

**ExxonMobil Pipeline Company**

**SCAT Area Transition Report for  
B42**

Silvertip Pipeline Incident  
Laurel, Montana

October 27, 2011



## **SCAT Area Transition Report for B42**

Silvertip Pipeline Incident  
Laurel, Montana

Prepared for:  
ExxonMobil Pipeline Company

Prepared by:  
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Our Ref.:  
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Date:  
October 27, 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 B42, 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 B42. 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 B42, 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 B42 is 37.8. There were partial access issues for the left bank.

### **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 regular inspections of Area B42. One deceased oiled fish (unknown species) was identified and retained. No Wildlife Priority Cleanup Areas were identified. A house wren (*Troglodytes aedon*) nest and an Osprey nest (*Pandion Haliaeetus*) were identified in Area B42.

### **1.3 Summary of Environmental Sampling**

Table 1 (below) summarizes samples collected within Area B42. 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 B42 are provided on Figure 3.

**Table 1 Environmental Sampling Summary**

Agency	Sample Num	Date	Matrix	Location	Latitude	Longitude	Results Validated?
EPA	SPPR03_070511	05-Jul-11	Product_Oil	SPPR03	45.779011	-108.485331	Yes

Appendix A contains a summary of sample results with detections for this sample set. Detections with a result above the screening level are highlighted; for this set, there were no exceedances in this area.

#### **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 B42 are included in Appendix B. Figure 4 provides the maximum oiling zones observed by the SCAT team during the initial surveys of Area B42.

#### **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. 32](#) and [CTR No. 33](#)).

#### **1.6 Oil Removal Activities**

Oil removal activities were conducted within Area B42 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**

SCAT Operations liaisons performed an inspection of the remediated areas of SCAT Area B42 and developed a Pre-Inspection Survey Transmittal (PIST) associated with the island within Area B42, which is presented in Appendix C.

### **1.8 Post-Inspection Survey Transmittal**

SCAT Operations liaisons performed an inspection of the remediated areas of SCAT Area B42 and developed a Post-Inspection Survey Transmittal (POST) associated with the island within Area B42, which is presented in Appendix D.

### **1.9 Summary of Final SCAT Surveys**

Figure 5 shows the oiling conditions within Area B42 following completion of oil removal activities. The SCAT team performed final surveys of the right bank, left bank, and island within SCAT Area B42 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 final SCAT surveys performed on the right bank, left bank, and island within Area B42, no further treatment is recommended for the island, no oil was observed on the left bank and a portion of the right bank with natural attenuation recommended for the remainder of the right bank. SCAT Segment Sign-Off Forms are included as Appendix F.



**SCAT Area Transition  
Report for B42**

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Laurel, Montana

**2. Transition Sign-Off Form**

**SCAT Area Transition Report for B42**

**Prepared for:**

**Unified Command**

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Date

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Unified Command – RP



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Laurel, Montana

**SCAT Area Transition Report for B42**

**Prepared for:**

**Unified Command**

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Date

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Unified Command – FOSC



**SCAT Area Transition  
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Laurel, Montana

**SCAT Area Transition Report for B42**

**Prepared for:**

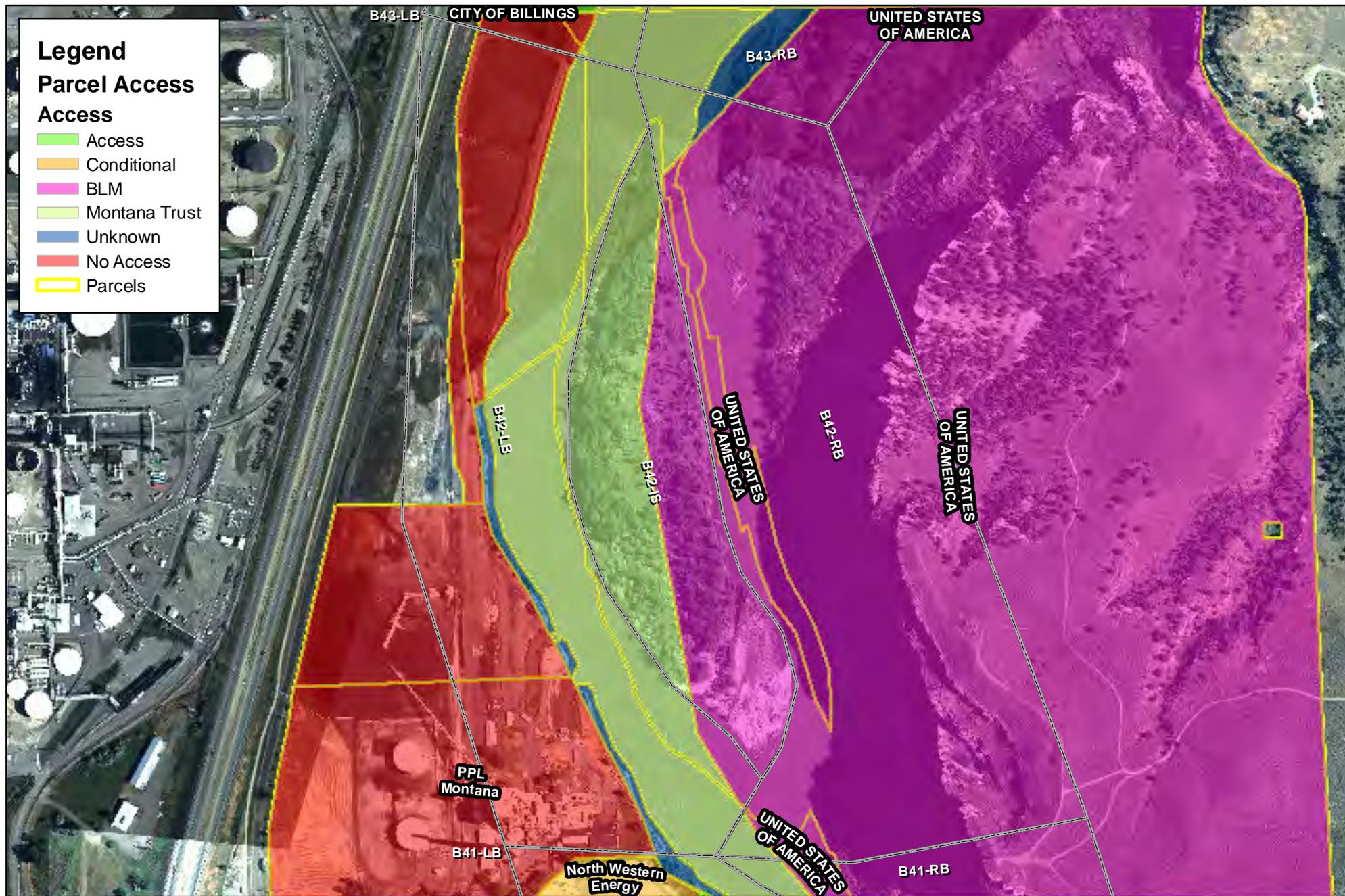
**Unified Command**

---

Date

---

Unified Command – MDEQ



### Legend

#### Parcel Access

#### Access

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

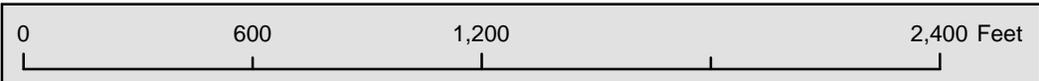
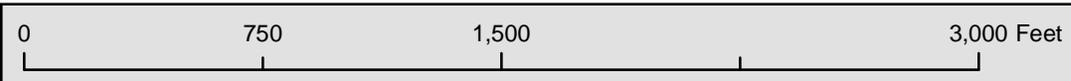


