

ExxonMobil Pipeline Company

**SCAT Area Transition Report for
B35**

Silvertip Pipeline Incident
Laurel, Montana

October 27, 2011



SCAT Area Transition Report for B35

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Laurel, Montana

Prepared for:
ExxonMobil Pipeline Company

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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 B35, 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 B35. 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 B35, 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 B35 is 74.9. There were access issues for the right bank, island, and a small portion of 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 B35. No oiled wildlife was observed or recovered. No Wildlife Priority Cleanup Areas were identified. No active migratory bird nests were identified in Area B35.

1.3 Summary of Environmental Sampling

Table 1 (below) summarizes samples collected within Area B35. 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 B35 are provided on Figure 3.

Table 1 Environmental Sampling Summary

Agency	Sample Num	Date	Matrix	Location	Latitude	Longitude	Results Validated?
CTEH	BIMT0721SW101	21-Jul-11	Water_Surface	BIMT_394_SW101	45.748878	-108.489835	No
CTEH	BIMT0824SO110	24-Aug-11	Soil_Surface	BIMT_535_SO110	45.74879	-108.491448	No
CTEH	BIMT0824SO112	24-Aug-11	Soil_Surface	BIMT_535_SO112	45.748177	-108.490173	No
CTEH	BIMT0824SO114	24-Aug-11	Soil_Surface	BIMT_535_SO114	45.74674	-108.497946	No
CTEH	BIMT0824SO115	24-Aug-11	Soil_Surface	BIMT_535_SO115	45.747432	-108.494839	No
CTEH	BIMT0824SO116	24-Aug-11	Soil_Surface	BIMT_535_SO116	45.748129	-108.49401	No
EPA	SPSO136D01_071611	16-Jul-11	Soil_Surface	SPSO136	45.7484814	-108.4920919	NA
EPA	SPSO136D01_071611	16-Jul-11	Soil_Surface	SPSO136	45.7484814	-108.4920919	Yes

NA - Not Available

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 two exceedances for vanadium.

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 B35 are included in Appendix B. Figure 4 provides the maximum oiling zones observed by the SCAT team during the initial surveys of Area B35.

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. 19](#), [CTR No. 27](#), and [CTR No. 42](#)).

1.6 Oil Removal Activities

Oil removal activities were conducted within Area B35 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 B35 following completion of oil removal activities. The SCAT team performed final surveys of the right and left banks and island within SCAT Area B35 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 and left banks along with the island within Area B35, no further treatment is recommended for these segments. SCAT Segment Sign-Off Forms are included as Appendix F.



**SCAT Area Transition
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Laurel, Montana

2. Transition Sign-Off Form

SCAT Area Transition Report for B35

Prepared for:

Unified Command

Date

Unified Command – RP



**SCAT Area Transition
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Silvertip Pipeline Incident
Laurel, Montana

SCAT Area Transition Report for B35

Prepared for:

Unified Command

Date

Unified Command – FOSC



**SCAT Area Transition
Report for B35**

Silvertip Pipeline Incident
Laurel, Montana

SCAT Area Transition Report for B35

Prepared for:

