

ExxonMobil Pipeline Company

**SCAT Area Transition Report for
C54**

Silvertip Pipeline Incident
Laurel, Montana

October 25, 2011



SCAT Area Transition Report for C54

Silvertip Pipeline Incident
Laurel, Montana

Prepared for:
ExxonMobil Pipeline Company

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Our Ref.:
B0085883.1103

Date:
October 25, 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 C54, 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 C54. 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 C54, 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 C54 is 119.3. 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 C54 due to the low level of oiling in Division C. One oiled America white pelican (*Pelecanus erythrorhynchos*) was observed, but was not able to be captured for cleaning. No Wildlife Priority Cleanup Areas were identified. A bald eagle (*Haliaeetus leucocephalus*) nest was identified in Area C54 and the appropriate buffer zone was maintained around it.

1.3 Summary of Environmental Sampling

Table 1 (below) summarizes samples collected within Area C54. 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 C54 are provided on Figure 3. However, to date, no samples have been collected in this area.

Table 1 Environmental Sampling Summary

Agency	Sample Num	Date	Matrix	Location	Latitude	Longitude
No Samples Collected						

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 C54 are included in Appendix B. Figure 4 provides the maximum oiling zones observed by the SCAT team during the initial surveys of Area C54.

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. 48](#) and [CTR No. 62](#)).

1.6 Oil Removal Activities

Oil removal activities were conducted within Area C54 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, 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 C54 following completion of oil removal activities. The SCAT team performed final surveys of the island within SCAT Area C54 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 survey performed within Area C54, only very light oiling was observed on a portion of the right bank and no oiling was observed on the left bank. The very light oiling zones will be addressed through natural attenuation. Based on the final SCAT surveys performed on the island within Area C54, no further treatment is recommended for this segment. SCAT Segment Sign-Off Forms are included as Appendix F.



**SCAT Area Transition
Report for C54**

Silvertip Pipeline Incident
Laurel, Montana

2. Transition Sign-Off Form

SCAT Area Transition Report for C54

Prepared for:

Unified Command

Date

Unified Command – RP



**SCAT Area Transition
Report for C54**

Silvertip Pipeline Incident
Laurel, Montana

SCAT Area Transition Report for C54

Prepared for:

Unified Command

Date

Unified Command – FOSC



**SCAT Area Transition
Report for C54**

Silvertip Pipeline Incident
Laurel, Montana

SCAT Area Transition Report for C54

Prepared for:

Unified Command

Date

Unified Command – MDEQ

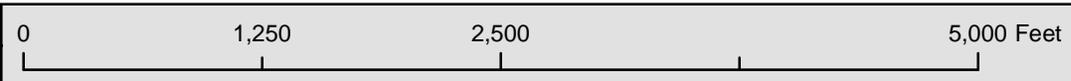
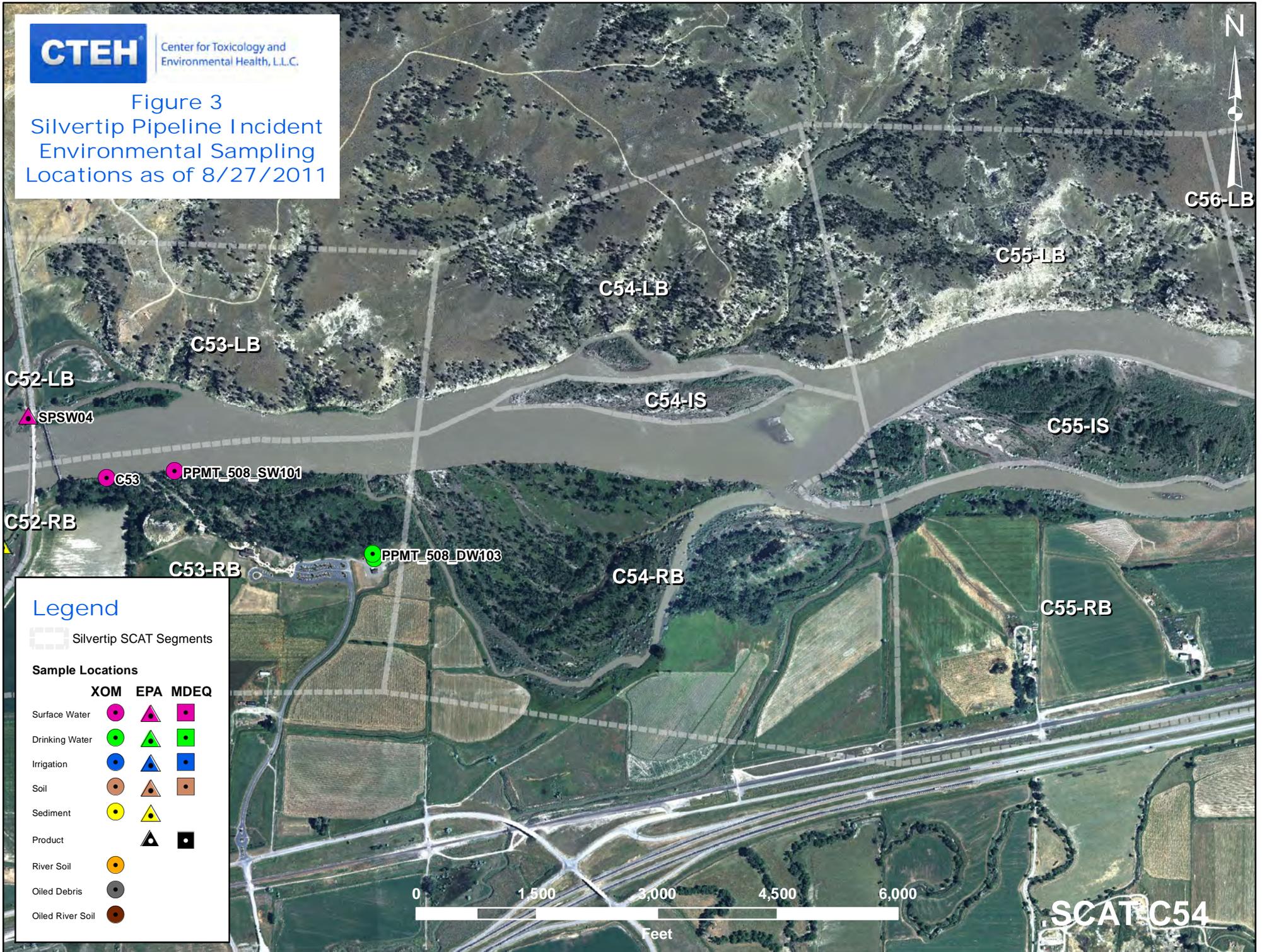


Figure 2
Wildlife Resources

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



Legend

Silvertip SCAT Segments

Sample Locations

	XOM	EPA	MDEQ
Surface Water			
Drinking Water			
Irrigation			
Soil			
Sediment			
Product			
River Soil			
Oiled Debris			
Oiled River Soil			

0 1,500 3,000 4,500 6,000
 Feet

SCAT C54



	9999 Oiling Zone ID	Light Oiling
	Heavy Oiling	Very Light Oiling
	Moderate Oiling	No Oil Observed

Figure 4 - Maximum SCAT Observations For SCAT Area: C54



- 9999 Oiling Zone ID
- Heavy Oiling
- Moderate Oiling

- Light Oiling
- Very Light Oiling
- No Oil Observed



**Figure 5 - Final SCAT Observations
For SCAT Area:**





Appendix A

Sample Detection Summary



Sample Results For
SCAT Area C54

Printed 9/8/2011

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 Detections Reported



Appendix B

Initial SCAT Survey Forms and
Sketches

3B/16

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy) 25/07/11	Time (24h): std / daylight 1210 hrs to 1210 hrs	Water Level low - mean (bankfull) overbank falling steady - rising
Segment/Reach ID: C 54 (Left Bank) Right Bank / Island		Operations Division: C		
Survey by: Foot / ATV (Boat) / Helicopter / Overlook / _____		(Sun) / Clouds / Fog / Rain / Snow / Windy / Calm		

2 SURVEY TEAM # 6	Name	Organization	Signature
Chelsea Murphy	Cardno ENTRIX		<i>Chelsea Murphy</i>
David Rouse	US Fish and Wildlife		
Jay Watson	MT Fish Wildlife and Parks		

3 SEGMENT Total Segment/Reach Length ~ 1,175 m Segment/Reach Length Surveyed ~ 1,170 m

Start GPS: LATITUDE 45 deg. 59.939 min. LONGITUDE 107 deg. 58.894 min. Datum: WGS 84

End GPS: LATITUDE 45 deg. 59.877 min. LONGITUDE 107 deg. 59.782 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 S 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: Est Height m canyon manmade meander S confined or leveed Substrate Type: mud/silt