Figure 1

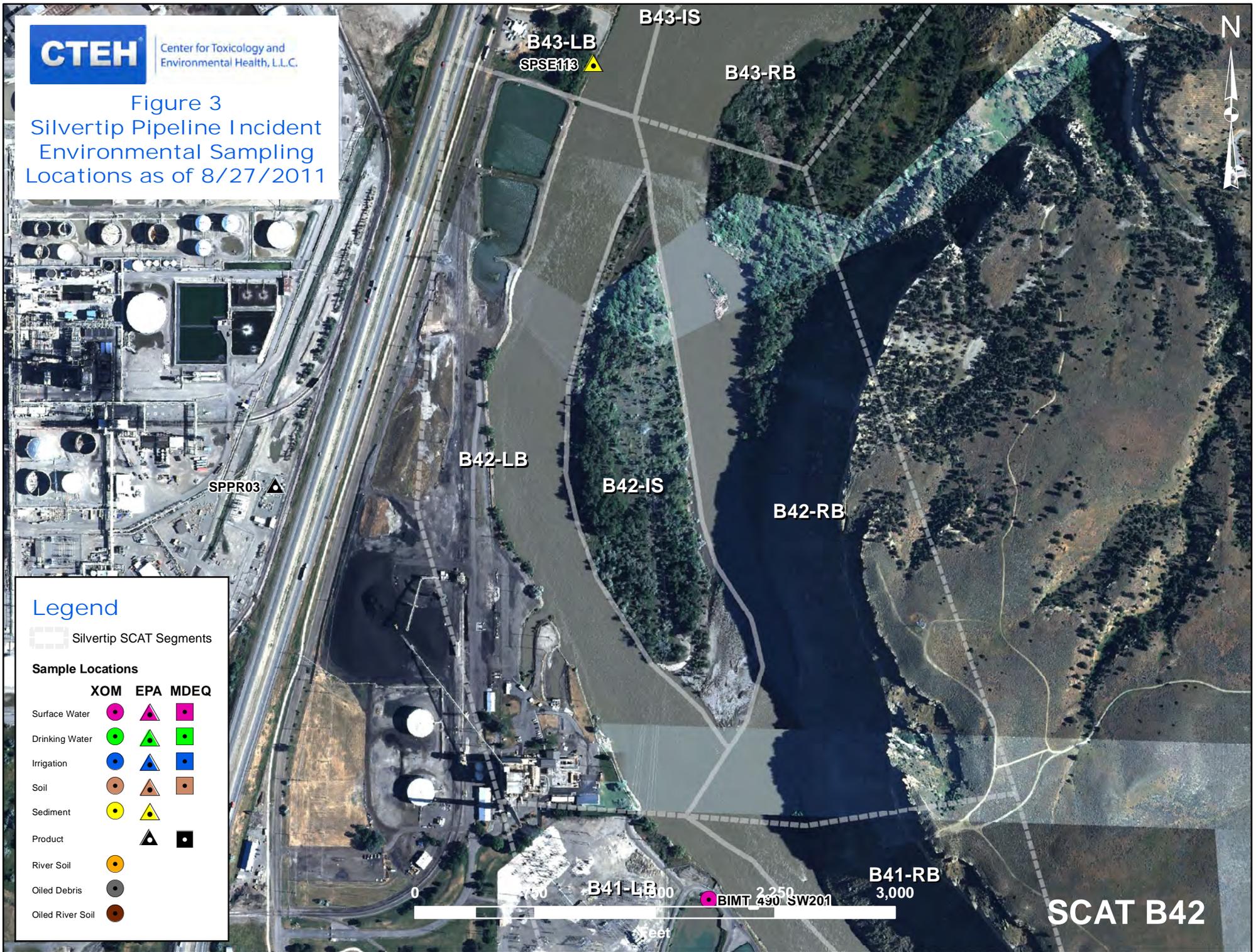


**Figure 2**  
**Wildlife Resources**



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

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



### Legend

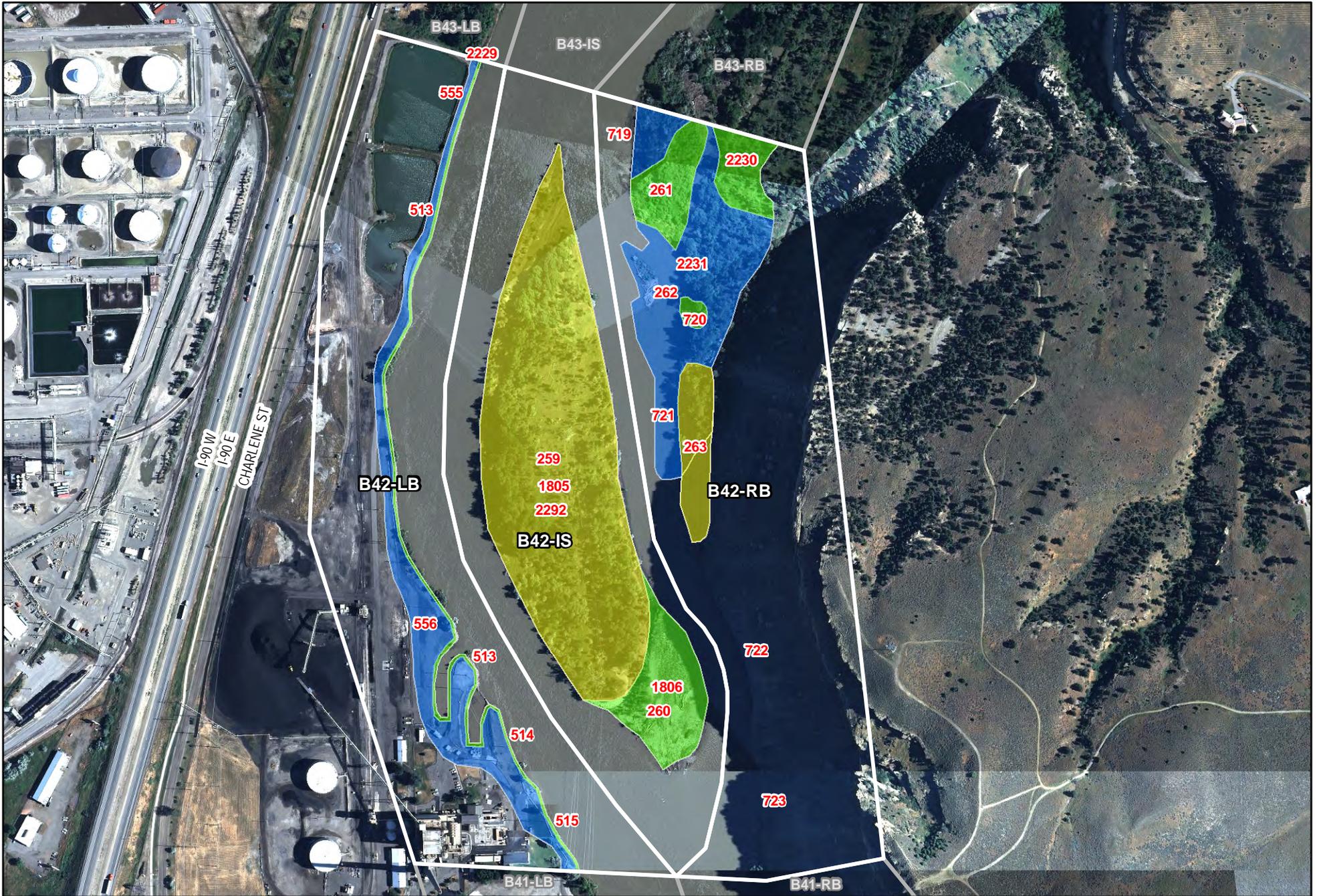
Silvertip SCAT Segments

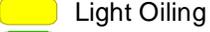
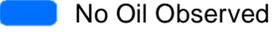
#### Sample Locations

