

ExxonMobil Pipeline Company

**SCAT Area Transition Report
for C06**

Silvertip Pipeline Incident
Laurel, Montana

October 28, 2011



SCAT Area Transition Report for C06

Silvertip Pipeline Incident
Laurel, Montana

Prepared for:
ExxonMobil Pipeline Company

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Our Ref.:
B0085883.1103

Date:
October 28, 2011

The observations described in this Report were made exclusively under the conditions at the time and subject to the limitations stated therein. It is understood by Client that ARCADIS has relied on the accuracy of documents, oral information, and other material and information provided by sources documented in this report, including but not limited to information provided by Client and Client's other contractors. ARCADIS has not independently verified any such information. The conclusions presented in the Report are based solely upon the observations and representations made by others.

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1. Executive Summary of Oil Removal Activities

This Shoreline Cleanup Assessment Technique (SCAT) Area Transition Report provides a summary of the SCAT surveys conducted to determine the extent of oiling along the riverbanks and floodplain within SCAT Area C06, as well as the oil remediation activities completed in this area based on the SCAT Team recommendations. This report also summarizes the environmental samples collected in SCAT Area C06. This report is intended to be read and used in conjunction with the Summary of Assessment and Oil Removal Activities report.

1.1 Land Ownership and Access Issues

Figure 1 provides an aerial map of SCAT Area C06, along with the (a) SCAT Area boundary, (b) parcel boundaries and respective property owners, and (c) access constraints identified during the oil cleanup process. The acreage surveyed in Area C06 is 16.9. There were no access issues for this area.

1.2 Cultural, Historic, and Natural Resource Constraints

No historic properties or cultural resources have been identified within this area that would affect oil removal activities.

Figure 2 summarizes the natural resources identified in this segment. International Bird Rescue and Resource Advisors from U.S. Fish and Wildlife Service conducted limited inspections of Area C06 due to the low level of oiling in Division C. No oiled wildlife was observed or recovered. No Wildlife Priority Cleanup Areas were identified. A bald eagle (*Haliaeetus leucocephalus*) nest was identified in Area C06 and a buffer zone to protect the nest was provided to Operations.

1.3 Summary of Environmental Sampling

Table 1 (below) summarizes samples collected within Area C06. The analytical results for the samples collected can be accessed through a publicly accessible database on the United States Environmental Protection Agency's (USEPA's) website. The approximate locations of samples collected within Area C06 are provided on Figure 3.

Table 1 Environmental Sampling Summary

Agency	Sample Num	Date	Matrix	Location	Latitude	Longitude
	No Samples Collected*					

Appendix A contains a summary of sample results with detections for this sample set. Detections with a result above the screening level are highlighted. No exceedances were reported for Area C06 because no samples have been collected in this area to date.

1.4 Summary of Initial SCAT Surveys

The SCAT teams used systematic evaluation criteria and treatment method tables approved by the National Oceanic and Atmospheric Administration to provide a standard approach for data collection and conducting field surveys. The forms and sketches from the initial SCAT surveys performed along the river bank (water edge) and floodplain within Area C06 are included in Appendix B. Figure 4 provides the maximum oiling zones observed by the SCAT team during the initial surveys of Area C06.

1.5 Applicable Compiled Treatment Recommendations

The SCAT team developed compiled treatment recommendations (CTRs) providing approved treatment methods (ATMs) for each oiling zone identified during the initial SCAT surveys ([CTR No. 60](#) and [CTR No. 61](#)).

1.6 Oil Removal Activities

Oil removal activities were conducted within Area C06 in accordance with the ATMs identified in the CTRs. [Appendix I](#) of the Summary of Assessment and Oil Removal Activities report presents this data including: date range/days worked, average number of people working per day, equipment used, and various types of bags removed: oily debris, personal protective equipment (PPE), plastic, trash, super sacks, wood chips, and contaminated wood.

1.7 Pre-Inspection Survey Transmittal

A Pre-Inspection Survey Transmittal (PIST) was not conducted for this area.

1.8 Post-Inspection Survey Transmittal

A Post-Inspection Survey Transmittal (POST) was not conducted for this area.

1.9 Summary of Final SCAT Surveys

Figure 5 shows the oiling conditions within Area C06 following completion of oil removal activities. The SCAT team performed final surveys of the left and right banks within SCAT Area C06 to confirm the agreed-upon cleanup endpoints identified in the applicable CTRs had been achieved. The final SCAT survey documentation is presented in Appendix E.

1.10 SCAT Area Conclusions

Based on the initial SCAT surveys performed on the island within Area C06, only very light oiling was observed on a portion of the island; no oiling was observed in the remainder of the island, and no further treatment was recommended. Based on the initial and final SCAT surveys performed on the left and right banks of Area C06, no further treatment was recommended for these segments. SCAT Segment Sign-Off Forms are included as Appendix F.



**SCAT Area Transition
Report for C06**

Silvertip Pipeline Incident
Laurel, Montana

2. Transition Sign-Off Form

SCAT Area Transition Report for C06

Prepared for:

Unified Command

Date

Unified Command – RP



**SCAT Area Transition
Report for C06**

Silvertip Pipeline Incident
Laurel, Montana

SCAT Area Transition Report for C06

Prepared for:

Unified Command

Date

Unified Command – FOSC



**SCAT Area Transition
Report for C06**

Silvertip Pipeline Incident
Laurel, Montana

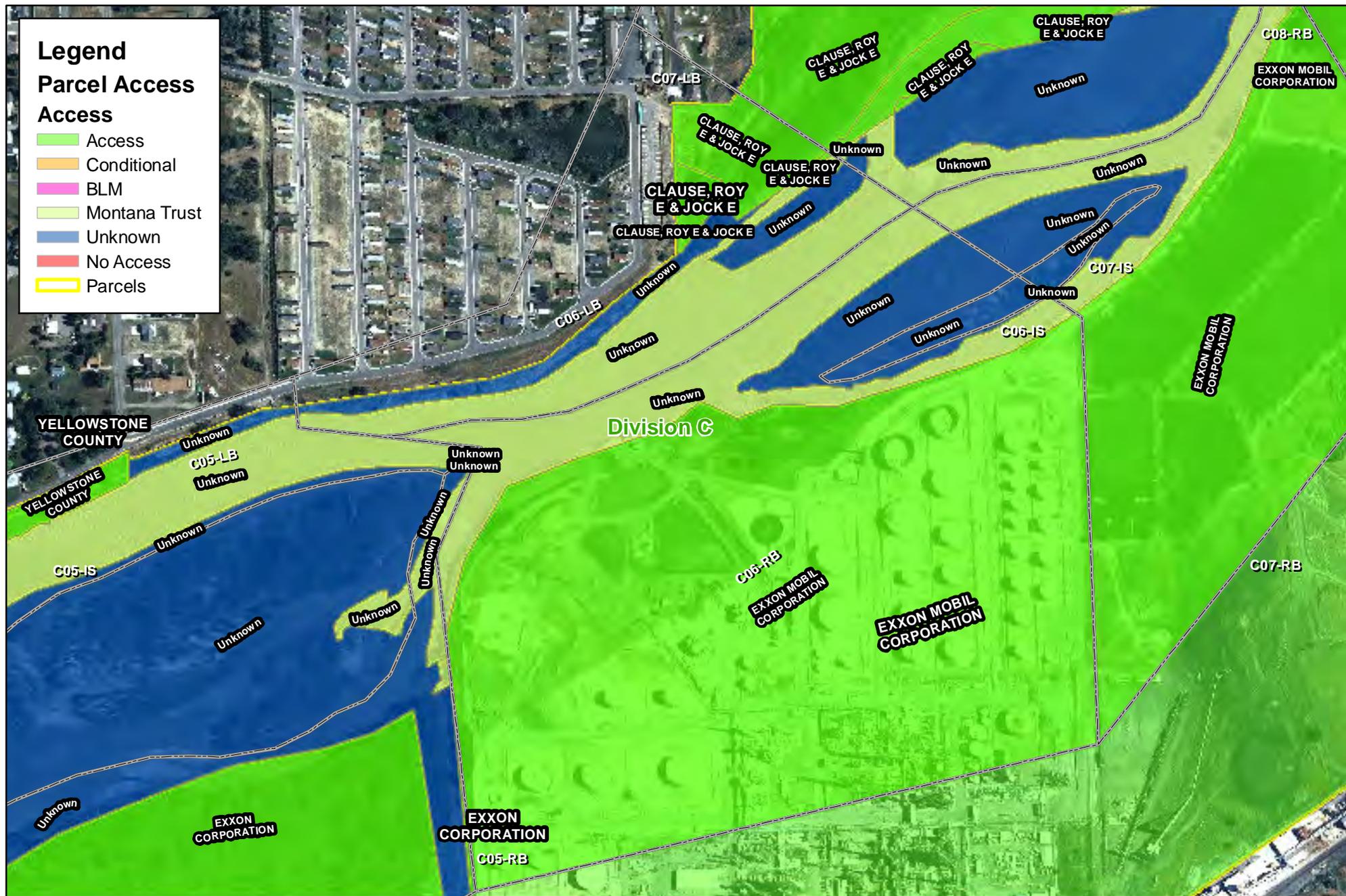
SCAT Area Transition Report for C06

Prepared for:

Unified Command

Date

Unified Command – MDEQ



Legend

Parcel Access

- Access
- Conditional
- BLM
- Montana Trust
- Unknown
- No Access
- Parcels

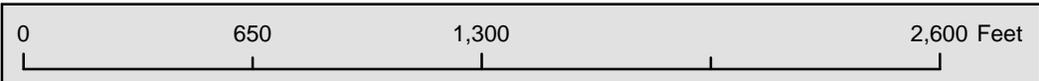


Figure 1

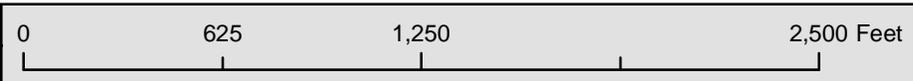
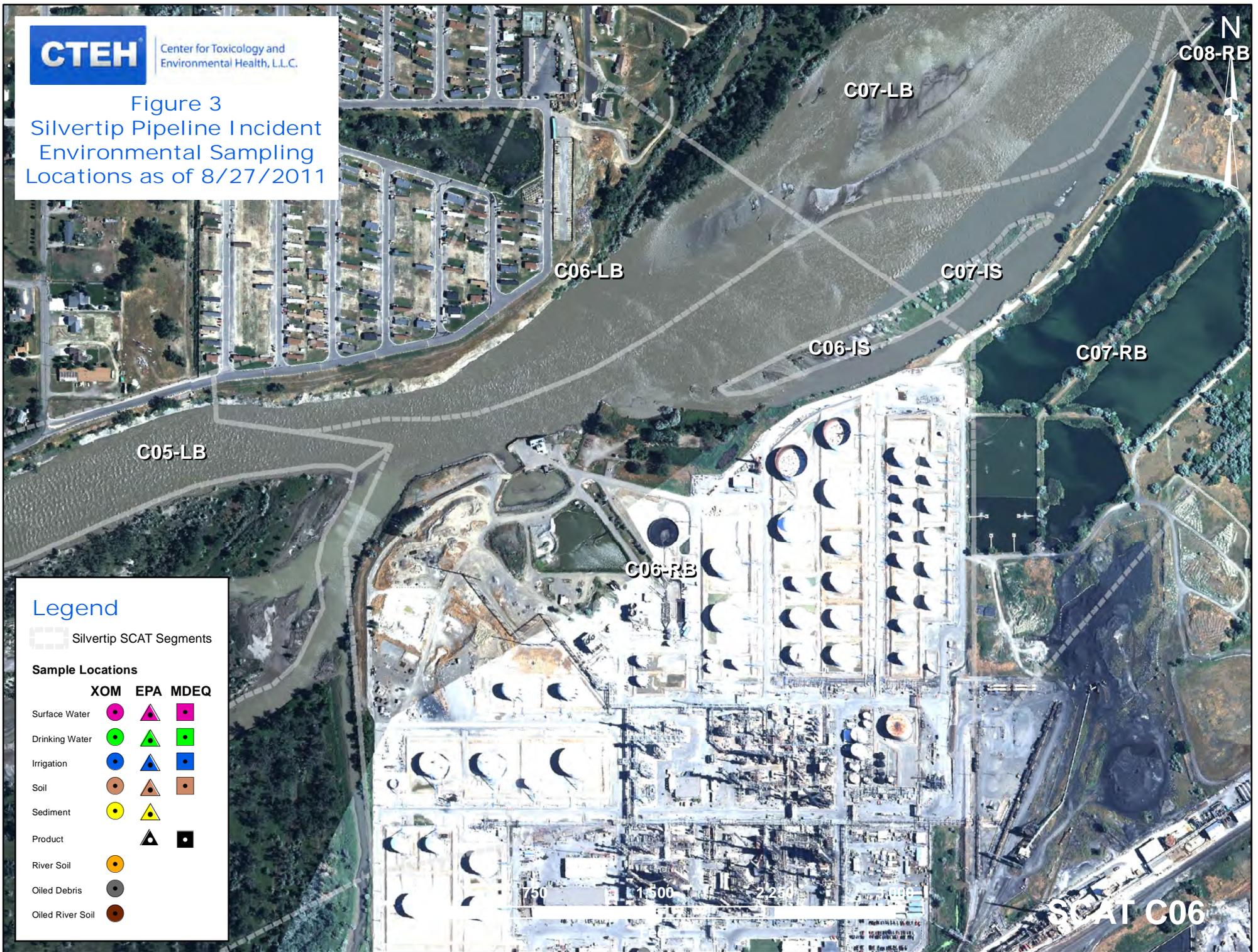


Figure 2
Wildlife Resources



Center for Toxicology and Environmental Health, L.L.C.

Figure 3
Silvertip Pipeline Incident
Environmental Sampling
Locations as of 8/27/2011





Appendix A

Sample Detection Summary



Sample Results For
SCAT Area C06

Printed 10/25/2011

NA - Not Available

Detected Above Screening Level

Sample Num	Date	Sample Type	Matrix	Analytical Method	Analyte	Detected	Result	Screening Level	Result Qualifier	Units	Above?
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No Samples Taken



Appendix B

Initial SCAT Survey Forms
and Sketches

DB/G/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy) 25-Jul-2011	Time (24h): std / daylight 1005 hrs to 1122 hrs	Water Level low - mean - <u>bankfull</u> - overbank falling - steady - rising
Segment/Reach ID: C06 Left Bank / <u>Right Bank</u> / Island				Air Temp + / - <u>31</u> deg C
Operations Division: B				
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook / _____		Sun / Clouds / Fog / Rain / Snow / <u>Windy</u> / Calm		

2 SURVEY TEAM # 1	name	organization	contact phone number
Pete Lee	<u>PBL</u>	Polaris	
John Bauer	<u>John Bauer</u>	Polaris	
Larry Alheim		MTDEQ	
Ron Lynn		USCG	

3 SEGMENT Total Segment/Reach Length _____ m Segment/Reach Length Surveyed 1045 m

Start GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min. Datum: _____

End GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min.

4A RIVER BANK TYPE SELECT only one primary (P) shoreline type and any number of secondary (S) types. CIRCLE those OILED

Bedrock: Cliff/Ramp _____ Shelf _____ Manmade: Solid _____ Permeable S (type) Riprap _____ Wetland: Swamp _____ Bog/Fen _____ Marsh _____

Sediment Bank: Clay/Mud _____ Sand _____ Mixed S Pebble/Cobble _____ Boulder _____ Peat/Organic _____ **Vegetated Bank:** P Wooded Upland: S

Sediment Flat: Clay/Mud _____ Sand _____ Mixed/Coarse _____ Other: _____ If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

Cliff or Bluff: _____ Est Height _____ m canyon _____ manmade _____ meander _____ confined or leveed _____ Substrate Type: mixed

Sloped: (>5°)(15°)(30°) straight P braided S oxbow _____ flood plain valley _____ Forested / Vegetated / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m 120m est. water depth: <1m 1-3m 3-10m >10m _____ m

shoal(s) present Y/N point bar present Y/N bar-shoal substrate: silt / sand / gravel / cobble / boulder / bedrock / debris

seasonal water level: low / mean / bank full / overbank flow est. change over next 7 days: falling — same — rising

5 OPERATIONAL FEATURES Suitable backshore staging Y/N Access: Direct from backshore Y/N Alongshore from next segment Y/N

Debris: Y/N oiled Y/N amount _____ bags or _____ trucks Access restrictions

Oiled trees/shrubs Y/N River Current strong Y/N Other Features: ExxonMobil refinery

6 SURFACE OILING CONDITIONS begin with "A" in the lowest tidal zone - circle the zone/s that correspond to primary shoreline type

OIL ZONE ID	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER							SUBST. TYPE(S)		
	MS	LB	UB	OB	Length	Width	Distrib.	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR	AP		NO	
	m	m	%																			
738 739 740 741 742 A			X		125	1	<1			(X)	X		X				(X)					Grass, trees, riprap
B			X		170	10														X	Grass, trees, riprap	
C			X		470	3	2			(X)	X		X				(X)				Grass, trees, riprap	
D			X		140	10														X	Grass, trees, riprap	
E			X		140	10														X	Grass, trees, riprap	

7 SUBSURFACE OILING CONDITIONS use letter for ZONE location plus Number of pit or trench — e.g., "A1"

TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER						WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes / No	SUBST. TYPE(S)	
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR					NO

8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

Overbank Survey Required Y/N Overbank Survey Completed Y/N Shoreline Survey Completed Y/N

Oil band heights: 60 cm

Treatment Recommendations:
 Zone B, D, E : No oil observed; no treatment required.
 Zone A, C : Cut & remove oil coated vegetation smaller than 1" diameter. Wipe larger oil coated vegetation.

*Refer to current approved treatment methods #1 (Cutting of Vegetation), #2 (Dead Vegetation and Small Debris), #3 (Large Woody Debris), #6 (Sorbent Use), # (Unconsolidated Sediments)

ExxonMobil refinery; requires site orientation, FRC and PPE for entry and work.