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 1-10 m 10-100 m (>100m) 160m est. water depth: <1 m 1-3 m (3-10 m) >10 m 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:

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			P		1170	<1	φ														P	vegetated

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				

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 - NFT

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



C54LB
Team#6
25/07/11

DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy) 02/Aug/2011	Time (24h): std / daylight 1430 hrs to 1530 hrs	Water Level low - mean - bankfull - overbank falling - steady - rising
Segment/Reach ID: <u>C54</u> Left Bank / <u>Right Bank</u> / Island		Operations Division:		
Survey by: <u>Foot / ATV / Boat / Helicopter / Overlook /</u>		Sun / Clouds / Fog / Rain / Snow / Windy / Calm		
Air Temp +/- <u>3.0</u> deg C				

2 SURVEY TEAM # <u>3</u>	Name	Organization	Signature
	John Bauer	Polaris	<i>[Signature]</i>
	Steve Opp	MT DEQ	<i>[Signature]</i>
	Jay Parks	BLM <u>8/3/11 Jay Parks - Approved</u>	<i>[Signature]</i> <u>(Treatment Not Approved)</u>
	Larry Patten	EPA BLM	<i>[Signature]</i> <u>NOT APPROVED</u>
	Josh Hofkes	Cardno Entrix	<i>[Signature]</i>
	Mark Denny	Tribal representative	<i>[Signature]</i>

3 SEGMENT Total Segment/Reach Length _____ m Segment/Reach Length Surveyed 816 m

Start GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min. Datum: WGS 84

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 S _____ Bog/Fen _____ Marsh _____

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

Sediment Flat: Clay/Mud s _____ 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: gravel

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 _____

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	
<u>1129</u> <u>1130</u> <u>1131</u> A				X	20	3	100				Y		⊙									water
B				X	3	1	30		⊙	X	X		⊙				X					vlg
C				X	816	500														X		vlg

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 bank heights: A: ~~Brown~~ Brown looking layer, possibly oil mixed with possible bio sheens or petroleum sheens on slough trapped behind log. Soft silt and wetland makes access difficult to sample or cleanup. NO treatment recommended

B: NO treatment required, oiled debris

C NO. NO treatment recommended

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)

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

BLM / DB, G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page 1 of 1

1 GENERAL INFORMATION		Date (dd/mm/yy) <u>05/08/11</u>	Time (24h): std / daylight <u>0845</u> hrs to <u>1100</u> hrs	Water Level low - mean - bankfull - <u>overbank</u> falling - steady - rising
Segment/Reach ID: <u>C54</u> Left Bank / <u>Right Bank</u> / Island				
Operations Division: <u>C</u>				
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook /		Sun / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp +/- <u> </u> deg C
2 SURVEY TEAM # <u>10</u>	Name	Organization	Signature	
	<u>Brandon Owens</u>	<u>Cardno ENTRIX</u>	<u>[Signature]</u>	
	<u>Dominic Ventura</u>	<u>EPA</u>	<u>[Signature]</u>	
	<u>Jeremiah Wood</u>	<u>MTFWP</u>	<u>[Signature]</u>	

3 SEGMENT Total Segment/Reach Length 1300 m Segment/Reach Length Surveyed 450 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 X Shelf Manmade: Solid Permeable (type) Wetland: Swamp Bog/Fen Marsh

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

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 braided P oxbow flood plain valley Forested / Vegetated / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m (-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 (X) amount -1 bags or trucks access restrictions BLM Property

Oiled trees/shrubs (Y) / N River Current strong (Y) / N Other Features: BLM Property

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

1237

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	%																			
A			X		450	400	-1			X	X						X					miled

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: -1% cover, primarily staining (trace) on shrub 491955
 BLM Representative on site for survey: Jay Parks (406) 698-2007
 Recommend: Natural Attenuation, NTR

Sketch Yes / No Photos Yes / No Frames Photographer



107°59.67'W 107°59.58'W 107°59.5'W 107°59.42'W 107°59.33'W 107°59.25'W 107°59.17'W 107°59.08'W 107°59'W 107°58.92'W
46°0.17'N 46°0.08'N 46°0'N 45°59.92'N 45°59.83'N 45°59.75'N 45°59.67'N

107°59.67'W 107°59.58'W 107°59.5'W 107°59.42'W 107°59.33'W 107°59.25'W 107°59.17'W 107°59.08'W 107°59'W 107°58.92'W
46°0.17'N 46°0.08'N 46°0'N 45°59.92'N 45°59.83'N 45°59.75'N 45°59.67'N

C54-RB (L/R)??

