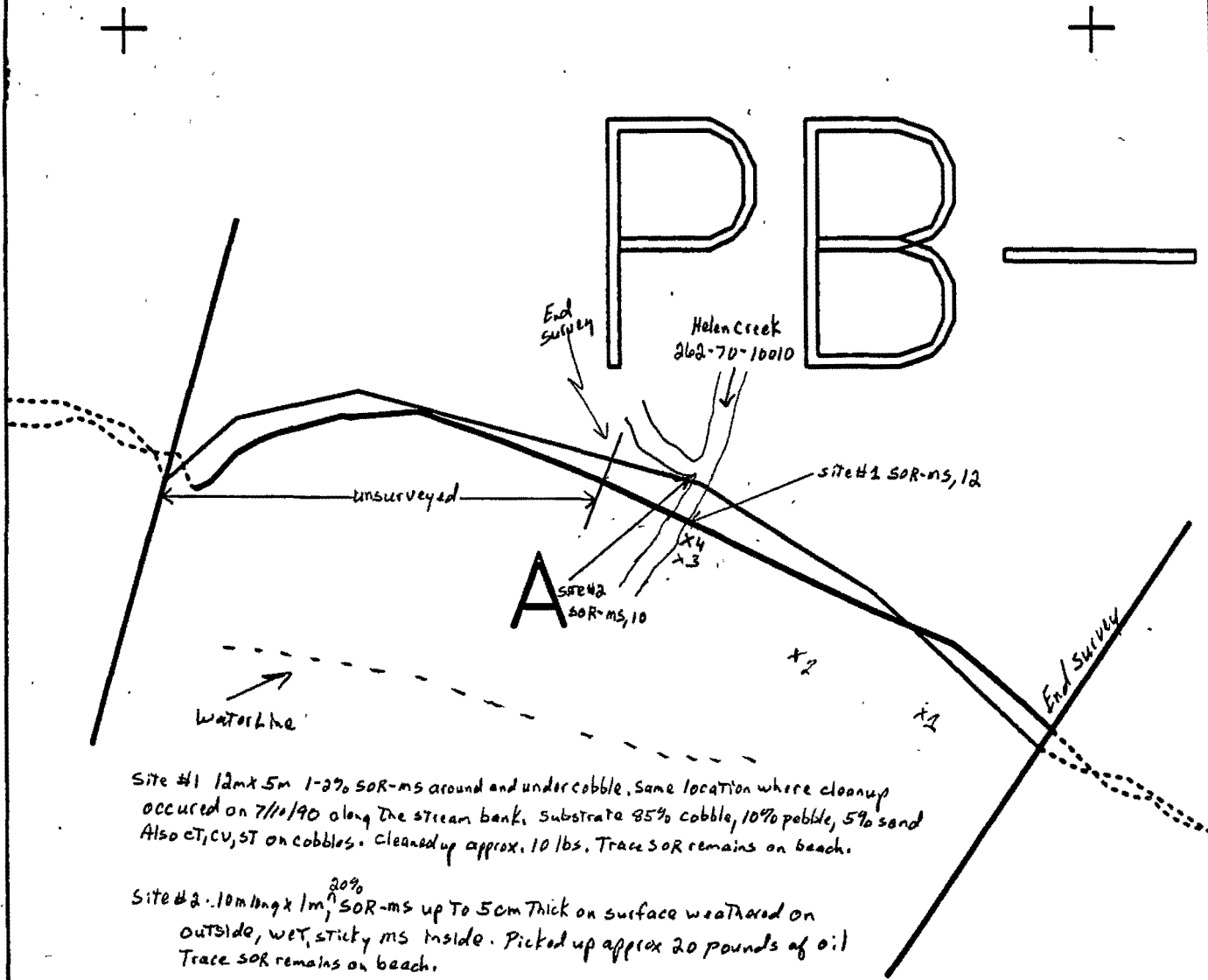
36) PHOTOLOG

FRAME(S)

DESCRIPTION

▲ = Sample Taken
 2/ = Photo Frame # and
 Shot Direction

A:EDDATFO
 April 3, 1991



Site #1 12m x 5m 1-2% SOR-MS around and under cobble. Same location where cleanup occurred on 7/10/90 along the stream bank. Substrate 95% cobble, 10% pebble, 5% sand. Also CT, CV, ST on cobbles. Cleaned up approx. 10 lbs. Trace SOR remains on beach.

Site #2 10m long x 1m ^{20%} SOR-MS up to 5cm thick on surface weathered on outside, wet, sticky MS inside. Picked up approx 20 pounds of oil. Trace SOR remains on beach.

P.T. NOTES.

- 1 30cm No oil
- 2 30cm No oil
- 3 20cm No oil
- 4 20cm No oil

XXXX
////

TTTT
0000

Wide
Medium
Narrow
Very Light
No Oil

K1007 PB016 A
ADEC Subsegment Length: 1178m
4mm = 8 meters METERS
AK State Place Zone 4
1007pb016a- . . .

Subdivision Field Map
Map Key: 60AK1007PB016A
Name: _____
Date: _____
Date Entered: _____



AM NO. 6-Helo SEGMENT PR-16 SUBDIVISION A DATE 19 May 91

ADEC

NAME J. BARNHART of ADFGSIGNATURE Jiff Barnhart☒ NTR ☐ Treatment Suggested

A few widely scattered SOR-TB's were located and removed along the beach north of the stream, Helen Creek 262-78-10010. The oiled area along the stream that was cleaned in 1990 exhibited 1-2% SOR-TB's around and under cobble, in an area approx 12m x 5m. This was picked up by the VECO crew. The second area occurs at the confluence of the tributary stream and Helen creek. The approx. size is 10m long x 1m wide, SOR-TB's. This was not detected in 1990 because it was covered with sand. The VECO crew removed as much oil as possible.

EXXON

NAME R. HANDELSONSIGNATURE RC Handel

☒ NTR All readily accessible oiled material has been removed from this area. No further treatment is required.

LANDMANAGER

NAME J. HANDISTEROF USFWSSIGNATURE John P. Handister

☒ NTR Concur with ADFG representative. The area along the anadromous stream that I observed in 1990 had been cleaned and the residual SOR-TB's were removed during the current survey by the VECO crew. No further cleanup is recommended.

USCG/NOAA

NAME CWO SPURK / G SHEGEMKASIGNATURE R.P. Spurr / G. Shegemka

☒ NTR SOR-TB's were removed by VECO workers during survey

SURVEYED PORTION OF THE SEGMENT CONSISTED OF A WIDE SAND BEACH BORDERED TO THE EAST BY ROCKY CLIFFS AND TO THE WEST BY AN ANADROMOUS STREAM. TO THE NORTH, ABOVE THE SUPRATIDAL MARGIN OF THE BEACH, WAS AN AREA OF SALT GRASS. DRIFTWOOD LOGS WERE ABUNDANT IN THE SUPRATIDAL ZONE. THE SAND BEACH APPEARED TO BE ACTIVELY SHIFTING, AND MATS OF BEACHED SEAWEED MATERIAL WERE BURIED IN THE UPPER MIZE. ALTHOUGH SOME SOR WAS FOUND ALONG THE BEACH PROPER, MOST OF THE OILING OBSERVED OCCURRED ALONG THE BANKS OF THE STREAM TO THE WEST. MOUSSE WAS FOUND IN AND UNDER COBBLE SUBSTRATE ON THE EASTERN SHORE. SOME RESIDUE WAS ALSO FOUND IN THE SUPRATIDAL IN THE SALT GRASS. ON THE WEST SIDE OF THE STREAM, AN APPROXIMATELY 2x4m BAND WHERE SOR/TAR MATS WERE FOUND IN SANDY SUBSTRATE WAS DOCUMENTED. IN THE SUPRA WEST OF THE STREAM, STAIN WAS FOUND ON DRIFTWOOD LOGS. THE MOST SUBSTANTIAL OF THE RESIDUES FOUND WERE RECOVERED BY THE VECO CREW.