Unified Command

Date

Unified Command – MDEQ

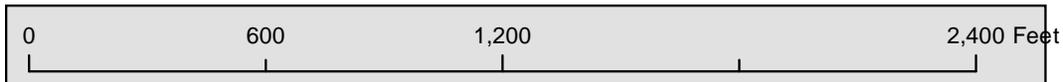
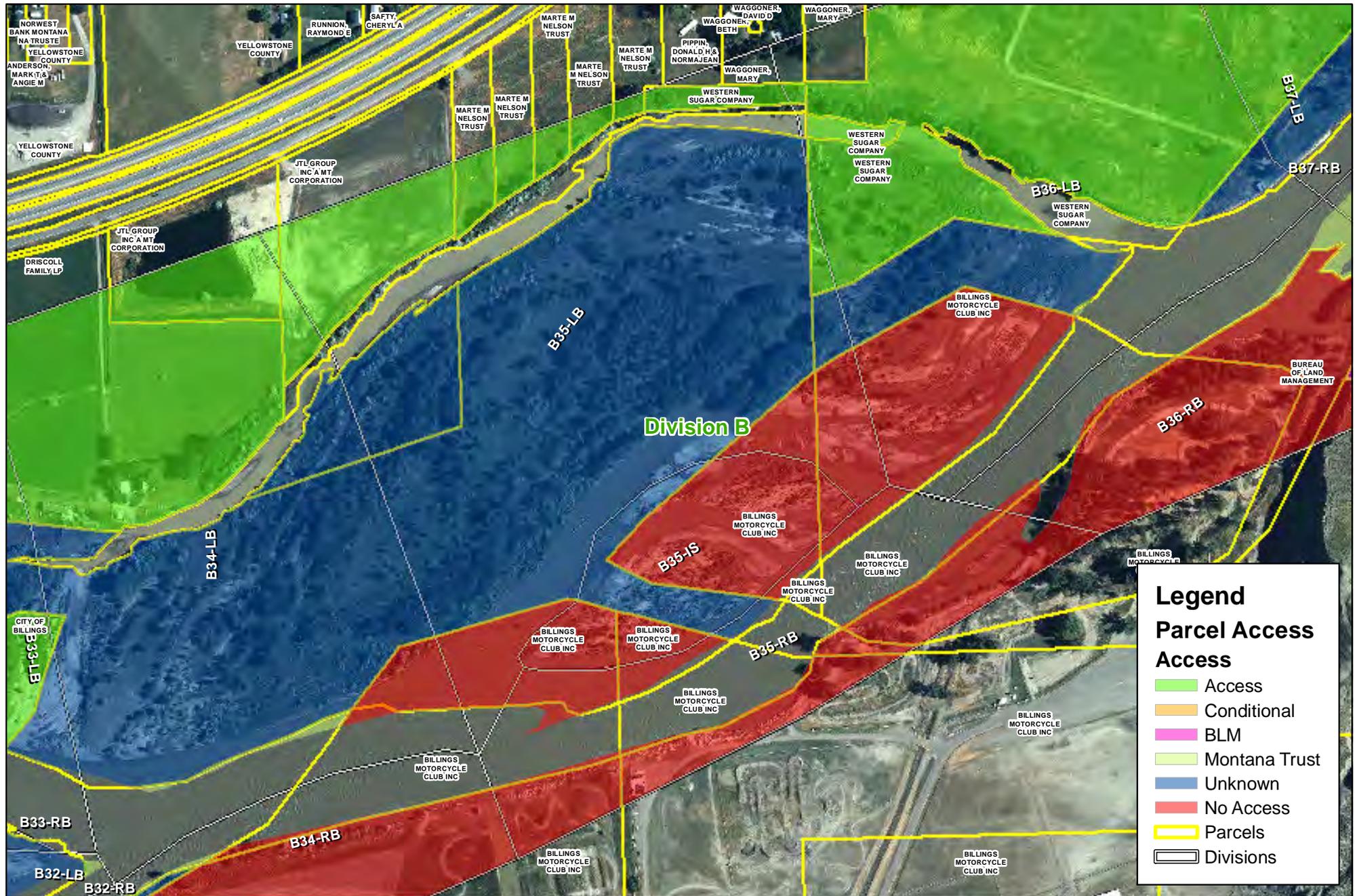
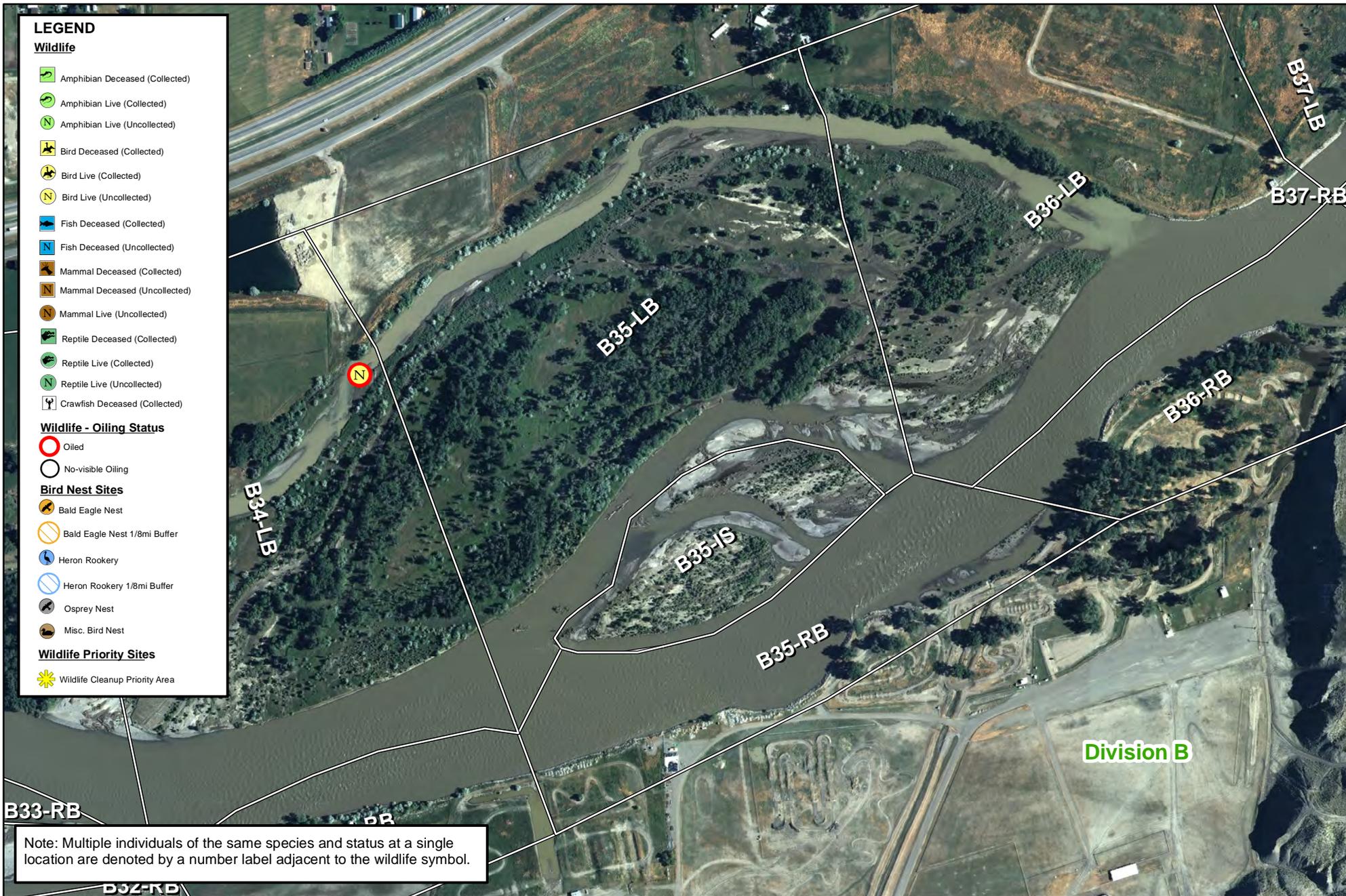


Figure 1



Note: Multiple individuals of the same species and status at a single location are denoted by a number label adjacent to the wildlife symbol.

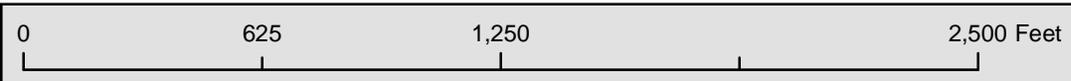
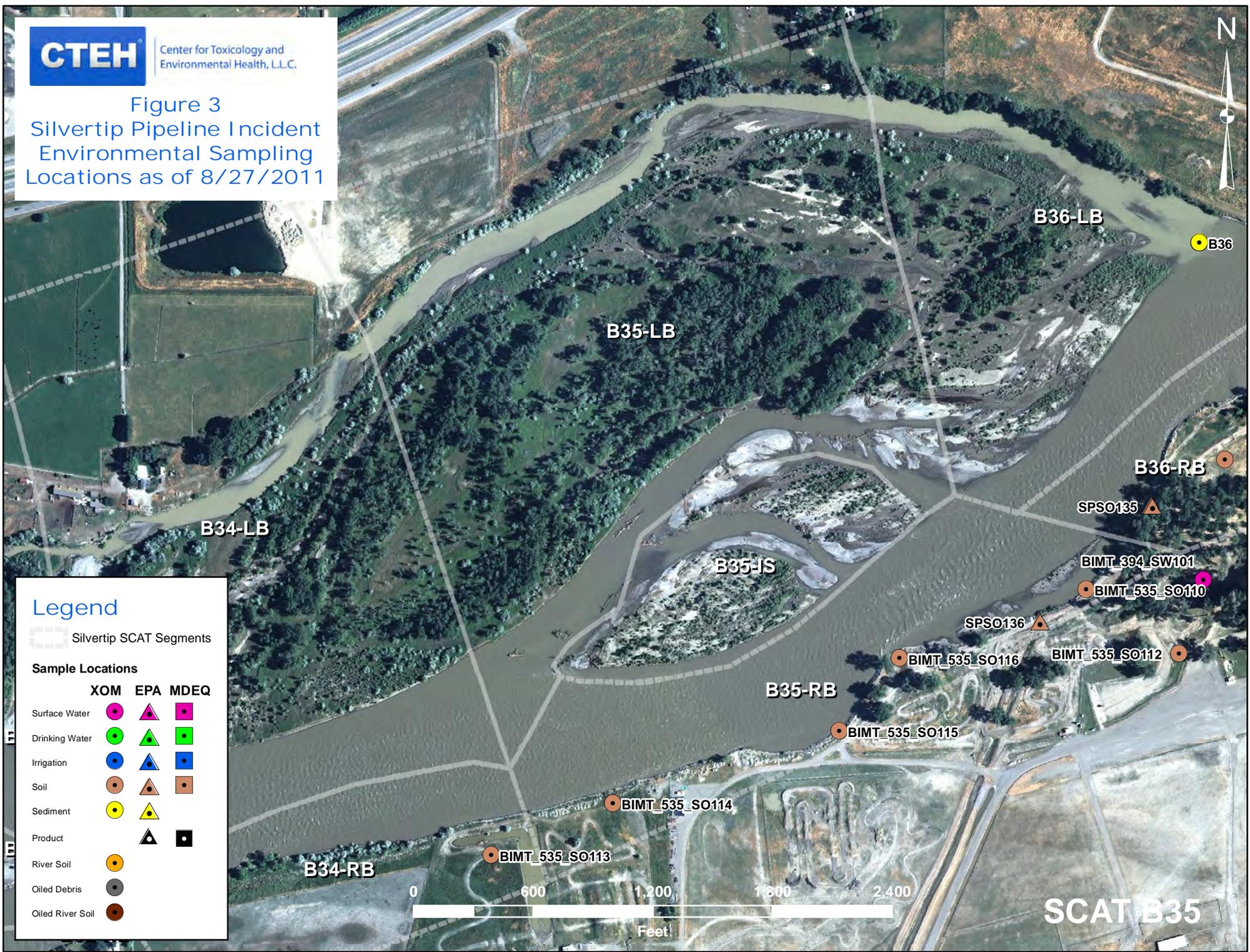