Sketch Yes / No Photos Yes / No Frames 0122-0131 (Lee)

DB/G/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy) 25-Jul-2011	Time (24h): std / daylight 1005 hrs to 1122 hrs	Water Level low - mean - <u>bankfull</u> - overbank falling - steady - rising
Segment/Reach ID: C06 Left Bank / <u>Right Bank</u> / Island				
Operations Division: B				
Survey by: <u>Foot / ATV / Boat / Helicopter / Overlook /</u>		Sun / Clouds / Fog / Rain / Snow / <u>Windy</u> / Calm		Air Temp +/- <u>31</u> deg C

2 SURVEY TEAM # 1	name	organization	contact phone number
Pete Lee	<u>PDL</u>	Polaris	
John Bauer	<u>John Bauer</u>	Polaris	
Larry Alheim		MTDEQ	
Ron Lynn	LYNN.RONALD. T.JR.1243861973	USCG	

3 SEGMENT Total Segment/Reach Length _____ m Segment/Reach Length Surveyed 1045 m

Start GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min. Datum: _____

End GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min.

4A RIVER BANK TYPE SELECT only one primary (P) shoreline type and any number of secondary (S) types. CIRCLE those OILED

Bedrock: Cliff/Ramp _____ Shelf _____ Manmade: Solid _____ Permeable S (type) Riprap Wetland: Swamp _____ Bog/Fen _____ Marsh _____

Sediment Bank: Clay/Mud _____ Sand _____ Mixed S Pebble/Cobble _____ Boulder _____ Peat/Organic _____ Vegetated Bank: P Wooded Upland: S

Sediment Flat: Clay/Mud _____ Sand _____ Mixed/Coarse _____ Other: _____ If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

Cliff or Bluff: Est Height _____ m canyon _____ manmade _____ meander _____ confined or leveed _____ Substrate Type: mixed

Sloped: (>5°)(15°)(30°) straight P braided S oxbow _____ flood plain valley _____ Forested / Vegetated / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m 120m est. water depth: <1m 1-3m 3-10m >10m _____ m

shoal(s) present Y/N point bar present Y/N bar-shoal substrate: silt / sand / gravel / cobble / boulder / bedrock / debris

seasonal water level: low / mean / bank full / overbank flow est. change over next 7 days: falling — same — rising

5 OPERATIONAL FEATURES Suitable backshore staging Y/N Access: Direct from backshore Y/N Alongshore from next segment Y/N

Debris: Y/N oiled Y/N amount _____ bags or _____ trucks Access restrictions _____

Oiled trees/shrubs Y/N River Current strong Y/N Other Features: ExxonMobil refinery

6 SURFACE OILING CONDITIONS begin with "A" in the lowest tidal zone - circle the zone/s that correspond to primary shoreline type

OIL ZONE ID	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER					SUBST. TYPE(S)			
	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC		SR	AP	NO
738 739 740 741 742 A			X		125	1	<1			X	X		X				X				Grass, trees, riprap
B			X		170	10				X	X						X				Grass, trees, riprap
C			X		470	3	2			X	X		X				X				Grass, trees, riprap
D			X		140	10														X	Grass, trees, riprap
E			X		140	10														X	Grass, trees, riprap

7 SUBSURFACE OILING CONDITIONS use letter for ZONE location plus Number of pit or trench — e.g., "A1"

TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER								WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes / No	SUBST. TYPE(S)			
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR	NO								

8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

Overbank Survey Required Y/N Overbank Survey Completed Y/N Shoreline Survey Completed Y/N

Oil band heights: 60 cm

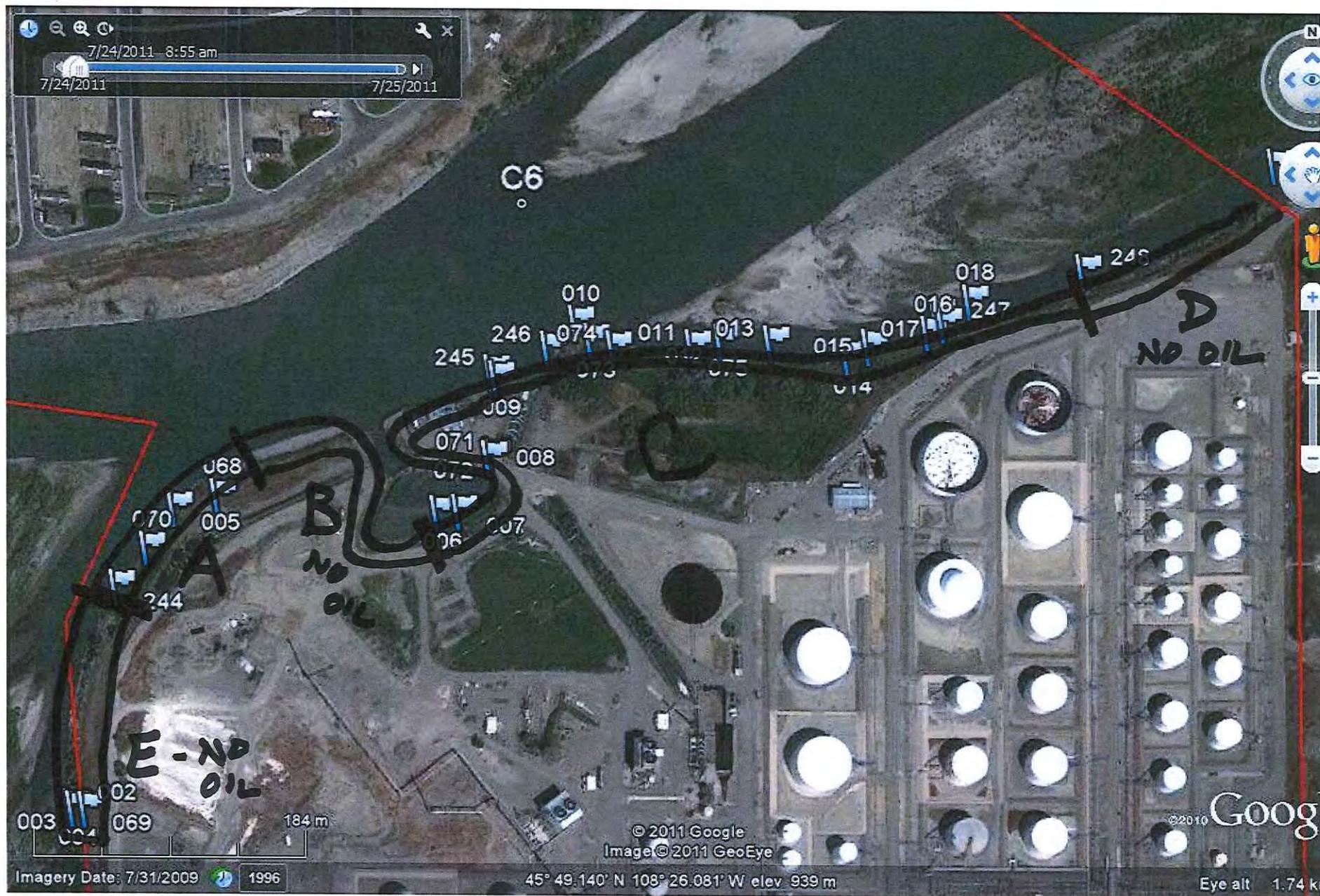
Treatment Recommendations:
 Zone B, D, E : No oil observed; no treatment required.
 Zone A, C : Cut & remove oil coated vegetation smaller than 1" diameter. Wipe larger oil coated vegetation.

*Refer to current approved treatment methods #1 (Cutting of Vegetation), #2 (Dead Vegetation and Small Debris), #3 (Large Woody Debris), #6 (Sorbent Use), # (Unconsolidated Sediments)

ExxonMobil refinery; requires site orientation, FRC and PPE for entry and work.

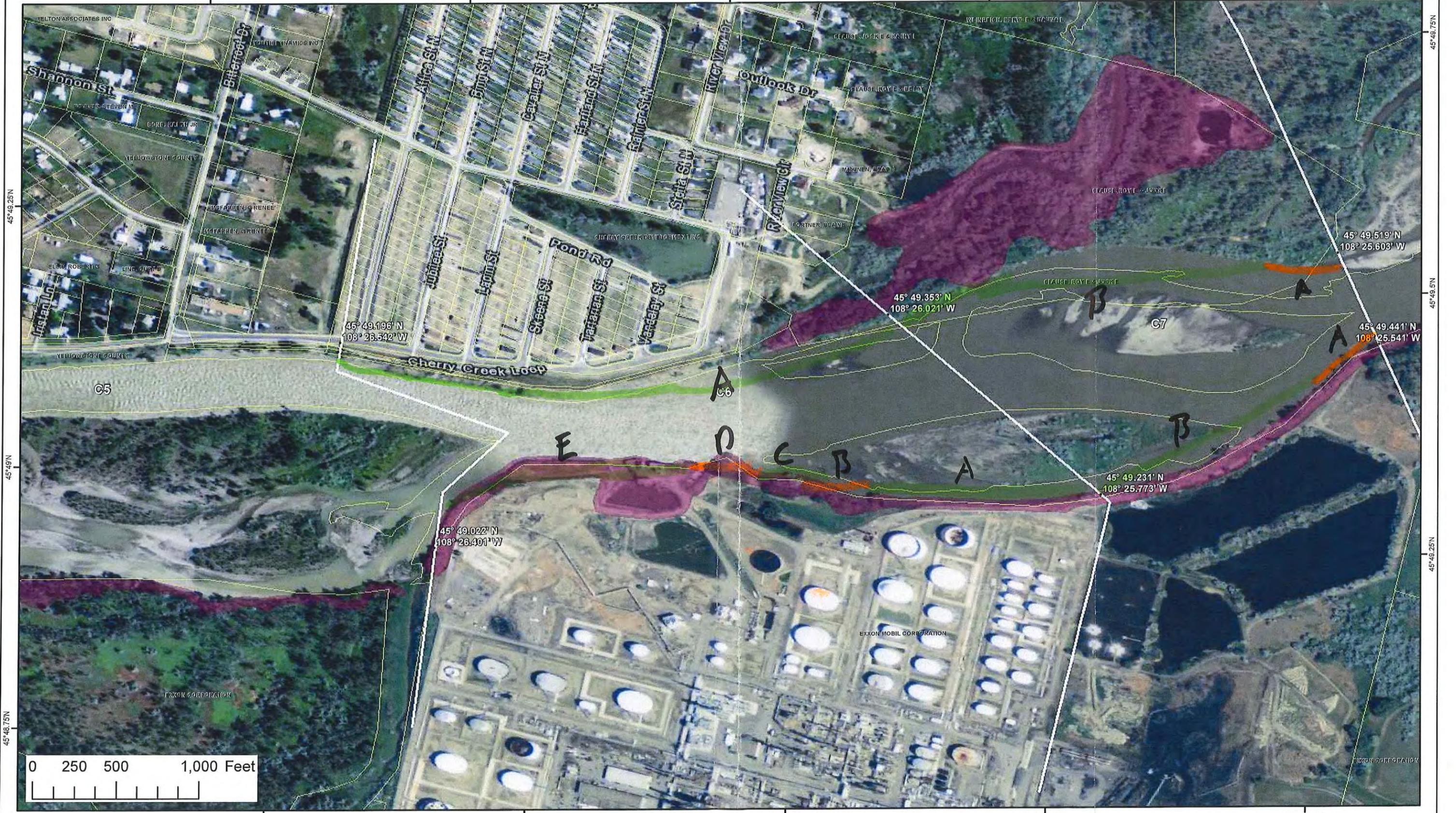
Sketch Yes / No Photos Yes / No Frames 0122-0131 (Lee)