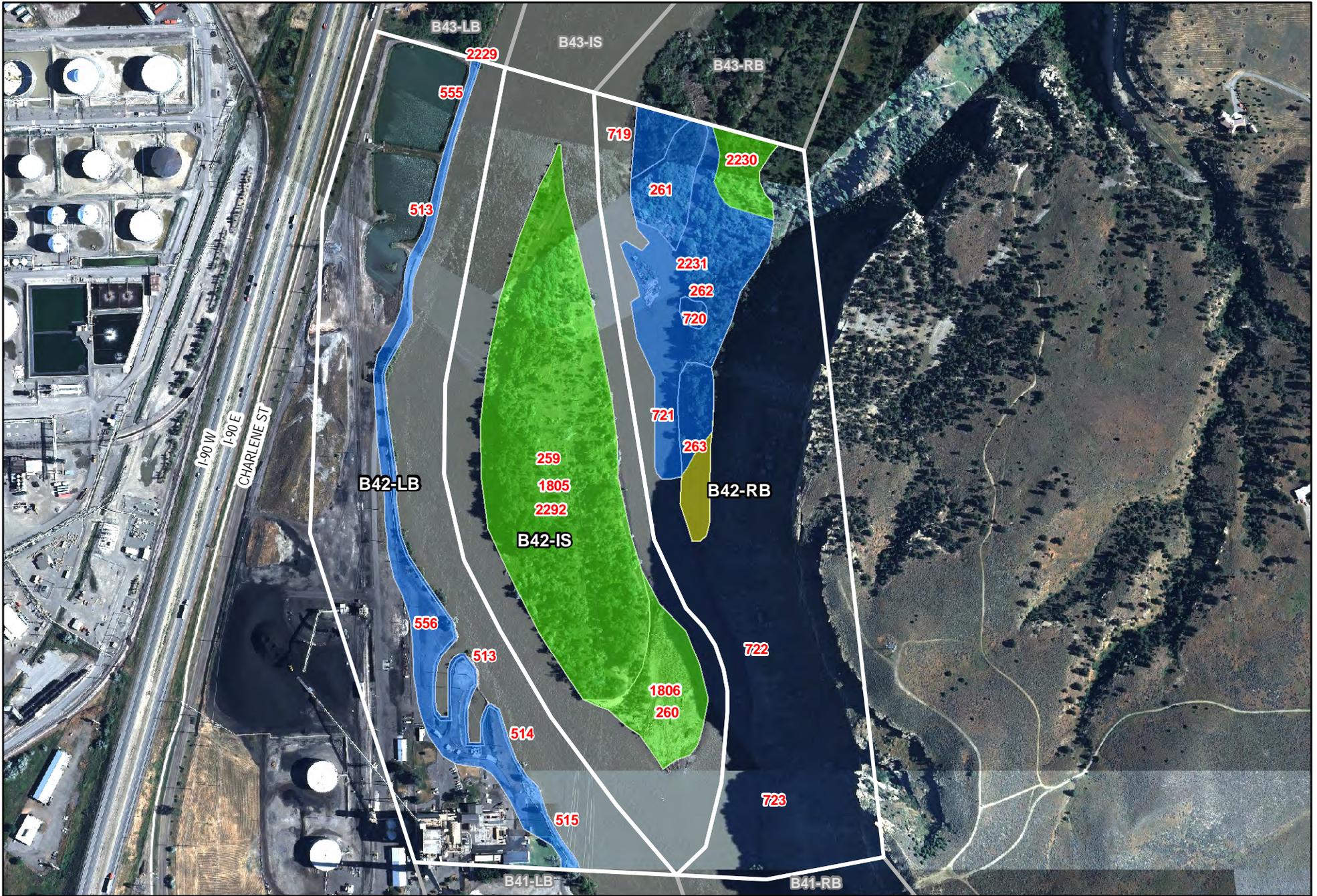
	XOM	EPA	MDEQ
Surface Water			
Drinking Water			
Irrigation			
Soil			
Sediment			
Product			
River Soil			
Oiled Debris			
Oiled River Soil			



SCAT B42



 <p><b>9999</b> Oiling Zone ID   Heavy Oiling   Moderate Oiling</p>	<p> Light Oiling   Very Light Oiling   No Oil Observed</p>	<p><b>Figure 4 - Maximum SCAT Observations For SCAT Area:</b></p> <p>380      0      380      760   Feet</p>	<p><b>B42</b> </p>
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-  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



## Detections in Samples Collected in SCAT Area B42

NA - Not Available

Detected Above Screening Level

Sample Num	Date	Sample Type	Matrix	Analytical Method	Analyte	Detected	Result	Screening Level	Result Qualifier	Units	Above?
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8270	2-Methylnaphthalene	Y	119	NA		mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8260	Benzene	Y	1750	NA		mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C10-C11	Y	1.8	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C11-C12	Y	1.83	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C12-C13	Y	2.77	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C13-C14	Y	2.7	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C14-C15	Y	3.55	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C15-C16	Y	3.37	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C16-C17	Y	3.41	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C17-C18	Y	3.36	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C18-C19	Y	3.44	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C19-C20	Y	3.7	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C20-C21	Y	3.02	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C21-C22	Y	3.46	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C22-C23	Y	3.21	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C23-C24	Y	2.89	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C24-C25	Y	2.66	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C25-C26	Y	2.71	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C26-C27	Y	2.96	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C27-C28	Y	2.45	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C28-C29	Y	3.01	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C29-C30	Y	3.33	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C30-C32	Y	5.79	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C32-C34	Y	5.22	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C34-C36	Y	4.56	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C36-C38	Y	3.78	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C38-C40	Y	1.81	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C40+	Y	0.11	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C5-C6	Y	3.38	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C6-C7	Y	5.55	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C7-C8	Y	5.52	NA		Vol %	no



## Detections in Samples Collected in SCAT Area B42

NA - Not Available

Detected Above Screening Level

Sample Num	Date	Sample Type	Matrix	Analytical Method	Analyte	Detected	Result	Screening Level	Result Qualifier	Units	Above?
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C8-C9	Y	2.87	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	SimDist	C9-C10	Y	1.78	NA		Vol %	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8015	Diesel Range Organics (DRO)	Y	237000	NA		mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8015	Diesel Range Organics (DRO)	Y	237000	NA		mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8260	Ethylbenzene	Y	312	NA		mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8260	m&p-Xylene	Y	1780	NA		mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8270	Naphthalene	Y	65	NA	J	mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8015	Oil Range Hydrocarbons (C28-C40+)	Y	136000	NA		mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8015	Oil Range Hydrocarbons (C28-C40+)	Y	136000	NA		mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8260	o-Xylene	Y	462	NA		mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8270	Phenanthrene	Y	86	NA	J	mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 1552	Sulfur, Total	Y	3.73	NA		wt%	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 1552	Sulfur, Total	Y	3.73	NA		wt%	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8260	Toluene	Y	3220	NA		mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8015	Total Extractable Hydrocarbons	Y	431000	NA		mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8015	Total Extractable Hydrocarbons	Y	431000	NA		mg/kg	no
SPPR03_070511	07/05/2011	Field	Product_Oil	EPA 8260	Xylene (Total)	Y	2240	NA		mg/kg	no



## **Appendix B**

Initial SCAT Survey Forms and  
Sketches

DB/G/Sc

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

<b>1 GENERAL INFORMATION</b>		Date (dd/mm/yy) 17-Jul-2011	Time (24h): std / daylight 1140 hrs to 1205 hrs	Water Level low - mean - <u>bankfull</u> - overbank falling - steady - rising
Segment/Reach ID: B42 Left Bank / <u>Right Bank</u> / Island				
Operations Division: B				
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook / _____		Sun / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp +/- <u>32</u> deg C

2 SURVEY TEAM # 1 & 2	name	organization	contact phone number
Andrew Milanes	<u>AM</u>	Polaris	
Pete Lee	<u>PL</u>	Polaris	
Aaron Anderson	<u>AA</u>	MTDEQ	
Larry Alheim	<u>LA</u>	MTDEQ	
Jay Parks		Bureau of Land Management (BLM)	
Ernie Mckenzie		BLM	

**3 SEGMENT** Total Segment/Reach Length \_\_\_\_\_ m Segment/Reach Length Surveyed 370 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 S 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 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 105m 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 10 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

261  
262  
263

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	135	50	<1			X	X		X									Grass, trees, debris		
B				X	35	35	<1			X	X		X									Grass, trees, debris		
C				X	200	30	1			X	X		X									Grass, trees, 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 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

Oil band heights: Zones A, B, C - 10cm

**Treatment Recommendations:**

Zones A & B: No Further Treatment Recommended

Zone C: Cut & remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter.