Figure 2
Wildlife Resources

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			

SCAT B35



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

Figure 4 - Maximum SCAT Observations For SCAT Area:





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



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





Appendix A

Sample Detection Summary



Detections in Samples Collected in SCAT Area B35

NA - Not Available

Detected Above Screening Level

Sample Num	Date	Sample Type	Matrix	Analytical Method	Analyte	Detected	Result	Screening Level	Result Qualifier	Units	Above?
BIMT0824SO110	08/24/2011	Field	Soil_Surface	EPA 6010	Arsenic	Y	21.2	40		mg/kg	no
BIMT0824SO110	08/24/2011	Field	Soil_Surface	EPA 6010	Barium	Y	184	820		mg/kg	no
BIMT0824SO110	08/24/2011	Field	Soil_Surface	EPA 6010	Cadmium	Y	0.74	3.8		mg/kg	no
BIMT0824SO110	08/24/2011	Field	Soil_Surface	EPA 6010	Chromium	Y	19.2	280		mg/kg	no
BIMT0824SO110	08/24/2011	Field	Soil_Surface	EPA 6010	Lead	Y	10.1	400		mg/kg	no
BIMT0824SO110	08/24/2011	Field	Soil_Surface	EPA 7471	Mercury	Y	0.031	1		mg/kg	no
BIMT0824SO110	08/24/2011	Field	Soil_Surface	EPA 6010	Nickel	Y	20.1	150		mg/kg	no
BIMT0824SO110	08/24/2011	Field	Soil_Surface	MADEP EPH	Total Extractable Hydrocarbons	Y	39.6	200		mg/kg	no
BIMT0824SO110	08/24/2011	Field	Soil_Surface	EPA 6010	Vanadium	Y	41.6	39		mg/kg	YES
BIMT0824SO112	08/24/2011	Field	Soil_Surface	EPA 6010	Arsenic	Y	20.4	40		mg/kg	no
BIMT0824SO112	08/24/2011	Field	Soil_Surface	EPA 6010	Barium	Y	400	820		mg/kg	no
BIMT0824SO112	08/24/2011	Field	Soil_Surface	EPA 6010	Cadmium	Y	1.2	3.8		mg/kg	no
BIMT0824SO112	08/24/2011	Field	Soil_Surface	EPA 6010	Chromium	Y	19.5	280		mg/kg	no
BIMT0824SO112	08/24/2011	Field	Soil_Surface	EPA 6010	Lead	Y	11.4	400		mg/kg	no
BIMT0824SO112	08/24/2011	Field	Soil_Surface	EPA 7471	Mercury	Y	0.024	1		mg/kg	no
BIMT0824SO112	08/24/2011	Field	Soil_Surface	EPA 6010	Nickel	Y	18.5	150		mg/kg	no
BIMT0824SO112	08/24/2011	Field	Soil_Surface	EPA 6010	Vanadium	Y	41	39		mg/kg	YES
BIMT0824SO114	08/24/2011	Field	Soil_Surface	EPA 6010	Arsenic	Y	26.9	40		mg/kg	no
BIMT0824SO114	08/24/2011	Field	Soil_Surface	EPA 6010	Barium	Y	208	820		mg/kg	no
BIMT0824SO114	08/24/2011	Field	Soil_Surface	EPA 6010	Cadmium	Y	1.2	3.8		mg/kg	no
BIMT0824SO114	08/24/2011	Field	Soil_Surface	EPA 6010	Chromium	Y	13.1	280		mg/kg	no
BIMT0824SO114	08/24/2011	Field	Soil_Surface	EPA 6010	Lead	Y	13.3	400		mg/kg	no
BIMT0824SO114	08/24/2011	Field	Soil_Surface	EPA 7471	Mercury	Y	0.042	1		mg/kg	no
BIMT0824SO114	08/24/2011	Field	Soil_Surface	EPA 6010	Nickel	Y	19.9	150		mg/kg	no
BIMT0824SO114	08/24/2011	Field	Soil_Surface	EPA 6010	Vanadium	Y	33.3	39		mg/kg	no
BIMT0824SO115	08/24/2011	Field	Soil_Surface	EPA 6010	Arsenic	Y	24.6	40		mg/kg	no
BIMT0824SO115	08/24/2011	Field	Soil_Surface	EPA 6010	Barium	Y	187	820		mg/kg	no
BIMT0824SO115	08/24/2011	Field	Soil_Surface	EPA 6010	Cadmium	Y	1.5	3.8		mg/kg	no
BIMT0824SO115	08/24/2011	Field	Soil_Surface	EPA 6010	Chromium	Y	14.5	280		mg/kg	no
BIMT0824SO115	08/24/2011	Field	Soil_Surface	EPA 8270 by SIM	Chrysene	Y	26	20000		ug/kg	no
BIMT0824SO115	08/24/2011	Field	Soil_Surface	EPA 6010	Lead	Y	15.2	400		mg/kg	no