C 6 right, Team 1, 25 Jul 2011





108°26.75'W 108°26.5'W 108°26.25'W 108°26'W 108°25.75'W



DB/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page _____ of _____

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>C6</u>	<u>Left Bank</u> / Right Bank / Island	<u>25/07/11</u>	<u>15.45</u> hrs to <u>1630</u> hrs	low - mean - <u>bankfull</u> - overbank
Operations Division: <u>C</u>				<u>falling</u> - steady - rising
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook /		<u>Sun</u> Clouds / Fog / Rain / Snow / Windy / Calm	Air Temp +/- <u>30</u> deg C	

2 SURVEY TEAM # <u>2</u>	Name	Organization	Signature
	<u>Chuck Pons</u>	<u>Centre ENTRIX</u>	<u>Chuck Pons</u>
	<u>Deagl Reed</u>	<u>MDEA</u>	<u>Deagl Reed</u>
	<u>Patrol Krisky</u>	<u>USCG</u>	

3 SEGMENT Total Segment/Reach Length 715 m Segment/Reach Length Surveyed 175 m

Start GPS: LATITUDE 45 deg. 49.353 min. LONGITUDE 109 deg. 26.067 min. Datum: WGS84

End GPS: LATITUDE 45 deg. 49.17.73 min. LONGITUDE 109 deg. 26.072 min.

4A RIVER BANK TYPE SELECT only one primary (P) shoreline type and any number of secondary (S) types. CIRCLE those OILED

Bedrock: Cliff/Ramp ___ Shelf ___ Manmade: Solid ___ Permeable ___ (type) ___ Wetland: Swamp ___ Bog/Fen ___ Marsh ___

Sediment Bank: Clay/Mud ___ Sand P Mixed ___ Pebble/Cobble S Boulder ___ Peat/Organic ___ Vegetated Bank: X Wooded Upland: ___

Sediment Flat: Clay/Mud ___ Sand ___ Mixed/Coarse ___ Other: ___ If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

Cliff or Bluff: ___ Est Height ___ m canyon ___ manmade ___ meander ___ confined or leveed ___ Substrate Type: Sand

Sloped: (>5°)(15°)(30°) straight ___ braided X oxbow ___ flood plain valley ___ Forested / Vegetated / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m 160m est. water depth: <1m 1-3m 3-10m >10m ___ m

shoal(s) present N point bar present N bar-shoal substrate: silt / sand / gravel / pebble / boulder / bedrock / debris

seasonal water level: low / mean / bank full / overbank flow est. change over next 7 days: falling - same - rising

5 OPERATIONAL FEATURES

Suitable backshore staging N Access: Direct from backshore N Alongshore from next segment Y / N

Debris: N oiled N amount 5 bags or ___ trucks access restrictions

Oiled trees/shrubs N River Current strong N Other Features:

6 SURFACE OILING CONDITIONS begin with "A" in the lowest tidal zone - circle the zone/s that correspond to primary shoreline type

OIL ZONE	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER								SUBST. TYPE(S)	
	MS	LB	UB	OB	Length	Width	Distrib.	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR	AP	NO		
<u>771</u> A					<u>175</u>	<u>45</u>	<u><1</u>			<u>S</u>	<u>P</u>		<u>X</u>									<u>Sand</u>

7 SUBSURFACE OILING CONDITIONS use letter for ZONE location plus Number of pit or trench - e.g., "A1"

TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH	OILED ZONE	SUBSURFACE OIL CHARACTER								WATER TABLE	SHEEN COLOUR	CLEAN BELOW	SUBST. TYPE(S)					
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR	NO	cm					B, R, S, N	Yes / No			

8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

Overbank Survey Required Y / N Overbank Survey Completed N Shoreline Survey Completed Y / N

Zone A has isolated areas of stunted and coastal vegetation and debris. These areas are small and with considerable distance between

Recommendation: Since the oiled areas are small and minimal natural attenuation will be the best treatment option.

The remainder of C6 L is extreme steep bank

Sketch Yes / No Photos Yes / No Frames _____ Photographer _____



Clause - Wick Lane to
Riverview Rd. ~ 3:30 PM



0 250 500 1,000 Feet

D13/

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page _____ of _____

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>L6</u>	<input checked="" type="radio"/> Left Bank / <input type="radio"/> Right Bank / <input type="radio"/> Island	<u>27/07/11</u>	<u>942</u> hrs to <u>943</u> hrs	low - mean - bankfull - overbank
Operations Division: <u>C</u>				<input checked="" type="radio"/> falling - <input type="radio"/> steady - <input type="radio"/> rising
Survey by: <input type="radio"/> Foot / <input type="radio"/> ATV / <input checked="" type="radio"/> Boat / <input type="radio"/> Helicopter / <input type="radio"/> Overlook /		<input checked="" type="radio"/> Sun / <input type="radio"/> Clouds / <input type="radio"/> Fog / <input type="radio"/> Rain / <input type="radio"/> Snow / <input type="radio"/> Windy / <input type="radio"/> Calm		Air Temp + / - <u>30</u> deg C

2 SURVEY TEAM # <u>1</u>	Name	Organization	Signature
	<u>Chuck Pons</u>	<u>Cardno ENTRIX</u>	<u>[Signature]</u>
	<u>Jay Watson</u>	<u>MFWP</u>	
	<u>Ernie McKenzie</u>	<u>US BLM</u>	

3 SEGMENT Total Segment/Reach Length 665 m Segment/Reach Length Surveyed 665 m

Start GPS: LATITUDE 45 deg. 49°15.79 min. LONGITUDE 108 deg. 25°29.52 min. Datum: WGS87

End GPS: LATITUDE 45 deg. 49°08.94 min. LONGITUDE 108 deg. 26°31.47 min.

4A RIVER BANK TYPE SELECT only one primary (P) shoreline type and any number of secondary (S) types. CIRCLE those OILED

Bedrock: Cliff/Ramp S Shelf _____ Manmade: Solid _____ Permeable _____ (type) _____ Wetland: Swamp _____ Bog/Fen _____ Marsh _____

Sediment Bank: Clay/Mud _____ Sand P Mixed _____ Pebble/Cobble S Boulder _____ Peat/Organic _____ Vegetated Bank: Wooded Upland:

Sediment Flat: Clay/Mud _____ Sand _____ Mixed/Coarse _____ Other: _____ If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

Cliff or Bluff: Est Height 50 m canyon manmade _____ meander _____ confined or leveed _____ Substrate Type: S&L

Sloped: 30 (>5°)(15°)(30°) straight _____ braided oxbow _____ flood plain valley _____ Forested / Vegetated / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m 100m 100m 110 est. water depth: <1m 1-3m 3-10m >10m _____ m

shoal(s) present / N point bar present / N bar-shoal substrate: silt / sand / gravel / cobble / boulder / bedrock / debris

seasonal water level: low / mean / bank full / overbank flow est. change over next 7 days: falling - same - rising

5 OPERATIONAL FEATURES Suitable backshore staging Y / N Access: Direct from backshore Y / N Alongshore from next segment Y / N

Debris: Y / N oiled Y / N amount _____ bags or _____ trucks access restrictions

Oiled trees/shrubs Y / N River Current strong Y / N Other Features:

6 SURFACE OILING CONDITIONS begin with "A" in the lowest tidal zone - circle the zone/s that correspond to primary shoreline type

OIL ZONE ID	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER					SUBST. TYPE(S)				
	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC		SR	AP	NO	
A			<input checked="" type="radio"/>	<input checked="" type="radio"/>	<u>665</u>	<u>2</u>	<u>0</u>														<input checked="" type="radio"/>	<u>colluv</u>

7 SUBSURFACE OILING CONDITIONS use letter for ZONE location plus Number of pit or trench - e.g., "A1"

TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER						WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes/No	SUBST. TYPE(S)	
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR					NO

8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

Overbank Survey Required Y / N Overbank Survey Completed Y / N Shoreline Survey Completed Y / N

No Treatment Required.