\*Refer to current approved treatment methods #1 (Cutting of Vegetation), #2 (Dead Vegetation and Small Debris)

Sketch Yes / No Photos Yes / No Photo Numbers 4482-4563 (Milanes)

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<b>1 GENERAL INFORMATION</b>		Date (dd/mm/yy) 17-Jul-2011	Time (24h): std / daylight 1140 hrs to 1205 hrs	Water Level low - mean - <u>bankfull</u> - overbank falling - steady - rising
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Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook / _____		Sun / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp + / - <u>32</u> deg C

<b>2 SURVEY TEAM # 1 &amp; 2</b>	name	organization	contact phone number
Andrew Milanes	<i>[Signature]</i>	Polaris	
Pete Lee	<i>[Signature]</i>	Polaris	
Aaron Anderson	<i>[Signature]</i>	MTDEQ	
Larry Alheim	<i>[Signature]</i>	MTDEQ	
Jay Parks	<i>[Signature]</i>	Bureau of Land Management (BLM)	
Ernie Mckenzie	<i>[Signature]</i>	BLM	

**3 SEGMENT** Total Segment/Reach Length \_\_\_\_\_ m Segment/Reach Length Surveyed 370 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 S 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 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 105m 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 10 bags or \_\_\_\_\_ trucks access restrictions \_\_\_\_\_

ad 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	135	50	<1			X	X			X									Grass, trees, debris
B				X	35	35	<1			X	X			X									Grass, trees, debris
C				X	200	30	1			X	X			X									Grass, trees, 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 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

Oil band heights: Zones A, B, C – 10cm

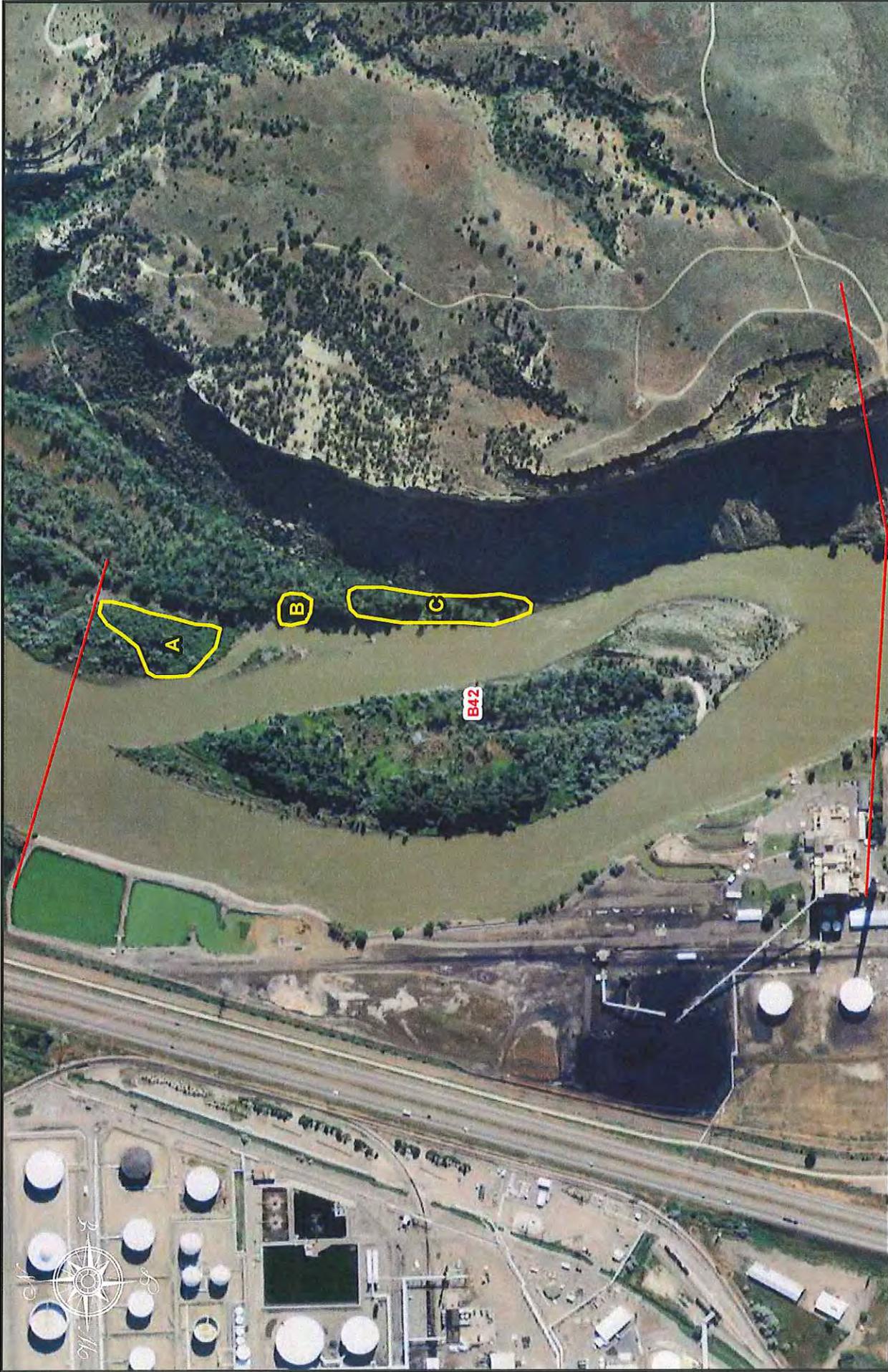
**Treatment Recommendations:**

Zones A & B: No Further Treatment Recommended

Zone C: Cut & remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter.

refer to current approved treatment methods #1 (Cutting of Vegetation), #2 (Dead Vegetation and Small Debris)

Sketch Yes / No Photos Yes / No Photo Numbers 4482-4563 (Milanes)



**Legend**

— Segment Boundaries

□ Oiling Zones



**SCAT Teams 1 & 2 Survey**

Segment B42 - Right Bank

17 July 2011

DB/G/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

<b>1 GENERAL INFORMATION</b>		Date (dd/mm/yy)	Time (24h): std / daylight	<b>Water Level</b>
Segment/Reach ID: <u>B4Z</u>	Left Bank <input type="checkbox"/> <u>Right Bank</u> <input checked="" type="checkbox"/> Island	19 / 07 / 11	0907 hrs to 0910 hrs	low - mean <input type="checkbox"/> <u>bankfull</u> <input checked="" type="checkbox"/> overbank
Operations Division: B				<u>falling</u> steady - rising
Survey by: <u>Foot / ATV / Boat</u> / Helicopter / Overlook /		<u>Sun</u> / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp + / - <u>35</u> deg C

<b>2 SURVEY TEAM # 5</b>	<b>name</b>	<b>organization</b>	<b>contact phone number</b>
	Bob Nailon	Cardno ENTRIX	713 817 2469
	John Beach <u>DFS</u>	EPA	707 364 0491
	Ken Frazer	FWP	406 247 2961

**3 SEGMENT** Total Segment/Reach Length 885 m Segment/Reach Length Surveyed 885 m

Start GPS: LATITUDE N \_\_\_\_\_ deg. \_\_\_\_\_ min. LONGITUDE W \_\_\_\_\_ deg. \_\_\_\_\_ min. Datum: WGS 84

End GPS: LATITUDE N \_\_\_\_\_ deg. \_\_\_\_\_ min. LONGITUDE W \_\_\_\_\_ 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 \_\_\_\_\_ 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 X confined or leveed \_\_\_\_\_ Substrate Type: mixed

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 \_\_\_\_\_ m 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 Vertical from river

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	160		1				P		X									veg bank
B				X	170																	veg bank
C				X	195		3				P		X									veg bank
D				X	215																	veg bank
E				X	145		1				P		X									veg bank