Detections in Samples Collected in SCAT Area B35

NA - Not Available

Detected Above Screening Level

Sample Num	Date	Sample Type	Matrix	Analytical Method	Analyte	Detected	Result	Screening Level	Result Qualifier	Units	Above?
BIMT0824SO115	08/24/2011	Field	Soil_Surface	EPA 7471	Mercury	Y	0.033	1		mg/kg	no
BIMT0824SO115	08/24/2011	Field	Soil_Surface	EPA 6010	Nickel	Y	23	150		mg/kg	no
BIMT0824SO115	08/24/2011	Field	Soil_Surface	MADEP EPH	Total Extractable Hydrocarbons	Y	19.1	200		mg/kg	no
BIMT0824SO115	08/24/2011	Field	Soil_Surface	EPA 6010	Vanadium	Y	37.4	39		mg/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 8260	Acetone	Y	39.5	61000000		ug/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 6010	Arsenic	Y	19.7	40		mg/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 6010	Barium	Y	175	820		mg/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 8270 by SIM	Benzo(b)fluoranthene	Y	13.1	200		ug/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 6010	Cadmium	Y	1	3.8		mg/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 6010	Chromium	Y	15	280		mg/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 8270 by SIM	Chrysene	Y	11.5	20000		ug/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 8270 by SIM	Fluoranthene	Y	19.8	300000		ug/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 6010	Lead	Y	10.6	400		mg/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 7471	Mercury	Y	0.021	1		mg/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 8270 by SIM	Naphthalene	Y	23.1	4000		ug/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 6010	Nickel	Y	17.1	150		mg/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 8270 by SIM	Pyrene	Y	19.1	200000		ug/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	MADEP EPH	Total Extractable Hydrocarbons	Y	29.2	200		mg/kg	no
BIMT0824SO116	08/24/2011	Field	Soil_Surface	EPA 6010	Vanadium	Y	34.3	39		mg/kg	no



Appendix B

Initial SCAT Survey Forms and
Sketches

DB/G/S

1 GENERAL INFORMATION Date (dd/mm/yy) 14/07/11 Time (24h): std / daylight 1400 hrs to 1500 hrs Water Level low - mean - bankfull - overbank bankfull falling - steady - rising

Segment/Reach ID: B35 Left Bank / Right Bank / Island Right Bank

Operations Division: MT Fish, Wildlife & Parks

Survey by: Foot / ATV / Boat / Helicopter / Overlook / Sup / Clouds / Fog / Rain / Snow / Windy / Calm Air Temp +/- deg C

2 SURVEY TEAM #

name	organization	contact phone number
<u>Mike Puggles</u>	<u>MT Fish, Wildlife & Parks</u>	<u>(406) 671-8863</u>
<u>Mike Connell</u>	<u>OSPR</u>	<u>(805) 331-1867</u>
<u>Bruce Klam</u>	<u>Polaris</u>	<u>(206) 953-6904</u>
<u>Earl Radonski</u>	<u>MT Fish, Wildlife & Parks</u>	<u>(406) 678-2198</u>

3 SEGMENT Total Segment/Reach Length 695 m Segment/Reach Length Surveyed 959 m

Start GPS: LATITUDE N 45 deg. 74680 min. LONGITUDE W 108 deg. 49843 min. Datum: _____

End GPS: LATITUDE N 45 deg. 74895 min. LONGITUDE W 108 deg. 49117 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 P (type) rip-rap Wetland: Swamp _____ Bog/Fen _____ Marsh _____

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

Cliff or Bluff: Est Height _____ m canyon _____ manmade _____ meander X confined or leveed _____ Substrate Type: rip-rap

Sloped: 45 (>5°) (15°) (30°) straight _____ braided _____ oxbow _____ flood plain valley X 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 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 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	Width	Distrib.	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR	AP		NO	
A			<u>X</u>		453	0.2	70			<u>X</u>			<u>X</u>									veg

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

TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH	OILED ZONE	SUBSURFACE OIL CHARACTER						WATER TABLE	SHEEN COLOUR	CLEAN BELOW	SUBST. TYPE(S)	
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR					NO
	<u>N/A</u>																

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

Oiled vegetation along upper bank in rip-rap gaps. Lower band of oil ~ 1m above sediment.

cleanup: recommend cutting oiled vegetation in zone A.

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

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

1 GENERAL INFORMATION				Date (dd/mm/yy)	Time (24h): std / daylight	Water Level																	
Segment/Reach ID: <u>B35</u> Left Bank / Right Bank / Island				<u>14/07/11</u>	<u>1400</u> hrs to <u>1500</u> hrs	low - mean - (bankfull) - overbank falling - (steady) - rising																	
Operations Division:						Air Temp + / - den C																	
Survey by: (Foot / ATV / Boat / Helicopter / Overlook /)				(Sun / Clouds / Fog / Rain / Snow / Windy / Calm)																			
2 SURVEY TEAM #				name	organization	contact phone number																	
<u>Mike Puggles</u>				<u>Mike Puggles</u>	<u>MT Fish, Wildlife & Parks</u>	<u>(406) 671-8863</u>																	
<u>Mike Cornell</u>				<u>Mike Cornell</u>	<u>OSPR</u>	<u>(805) 331-1867</u>																	
<u>Bruce Kvan</u>				<u>Bruce Kvan</u>	<u>Polaris</u>	<u>(206) 953-6904</u>																	
<u>Paul Padonko</u>				<u>Paul Padonko</u>	<u>MT Fish, Wildlife & Parks</u>	<u>(406) 698-2198</u>																	
3 SEGMENT				Total Segment/Reach Length	<u>695</u> m	Segment/Reach Length Surveyed	<u>959</u> m																
Start GPS: LATITUDE <u>N 45</u> deg. <u>24680</u> min. LONGITUDE <u>W 108</u> deg. <u>49843</u> min. Datum: _____																							
End GPS: LATITUDE <u>N 45</u> deg. <u>24895</u> min. LONGITUDE <u>W 108</u> deg. <u>49117</u> 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 _____ Shell _____				Manmade: Solid _____ Permeable <u>P</u> (type) <u>rip-rap</u>				Wetland: Swamp _____ Bog/Fen _____ Marsh _____															
Sediment Bank: Clay/Mud _____ Sand _____ Mixed _____ Pebble/Cobble _____ Boulder _____				Peat/Organic _____				Vegetated Bank? <u>S</u> Wooded Upland? <u>S</u>															
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 <u>X</u> confined or leveed _____				Substrate Type: <u>rip-rap</u>															
Sloped: <u>25</u> (>5°)(15°)(30°)				straight _____ braided _____ oxbow _____ flood plain valley <u>Y</u>				Forested / Vegetated / Bare															
4C RIVER CHANNEL CHARACTER				circle or select as appropriate																			
est. width: <1m 1-10m <u>10-100m</u> >100m _____ m				est. water depth: <1m 1-3m <u>3-10m</u> >10m _____ m																			
shoal(s) present <u>Y(N)</u> point bar present <u>Y(N)</u>				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 - <u>same</u> - rising																			
5 OPERATIONAL FEATURES				Suitable backshore staging <u>Y(N)</u> Access: Direct from backshore <u>Y(N)</u> Alongshore from next segment <u>Y(N)</u>																			
Debris: <u>Y(N)</u> oiled <u>Y(N)</u> amount _____ bags or _____ trucks				access restrictions																			
Oiled trees/shrubs <u>Y(N)</u> River Current strong <u>Y(N)</u>				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	Width	Distrib.	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC		SR	AP	NO		
	m	m	%																				
<u>180</u> A			<u>X</u>		<u>453</u>	<u>0.2</u>	<u>70</u>			<u>X</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																			