AFS 262-70-10010
HELEN CREEK, AK PENINSULA
SITE 1 AKP 1-3 '89

262-70-701

ACE 1950715



ASC NUMBER:	SEGMENT NUMBER:	YR CATALOGED:
LOCATION:		
STREAM NAME:		LATITUDE:
KODIAK K-UNIT:	LOCAL STREAM #:	LONGITUDE:
USGS QUADRANGLE:		LEGAL:
SHORELINE TYPE: BEACH		WAVE EXPOSURE: M

ASC NUMBER: 262-70-10010
 SURVEY TYPE: PA
 METHOD: F
 DATE: 04/10/90
 START TIME: 1107
 STOP TIME: 1130

TEAM RECORDER: JEFFREY P. BARNHART
 OBSERVERS: J. DEVEE

AGENCY(IES): ADFG, EXXON

PHOTOS TAKEN? ☒
 Roll #: Frames:
 VIDEO TAKEN? ☒ Tape Number: ☒
 Counter Start: ☒

SAMPLES TAKEN? ☒

SAMPLE I.D. NUMBERS: 1. / 2. / 3. /
 4. / 5. / 6. /

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1							MS, AT
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? ☒

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? ☒

SUBSTRATE	
Bedrock	Granule
Boulder	Sand 90
Cobble	Silt
Pebble 10	Veget.

SPECIES					
COUNT					

COMMENTS: FOUND TWO MOUSSE PATTIES, 6 INCH SIZE ON WEST SIDE STREAM BANK. ALSO LOCATED THREE 4 INCH MOUSSE PATTIES ON BEACH WEST OF STREAM MOUTH, SURVEYED 30 YDS OF WEST SIDE STREAM BANK AND 50 YDS OF BEACH WEST OF STREAM. NO SURVEY ON EAST SIDE STREAM BANK OR BEACH AREA. NO SUBSURFACE OBSERVATIONS MADE.
 RECOMMEND ANALYSIS.

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS (SS) DS TS AVS SCHA MMS PTA 2 REGION: PWS KP,CI (K)AP

METHOD: Aerial (Ground) Boat

3 DATE: 4/15/90 15 HIGH TIDE TIMES: 1 21 TEAM RECORDER: JEFF BARNHART

4 START TIME: 1107 16 HIGH TIDE HTS: 1 22 OBSERVERS: John Pevee

5 STOP TIME: 1130 17 LOW TIDE TIMES: 1216 1 23 AGENCY: ADF&G / Exxon

6 SEGMENT #: PB016 18 LOW TIDE HTS: 1.4 1 24 PHOTOS TAKEN: Y (N)

7 STATION #: 262-70-10010 19 TIDE HT AT SURVEY: _____ Roll #: _____ Frame: _____

8 K-UNIT: K10-07 (Ebb) Slack Flood Slack 25 VIDEO TAKEN: Y (N) TAPE#: _____

9 STAT AREA: 262-70 20 USCG QUAD: Kacluk D-5 Start: _____ End: _____

10 LAT: 57°45'20" N 11 LONG: 155°29'9" W 26 SAMPLES TAKEN? Y (N) Number _____

12 SOURCE: Map Loran Anadromous Fish Catalog Oil _____

13 LOCATION: Helen Creek, Puale Bay Sediment _____

14 DESCRIPTION: S 28S 38W22 Biological _____

Water _____

EXTENT OF OIL

	SHORELINE				STREAM				
	L	W	M ²	%	L	W	M ²	%	
27 SURFACE COVERAGE									36 CATALOGED ANAD. FISH SREAM? <u>(Y)</u> N
28 SURFACE THICKNESS									37 CATALOG #: <u>262-70-10010</u>
29 PENETRATION									38 STREAM NAME: <u>Helen Creek</u>
30 OVERALL OIL IMPACT: N VL L M H									39 OIL IN STREAM BED? Y <u>(N)</u>
31 OIL TYPE: Pooled <u>(Mousse)</u> Tar Asphalt Sticky Stain									40 OIL ON STREAM BANKS? <u>(Y)</u> N
32 OILED DEBRIS? <u>(Y)</u> N									41 OIL ON BEACH ADJACENT TO MOUTH? <u>(Y)</u> N (within 50 meters)
33 SHORELINE TYPE: Headland Low-lying Rocks <u>(Beach)</u> Cove Lagoon Marsh									42 OIL WITHIN 1 MILE OF STREAM? Y N
34 WAVE EXPOSURE: High <u>(Moderate)</u> Low									Where: _____
35 SUBSTRATE TYPE: Bedrock Boulder Cobble <u>(Gravel)</u> <u>10%</u> <u>(Sand)</u> <u>90%</u> Mud/silt									43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION

Species	Aerial	Ground

COMMENTS: Found Two mousse patties, 6 inch sized on west side stream bank.
Also located Three, four inch mousse patties on beach west of stream
mouth. Surveyed 30 yards of west side stream bank and 50 yards of
beach west of stream. No survey on East side stream bank or beach
area. No subsurface observations made.

Recommend ANADSSAT Jeff Barnhart

ACE 1950728 →



90 ANAD88AT

ASC NUMBER: LOCATION: STREAM NAME: KODIAK K-UNIT: USGS QUADRANGLE: SHORELINE TYPE: BEACH
SEGMENT NUMBER: LOCAL STREAM #: LATITUDE: LONGITUDE: LEGAL: WAVE EXPOSURE: HIGH
YR CATALOGED:

ASC NUMBER: 262-70-10010
SURVEY TYPE: AN
METHOD: F
DATE: 05/02/90
START TIME: 13:15
STOP TIME: 13:35

TEAM RECORDER: JEFFREY P. BARNHART
OBSERVERS: G. GARCIA, W. RIES, J. McMAHON
M. FAWCETT
AGENCY(IES): ADFG, EXXON, USCG, WWC
PHOTOS TAKEN? N
Roll #: Frames:
VIDEO TAKEN? N Tape Number:
Counter Start:

SAMPLES TAKEN? N
SAMPLE I.D. NUMBERS: 1. 2. 3.
4. 5. 6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1					Ø	Ø	TB
SITE 2							
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: VL

OIL IN STREAM CHANNEL? Y

SUBSTRATE

Bedrock Granule
Boulder Sand - 80
Cobble Silt
Pebble - 20 Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? N

SPECIES	CARIBOU	RIVER OTTER			
COUNT	4	Tracks			

COMMENTS: FOUND ONLY 4 TB. NO CLEANUP

RECOMMENDED

ACE 1950730+56

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMHS PTA2 REGION: PWS KP, CI K, APMETHOD: Aerial Ground Boat3 DATE: 5/3/9015 HIGH TIDE TIMES: 8:52 AM / 10:16 PM21 TEAM RECORDER: JEFFREY BARNHART4 START TIME: 1:15 PM16 HIGH TIDE HTS: 14.1 / 14.622 OBSERVERS: John M. Mahan, Mike Fawcett5 STOP TIME: 1:35 PM17 LOW TIDE TIMES: 3:11 AM / 3:50 PM23 AGENCY: ADF&G/Essex/JUSCG/WWC/WWC6 SEGMENT #: P801618 LOW TIDE HTS: 5.4 / 1.924 PHOTOS TAKEN: Y (N)7 STATION #: 262-70-10010

19 TIDE HT AT SURVEY: _____

Roll #: _____ Frame: _____

8 K-UNIT: K10-07Ebb Slack Flood Slack25 VIDEO TAKEN: Y (N) TAPE#: _____9 STAT AREA: 262-7020 USCG QUAD: Karluk D-5

Start: _____ End: _____

10 LAT: 57° 45' 20" N11 LONG: 155° 29' 9" W26 SAMPLES TAKEN? Y (N) Number12 SOURCE: Map Loran Anadssat

Oil _____

13 LOCATION: Helen Creek, Puale Bay

Sediment _____

14 DESCRIPTION: SABS 38W22

Biological _____

EXTENT OF OIL

Water _____

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION	φ							

36 CATALOGED ANAD. FISH SKEIN? Y (N)37 CATALOG #: 262-70-1001038 STREAM NAME: Helen Creek39 OIL IN STREAM BED? Y (N)40 OIL ON STREAM BANKS? Y (N)30 OVERALL OIL IMPACT: N (VL) L M H41 OIL ON BEACH ADJACENT TO MOUTH? Y (N)
(within 50 meters)31 OIL TYPE: Pooled Mousse Tan Asphalt Sticky Stain42 OIL WITHIN 1 MILE OF STREAM? Y (N)32 OILED DEBRIS? Y (N)

Where: _____

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh43 ANADROMOUS FISH PRESENT? Y (N)34 WAVE EXPOSURE: High Beach Moderate Low Stream44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble _____
Gravel 20 Sand 80 Mud/silt _____

Species	Aerial	Ground

COMMENTS: Found only 4 T/B's. No cleanup recommended.