Team #6
05/08/11

0 335 670 1,340
Feet
Very Light, -1% cover
NTS



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

JB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION <i>Attached to C5515</i>		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>C54</u>	Left Bank / Right Bank / Island <u>(C)</u>	<u>16/09/2011</u>	<u>14:30</u> hrs to <u>16:30</u> hrs	<u>(B)</u> low - bankfull - overbank
Operations Division: <u>C</u>				<u>(B)</u> falling - steady - rising
Survey by: <u>(C)</u> Foot / ATV / Boat / Helicopter / Overlook /	<u>(C)</u> Sun / <u>(C)</u> Clouds / Fog / Rain / Snow / Windy / Calm			Air Temp <u>(C)</u> - <u>24</u> deg C

2 SURVEY TEAM # <u>2</u>	Name	Organization	Signature
	<u>Herlo GAVUREAU</u>	<u>POLARIS</u>	<u>[Signature]</u>
	<u>DAMIAN KORTE</u>	<u>ENTRIX</u>	<u>[Signature]</u>
	<u>DARYL REED</u>	<u>DEQ</u>	<u>[Signature]</u>

3 SEGMENT Total Segment/Reach Length 1225 m Segment/Reach Length Surveyed 209 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 (S) Mixed (S) Pebble/Cobble (S) 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 complete for primary

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

Sloped: _____ (>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

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

2318

OIL ZONE	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER							SUBST. TYPE(S)				
					Length	Width	Distrib.	TO CV CT ST FL					FR MS TB PT TC SR AP NO											
	ID	MS	LB	UB	OB	m	m	%																
A				X	168	128	<1				X													Us, Dd

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					

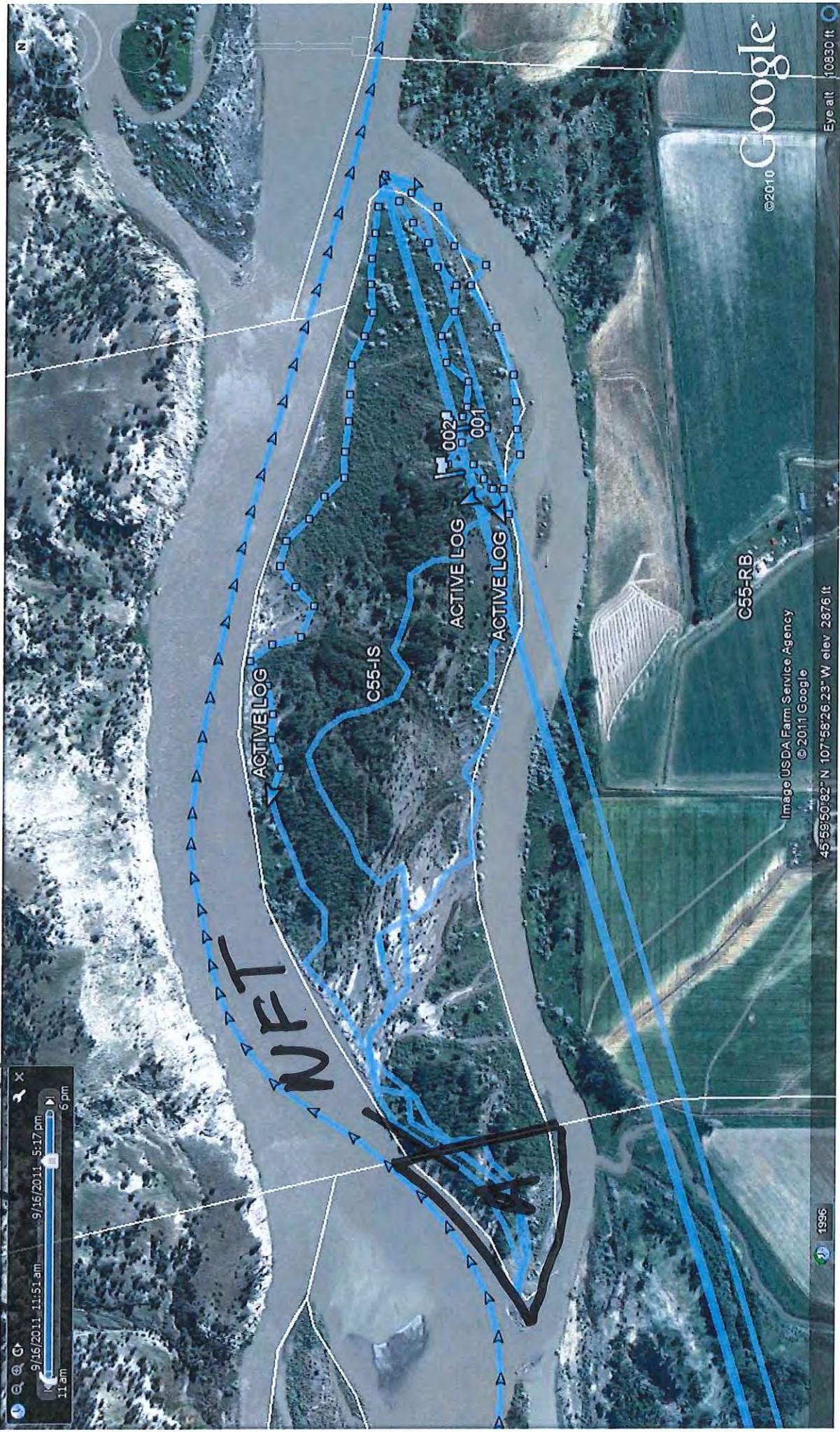
8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