Oiled vegetation along upper bank in rip-rap gaps. Lower band of oil ~ 1m above sediment.

Cleanup: commenced cutting oiled vegetation in zone A.

1 GENERAL INFORMATION Date (dd/mm/yy) 14/07/11 Time (24h): std / daylight 1400 hrs to 1500 hrs Water Level low - mean - bankfull - overbank falling - (steady) - rising

Segment/Reach ID: B35 Left Bank / Right Bank / Island Operations Division: Survey by: Foot / ATV / Boat / Helicopter / Overlook / Sun / Clouds / Fog / Rain / Snow / Windy / Calm Air Temp + / - deg C

2 SURVEY TEAM # name organization contact phone number
 Mike Puggles mitk MIT Fish, Wildlife & Parks (406) 671-8863
 Mike Colwell OSPR (805) 331-1867
 Bruce Kwan Palaris (206) 953-6704
 East Padonski East Padonski MIT Fish, Wildlife & Parks (406) 698-2198

3 SEGMENT Total Segment/Reach Length 695 m Segment/Reach Length Surveyed 959 m
 Start GPS: LATITUDE N 45 deg. 74680 min. LONGITUDE W 108 deg. 49843 min. Datum:
 End GPS: LATITUDE N 45 deg. 74675 min. LONGITUDE W 108 deg. 49717 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 P (type) rip-rap Wetland: Swamp Bog/Fen Marsh
 Sediment Bank: Clay/Mud Sand Mixed Pebble/Cobble Boulder Peat/Organic Vegetated Bank S 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 X confined or leveed Substrate Type: rip-rap
 Sloped: 4 (>5°)(15°)(30°) straight braided oxbow flood plain valley Y 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
 Oiled trees/shrubs Y/N River Current strong Y/N Other Features:

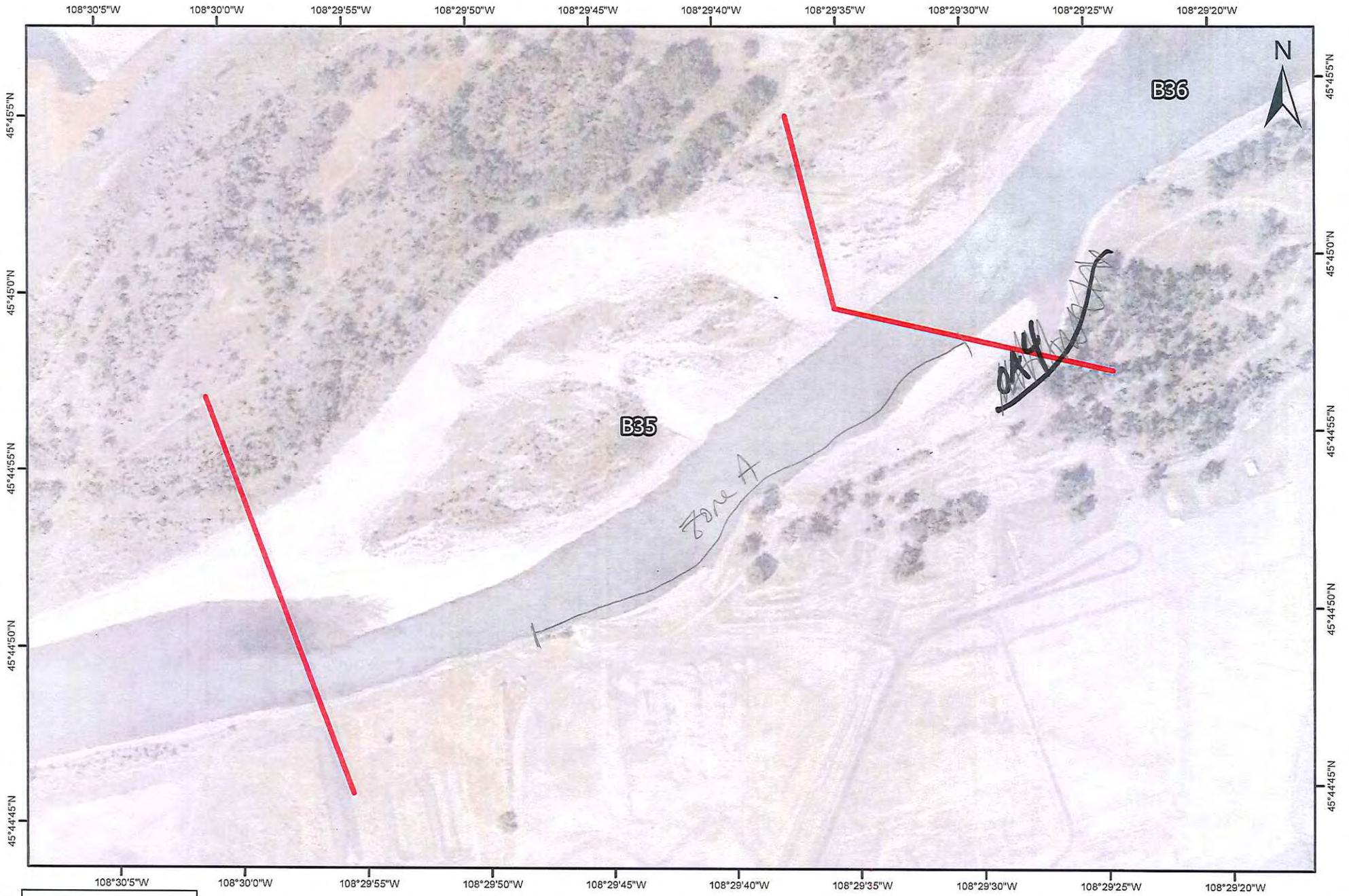
6 SURFACE OILING CONDITIONS begin with "A" in the lowest tidal zone - circle the zone/s that correspond to primary shoreline type

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		455	0.2	70			X			X									veg

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					

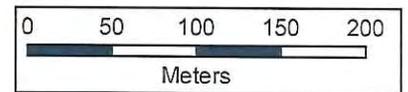
8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations
 Oiled vegetation along upper bank in rip-rap gaps. Lower band of oil ~ 1m above sediment.
 Cleanup: remove and cut oiled vegetation in zone A.