89 Stream Survey

Kathrin,
Need to check with
Ed on this. No data
available in feeding
N/A, checked.

ASC NUM
LOCATION
STREAM
KODIAK
USGS QU
SHORELINE TYPE:

EGMENT NUMBER:
LOCAL STREAM #:

YR CATALOGED:

LATITUDE:
LONGITUDE:
LEGAL:
WAVE EXPOSURE: H2

ASC NUMBER: 262-70-10010
SURVEY TYPE: SS
METHOD: F
DATE: 09/01/89
START TIME: 1420
STOP TIME:

TEAM RECORDER: EDWARD W. WEISS
OBSERVERS: T. GIEGERICH
AGENCY(IES): ADFG

PHOTOS TAKEN? Y
Roll #: 89EW0016K Frames: 24-35
VIDEO TAKEN? Y Tape Number: 53KAP01
Counter Start:

SAMPLES TAKEN? Y

SAMPLE I.D. NUMBERS: 1. ~~KAP 1-3-1~~ 89TG140K
2. ~~KAP 1-3-2~~ 89TG141K
3. ~~KAP 1-3-3~~ 89TG142K 89EW0016K
4. KAP 1-3-4 89TG143K
5.
6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1	125 m	2 m	250	10	.75" ^{0.02m}	*2"	MS, PT
SITE 2	10 m	3 m	30	3	.75"	3"	PT, ST, CT
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L

OIL IN STREAM CHANNEL? ☐

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? ☐

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES	PINK SALMON				
COUNT	75,000				

COMMENTS: AERIAL COUNT OF SALMON FROM MOUTH UPSTREAM
2 MILES. SITE 1 REPRESENTS OILING ALONG BEACH
ADJACENT TO STREAM. SITE 2 REPRESENTS OILING IN
STREAM AND ON STREAM BANKS.

yes implied by comments. Enter "Y"?



89 Stream Survey

ASC NUMBER: LOCATION: SEGMENT NUMBER: YR CATALOGED:
 STREAM NAME: KODIAK K-UNIT: LOCAL STREAM #: LATITUDE:
 USGS QUADRANGLE: SHORELINE TYPE: LONGITUDE:
 LEGAL:
 WAVE EXPOSURE: 11?

ASC NUMBER: 262-70-10010
 SURVEY TYPE: SS
 METHOD: F
 DATE: 09/01/89
 START TIME: 1420
 STOP TIME:

TEAM RECORDER: EDWARD W. WEISS
 OBSERVERS: T. GIEGERICH

AGENCY(IES): ADFG

PHOTOS TAKEN? Y
 Roll #: 89EW0016K Frames: 24-35
 VIDEO TAKEN? Y Tape Number: 55KAP01
 Counter Start:

SAMPLES TAKEN? Y

SAMPLE I.D. NUMBERS:

1. ~~KAP 1-3-1~~ 89TG140K
 2. ~~KAP 1-3-2~~ 89TG141K
 3. ~~KAP 1-3-3~~ 89TG142K 89EW0016K
 4. KAP 1-3-4 89TG143K
 5.
 6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1	125 m	2 m	250	10	.75" ^{max}	*2"	MS, PT
SITE 2	10 m	3 m	30	3	.75"	3"	PT, ST, CT
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: L

OIL IN STREAM CHANNEL?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SPECIES	PINK SALMON				
COUNT	75,000				

COMMENTS: AERIAL COUNT OF SALMON FROM MOUTH UPSTREAM 2 MILES. SITE 1 REPRESENTS OILING ALONG BEACH ADJACENT TO STREAM. SITE 2 REPRESENTS OILING IN STREAM AND ON STREAM BANKS.

yes implied by comments. Enter "Y"?



'90 CLEANUP INSPECTION/MONITORING

ASC NUMBER:	SEGMENT NUMBER: PB-016	YR CATALOGED:
LOCATION:		
STREAM NAME:	LOCAL STREAM #:	LATITUDE:
KODIAK K-UNIT:		LONGITUDE:
USGS QUADRANGLE:		LEGAL:
SHORELINE TYPE: Beach		WAVE EXPOSURE: High

ASC NUMBER: 262-70-10010
 SURVEY TYPE: CL
 METHOD: F
 DATE: 7/10/90
 START TIME: 1430
 STOP TIME: 1500

TEAM RECORDER: JEFFREY P. BARNHART
 OBSERVERS: J. DAVIS, F. BYARS, J. CARRAN
 D. WYDOSKI, Ken Middleton
 AGENCY(IES): ASFG, USCG, EXXON, ADEC
 USFWS
 PHOTOS TAKEN? N
 Roll #: ☒ Frames: ☒
 VIDEO TAKEN? ☒ Tape Number: ☒
 Counter Start: ☒

SAMPLES TAKEN? N

SAMPLE I.D. NUMBERS: 1. ☒ 2. ☒
 4. ☒ 5. ☒ 6. ☒

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1	20 m	3m	60	60		15cm	MS, PO
SITE 2	105 m	5 m	525	1		1cm	TB, AT
SITE 3	100 m	6m	600	10		1cm	TB, AT
SITE 4	48 m	4m	192	1		1cm	TB, AT
SITE 5							

OVERALL OIL IMPACT: M

OIL IN STREAM CHANNEL? Y

SUBSTRATE

Bedrock	Granule
Boulder	Sand 80
Cobble 5	Silt
Pebble 15	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? Y

SPECIES					
COUNT					ACE 1950776 + 1/2/SG

COMMENTS: 5 MAN HELICOPTER BASED CREW WORKED 3 HOURS (15 MAN HOURS) AND REMOVED 56 BAGS (2,240 POUNDS OF OIL/OILED SEDIMENT). TREATMENT WAS MANUAL REMOVAL ONLY. I WAS NOT PRESENT DURING ACTUAL CLEANUP PROCEDURE. K. MIDDLETON AND I ARRIVED AFTER CLEANUP WAS COMPLETE. THE HELO WORK SQUAD WAS STILL ON SITE. THE HEAVY OILING ON THE NORTH STREAM BANK (SITE 1) WAS REMOVED TO A SATISFACTORY LEVEL. THE WORK PLAN MODIFICATION DID NOT ALLOW FOR CLEANUP OF THE OIL ON THE BEACH FROM THE STREAM MOUTH NORTH. THE ADEC AND USFWS MONITORS CLEANED THIS AREA.

I SUSPECT THE TARBALLS PRESENT ON THE BEACH MAY BE BREAKING OFF LARGER DEPOSITS OF SUBSURFACE OIL ON THE BEACHFRONT. ENTIRE SEGMENT SHOULD BE SURVEYED DURING 1991 WITH SPECIAL EMPHASIS PLACED ON LOCATING AND DETERMINING EXTENT OF SUBSURFACE OILING.

2,240 pounds of oil/oiled sediment removed.