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy) 19/08/11	Time (24h): std / daylight 10:20 hrs to 11:40 hrs	Water Level low - mean - bankfull - overbank falling - steady - rising
Segment/Reach ID: C06 <u>Left Bank</u> Right Bank				
Operations Division: C				
Survey by: <u>Foot / ATV / Boat / Helicopter / Overlook /</u>		Sun / Clouds / Fog / Rain / Snow / Windy / Calm	Air Temp + / - <u>26</u> deg C	

2 SURVEY TEAM # <u>1 + 3</u>		Name	Organization	Signature
Lisa Gerencher			Cardno ENTRIX	<i>Lisa Gerencher</i>
Joe Busalucci			Cardno ENTRIX	
Jessica Ross			DEQ	<i>Jessica Ross</i>
Jon Davis			USCG	
Jeffrey Frank			DEQ	<i>Jeffrey Frank</i>
Rachelle Thompson Rachelle Thompson			WWP FPA	<i>Rachelle Thompson</i>

3 SEGMENT Total Segment/Reach Length 800 m Segment/Reach Length Surveyed 562 m

Start GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min. Datum: _____

End GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min.

4A RIVER BANK TYPE SELECT only one primary (P) shoreline type and any number of secondary (S) types. CIRCLE those OILED

Bedrock: Cliff/Ramp _____ Shelf _____ Manmade: Solid _____ Permeable _____ (type) _____ Wetland: Swamp _____ Bog/Fen _____ Marsh _____

Sediment Bank: Clay/Mud _____ Sand _____ Mixed X Pebble/Cobble _____ Boulder _____ Peat/Organic _____ Vegetated Bank: S Wooded Upland: P

Sediment Flat: Clay/Mud _____ Sand _____ Mixed/Coarse _____ Other: _____ If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate

Cliff or Bluff: _____ Est Height _____ m canyon _____ manmade _____ meander _____ confined or leveed _____

Sloped: (>5°)(15°)(30°) _____ straight _____ braided X oxbow _____ flood plain valley _____

Substrate Type: MIXED

Forested / Vegetated Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m 160m est. water depth: <1m 1-3m 3-10m >10m _____ m

shoal(s) present Y / N point-bar present Y / N bar-shoal substrate: silt / sand / gravel / cobble / boulder / bedrock / debris

seasonal water level: low / mean / bank full / overbank flow est. change over next 7 days: falling — same — rising

5 OPERATIONAL FEATURES Suitable backshore staging Y / N, Access: Direct from backshore Y / N Alongshore from next segment Y / N

Debris: Y / N oiled Y / N amount _____ bags or _____ trucks access restrictions Island is only accessible by boat

Oiled trees/shrubs Y / N River Current strong Y / N Other Features: _____

6 SURFACE OILING CONDITIONS begin with "A" in the lowest tidal zone - circle the zone/s that correspond to primary shoreline type

OIL ZONE	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER							SUBST. TYPE(S)	
	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR	AP		NO
A				<u>X</u>	562	50															X

7 SUBSURFACE OILING CONDITIONS use letter for ZONE location plus Number of pit or trench — e.g., "A1"

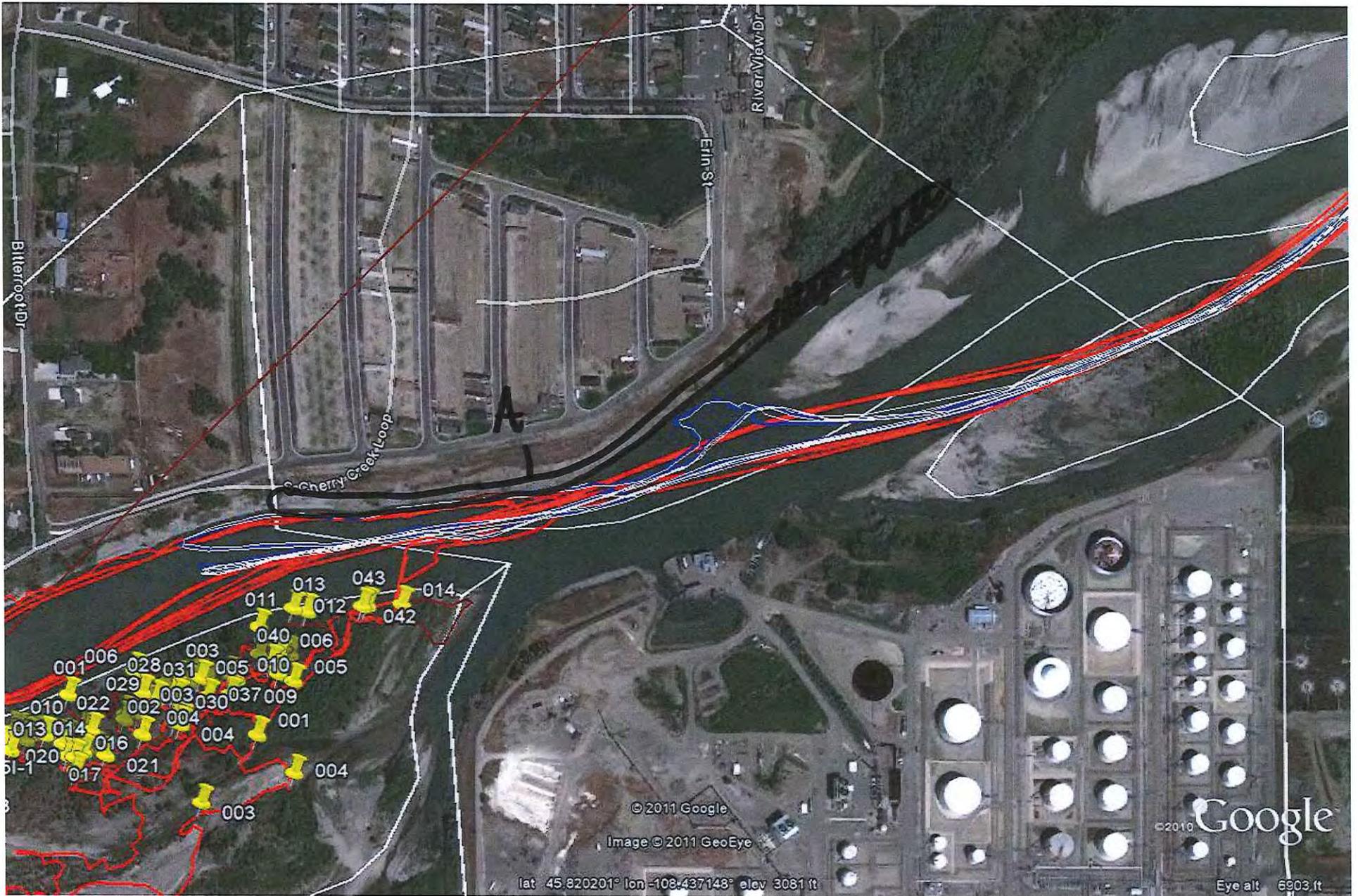
TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER					WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes / No	SUBST. TYPE(S)
	MS	LB	UB	OB			SAP	OP	PP	OR	OF				

8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

Overbank Survey Required (Y) N Overbank Survey Completed (Y) N Shoreline Survey Completed (Y) N

Zone A. no oiling observed. NFT.

Sketch Yes / No Photos Yes / No Frames _____ Photographer _____



C06
 SCAT 143
 19 Aug 2011

$A = 562 \times 50$

DB/G/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page _____ of _____

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>C6</u>	Left Bank / Right Bank / Island	<u>08/02/2011</u>	<u>1349</u> hrs to <u>1600</u> hrs	low - mean - bankfull - overbank
Operations Division: <u>C</u>				falling - steady - rising
Survey by: <u>Foot/ATV/Boat/Helicopter/Overlook/</u>		Sun / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp +/- _____ deg C

2 SURVEY TEAM # <u>142</u>	Name	Organization	Signature
	<u>BRUCE KVAM & RICH HARTY</u>	<u>POLARIS</u>	<u>Bruce Kvan</u> <u>Richard Marty</u>
	<u>MICHAEL DIRKS & CHRIS ARRENOONDO</u>	<u>CORDON ENTRIX</u>	<u>Michael Dirks</u> <u>Chris Arreondo</u>
	<u>TRAVIS CAIN</u>	<u>EPA</u>	<u>Travis Cain</u>
	<u>JUSTIN HAWKALUK</u>	<u>FWP</u>	<u>Justin Hawkaluk</u>
	<u>RON LYNN</u>	<u>USCG</u>	<u>Ron Lynn</u>
	<u>JOHN BROWN</u>	<u>DEQ</u>	<u>John Brown</u>

3 SEGMENT Total Segment/Reach Length _____ m Segment/Reach Length Surveyed 380 m

Start GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min. Datum: _____

End GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min.