B35 -
(L/R/I)??

DATE:
TEAM:

COMMENTS:



DB/S/S

REPORTING SUMMARY FORM for Silvertip Pipeline Incident

INFORMATION

Segment ID: B35 Left Bank / Right Bank / Island
 Division: B
 Date (dd/mm/yy): 19/07/11
 Time (24h): std / daylight
1004 hrs to 1006 hrs
 Water Level: low - mean - bankfull - overbank
falling steady - rising
 by: Foot / ATV / Boat / Helicopter / Overlook /
 (Sun) Clouds / Fog / Rain / Snow / Windy / Calm
 Air Temp + / - 35 deg C

SURVEY TEAM # 5

name	organization	contact phone number
Bob Nailon	Cardno ENTRIX	713 817 2469
John Beach	EPA	707 364 0491
Ken Frazer	FWP	406 247 2961

3 SEGMENT Total Segment/Reach Length 640 m Segment/Reach Length Surveyed 640 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) rip rap Wetland: Swamp ___ Bog/Fen ___ Marsh ___

Sediment Bank: Clay/Mud ___ Sand ___ Mixed S Pebble/Cobble S 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

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

Sloped: ___ (>5°)(15°)(30°) straight X 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 160 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

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

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	525		1						P									veg bank
B				X	115		60						P									if 11

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 = Y 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 5104) Video Tape Yes/No (tape #

108°30'5"W 108°30'0"W 108°29'55"W 108°29'50"W 108°29'45"W 108°29'40"W 108°29'35"W 108°29'30"W 108°29'25"W 108°29'20"W



B36

B35

A

B

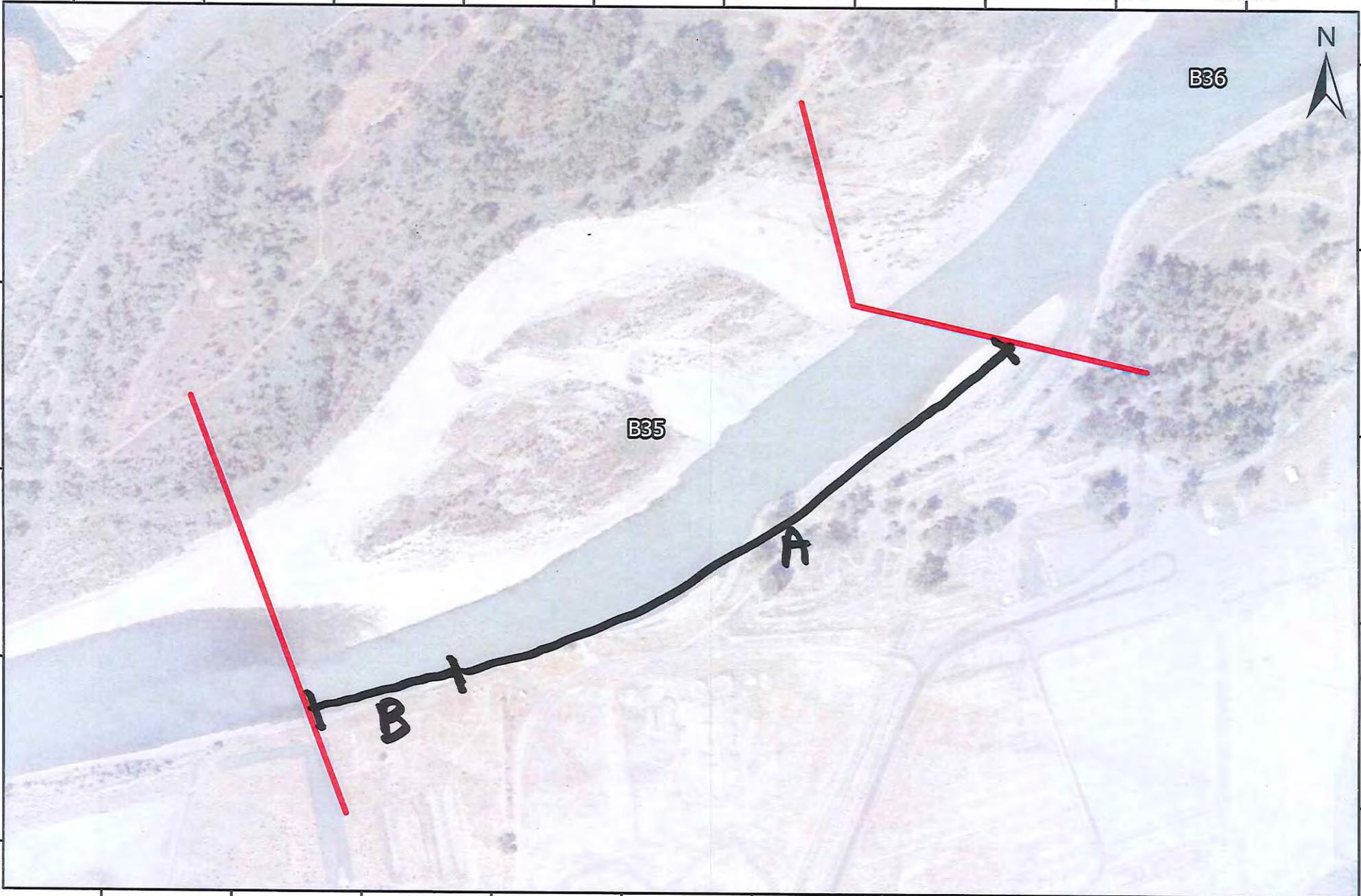
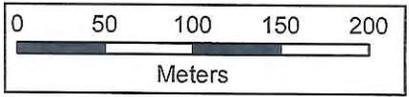
45°45'5"N
45°45'0"N
45°44'55"N
45°44'50"N
45°44'45"N

108°30'5"W 108°30'0"W 108°29'55"W 108°29'50"W 108°29'45"W 108°29'40"W 108°29'35"W 108°29'30"W 108°29'25"W 108°29'20"W

B35 -
(L/R/I)??