POST PANASSAT SURVEY

In season survey

ASC NUMBER: SEGMENT NUMBER: PB-016 YR CATALOGED:
 LOCATION: LATITUDE:
 STREAM NAME: LONGITUDE:
 KODIAK K-UNIT: LOCAL STREAM #:
 USGS QUADRANGLE: LEGAL:
 SHORELINE TYPE: BEACH WAVE EXPOSURE: HIGH

ASC NUMBER: 262-70-10010
 SURVEY TYPE: SS
 METHOD: F
 DATE: 06/29/90
 START TIME: 1140
 STOP TIME: 1250

TEAM RECORDER: JEFFREY P. BARNHART
 OBSERVERS: A. SMITH, W. JANICEK, J. CARLSON
 A. ELIASON, Dick Munoz, Tony Martin
 AGENCY(IES): ANF, USCG, NOAA, ANEC,
 NPS, USFWS
 PHOTOS TAKEN? Y
 Roll #: 90JPB002K Frames: 22-27
 VIDEO TAKEN? N Tape Number: _____
 Counter Start: _____

SAMPLES TAKEN? Y
 SAMPLE I.D. NUMBERS: 1. 90JPB003K 2. 3.
 4. 5. 6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
* SITE 1	20 m	3 m	60 m	60	22 cm	15 cm	MS/OP PO/D
SITE 2	105 m	5 m	525	1		1 cm	TB
SITE 3	100 m	6 m	600 m	17		1 cm	TB, AT
SITE 4	48 m	4 m	192 m	1		1 cm	TB, AT
SITE 5							

OVERALL OIL IMPACT: H

OIL IN STREAM CHANNEL? Y

OIL ON BEACH WITHIN 50M OF STREAM MOUTH? Y

SUBSTRATE	
Bedrock	Granule
Boulder	Sand
Cobble 5	Silt
Pebble 15	Veget.

SPECIES					
COUNT					

* Site 1: Thickness represents the 7cm on the surface extending another 15cm into the substrate for a total of 22cm.

COMMENTS: INTERAGENCY INSPECTION OF OIL IN STREAM AS REPORTED
 BY USFWS. TIME CONSTRAINTS PERMITTED ONLY A PARTIAL
 SURVEY. OIL IN AND AROUND THE STREAM AND BEACH WAS
 UNCOVERED BY STORM ACTION SINCE MY MAY 2, 1990 ANABSSAT.
 IT IS LOCATED IN THE MID BANK AREA OF THE STREAM
 AND EXTENDS TO THE STREAM BED. 20 m x 3 m MS/B, PO/B
 WITH 60 % SURFACE COVERAGE. AVERAGE THICKNESS 5-8 cm.
 SUBSURFACE MOUSSE PRESENT TO A MINIMUM DEPTH OF 15 cm,
 OP/UC, OL/UC. TEST PITS DUG AT EDGE OF STREAM BED
 REVEAL MOUSSE/SHEENING. TB AND AT/B OCCUR IN U1TZ
 FROM STREAM MOUTH NORTH ALONG BEACH <1% TO 30% →

WATER SURVEY DATA

(CONT)

COVERAGE. COMPLETE SURVEY NEEDS TO BE DONE AT
TIME OF TREATMENT.

ACE 1950744

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMS PTA

2 REGION: PWS KP, CI KAP

METHOD: Aerial Ground Boat

3 DATE: 6/29/90

15 HIGH TIDE TIMES: 0805 12034

21 TEAM RECORDER: JEFF BARNHART ADF&G
CPR Arch. L. Smith, wait Janicek

4 START TIME: 1140 hours

16 HIGH TIDE HTS: 14.2 16.1

22 OBSERVERS: Julia Carlson Alan Eliason
Dick Munoz Tony Martin

5 STOP TIME: 1250 hours

17 LOW TIDE TIMES: 0204 11407

23 AGENCY: USCG/NOAA/DEL/NPS/USFWS/USCG

6 SEGMENT #: PB-016

18 LOW TIDE HTS: 3.2 12.6

24 PHOTOS TAKEN: (Y) N

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: 90-JPB-002K Frame: 22, 23, 24, 25, 26, 27

8 K-UNIT: K10-07

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPE#:

9 STAT AREA: 262-70

20 USCG QUAD: Karluk D-5

Start: End:

10 LAT: 57°45'20"N

11 LONG: 155°29'9"W

26 SAMPLES TAKEN? (Y) N Number

12 SOURCE: Map Loran Anadcat

OIL 90-JPB003K

13 LOCATION: Helen Creek, Puale Bay

Sediment

14 DESCRIPTION: S 28 S 38 W 22

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

36 CATALOGED ANAD. FISH SREAM? (Y) N

37 CATALOG #: 262-70-10010

38 STREAM NAME: Helen Creek

39 OIL IN STREAM BED? (Y) N

40 OIL ON STREAM BANKS? (Y) N

30 OVERALL OIL IMPACT: N VL L M (H)

41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

42 OIL WITHIN 1 MILE OF STREAM? Y N

32 OILED DEBRIS? Y (N)

Where:

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh

43 ANADROMOUS FISH PRESENT? Y (N)

34 WAVE EXPOSURE: High Moderate Low

44 ANADROMOUS FISH OBSERVATION

35 SUBSTRATE TYPE: Bedrock Boulder Cobble 5
Gravel 15 Sand 80 Mud/silt

Species Aerial Ground

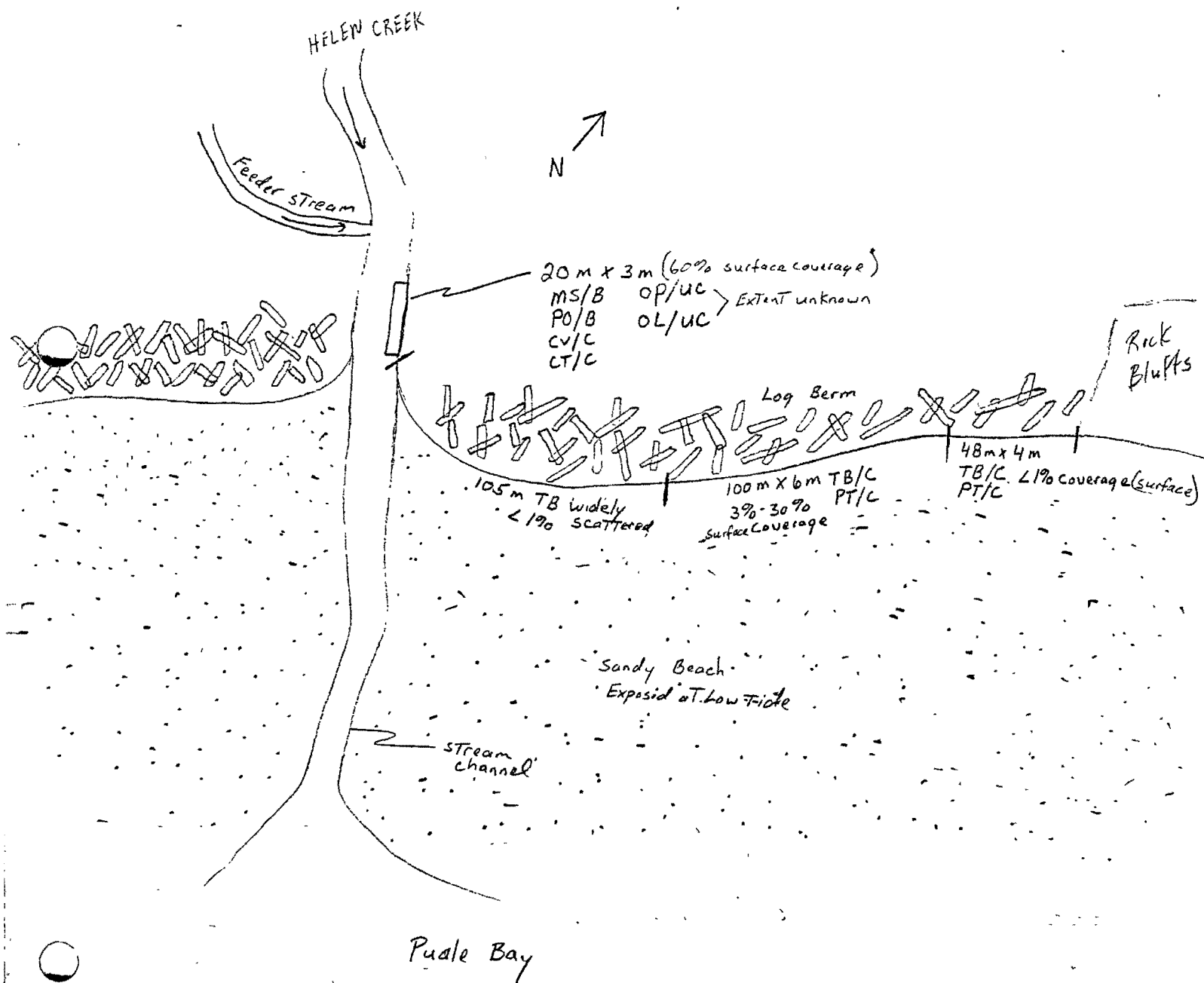
ACE 1950761

COMMENTS: Interagency inspection of oil in stream as reported by USFWS. Time constraints
permitted only a partial survey. Oil in and around the stream and beach was uncovered by storm
action since my May 2, 1990 Anadcat. It is located in the mid bank area and extends to the
stream bed. 2m x 3m MS/R, PO/B 60% surface coverage, Avg thickness 5-8 cm. Subsurface
mousse present to a minimum depth of 15 cm. OP/UC PL/UC. Test pits dug at edge of stream
bed reveal mousse/shreening. TB and PT/B occur in LITZ from stream mouth
North along Beach 41% to 36% coverage. Complete survey needs to be done at time of treatment.