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

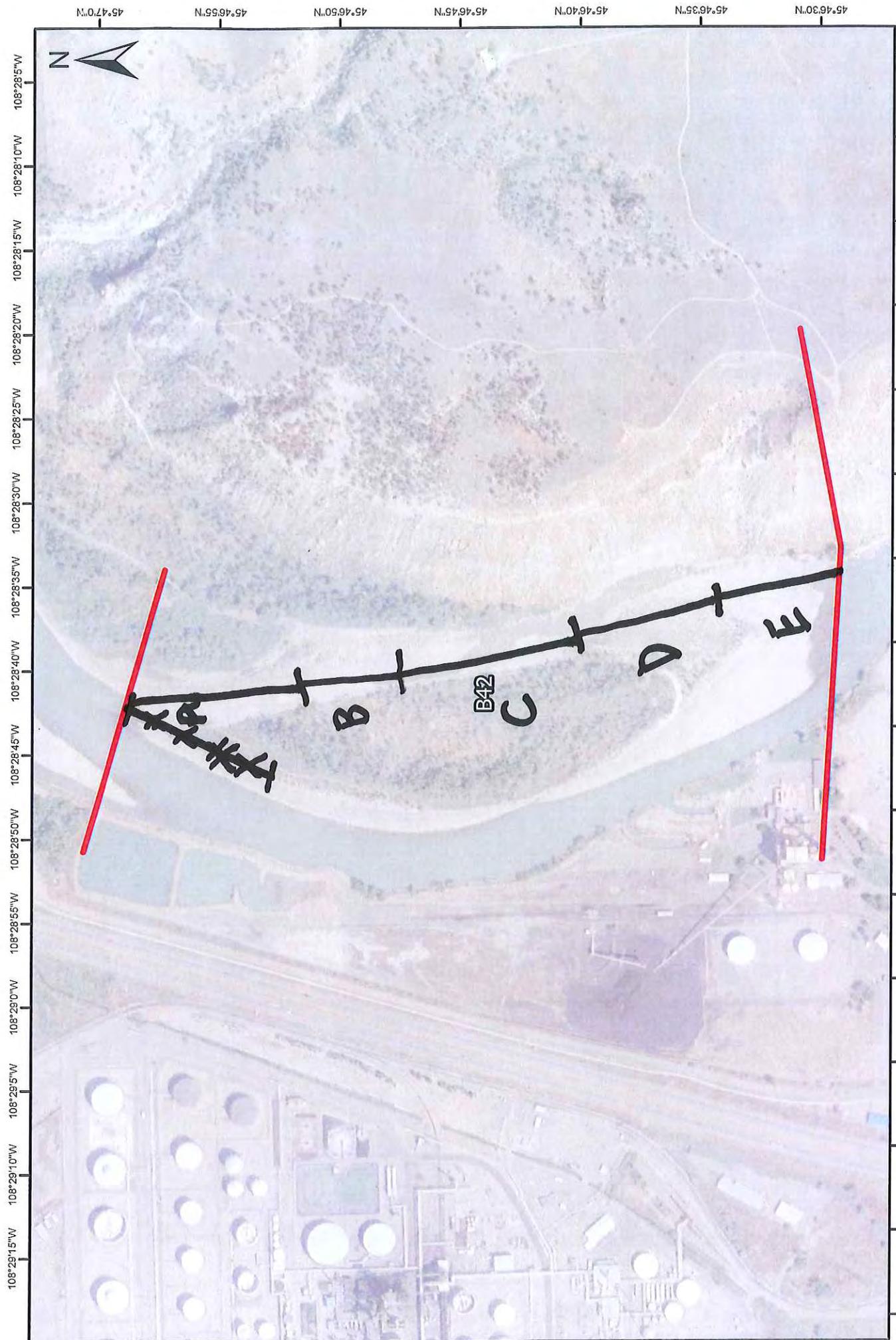
TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER						WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes / No	SUBST. TYPE(S)	
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR					NO

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

OSR = 4 OSC = UNK SSC = UNK

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

Sketch Yes/No Photos Yes/No (Roll # 5002 Frames 5007) Video Tape Yes/No (tape # 5026)



**B42** - (L/R/I)??

DATE: \_\_\_\_\_

TEAM: \_\_\_\_\_

COMMENTS:

0 75 150 225 300  
Meters

DB/G/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

<b>1 GENERAL INFORMATION</b>		Date (dd/mm/yy) 19-Jul-2011	Time (24h): std / daylight 0910 hrs to 0915 hrs	<b>Water Level</b> low - mean - <u>bankfull</u> - overbank falling - steady - rising
Segment/Reach ID: B42 <u>Left Bank</u> / Right Bank / Island				
Operations Division: B				
Survey by: <u>Foot</u> / ATV / <u>Boat</u> / Helicopter / Overlook / _____		Sun / Clouds / Fog / Rain / Snow / <u>Windy</u> / Calm		Air Temp +/- <u>31</u> deg C

<b>2 SURVEY TEAM # 1</b>	name	organization	contact phone number
Pete Lee	<u>PBL</u>	Polaris	
Larry Alheim		MTDEQ	
Andy Johnson	<u>Andy Johnson</u>	USCG	<u>[Signature]</u>

**3 SEGMENT** Total Segment/Reach Length \_\_\_\_\_ m Segment/Reach Length Surveyed 995 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 S \_\_\_\_\_ 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 \_\_\_\_\_ 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 105m 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 10 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	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	X	755	1															X	Grass, trees
B			X	X	135	1	<u>100</u>			X	<u>X</u>			X								Grass, trees
C			X	X	105	1															X	Grass, trees

**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: Zone B – 60cm

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

\*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 1046-1058, 1072-1076 (Lee)



©2010 Google™

Eye alt 7901 ft

Image © 2011 GeoEye

45°46'44.14" N 108°28'33.92" W elev 3225 ft

B42

Imagery Date: 7/31/2009

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

<b>1 GENERAL INFORMATION</b>		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>B42</u>	<u>(Left Bank / Right Bank / Island)</u>	<u>24/07/11</u>	<u>14:30</u> hrs to <u>15:30</u> hrs	low <u>(mean)</u> bankfull - overbank
Operations Division: <u>SRAT</u>				<u>(falling)</u> steady - rising
Survey by: <u>Foot / ATV / Boat / Helicopter / Overlook /</u>	<u>(Sun)</u> Clouds / Fog / Rain / Snow / Windy / Calm			Air Temp +/- <u>31</u> deg C

<b>2 SURVEY TEAM # <u>4</u></b>	Name	Organization	Signature
	<u>John Matuschek</u>	<u>Cardo ENTRIX</u>	<u>[Signature]</u>
	<u>GARY KILAY</u>	<u>US EPA</u>	<u>[Signature]</u>
	<u>Ray Mule</u>	<u>MT FWP</u>	<u>[Signature]</u>

**3 SEGMENT** Total Segment/Reach Length 1017 m Segment/Reach Length Surveyed 1017 m

Start GPS: LATITUDE 45 deg. 46.507 min. LONGITUDE 108 deg. 28.776 min. Datum: WGS84

End GPS: LATITUDE 45 deg. 47.018 min. LONGITUDE 108 deg. 28.810 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 P Sand \_\_\_ Mixed \_\_\_ Pebble/Cobble \_\_\_ Boulder \_\_\_ Peat/Organic \_\_\_ Vegetated Bank: P Wooded Upland: \_\_\_

Sediment Flat: Clay/Mud \_\_\_ Sand \_\_\_ Mixed/Coarse \_\_\_ Other: S Rip/Rq 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 P confined or leveed \_\_\_ Substrate Type: Veg

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 160m est. water depth: <1m 1-3m 3-10m >10m \_\_\_ m

shoal(s) present Y point bar present Y 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: Access by Pacific Power & Light

**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>A</u>			<u>S</u>	<u>P</u>	<u>1017</u>	<u>3</u>	<u>S</u>			<u>P</u>	<u>S</u>						<u>P</u>				<u>Veg</u>	
<u>B</u>					<u>1017</u>	<u>10</u>	<u>O</u>														<u>NO</u>	<u>Veg</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

Zone A - Recommend removal of affected vegetation and debris piles

Zone B - no oil

Sketch Y / No Photos Y / No Frames \_\_\_\_\_ Photographer \_\_\_\_\_



COMMENTS:

DATE:

TEAM:

**B42 -**  
(L/R/I)??

DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

<b>1 GENERAL INFORMATION</b>		Date (dd/mm/yy) 17-Jul-2011	Time (24h): std / daylight 0930 hrs to 1135 hrs	Water Level low - mean - <u>bankfull</u> - overbank falling - steady - rising
Segment/Reach ID: B42 Left Bank / Right Bank / <u>Island</u>		Operations Division: B		
Survey by: <u>Foot / ATV / Boat / Helicopter / Overlook /</u>		Sun / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp +/- <u>32</u> deg C

2 SURVEY TEAM # 1 & 2		name	organization	contact phone number
Andrew Milanes		<u>AM</u>	Polaris	
Pete Lee		<u>PL</u>	Polaris	
Aaron Anderson		<u>AA</u>	MTDEQ	
Larry Alheim		<u>LA</u>	MTDEQ	
Jay Parks		<u>JP</u>	Bureau of Land Management (BLM)	
Ernie Mckenzie		<u>EM</u>	BLM	

**3 SEGMENT** Total Segment/Reach Length \_\_\_\_\_ m Segment/Reach Length Surveyed 760 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 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: 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 105m 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 100 bags or \_\_\_\_\_ trucks access restrictions \_\_\_\_\_

Dead 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>259</u> <u>260</u> A				X	635	135	3			<u>X</u>	X		X										Grass, trees, debris
B				X	125	110														X		tree, gravel, 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

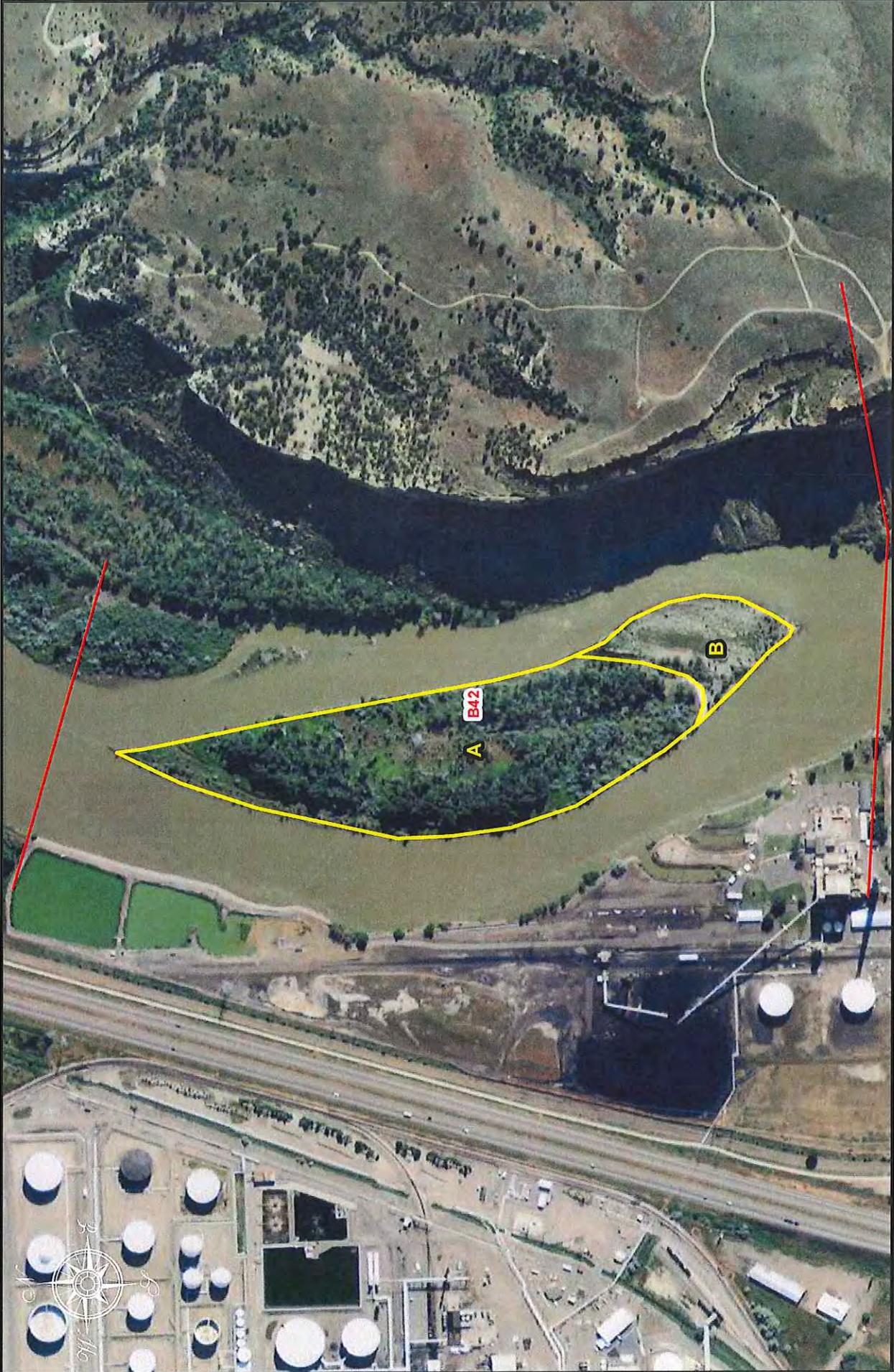
**8 COMMENTS** ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

Oil band heights: Zone A - 20cm

**Treatment Recommendations:**  
 Zone A: Cut & remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter.  
 Zone B: No Oil Observed. No treatment required.

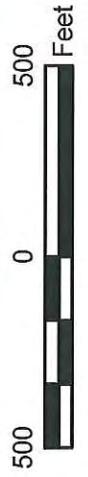
\*Refer to current approved treatment methods #1 (Cutting of Vegetation), #2 (Dead Vegetation and Small Debris)

Sketch Yes / No Photos Yes / No Photo Numbers 4357-4470 (Milanes)



**Legend**

- Segment Boundaries
- Oiling Zones



**SCAT Teams 1 & 2 Survey**

Segment B42 - Island

17 July 2011

DB IG

R

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

<b>1 GENERAL INFORMATION</b>		Date (dd/mm/yy) 08/23/11	Time (24h): std / daylight 1330 hrs to 1500 hrs	Water Level low - mean - (bankfull) - overbank low - mean - (bankfull) - overbank <u>(falling)</u> steady - rising
Segment/Reach ID: B42 Left Bank / Right Bank / Island				
Operations Division: <u>B</u>				
Survey by: <u>(Foot)</u> / ATV / Boat / Helicopter / Overlook / _____		<u>(Sun)</u> / Clouds / Fog / Rain / Snow / Windy <u>(Calm)</u>		Air Temp + / - 30 deg C

<b>2 SURVEY TEAM # 6</b>	Name	Organization	Signature
Lee Burroughs		MFW&P	<i>[Signature]</i>
Bob Nailon		Cardno Entrix	<i>[Signature]</i>
Bruce Kvam		Polaris Applied Sciences, LLC	<i>[Signature]</i>
Jeffrey Frank Herrick		MDEQ	<i>[Signature]</i>

**3 SEGMENT** Total Segment/Reach Length 910 m Segment/Reach Length Surveyed 765 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: 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: mixed

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

**4C RIVER CHANNEL CHARACTER** circle or select as appropriate

est. width: <1m 1-10 m 10-100 m >100m 3 0 6 m 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				X	652	116	<1			(X)	X		X											Shrubs, trees, grass, woody debris
B				X	113	71																	X	

1805  
1806

**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)

Treatment Recommendations\*:

Zone A: Cut and remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter. Some oil coated debris was dusted and this dusted debris requires no further treatment.