DATE:
TEAM:

COMMENTS:



DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy) 19-Jul-2011	Time (24h): std / daylight 0950 hrs to 1010 hrs	Water Level low - mean - <u>bankfull</u> - overbank falling - steady - rising
Segment/Reach ID: B35 <u>Left Bank</u> / Right Bank / Island				
Operations Division: B				
Survey by: Foot / ATV / <u>Boat</u> / Helicopter / Overlook / _____		Sun / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp +/- <u>31</u> deg C

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

3 SEGMENT Total Segment/Reach Length _____ m Segment/Reach Length Surveyed 576 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: S

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

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

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

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

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m 130m 90m 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 5 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	Width	Distrib.	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR		AP	NO	
A				X	65	1															X	Grass, trees
B				X	15	1	100			X	X			X								Grass, trees
C				X	496	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	OILED ZONE	SUBSURFACE OIL CHARACTER						WATER TABLE	SHEEN COLOUR	CLEAN BELOW	SUBST. TYPE(S)						
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR					NO	cm	B, R, S, N	Yes / No		
					cm	cm-cm																

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 1109-1110 (Lee)



B35

A

B

C

Image © 2011 GeoEye

©2010 Google

Imagery Date: 8/5/2009

45°44'55.18" N 108°29'44.59" W elev 3139 ft

Eye alt 5509 ft

DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page 1 of 1

1 GENERAL INFORMATION		Date (dd/mm/yy) <u>22/07/11</u>	Time (24h): std / daylight <u>0851</u> hrs to <u>1255</u> hrs	Water Level low - mean - bankfull - overbank falling - steady - rising Air Temp +/- <u>24</u> deg C
Segment/Reach ID: <u>B35</u> (Left Bank / Right Bank / Island)				
Operations Division: <u>B3</u>				
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook /		Sun / Clouds / Fog / Rain / Snow / Windy / Calm		

2 SURVEY TEAM # <u>0</u>	Name	Organization	Signature
	<u>Joe Boyle</u>	<u>Cordoba ENTRIX</u>	<u>[Signature]</u>
	<u>JAMES BOWERS</u>	<u>USCG PAC STRIKE TEAM</u>	<u>727-244-8292</u>
	<u>Darrick Turner</u>	<u>MT DEC</u>	<u>406-998-0970 444-1524</u>

3 SEGMENT Total Segment/Reach Length 570 m Segment/Reach Length Surveyed 570 m

Start GPS: LATITUDE 45.74486 deg. min. LONGITUDE 108.50671 deg. min. Datum: WGS 84

End GPS: LATITUDE 45.75187 deg. min. LONGITUDE 108.49343 deg. min.

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

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

Sediment Bank: Clay/Mud ___ Sand ___ Mixed ___ Pebble/Cobble ___ Boulder ___ Peat/Organic ___ Vegetated Bank: ___ Wooded Upland: 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 S confined or leveed ___ Substrate Type: WV

Sloped: (>5°)(15°)(30°) 25° 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 YN point bar present YN 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 YN Access: Direct from backshore YN Alongshore from next segment YN

Debris: YN oiled YN amount ___ bags or ___ trucks access restrictions

Oiled trees/shrubs YN River Current strong YN 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				<u>P</u>	<u>570</u>	<u>300</u>	<u>0</u>														<u>P</u>	<u>mud</u>
B				<u>P</u>	<u>350</u>	<u>20</u>	<u>10</u>			<u>P</u>	<u>S</u>		<u>P</u>									<u>mud</u>

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

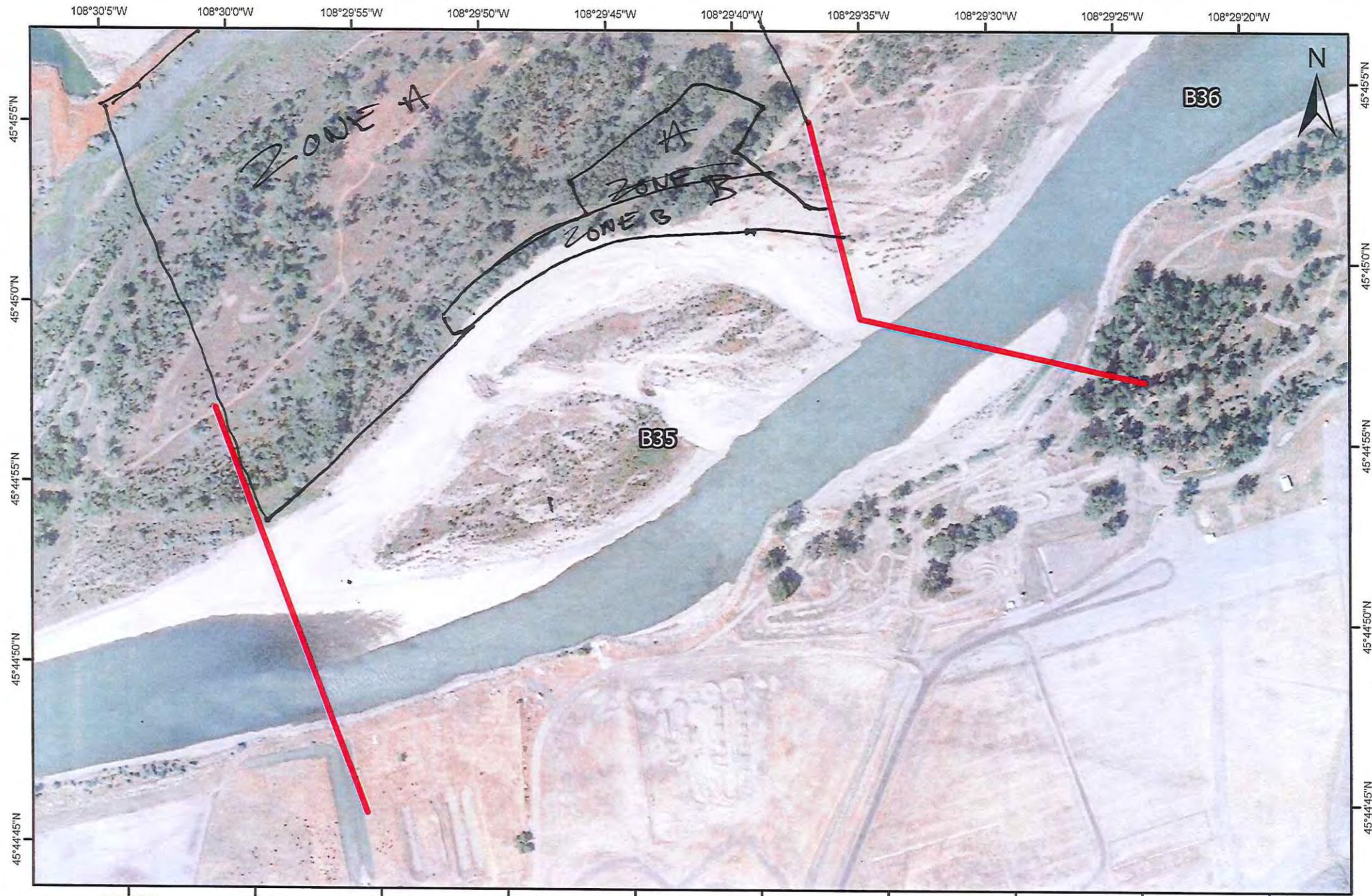
TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER					WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes / No	SUBST. TYPE(S)
	MS	LB	UB	OB			SAP	OP	PP	OR	OF				

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

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

Zone A: no oil observed. no further treatment
 Zone B: light oiling of debris and vegetation
 recommendation: hand removal / weed whacking of oiled veg and debris

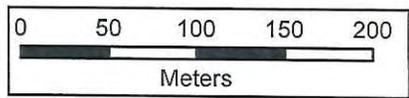
Sketch Yes/No Photos Yes/No Frames 139-139 Photographer JB



B35 -
(L/R/I)??