4A RIVER BANK TYPE SELECT only one primary (P) shoreline type and any number of secondary (S) types. CIRCLE those OILED

Bedrock: Cliff/Ramp _____ Shelf _____ Manmade: Solid _____ Permeable _____ (type) _____ Wetland: Swamp _____ Bog/Fen _____ Marsh _____

Sediment Bank: Clay/Mud _____ Sand _____ Mixed _____ Pebble/Cobble _____ Boulder _____ Peat/Organic _____ Vegetated Bank: P Wooded Upland: _____

Sediment Flat: Clay/Mud _____ Sand _____ Mixed/Coarse X Other: _____ If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

Cliff or Bluff: _____ Est Height _____ m canyon _____ manmade _____ meander _____ confined or leveed _____ Substrate Type: _____

Sloped: _____ (>5°)(15°)(30°) straight _____ braided P oxbow _____ flood plain valley _____ Forested / Vegetated / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m 160m est. water depth: <1m 1-3m 3-10m >10m _____ m

shoal(s) present Y/N point bar present Y/N bar-shoal substrate: silt / sand / gravel / cobble / boulder / bedrock / debris

seasonal water level: low / mean / bank full / overbank flow est. change over next 7 days: falling / same / rising

5 OPERATIONAL FEATURES

Suitable backshore staging Y/N Access: Direct from backshore Y/N Alongshore from next segment Y/N

Debris Y/N oiled Y/N amount _____ bags or _____ trucks access restrictions ISLAND, BOAT ACCESS ONLY

Oiled trees/shrubs Y/N River Current strong Y/N Other Features: _____

6 SURFACE OILING CONDITIONS begin with "A" in the lowest tidal zone - circle the zone/s that correspond to primary shoreline type

OIL ZONE ID	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER						SUBST. TYPE(S)			
	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR		AP	NO	
A				X	230	20	<1			X	(X)		X									mixed
				X	150	55	0														X	COBBLE

7 SUBSURFACE OILING CONDITIONS use letter for ZONE location plus Number of pit or trench - e.g., "A1"

TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER						WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes / No	SUBST. TYPE(S)	
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR					NO

8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

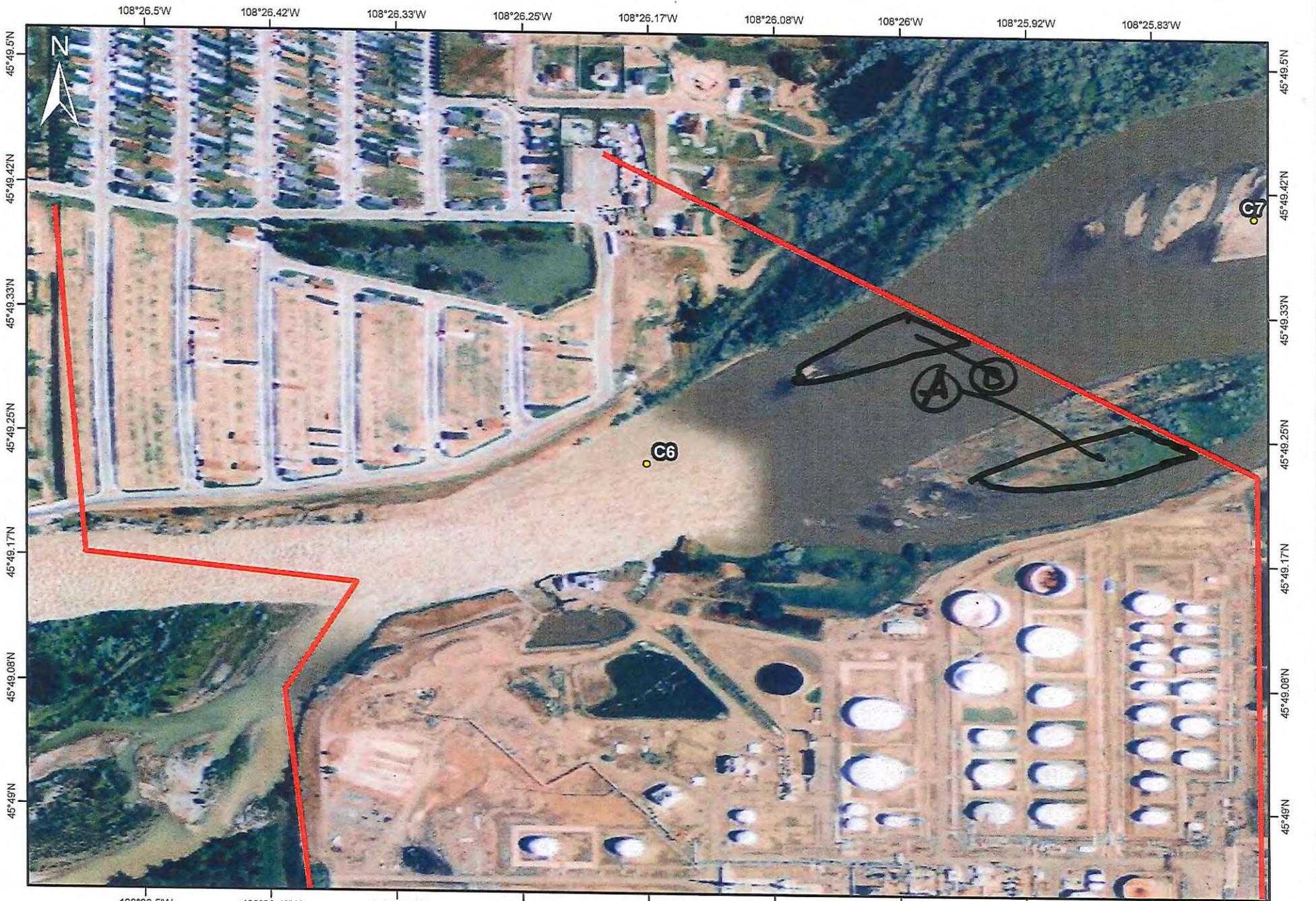
Overbank Survey Required Y/N Overbank Survey Completed Y/N Shoreline Survey Completed Y/N

ZONE A: Very sporadic throughout. Small area ~ 1m x 2m noted with coating on debris & stained vegetation.

ZONE B: No oil observed

RECOMMENDATIONS A & B: NO TREATMENT REQUIRED.

Sketch Yes/No Photos Yes/No Frames _____ Photographer _____



C6-
(L/R/I)??

08/02/2011 Teams 1&2





Appendix C

Pre-Inspection Survey Transmittal

**A Pre-Inspection Survey was
not conducted for this area**



Appendix D

Post-Inspection Survey Transmittal

**A Post-Inspection Survey
was not conducted for this area**



Appendix E

Final SCAT Survey Forms
and Sketches

DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page 1 of 3

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>C06</u>	Left Bank / Right Bank / Island	<u>08/09/11</u>	<u>1400</u>	low - <u>mean</u> - bankfull - overbank
Operations Division: <u>C</u>		<u>1345</u> hrs to <u>1440</u> hrs		falling - steady - rising
Survey by: <u>Foot / ATV / Boat / Helicopter / Overlook /</u>	<u>Sun</u> Clouds / Fog / Rain / Snow / Windy / <u>Calm</u>			Air Temp + / - <u>20</u> deg C

2 SURVEY TEAM # <u>4</u>	name	organization	contact phone number
<u>P.O. DALLAS</u>		<u>USCG</u>	
<u>BRAD OLSZEKI</u>		<u>MT FWP</u>	
<u>MICHAEL DIRKS</u>		<u>Corvus ENTRIX</u>	

3 SEGMENT	Total Segment/Reach Length _____ m	Segment/Reach Length Surveyed <u>376</u> m
Start GPS: LATITUDE _____ deg. _____ min.	LONGITUDE _____ deg. _____ min.	Datum: <u>WGS84</u>
End GPS: LATITUDE _____ deg. _____ min.	LONGITUDE _____ deg. _____ min.	

4A RIVER BANK TYPE		SELECT only one primary (P) shoreline type and any number of secondary (S) types. CIRCLE those OILED	
Bedrock: Cliff/Ramp _____ Shelf _____	Manmade: Solid _____ Permeable _____ (type) _____	Wetland: Swamp _____ Bog/Fen _____ Marsh _____	
Sediment Bank: Clay/Mud _____ Sand _____ Mixed <input checked="" type="checkbox"/> Pebble/Cobble _____ Boulder _____ Peat/Organic _____	Vegetated Bank: <input checked="" type="checkbox"/>	Wooded Upland: _____	
Sediment Flat: Clay/Mud _____ Sand _____ Mixed/Coarse <input checked="" type="checkbox"/>	Other: _____	If snow and ice use Winter River SOS	

4B RIVER VALLEY CHARACTER			select as appropriate	complete for primary
Cliff or Bluff: _____ Est Height _____ m	canyon _____ manmade _____ meander _____	confined or leveed _____	Substrate Type: <u>GRASSES/RIPRAP</u>	
Sloped: <u>(>5°)(15°)(30°)</u>	straight _____ braided <input checked="" type="checkbox"/> oxbow _____	flood plain valley <input checked="" type="checkbox"/>	Forested / Vegetated / Bare	

4C RIVER CHANNEL CHARACTER				circle or select as appropriate
est. width: <1m 1-10m 10-100m <input checked="" type="checkbox"/> 100m _____ m	est. water depth: <1m <input checked="" type="checkbox"/> 1-3m 3-10m >10m _____ m	shoal(s) present <input checked="" type="checkbox"/> point bar present <input checked="" type="checkbox"/>		bar-shoal substrate: <u>silt/ sand</u> gravel / cobble / boulder / bedrock / debris
seasonal water level: low / <u>mean</u> / bank full / overbank flow	est. change over next 7 days: <u>falling</u> — same — rising			