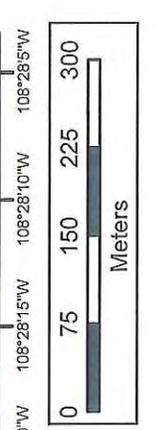
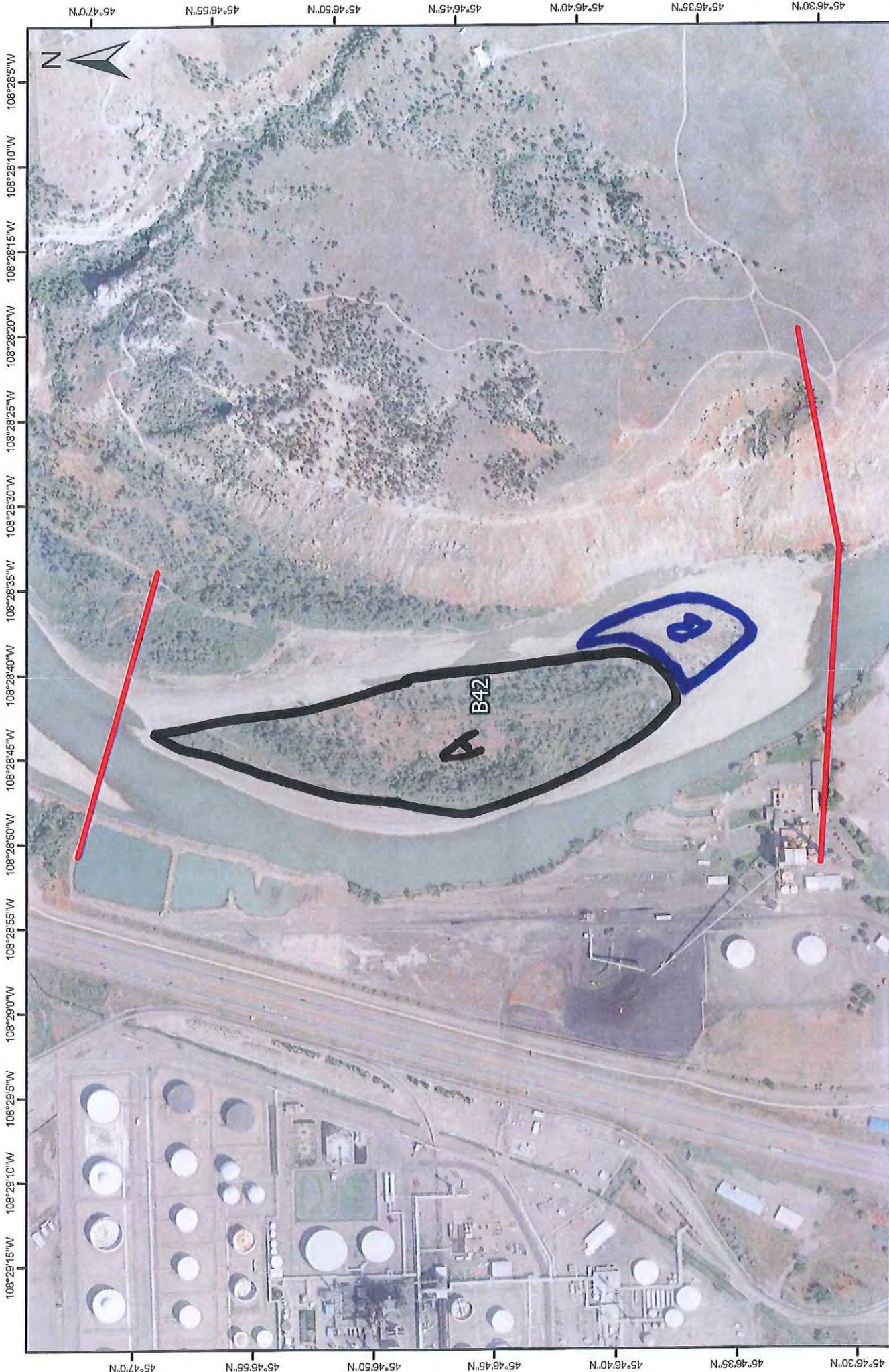
Zone B: No oil observed. No treatment required.

1- CTR 32 still apply for Zone ~~G~~ still apply applies.

2- " " " " F still apply applies.

\* Refer to current (7-30-11 version) treatment recommendations.

Sketch Yes / No Photos Yes / No Frames \_\_\_\_\_ Photographer \_\_\_\_\_



COMMENTS:

DATE: 08/23/2011

TEAM: 6

**B42 -**  
(L/R)??



## **Appendix C**

Pre-Inspection Survey Transmittal

**SCAT – Pre Inspection Survey Transmittal (PIST) Memo**

Survey Date: 8/23/11  
Segment: B42 Island

Team:  
RP Team Leader Robert Nailon  
Federal Rep N/A  
State Rep Lee Burroughs  
Other trustee Jeffrey Herrick

Signed: [Signature]  
Signed: [Signature]  
Signed: [Signature]  
Signed: [Signature]

Segment meets criteria? YES  NO

RBOS attached? YES  NO

**If NO:**  
Location Sketch attached? YES  NO

CTR continue? YES  NO

Comments:

cut + remove oiled vegetation + oiled debris  
Ops has not started to date



## **Appendix D**

Post-Inspection Survey Transmittal

# POST

## Post Inspection Survey Transmittal

*Created by Connor Kobeski / Cardno ENTRIX 9/30/11  
QA/QC*

Segment B42-IS

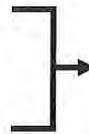
Date of Survey 23 Aug 2011

SCAT Team Member Robert Nailon Signed: (see attached PIST)

SCAT Team Member Lee Burroughs Signed: (see attached PIST)

SCAT Team Member Jeffrey Herrick Signed: (see attached PIST)

### Segment FAILED ReSCAT



Referred to Ops  
For Further Treatment

### Segment Conditionally PASSES ReSCAT

IF the Segment FAILED ReSCAT, another ReSCAT is required after treatment has been completed.  
IF the Segment Conditionally PASSES ReSCAT, a SCAT/Ops Liaison will verify treatment completion.

Describe the zone requiring further treatment. Comment on oiling conditions, relevant portions of the CTR(s), the appropriate ATMs to use, GPS waypoints, additional comments, etc. Attach map.

Further treatment required in zone A (see map). Cut and remove oil coated vegetation < 1" diameter. Remove oil coated debris < 4" diameter. Transferable oil may also be dusted. Follow CTR 32 for zone G and zone F in CTR.

Zone Dimensions: Length 652 Width 116m GPS Waypoint: Lat. \_\_\_\_\_ Long. \_\_\_\_\_  
(required) (center of zone)

Estimated Work Effort: Number of People \_\_\_\_\_ Hours of Work \_\_\_\_\_ CTR(s) 32  
(required) Access Issues?

*The undersigned attests that the above treatment has been completed and the identified area meets the Approved Treatment Methods Target Endpoints.*

Sign Name \_\_\_\_\_ Print Name/ Affiliation \_\_\_\_\_ Date \_\_\_\_\_

Sign Name \_\_\_\_\_ Print Name/ Affiliation \_\_\_\_\_ Date \_\_\_\_\_  
Silvertip Pipeline Response Updated: 8/29/2011



## **Appendix E**

Final SCAT Survey Forms and  
Sketches

DB / G

**RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident**

<b>1 GENERAL INFORMATION</b>	Date (dd/mm/yy) 09/09/2011	Time (24h): std / daylight 1000 hrs to 1500 hrs	Water Level low - <u>mean</u> - bankfull - overbank falling - <u>steady</u> - rising
Segment/Reach ID: B42      Left Bank / <u>Right Bank</u> / Island			Air Temp + / - <u>28</u> deg C
Operations Division: B			
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook / _____	Sun / Clouds / Fog / Rain / Snow / Windy / Calm		

<b>2 SURVEY TEAM # <u>NA</u></b>	Name	Organization	Signature
	Jay Parks	Bureau of Land Management	<i>Jay Parks</i>
	Shawn Briggs	Montana FWP	<i>Shawn Briggs</i>
	Richard Marty	Polaris	<i>Richard Marty</i>

**3 SEGMENT**      Total Segment/Reach Length \_\_\_\_\_ m      Segment/Reach Length Surveyed \_\_\_\_\_ 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 S Sand \_\_\_\_\_ Mixed \_\_\_\_\_ 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 p      confined or leveed \_\_\_\_\_      Substrate Type: mud/sand/grvl

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

**4C RIVER CHANNEL CHARACTER**      *circle 51 or select as appropriate*

est. width:      <1m   1-10m   10-100m   >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: Best accessed 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)			
	ID	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR		AP	NO	
A					X	170	110	<1				P						X					Vegetation
B					X	395	200	0														X	All

**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				
None																	

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

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

Area has been cleaned by operations. The oiled zone that was present has been reduced to traces of stain.