PHOTOLOG

TIME(S)	DESCRIPTION
22	Oil mousse on stream bank
23	Sheeping in Test pit dug at edge of stream
24	Julie Carlson ADEC Taking sample of mousse from stream bank
25	Tar potties on beach North of Stream mouth
26	view looking upstream. Heavily oiled area between sample box and stream
27	Test pit sheening. Sand mousse and pebble substrate removed from Test pit.

46 OIL DISTRIBUTION DIAGRAM



= Sample taken
= Photo frame # and shot direction.

ACE 1950762

89 Stream Survey

ASC NUMBER:	SEGMENT NUMBER:	YR CATALOGED:
LOCATION:		
STREAM NAME:		LATITUDE:
KODIAK K-UNIT:	LOCAL STREAM #:	LONGITUDE:
USGS QUADRANGLE:		LEGAL:
SHORELINE TYPE:		WAVE EXPOSURE:

ASC NUMBER: 262-70-10010
SURVEY TYPE: SS
METHOD: F
DATE: 09/01/89
START TIME: 1420
STOP TIME:

TEAM RECORDER: EDWARD W. WEISS
OBSERVERS: T. GIEGERICH

AGENCY (IES) : IAAFG

PHOTOS TAKEN? Y
Roll #: 89EW0016K Frames: 24-35
VIDEO TAKEN? Y Tape Number: 55KAP01
Counter Start:

SAMPLES TAKEN? Y

COPIES TAKEN? Y
SAMPLE I.D. NUMBERS: 1. KAP 1-3-1 2. KAP 1-3-2 3. KAP 1-3-3
4. KAP 1-3-4 5. 6.

OILING DATA

	LENGTH	WIDTH	M2	%	THICK	FEN	OIL TYPE
SITE 1	125 m	2 m	250	10	.75"	2"	MS, PT
SITE 2	10 m	3 m	30	3	.75"	3"	PT, ST, CT
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: /

OIL IN STREAM CHANNEL?

-SUBSTRATE:

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SPECIES	Pink Salmon				
COUNT	75,000				

COMMENTS: AERIAL COUNT OF SALMON FROM MOUTH UPSTREAM
2 MILES. SITE 1 REPRESENTS OILING ABOVE BEHN
ADJACENT TO STREAM. SITE 2 REPRESENTS OILING IN
STREAM AND ON STREAM BANKS.

ACE 1950716
+15/FF

FISH HABITAT ASSESSMENT FORM

 REGION: PWS KP, CI K, AP OBSERVER(S) E. WEISS
T. GIEBERICH

 SITE NO. AKP-1-3 AERIAL PHOTO NO. K1-6 CAT NO. 262-70-10010

 STREAM NAME HELEN CREEK LAT 57° 45' 3" N LONG 155° 29' 0" W

 DATE 9-1-89 TIME 1420 TIDE: Low slack Flood High slack Ebb

 CATALOGED ANADROMOUS STREAM? (Y) N ANAD. FISH FOUND? (Y) N

 OIL FOUND IN STREAM? (Y) N OIL FOUND NEAR STREAM (1 MI.)? (Y) N

 OIL SAMPLES TAKEN? (Y) N ID NOS. KAP 1-3-1, 2, 3, + 4

 35 mm PICTURES TAKEN? (Y) N ROLL NO(S). A-02

EXPOSURE NO. DESCRIPTION

24+25	AERIAL OF STREAM MOUTH
26+27	MOUSSE PATCHES ON GRAVEL SPIT BETWEEN FORKS
28	LOOKING UP SMALL TRIBUTARY
29	" " MAIN STREAM
31	" " AT MOUTH
30, 34-35	MOUSSE / OILED DEBRIS
32-33	OIL MOUSSE ON STREAM BOTTOM

 VIDEO FOOTAGE TAKEN? (Y) N CASSETTE NO(S). SSKAP-01

 DESCRIPTION: OIL MOUSSE AROUND STREAM
262-70-10010. ON BANKS, SALMON IN
STREAM,

ACE 1950717+1P

ANADROMOUS FISH OBSERVATIONS

	PINK	CHUM	RED	KING	COHO	DOLLY		
Aerial	75,000 +							
Ground	500 +							

 COMMENTS: AERIAL 2 mi OF STREAM FROM MOUTH UP
GROUND 100 m AT MOUTH.

OIL OBSERVATIONS

EXTENT OF OIL:

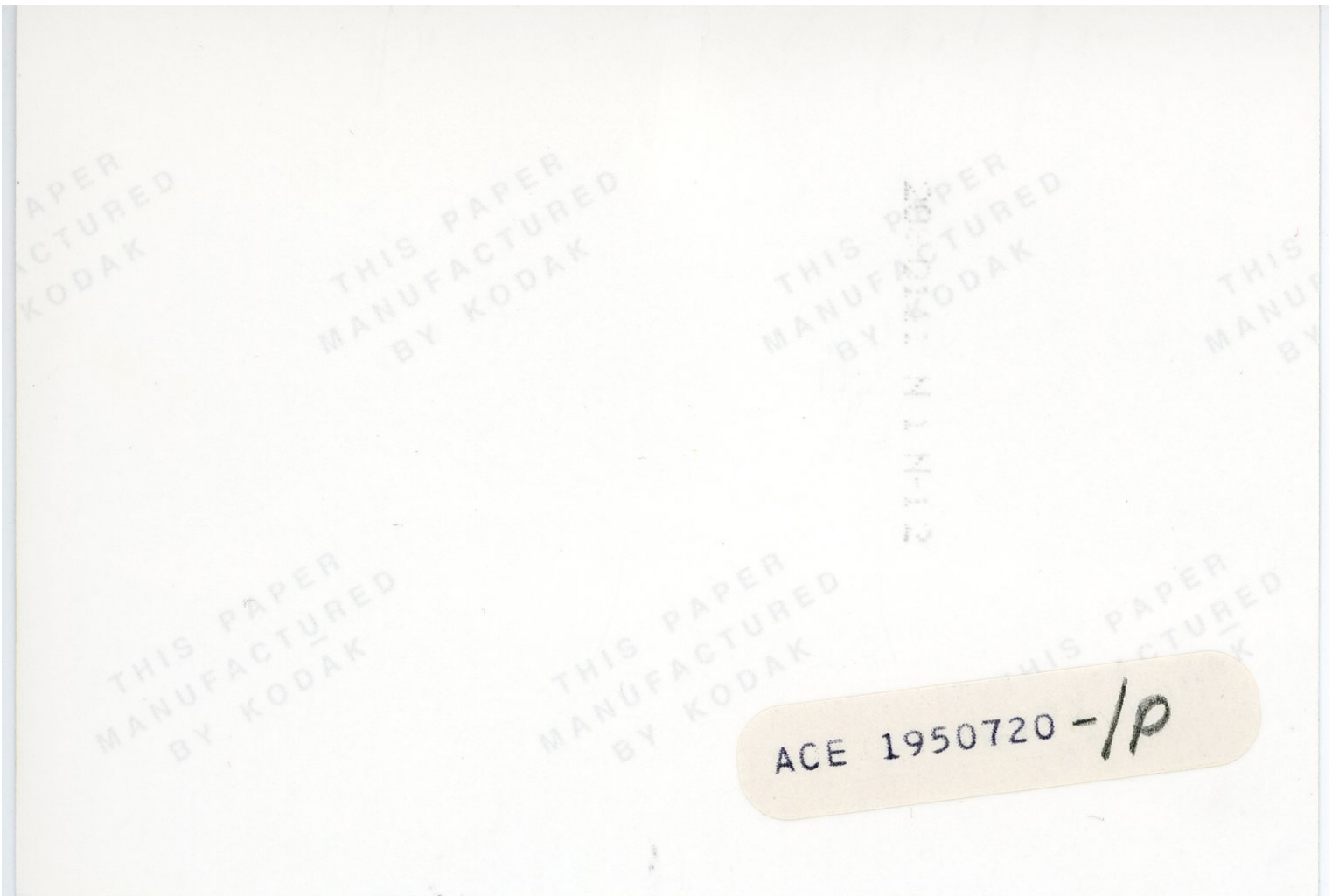
	WITHIN STREAM	10% OUTSIDE STREAM
PERIMETER SURFACE COVERAGE	3% of 30 m ²	2 m x 125 m
SURFACE THICKNESS	.75 INCH	.75 INCH
PENETRATION	3.0"	2.0"