5 OPERATIONAL FEATURES		Suitable backshore staging Y/N	Access: Direct from backshore <input checked="" type="checkbox"/> Alongshore from next segment Y / <input checked="" type="checkbox"/> N
Debris: <input checked="" type="checkbox"/> oiled <input checked="" type="checkbox"/> amount <u>3</u> bags or _____ trucks	access restrictions	<u>EXXON MOBIL WILDLIFE AREA, NEAR ESCORT 10/25/11</u>	
Oiled trees/shrubs <input checked="" type="checkbox"/> River Current strong <input checked="" type="checkbox"/>	Other Features:	<u>ACCESS BY BOAT, CONTACT STEVE WARTS 406-657-5285</u>	

6 SURFACE OILING CONDITIONS																						begin with "A" in the lowest tidal zone - circle the zone/s that correspond to primary shoreline type	
OIL ZONE ID	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER							SUBST. TYPE(S)			
	MS	LB	UB	OB	Length	Width	Distrib.	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR	AP		NO		
	m	m	%																				
<u>2198</u> A			<u>S</u>	<u>P</u>	<u>376</u>	<u>20</u>	<u>L</u>			<u>S</u>	<u>P</u>						<u>X</u>				<u>GRASSES</u>		

7 SUBSURFACE OILING CONDITIONS														use letter for ZONE location plus Number of pit or trench — e.g., "A1"			
TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER							WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes / No	SUBST. TYPE(S)
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR	NO				

8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

RE SCAT

ZONE A: VERY LIGHT OILING w/ WEATHERED AREAS OF DRIED OIL. REMOVED FLAGS & SOME STAINED VEGETATION

Recommendations: No additional Treatment Needed

(for ALL sub-segments record: sub-segment ID, length, length surveyed, and GPS start/end fixes)

Sketch Yes/No Photos Yes/No (Roll # _____ Frames _____) Video Tape Yes/No (tape# _____)



C6RB
Team #4
08/09/11

RE-SCAT

DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page _____ of _____

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>C-06</u> Left Bank <input checked="" type="checkbox"/> Right Bank <input type="checkbox"/> Island <input type="checkbox"/>		<u>14/09/11</u>	<u>1030</u> hrs to <u>1230</u> hrs	low - <input checked="" type="checkbox"/> mean <input type="checkbox"/> bankfull - overbank
Operations Division: <u>C</u>				(falling) <input type="checkbox"/> steady - rising <input checked="" type="checkbox"/>
Survey by: <input checked="" type="checkbox"/> Foot/ATV/ <input checked="" type="checkbox"/> Boat/ <input type="checkbox"/> Helicopter / <input type="checkbox"/> Overlook / _____		Sun/ <input checked="" type="checkbox"/> Clouds/ <input type="checkbox"/> Fog / Rain / Snow / Windy / Calm	Air Temp +/- <u>15</u> deg C	

2 SURVEY TEAM # <u>1</u>	Name	Organization	Signature
	<u>Todd Farrar</u>	<u>Polaris</u>	<u>Todd Farrar</u>
	<u>Jessica Ross</u>	<u>DEA</u>	<u>Jessica Ross</u>

3 SEGMENT Total Segment/Reach Length _____ m Segment/Reach Length Surveyed 320 m

Start GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min. Datum: _____

End GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min.

4A RIVER BANK TYPE SELECT only one primary (P) shoreline type and any number of secondary (S) types. CIRCLE those OILED

Bedrock: Cliff/Ramp _____ Shelf _____ Manmade: Solid _____ Permeable S (type) RipRap Wetland: Swamp _____ Bog/Fen _____ Marsh _____

Sediment Bank: Clay/Mud _____ Sand _____ Mixed _____ Pebble/Cobble _____ Boulder _____ Peat/Organic _____ Vegetated Bank: P Wooded Upland: _____

Sediment Flat: Clay/Mud _____ Sand _____ Mixed/Coarse _____ Other: _____ If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

Cliff or Bluff: P Est Height 10 m canyon _____ manmade _____ meander _____ confined or leveed _____ Substrate Type: Silt

Sloped: (>5°)(15°)(30°) straight _____ braided S oxbow _____ flood plain valley _____ Forested / Vegetated / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m est. water depth: <1m 1-3m 3-10m >10m _____ m

shoal(s) present N point bar present N bar-shoal substrate: silt / sand / gravel / cobble / boulder / bedrock / debris

seasonal water level: low / mean / bank full / overbank flow est. change over next 7 days: falling same — rising

5 OPERATIONAL FEATURES Suitable backshore staging Y/ N Access: Direct from backshore Y/ N Alongshore from next segment N

Debris N oiled Y/ amount _____ bags or _____ trucks access restrictions Exxon Refinery

Oiled trees/shrubs N River Current strong N Other Features: _____

6 SURFACE OILING CONDITIONS begin with "A" in the lowest tidal zone - circle the zone/s that correspond to primary shoreline type

OIL ZONE	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER							SUBST. TYPE(S)		
	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR	AP		NO	
A				X	130	5	<1				P						P					shrub
B				X	190	5	<1				S	P					P					shrub

2295
2296

7 SUBSURFACE OILING CONDITIONS use letter for ZONE location plus Number of pit or trench — e.g., "A1"

TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER						WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes / No	SUBST. TYPE(S)	
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR					NO

8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

Overbank Survey Required Y/ N Overbank Survey Completed N Shoreline Survey Completed N

RESCAT of Portion of @ river bank ~~in front~~ Exxon Refinery. Zone A & Zone B had widely scattered distribution of stained grass & shrubs. We had a hot shot team that treated ~~at~~ transferable oiling. No further treatment (NFT)

Sketch Yes / No Photos Yes / No Frames/Photographer: _____

9/14/2011 3:22 pm

Stacy Creek Loop

Erin St

C-6 RB
TEAM 1
Sept 14

C06-LB

C07-IS 259

C06-IS

C07-RB

260

Zone B

Zone A

C06-RB

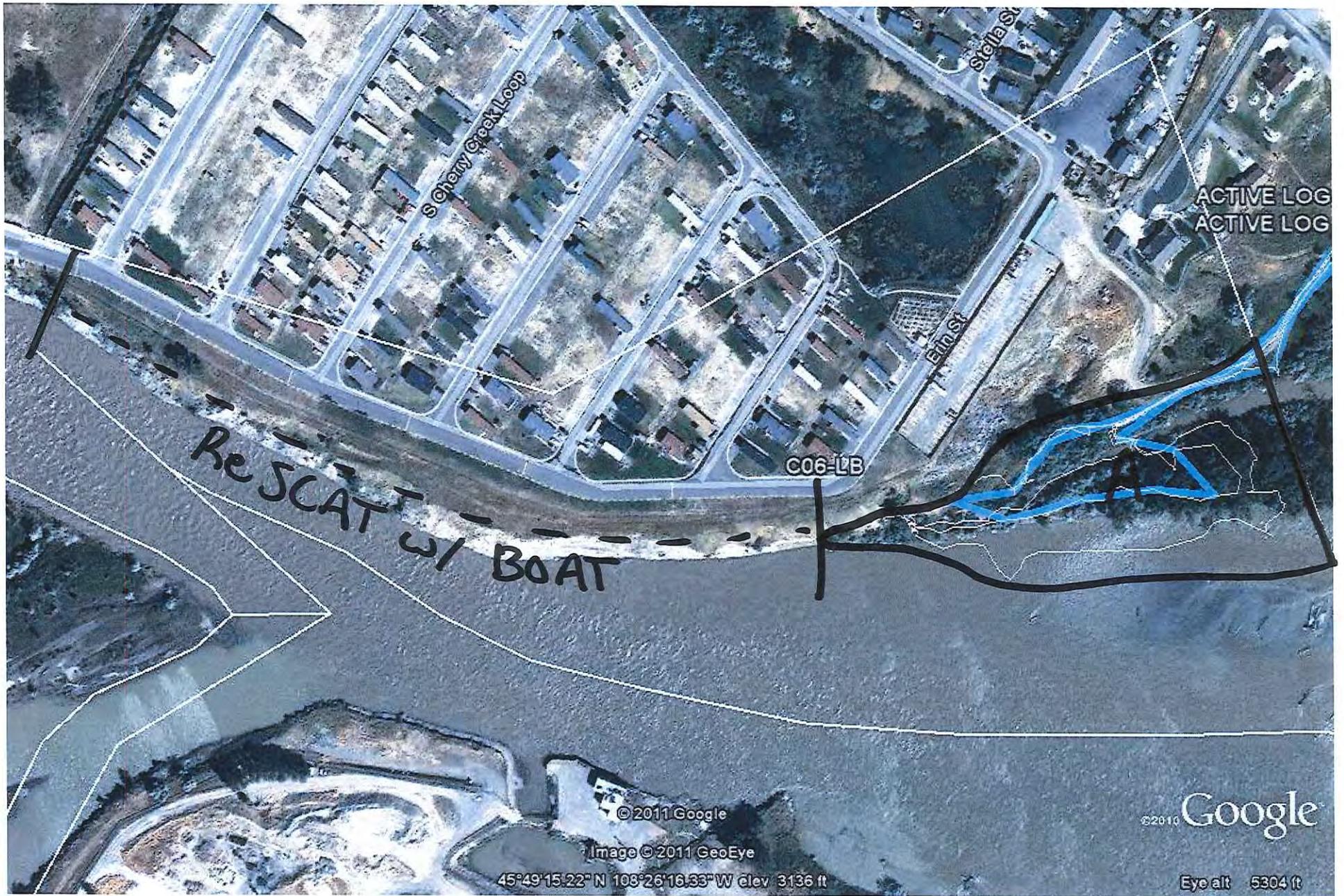
Image © 2011 GeoEye
© 2011 Google

7/31/2009 1996

45°49'05.96" N 108°26'00.39" W elev 3088 ft

GO

Eye alt



TEAM 5
September 5, 2011

C06 LB A: Less than 1% stain
⇒ N.F.T.