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

A: Re SCAT with Ops Hot Shot
 Stain on trees and debris, clean by Hot Shot
 Meet the condition of the CTR, NFT

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

Team # 2
16/09/2011
Re SCAT
C54 IS



DIB / G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy) 07/09/11	Time (24h): std / daylight 15:30 hrs to 16:30 hrs	Water Level low - MEAN - bankfull - overbank falling - STEADY - rising
Segment/Reach ID: <u>C 54</u> Left Bank / Right Bank (<u>Island</u>)				
Operations Division:				
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook / _____		(Sun) Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp + / - <u>26</u> deg C

2 SURVEY TEAM # <u>1</u>	name	organization	contact phone number
	Tom Freeman	<u>Polaris</u>	<u>Umm Freeman</u>
	Jeffrey Herrick	<u>MT DEC</u>	<u>Jeffrey Herrick</u>
	Griff Miller	<u>USCPA</u>	<u>Griff Miller</u>

3 SEGMENT	Total Segment/Reach Length <u>785</u> m	Segment/Reach Length Surveyed <u>785</u> 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 <u>X</u> Mixed <u>(X)</u> Pebble/Cobble <u>(X)</u> Boulder _____ Peat/Organic _____	Vegetated Bank: <u>Yes</u>		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: <u>MIXED</u>					
Sloped: _____ (>5°)(15°)(30°)	straight _____	braided <u>(X)</u>	oxbow _____	flood plain valley <u>(X)</u>		Forested / <u>VEGETATED</u> / Bare					

4C RIVER CHANNEL CHARACTER				circle or select as appropriate			
est. width: <1m 1-10 m 10-100 m >100m _____ m		est. water depth: <1 m <u>1.3M</u> 3-10 m >10 m _____ m		shoal(s) present <u>Y</u> <u>(N)</u> point bar present <u>Y</u> <u>(N)</u>		bar-shoal substrate: silt / sand / gravel / cobble / boulder / bedrock / debris	
seasonal water level: low <u>(MEAN)</u> / bank full / overbank flow		est. change over next 7 days: falling <u>(SAME)</u> - 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 <u>Y</u> <u>(N)</u> River Current strong <u>(Y)</u> / 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)			
					Length	Width	Distrib.																
	ID	MS	LB	UB	OB	m	m	%	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR		AP	NO	
A				X	785	115	<1				X						X				Veg/Debris		

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)	
							SAP	OP	PP	OR	OF	TR					NO