OIL DISTRIBUTION DIAGRAM
(SHOW SAMPLING SITES)PREDOMINANT
SUBSTRATE TYPE:

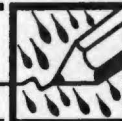
1. Bedrock
2. Boulder
3. Cobble
- (Y) 4. Gravel
5. Sand
6. Mud
7. Other _____

COMMENTS:

ACE 1950718



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Notebook No. 311-M

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STREAM SURVEY LOG

STREAM 262-70-701

CAT # 262-70-10010

57°45.3'N 155°29.0'W

HELEN CREEK, PUALE BAY

ACE 1950721

AKP-1-3 9-1-89 1420

DID AERIAL SURVEY OF
STREAM TO DISTANCE APPROX.
2 MI FROM MOUTH, OVER
75,000 PINKS, SPANNING
10 MOST OF RIVER IN
SURVEYED SECTION. AERIAL
PHOTOS OF MOUTH (A-02-
24+25) SET DOWN
ON WEST SIDE OF MOUTH.
WALKED 125 M ALONG
BEACH TO WEST 2 M X
125 M BAND OF SCATTERED
MOUSSE PATTIES ON SAND
SUBSTRATE, CONTINUED INTO
COBBLE DOWN THE BEACH.
PATTIES 1-10" DIA. FREQUENCY
VARIABLE 1-5 / 20 FT.
IN AND AROUND STREAM
MOUTH IS ACCUMULATION
OF OILED DRIFT AND DEBRIS
AND OIL MOUSSE, OIL MOUSSE
SPATTERING AND PATTIES
ON STREAM BED OF TRIBUTARY
AND ROBE OF MAIN STREAM.

ACE 1950722

PINK SALMON SPAWNING
+ MIGRATING UP SMALL
TRIBUTARY. OIL SPLATTERING
IN TRIBUTARY EXTENDED
ALL THE WAY ACROSS IN
BAND $\approx$ 10' WIDE.
GRAVEL SPIT BETWEEN MAIN
STREAM + TRIBUTARY ALSO
HAD MOUSSE SPLATTERING
AND PATIES THIS UNDERWATER
AT HIGH TIDE. MOUSSE
PATIES ALSO FOUND IN
MAIN STREAM BED AT
EDGE, NEAR FORK.
TIDE COMING IN WHILE
THERE WASHING OVER
IMPACTED AREAS. FISH
MOVING IN AND THROUGH
ALSO. OIL MOUSSE PATIES
RANGE IN SIZE FROM 1-8".
PHOTOS + VIDEO TAKEN.
OIL SAMPLES TAKEN.

ACE 1950723

PHOTOS TAKEN A-02 #24-35

24-25 AERIAL OF MOUTH
26-27 OIL MOUSSE ON SPIT IN FORK
OF STREAM
28 LOOKING UP SM TRIB.
29 LOOKING UP MAIN STREAM
31 LOOKING AT MOUTH
30, 34-35 MOUSSE / OILED DEBRIS
32-33 OIL MOUSSE ON STREAM
BOTTOM.

SAMPLES TAKEN

OIL

KAP 1-3-1
KAP 1-3-2
KAP 1-3-3
KAP 1-3-4

VIDEO TAKEN

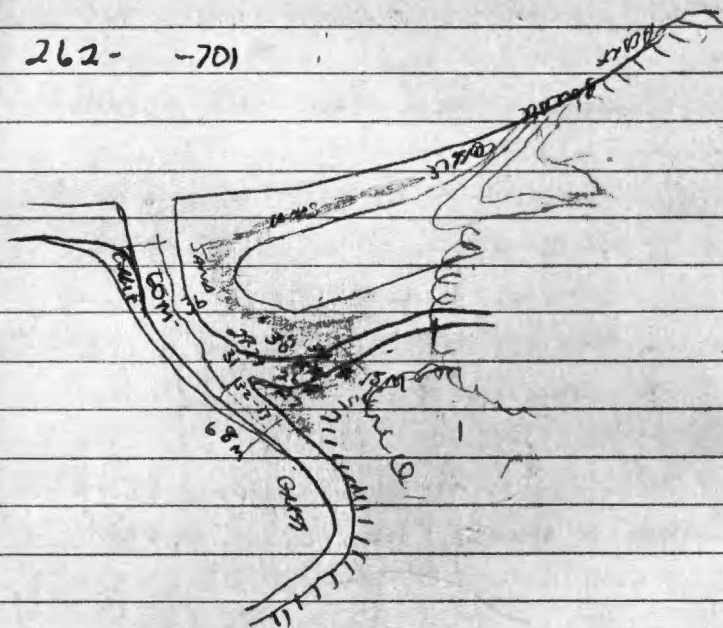
SSKAP-01

ACE 1950724

9-1-89

REFUEL PUALE BAY AREA 1340-

262- -701



BACK AT CAMP 1800

ACE 1950725

18

9-2-89

TAKE OFF GEOGRAPHIC HARBOR 0730
BOUND FOR PUALE BAY FOR STREAM
SURVEYS. WEATHER: BROKEN OVERCAST,
3000+.

ARRIVE STREAM 262-70-706

200 FISH

20 MILES

OTHER WATERFALL

300 IN JARRE POTION 1.5 MILE OF
STREAM ABOVE LAKEON LOW LYING
MARSH LANDS SLOW MEANDERING

LAKEON / L. STREAM SAND SUBSTRATE UP TO
LOW BANKS GRASS MARSHLAND THAT FLOODS
DURING HIGHER TIDES. OIL MOUSSE PATCHES
IN WATER ON SAND BOTTOM, UP IN
GRASS + ON SAND + CORAL BANKS
SCATTERED VARIABLE 10' SAND 300 m +
1/1 FT TO 1/30 FT. OLDER MOUSSE
MIX W/ SAND.

MOUSSE PATCHES 10' SAND X 400 m

1/6' TO 1/1' MOUSSE PATCHES ON TRIP,
BED ALL ALONG PERIMETER OF LAKEON

MOUSSE PATCHES 1-18" DIA. 1/6" UP LESS
IN SAND LAKEON BOTTOM ADJACENT TO
MOUTH. MOD. IMPACT OF MOUSSE ON

ACE 1950726-15

K10-07 PB-16 AFS 262-70-10010

Helen creek

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS (SS) DS TS AVS SCHA MMHS PTA2 REGION: PWS KP, CI K(AD)

METHOD: Aerial Ground Boat

3 DATE: 6/29/90 15 HIGH TIDE TIMES: 0805 120344 START TIME: 1140 hours 16 HIGH TIDE HTS: 14.2 16.15 STOP TIME: 1250 hours 17 LOW TIDE TIMES: 0204 114076 SEGMENT #: PB-016 18 LOW TIDE HTS: 3.2 12.6