DB/IG

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>C06</u> Left Bank / Right Bank / Island		<u>10/09/11</u>	<u>1300</u> hrs to <u>1315</u> hrs	low - mean - bankfull - overbank
Operations Division: <u>C</u>		<input checked="" type="checkbox"/> Sun / <input type="checkbox"/> Clouds / Fog / Rain / Snow / Windy / Calm		falling - steady - rising
Survey by: Foot / ATV / <input checked="" type="checkbox"/> Boat / Helicopter / Overlook / _____				Air Temp +/- <u>25</u> deg C
2 SURVEY TEAM # <u>5</u>	Name	Organization	Signature	
	<u>Damien Korte</u>	<u>Cardno Entrix</u>	<u>[Signature]</u>	
	<u>Matthew Kent</u>	<u>DEQ</u>	<u>[Signature]</u>	

3 SEGMENT Total Segment/Reach Length 740 m Segment/Reach Length Surveyed 530 m

Start GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min. Datum: _____

End GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min.

4A RIVER BANK TYPE SELECT only one primary (P) shoreline type and any number of secondary (S) types. CIRCLE those OILED

Bedrock: Cliff/Ramp Shelf _____ Manmade: Solid Permeable (type) _____ Wetland: Swamp Bog/Fen Marsh _____

Sediment Bank: Clay/Mud _____ Sand _____ Mixed _____ Pebble/Cobble _____ Boulder _____ Peat/Organic _____ Vegetated Bank: _____ Wooded Upland: _____

Sediment Flat: Clay/Mud _____ Sand _____ Mixed/Coarse _____ Other: _____ If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

Cliff or Bluff: Est Height 10 m canyon _____ manmade _____ meander _____ confined or leveed _____ Substrate Type: Sandstone

Sloped: 60 (>5°)(15°)(30°) straight _____ braided oxbow _____ flood plain valley _____ Forested / Vegetated / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m est. water depth: <1m 1-3m 3-10m >10m _____ m

shoal(s) present Y/N point bar present Y/N bar-shoal substrate: silt/sand/gravel/cobble/boulder/bedrock/debris

seasonal water level: low/mean/bank full/overbank flow est. change over next 7 days: falling/same/rising

5 OPERATIONAL FEATURES Suitable backshore staging Y /N Access: Direct from backshore Y /N Alongshore from next segment Y /N

Debris: Y /N oiled Y /N amount _____ bags or _____ trucks access restrictions clean

Oiled trees/shrubs Y /N River Current strong Y/N Other Features: _____

6 SURFACE OILING CONDITIONS begin with "A" in the lowest tidal zone - circle the zone/s that correspond to primary shoreline type

OIL ZONE ID	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER							SUBST. TYPE(S)		
	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR	AP		NO	
A			<input checked="" type="checkbox"/>		530	5	0														<input checked="" type="checkbox"/>	Sandstone

7 SUBSURFACE OILING CONDITIONS use letter for ZONE location plus Number of pit or trench - e.g., "A1"

TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER						WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes / No	SUBST. TYPE(S)	
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR					NO

8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

Overbank Survey Required Y /N Overbank Survey Completed Y /N Shoreline Survey Completed Y/N

Zone A - NOO

Sketch Yes / No Photos Yes / No Frames/Photographer: _____

9/10/2011 11:31 am
9/10/2011 12:28 pm
9/10/2011

SCAT
09/10/11
Team 5
C06-LB



C06-LB

A

C6

© 2011 Europa Technologies
Image © 2011 GeoEye

© 2011 Google

45°49'13.06" N 108°26'17.16" W elev 3102 ft

1996

©2010



Appendix F

Completed SCAT Segment
Sign-Off Forms

SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

SILVERTIP PIPELINE RELEASE

Segment CO6 RB Date of Survey 09/08/11

Dates of Initial SCAT Assessments 25 JUL 11 (12)
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment 60

Segment has been treated by Operations or an Operations Hotshot Team YES NO

Segment Assessment Complete¹

Partial Segment Assessment

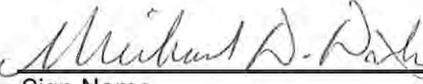
The undersigned are in agreement that the above segment or partial segment meets the Approved Treatment Methods Target Endpoints.

This Segment is Conditionally Approved
(See attached Post Inspection Survey Transmittal (POST))

The undersigned are in agreement that the above segment meets the Approved Treatment Methods Target Endpoints conditional upon completion of the treatment identified in the attached Post Inspection Survey Transmittal (POST).


Sign Name _____ Print Name/ Affiliation JAMEL H. DALLAS Date 9/8/11
Federal Representative (EPA/USCG)


Sign Name _____ Print Name/ Affiliation BRAD OLSZEWSKI / FWP Date 9/8/11
State Representative (DEQ/FWP)


Sign Name _____ Print Name/ Affiliation MICHAEL DIRKS / Cardio ENTRIX Date 09/08/11
RP Representative (SCAT RP Representative)

Once all applicable SCAT Segments (i.e. LB, RB, and IS) within a particular SCAT Area (i.e. A21) have been successfully signed-off during a formal SCAT Assessment, the SCAT Area will achieve the Response Endpoints and an Area Transition Report will be completed and submitted to EPA and DEQ.

¹ A Segment Sign-Off Assessment is considered complete when all accessible lands that have not already been signed-off by a claims liaison have been surveyed. If any previous SCAT Assessments were conducted, all lands that were originally recommended for treatment must be re-surveyed in the Sign-Off Assessment. If the conducted survey does not meet these conditions it is considered a Partial Assessment. Multiple Partial Assessments that meet the conditions of a Complete Assessment may together constitute a Complete Sign-Off Assessment.

SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

SILVERTIP PIPELINE RELEASE

Segment C-06 Right Bank Date of Survey Sept 14, 2011

Dates of Initial SCAT Assessments

25 Jul 2011 ^(B)

(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment

60

Segment has been treated by Operations or an Operations Hotshot Team

YES

NO

Segment Assessment Complete¹

Partial Segment Assessment

The undersigned are in agreement that the above segment or partial segment meets the Approved Treatment Methods Target Endpoints.

This Segment is Conditionally Approved

(See attached Post Inspection Survey Transmittal (POST))

The undersigned are in agreement that the above segment meets the Approved Treatment Methods Target Endpoints conditional upon completion of the treatment identified in the attached Post Inspection Survey Transmittal (POST).

No federal rep.

Sign Name

Print Name/ Affiliation

Date

Federal Representative (EPA/USCG)

[Signature]

Jessica Rose / DEQ

9/14/11

Sign Name

Print Name/ Affiliation

Date

State Representative (DEQ/FWP)

[Signature]

Todd Farrar / Polaris

9/14/11

Sign Name

Print Name/ Affiliation

Date

RP Representative (SCAT RP Representative)

Once all applicable SCAT Segments (i.e. LB, RB, and IS) within a particular SCAT Area (i.e. A21) have been successfully signed-off during a formal SCAT Assessment, the SCAT Area will achieve the Response Endpoints and an Area Transition Report will be completed and submitted to EPA and DEQ.

¹ A Segment Sign-Off Assessment is considered complete when all accessible lands that have not already been signed-off by a claims liaison have been surveyed. If any previous SCAT Assessments were conducted, all lands that were originally recommended for treatment must be re-surveyed in the Sign-Off Assessment. If the conducted survey does not meet these conditions it is considered a Partial Assessment. Multiple Partial Assessments that meet the conditions of a Complete Assessment may together constitute a Complete Sign-Off Assessment.

SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

SILVERTIP PIPELINE RELEASE

Segment CO6 LB Date of Survey 09/10/11

Dates of Initial SCAT Assessments 25 JUL 11 (IC)
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment _____

Segment has been treated by Operations or an Operations Hotshot Team YES NO

Segment Assessment Complete¹

Partial Segment Assessment

The undersigned are in agreement that the above segment or partial segment meets the Approved Treatment Methods Target Endpoints.

This Segment is Conditionally Approved
(See attached Post Inspection Survey Transmittal (POST))

The undersigned are in agreement that the above segment meets the Approved Treatment Methods Target Endpoints conditional upon completion of the treatment identified in the attached Post Inspection Survey Transmittal (POST).

No federal rep.

Sign Name _____ Print Name/ Affiliation _____ Date _____
Federal Representative (EPA/USCG)

[Signature] MATTHEW KORT/DEQ 9/10/11
Sign Name _____ Print Name/ Affiliation _____ Date _____
State Representative (DEQ/FWP)

[Signature] Cardno Entrix / Damien Korte 09/10/11
Sign Name _____ Print Name/ Affiliation _____ Date _____
RP Representative (SCAT RP Representative)

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