A – Trace levels of stain in willows. Oiling is not transferable and Natural Attenuation is recommended to deal with the remaining oiling.

B – No oil observed. No additional treatment is required.

Sketch Yes / No      Photos Yes / No      Frames None      Photographer \_\_\_\_\_







DB/G/1

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

<b>1 GENERAL INFORMATION</b>		Date (dd/mm/yy)	Time (24h): sld / daylight	Water Level
Segment/Reach ID: <u>B#2</u>	Left Bank / Right Bank <u>(Island)</u>	<u>14/09/2011</u>	<u>10:30</u> hrs to <u>14:00</u> hrs	<u>low</u> - mean - bankfull - overbank
Operations Division: <u>B</u>				<u>falling</u> - steady - rising
Survey by: <u>(Foot)</u> / ATV / Boat / Helicopter / Overlook /		Sun / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp: <u>15</u> deg C

2 SURVEY TEAM # <u>2</u>	Name	Organization	Signature
	<u>MERLO GAUREAU</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>
	<u>JOHN BROWN</u>	<u>DEQ</u>	<u>[Signature]</u>

**3 SEGMENT** Total Segment/Reach Length 780 m Segment/Reach Length Surveyed 780 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 P 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 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 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

292

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	%																	
<u>A</u>				<u>X</u>	<u>780</u>	<u>170</u>	<u>&lt;1</u>					<u>X</u>												<u>Db, Vg, GRASS</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

A: Re SCAT; Stain on trees and vegetation and large debris meet the conditions of the CTR, NFT

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

9/14/2011 3:47 pm  
4 pm

*Handwritten:* 56 FA 2  
56 FA 11 FS  
B42-IB  
B42-IB

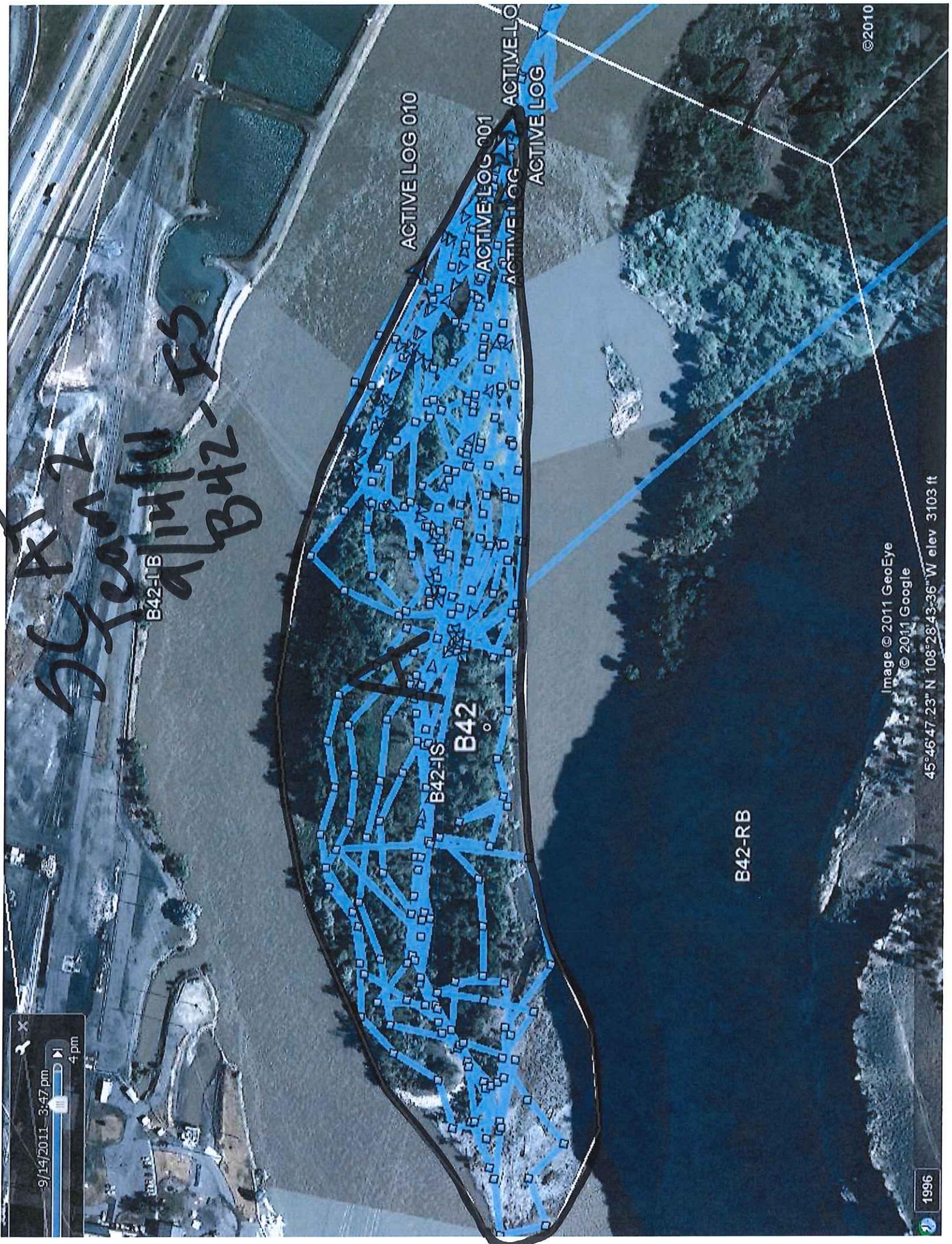


Image © 2011 GeoEye  
© 2011 Google

45°46'47.23" N 108°28'43.36" W elev 3103 ft

1996

©2010



## **Appendix F**

Completed SCAT Segment Sign-Off  
Forms

# SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

## SILVERTIP PIPELINE RELEASE

Segment   B42R   Date of Survey   9 Sept. 2011  

Dates of Initial SCAT Assessments   17 July, 19 July 2011    
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment   CTR-32  

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

Segment Assessment Complete<sup>1</sup>

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).*

Jay Parks Jay Parks/US Bureau of Land Management 9/12/11  
Sign Name Print Name/ Affiliation Date  
**Federal Representative (USBLM)**

Shawn Briggs Shawn Briggs/Montana Fish, Wildlife, and Parks  
Sign Name Print Name/ Affiliation Date  
**State Representative (DEQ/FWP)**

Richard Marty Richard Marty/Polaris (for Exxon-Mobile) 10 Sept. 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.

<sup>1</sup> 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   B42L   Date of Survey   9 Sept. 2011  

Dates of Initial SCAT Assessments   24 July, 19 July 2011    
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment   CTR-33  

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

Segment Assessment Complete<sup>1</sup>

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).*

Jay Parks Jay Parks/US Bureau of Land Management 9/12/11  
Sign Name Print Name/ Affiliation Date  
**Federal Representative (USBLM)**

Shawn Briggs Shawn Briggs/Montana Fish, Wildlife, and Parks 9/14/2011  
Sign Name Print Name/ Affiliation Date  
**State Representative (DEQ/FWP)**

Richard Marty Richard Marty/Polaris (for Exxon-Mobile) 10 Sept. 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.

<sup>1</sup> 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 B42 IS Date of Survey 14/09/2011

Dates of Initial SCAT Assessments 17 Jul 2011 (B)  
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment 32

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

Segment Assessment Complete<sup>1</sup>   
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* *9/14/11*  
Sign Name \_\_\_\_\_ Print Name/ Affiliation \_\_\_\_\_ Date \_\_\_\_\_  
**State Representative (DEQ/FWP)**

*[Signature]* *Herlo GAUVREAU, Polaris* *14/09/2011*  
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.

<sup>1</sup> 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.