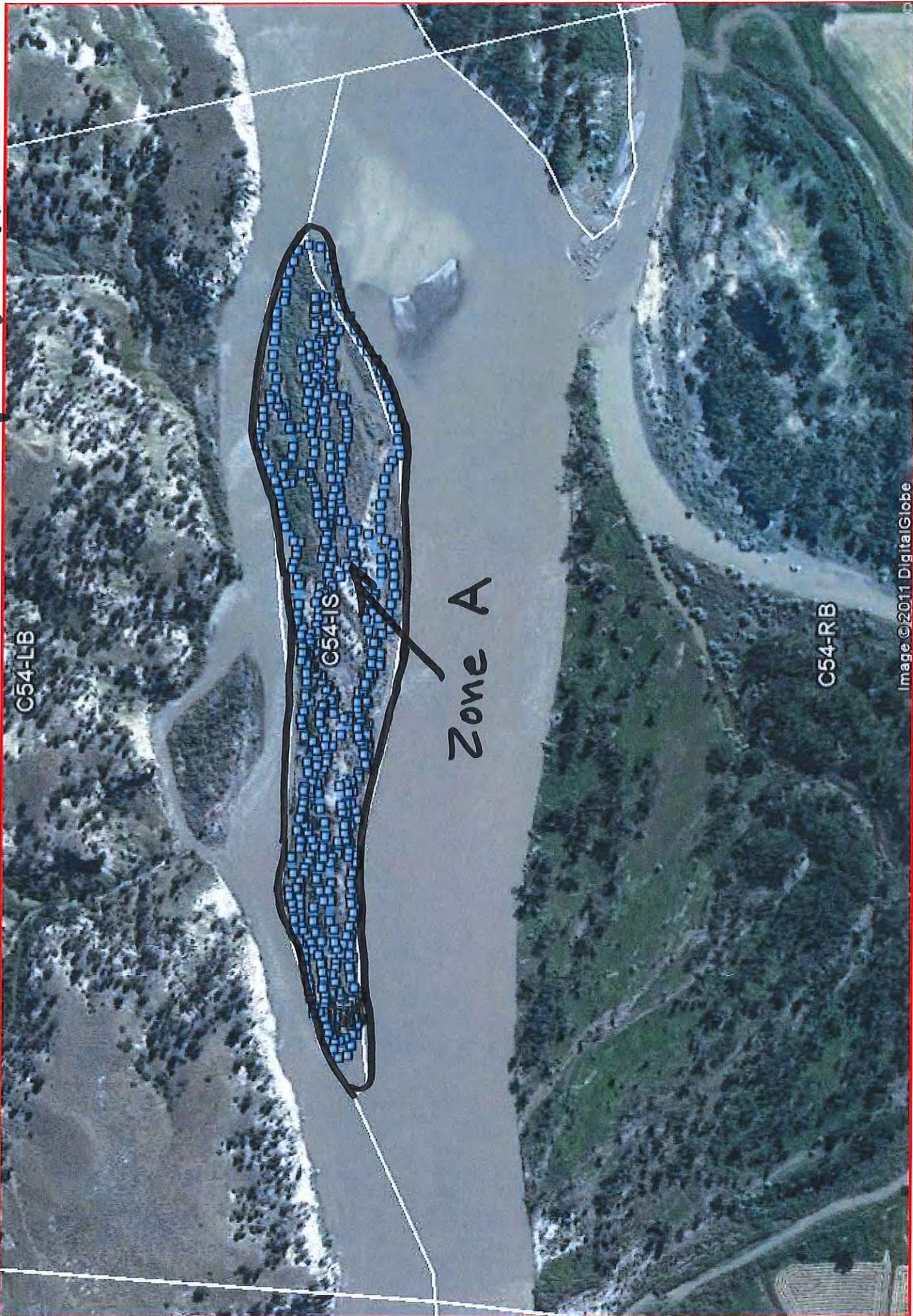
8 COMMENTS *ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations*

Zone A: NFT - no removal by Hot Shot team. was warranted.

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

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

C 54 Island S&AT Team 1 Sept 7, 2011





Appendix F

Completed SCAT Segment Sign-Off
Forms

SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

SILVERTIP PIPELINE RELEASE

Segment CS4 IS Date of Survey 16/09/2011
Attached to CSS IS

Dates of Initial SCAT Assessments 07 SEP 2011
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment 61

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)

Daryl Reed *Daryl Reed-DEQ* *9/16/11*

Sign Name _____ Print Name/ Affiliation _____ Date _____
State Representative (DEQ/FWP)

[Signature] *Herald Grosvenor, Paris* *16/09/2011*

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 C-54 Island

Date of Survey Sept 7, 2011

Dates of Initial SCAT Assessments _____

(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment _____

None

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).

[Signature]
Sign Name

G. R. Miller / EPA
Print Name/ Affiliation

9-7-11
Date

Federal Representative (EPA/USCG)

[Signature]
Sign Name

Frank Herrick / DEQ
Print Name/ Affiliation

07 Sept. 2011
Date

State Representative (DEQ/FWP)

[Signature]
Sign Name

Tom Freeman / Polaris
Print Name/ Affiliation

Sept 7, 2011
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.