7 STATION #: _____ 19 TIDE HT AT SURVEY: _____

8 K-UNIT: K10-07 (Ebb) Slack Flood Slack9 STAT AREA: 262-70 20 USCG QUAD: Karluk D-510 LAT: 57°45'20"N 11 LONG: 155°29'9"W12 SOURCE: Map Loran Anadcat13 LOCATION: Helen Creek, Puale Bay14 DESCRIPTION: S 285 38 W 2221 TEAM RECORDER: JEFF BARNHART ADF&G
CDR Archie Smith, Walt Janicek22 OBSERVERS: Julie Carlson, Alan Eliason
Dick Munoz, Tony Martin23 AGENCY: USCG/NOAA/BEL/NPS/USFWS/USCG24 PHOTOS TAKEN: (Y) NRoll #: 90-JPB-002k Frame: 22, 23, 24, 25, 26, 2725 VIDEO TAKEN: Y (N) TAPE#: _____

Start: _____ End: _____

26 SAMPLES TAKEN? (Y) N Number011 90-JPB003K

Sediment _____

Biological _____

Water _____

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								
30 OVERALL OIL IMPACT:	N	VL	L	M	<u>(H)</u>			

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain32 OILED DEBRIS? Y (N)33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh34 WAVE EXPOSURE: (High) Moderate Low35 SUBSTRATE TYPE: Bedrock _____ Boulder _____ Cobble 5
Gravel 15 Sand 80 Mud/silt _____36 CATALOGED ANAD. FISH SREAM? (Y) N37 CATALOG #: 262-70-1001038 STREAM NAME: Helen Creek39 OIL IN STREAM BED? (Y) N40 OIL ON STREAM BANKS? (Y) N41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)42 OIL WITHIN 1 MILE OF STREAM? Y N

Where: _____

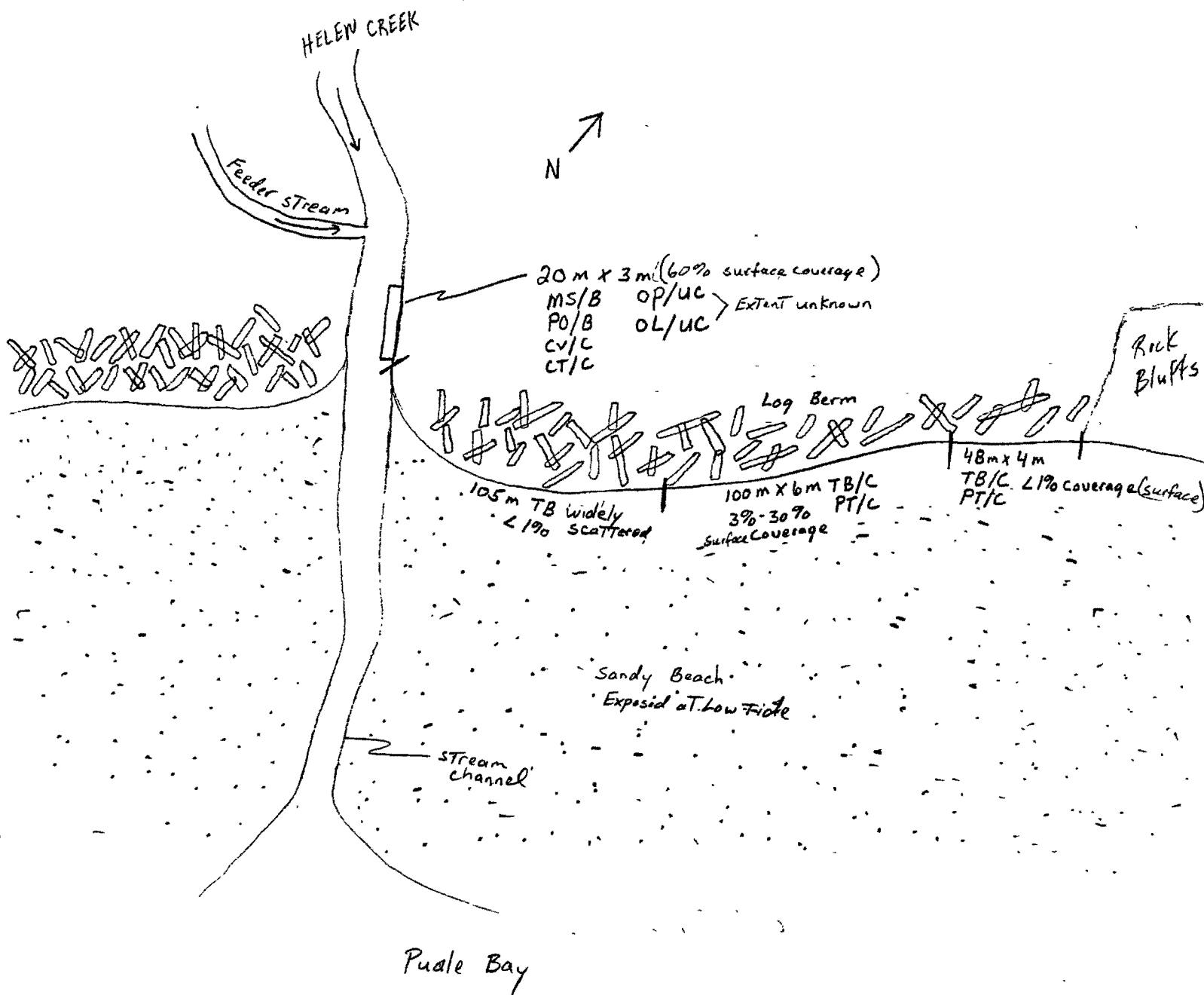
43 ANADROMOUS FISH PRESENT? Y (N)44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

COMMENTS: Interagency inspection of oil in stream as reported by USFWS. Time constraints

permitted only a partial survey. Oil in and around the stream and beach was uncovered by storm
action since my May 2, 1990 Anadcat. It is located in the mid bank area and extends to the
stream bed. 2m x 3m MS/B, PO/B 60% surface coverage, Avg thickness 5-8 cm. Subsurface
mousse present, to a minimum depth of 15 cm. OP/UC PL/UC. Test pits dug at edge of stream
bed reveal mousse/shore up. TB and PT/B occur in U/TZ from stream mouth.
Water along Beach 41% to 30% coverage. Complete survey needs to be done at time of T/Tm

FRAME(S)	DESCRIPTION
22	Oil mousse on stream bank
23	Sheening in Test pit dug at edge of stream
24	Julie Carlson, ADEC taking sample of mousse from stream bank
25	Tar patties on beach North of Stream mouth
26	view looking upstream. Heavily oiled area between sample box and stream
27	Test pit sheening. Sand, mousse and pebble substrate removed from test pit.

46 OIL DISTRIBUTION DIAGRAM



- = Sample taken
- = Photo frame # and shot direction.

SENT BY FAX Telecopier 7020 7-10-90 12:03 5072000743- 507200400012
1delo #9
**ADEC DEMOBILIZATION REPORT
FOR PHYSICAL/MECHANICAL TREATMENT AND CUSTOMER**

To: Alaska Department of Environmental Conservation
Oil Spill Response Center
Anchorage, Alaska
Attn: John Bauer
FAX 265-4666, 265-4656

Helen Creek

Str. # 262-70-10010

RE: SEGMENT NUMBER K10-07 PB16 SUBSEGMENT NUMBER —

DEC REP Juleanna Carlson USCG REP Jim Davis

EXXON REP Fred Byars BOAT NAME/SQUAD NUMBER Helo / #9

Has work been completed as stated on the work order? If your answer is no please explain in detail how the work performed was different from the work order language.

Yes. Manual treatment was completed.

Is there additional oil remaining which can be removed with further physical/mechanical treatment? If yes what is the recommended treatment method.

No

Describe the amount of oil remaining (type, size of area and location).

There is 4lb mousse, coat & stain remaining in an area 3 meters wide by 20 meters long.

Additional Comments (keep objective)

Crew Grade B.

signature Juleanna Carlson
Date and time of demobilization from segment 7/10/90 14:50
Shoremon\55 5-12-90

State of Alaska
Department of Fish and Game
Habitat Division

Page 1 of 1

Field Inspection Report

Date 7/10/90 Time 1430

Location: (Logging unit/Road/Waterbody) K10-07 - PB16 Paule Bay,
Alaska Peninsula. Anadromous Fish Stream 262-70-10010 Helen Creek

Operator/Contractor: Exxon Corporation, EVOS

Individuals present at time of inspection:

<u>Name</u>	<u>Representing</u>
<u>Ken Middleton</u>	<u>ADF+G Habitat Division</u>
<u>Jim Davis</u>	<u>USCG</u>
<u>Julie Carlson</u>	<u>ADEC</u>
<u>Dick Wydoski</u>	<u>USFWS</u>
<u>Fred Byars</u>	<u>Exxon</u>

Activity/Situation Observed: Land Helen Creek via helo 1430 depart 1500. work was
completed when Ken and I arrived. The heavy oiling on the north stream
bank was removed to satisfactory standards. I dug six test pits on the
south stream bank along the stream bed. No subsurface oil was observed.

Pertinent Statutes/Regulations: _____

Recommended/Required Action (Specify): The tar balls/patties located on the
beach from the stream mouth north may be breaking off larger deposits of
subsurface oil on the beach front. The entire segment should be surveyed during
1991 with special emphasis placed on locating and determining the extent of
the subsurface oiling

By (date) _____ (if applicable)

Please note: This is not a final inspection report. It is intended to provide the operator/contractor with a notice of problems or concerns which require immediate attention. If necessary, a final inspection report will be issued at a subsequent date.

Jeffrey P. Barnhart F.B.I.
Fish and Game Representative/Title

Company Representative/Title

EVOS CLEANUP MONITORING, 1990.

REGION: Alaska Peninsula

REPRESENTATIVES

K-UNIT: K10-07

Exxon: Fred Byars

SEGMENT: PB-016

USCG: Jim Davis

LOCATION: Paule Bay

DEC: Julie Carlson

STREAM NAME: Helen Creek

NPS: Howard Overton

ANAD. STREAM CAT. #: 262-70-10010

USFWS: Dick Wiydoski

ANAD. FISH STREAM PERMIT ISSUED: 7/10/90

ADFG: Jeff Barnhart

DATE(S) WORKED: 7/10/90

OTHER:

SQUAD # 9 Helo

HOURS WORKED: 3.0

SQUAD SIZE: 5

TOTAL MAN HOURS WORKED: 15.0

NUMBER OF BAGS COLLECTED: 56

Work order Issued modification 6-29-90

POUNDS OF OIL/OILED SEDIMENT REMOVED: 2,240

TREATMENT TECHNIQUES: MANUAL REMOVAL ☒ BIOREMEDIATION

OTHER

OIL BANDS

DEMOS DATE: 7/10/90

L 20m W 3m D 15cm m² 60

% oil
Cover 60 V

OIL SAMPLE # 90JPB003K

L 105m W 5m D 1cm m² 525

% oil
Cover 41 V

OIL TYPE: Mousse/TB/PT

L 100m W 6m D 1cm m² 600

% oil
Cover 10 V

SUBSTRATE TYPE: Sand 80%

L 48m W 4m D 1cm m² 192

% oil
Cover 41 V

Gravel 15% Cobble 5%

L _____ W _____ D _____ m² _____

% oil
Cover _____ V

PHOTOLOG

Roll #

FRAME #

DESCRIPTION

No photos Taken during cleanup...

PROBLEMS: I conducted an anadssat survey of this stream on 5/2/90. Only four small tarballs were found. No cleanup was recommended. On 6/24/90 53 days after the anadssat survey ^{was conducted} oil was discovered in Helen Creek by the USFWS.

I was not present during the cleanup as I was with an Interagency group conducting a follow-up survey on the treatment of Douglas Creek.

OBSERVATIONS: Ken Middleton and I arrived at Helen Creek after the cleanup was complete. The hole work squad was still on site. The heavy oiling on the North Stream bank was removed to a satisfactory level.

The work plan modification did not allow for cleanup of the oil on the beach from the stream mouth north. The ADEC and USFWS monitors cleaned this area.

I suspect the tarballs present on the beach may be breaking off larger ^{subsurface} deposits of oil on the beachfront.

SIGNED: Jeffrey P. Barnhart

JPB

7/10/47
Tues. Start 7:15 AM. ^{Fred} Fred Dyer called, Re:

8:00 departure to Helen creek. Drive to
Airport. called Ken. will go with flight
to Douglas. Crew: See Manifest

Boarded Aircraft 9:00 AM Burn off excess fuel

10:10 Easily depart Kodiak. Land Douglas

River 11:13 AM walked Beach. Some mouse

patties remain along with scattered Tar balls

+ patties. will check. Departed 12:15 pm

Land Big Bay, Shuyak Island For Fuel

12:40 pm. Depart 1:15 pm. [Land Helen creek

2:25 pm. work looks good Depart 3 PM]

Land Sturgeon Lagoon 5:15 3:15

Helen creek 57 total bags - 1 ^{bag} Oil Tyler = 56

- 8 off beach = 48 For stream

5:15
Sturgeon Lagoon 10 bags oil + sediment

20 pound bags + 3 bags of pump

plastic bags. Depart Sturgeon Lagoon 5 pm

Land Airport Kodiak 3:47 pm. Crew From

Helen creek to Sturgeon to Kodiak was

Fred Byars (Ensign) myself, Julie Carlson (Deck)

Harwood overboard (N2S) Jim Davis USCG

10:00 PM Dick Wydrick 357 EH

Daniel bit 5 pm. Dick Harwood arrived today

No lunch break.

Picked up trucking for ~~Returned to~~
~~offer. Did a minimum of paper work to~~
~~Keep my head above water. Editing~~
~~changed radio etc etc. Done 8:45 pm~~

6/29 0630 Drive to JCP. Provided Fred Byers with
corrections to streams numbers on work orders.
Found out Kashwit Bay is fogged in.
Call USFWS (John Hardister) requesting
They allow me to represent them during
The real Fox stream cleanup. Found out from
John that a survey currently under way
on the Alaska Peninsula by USFWS
(Ronald E. Howell) discovered oil in & around
Helen creek that requires immediate cleanup.
I was not notified by Exxon or USCG.
Spoke to Commander Smith asking why I was
not contacted. He told me he spoke to
Mike Gordon and Gordon was to speak
to me. Sounds phony to me. Anyhow I got

a seat on the ship to fly to Helen Creek

10:02 AM Today

work on Time sheet, photocopy paperwork necessary

For Trip to Helen Creek. 10:20 AM in helicopter, leaving.

EPA 412. Photocopy of manifest. Depart 10:40 AM
from Kodiak Airport. Land Helen Creek 360-70-10010

11:40 AM. 20 yd x 3m 60% coverage

Choc. Mousse, band, located in stream bed.

Penetration shown to 6" as evidenced by TEST
PITS. A portion of this band is still covered by
sand. TEST pits indicate a band of mousse

3-6 inches thick mixed with the sands

From the beach/stream interface north the first 105
yards widely scattered TB < 12%. This is followed by an area

99 yards x 6 yards wide the heaviest hit area is

2 m wide 30-30% coverage. The remainder is

3% coverage. Surface Tar balls/patties. Some
of it is under 1' of sand. I located it with my

fingers. The last 45 yds x 4 yds 1% coverage.

T/B mixed with sand. I walked to the point where

the Rock bluffs start. I suspect the Tar balls
may be breaking off a larger deposition on the

beach front. Area should be fully assessed

at time of cleanup. Time did not permit a

survey of the south side of the stream.

Depart Helen Creek 12:50 PM. Land Kodiak 1:20 PM

Fuels. Depart Kodiak 2:20 PM Land ICP 3:40 PM

Location needs 56-17 OK.

Photo #3 Roll 90-SPB-002-K

#22. 11:50 AM Helen Creek Chocolate mousse at

Stream bed. #23 12 noon sheening in TEST pit.

#24. 12:01 PM Helen Creek. Julie (DEC) Taking sample of mousse
from low stream bank, stream in background.

#25 12:15 PM Tar patties North of stream mouth

#26 12:45 PM Looking up stream Helen Creek. Heavily oiled area
between Tackle Box & stream

#27 12:46 PM TEST pit with sand, mousse, pebble substrate
removed, sheening.

oil sample # 90-SPB-003-K

Planning for stream cleanup areas with CREP

By 5:45. Drive to office. Work on

paperwork Done 8 PM