DATE:
TEAM:

COMMENTS:



DB/G/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>B35</u> <input checked="" type="radio"/> Left Bank / <input type="radio"/> Right Bank / <input type="radio"/> Island		<u>23/07/11</u>	<u>13:00</u> hrs to <u>15:30</u> hrs	low - <input checked="" type="radio"/> mean - <input type="radio"/> bankfull - <input type="radio"/> overbank
Operations Division: <u>SCAT</u>				<input checked="" type="radio"/> falling - <input type="radio"/> steady - <input type="radio"/> rising
Survey by: <input checked="" type="radio"/> Foot / <input type="radio"/> ATV / <input type="radio"/> Boat / <input type="radio"/> Helicopter / <input type="radio"/> Overlook / _____		<input checked="" type="radio"/> (Sun) Clouds / <input type="radio"/> Fog / <input type="radio"/> Rain / <input type="radio"/> Snow / <input type="radio"/> Windy / <input type="radio"/> Calm		Air Temp +/- <u>30</u> deg C

2 SURVEY TEAM #	Name	Organization	Signature
<u>4</u>	<u>JOHN MATRUSEK</u>	<u>Cardus Enviro</u>	
	<u>COURTNEY TYLER</u>	<u>MT FWP</u>	
	<u>GARY MCLAY</u>	<u>US EPA</u>	

3 SEGMENT Total Segment/Reach Length 544 m Segment/Reach Length Surveyed 544 m

Start GPS: LATITUDE 45 deg. 44.928 min. LONGITUDE 108 deg. 36.015 min. Datum: WGS84

End GPS: LATITUDE 45 deg. 45.011 min. LONGITUDE 108 deg. 29.602 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 S 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 S confined or leveed _____ Substrate Type: veg

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 1 bags or _____ trucks access restrictions

Oiled trees/shrubs Y / N River Current strong Y N Other Features: Access from River is best

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

538
539

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>P</u>	<u>544</u>	<u>275</u>	<u>SD</u>			<u>P</u>	<u>S</u>							<u>P</u>							<u>veg</u>
<u>B</u>				<u>P</u>	<u>544</u>	<u>25</u>	<u>O</u>																	<u>Neg</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 Low Priority debris pile bag and Removal. Also spot vegetation cut and removal

Zone B - no oil

In Google earth

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

108°30'5"W 108°30'0"W 108°29'55"W 108°29'50"W 108°29'45"W 108°29'40"W 108°29'35"W 108°29'30"W 108°29'25"W 108°29'20"W



B36

See Google Earth
file for polygons
this map **B35** does not
cover the surveyed
area

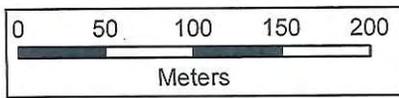


108°30'5"W 108°30'0"W 108°29'55"W 108°29'50"W 108°29'45"W 108°29'40"W 108°29'35"W 108°29'30"W 108°29'25"W 108°29'20"W

B35 -
(L/R/I)??

DATE:
TEAM:

COMMENTS:



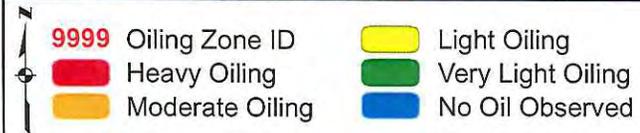


Figure 4 - Maximum SCAT Observations For SCAT Area: B35



DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page 1 of 2

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>B35</u> <input checked="" type="radio"/> Left Bank <input type="radio"/> Right Bank / Island		<u>26/08/11</u>	<u>0845</u> hrs to <u>1425</u> hrs	low - <input checked="" type="radio"/> mean <input type="radio"/> bankfull - overbank
Operations Division: <u>B</u>		<input checked="" type="radio"/> Sun <input type="radio"/> Clouds / Fog / Rain / Snow / Windy / <input checked="" type="radio"/> Calm		<input checked="" type="radio"/> falling <input type="radio"/> steady - rising
Survey by: <input checked="" type="radio"/> Foot <input type="radio"/> ATV / Boat / Helicopter / Overlook /				Air Temp +/- <u>31</u> deg C

2 SURVEY TEAM # <u>2</u>	Name	Organization	Signature
	<u>Joe Boyle</u>	<u>Cardno Entrix</u>	<u>[Signature]</u>
	<u>Nathan Hammond</u>	<u>Cardno Entrix</u>	<u>[Signature]</u>
	<u>Dave Hergenrider</u>	<u>FWP</u>	<u>[Signature]</u>
	<u>Laura Alvey</u>	<u>DEQ</u>	<u>[Signature]</u>
	<u>Stephen Ball</u>	<u>EPA</u>	<u>[Signature]</u>

3 SEGMENT Total Segment/Reach Length 580 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 Pebble/Cobble _____ Boulder _____ Peat/Organic _____ Vegetated Bank: Wooded Upland:

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

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

Cliff or Bluff: _____ Est Height _____ 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 100m est. water depth: <1m 1-3m 3-10m >10m _____ m

shoal(s) present point bar present 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 N Access: Direct from backshore N Alongshore from next segment N

Debris N oiled N amount 15 bags or _____ trucks access restrictions

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

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

OIL ZONE	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER							SUBST. TYPE(S)			
					Length	Width	Distrib.																
	ID	MS	LB	UB	OB	m	m	%	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR		AP	NO	
A		S	S	P	55	400	0															X	
B				P	370	90	Cl			P	S							P					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 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 N Overbank Survey Completed N Shoreline Survey Completed N

Zone A - NOO - No Further Treatment

Zone B - ATM1, ATM2, ATM9 utilized by hot shot crew on site; no further treatment required.

Sketch Yes No Photos Yes No Frames _____ Photographer _____



90

025

004

003

00

096

026

B36-LB

028

027

B35-LB

B35 LB

Team 2
8/26/11

B35-IS

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© 2010

1996

45°45'04.77" N 108°29'48.93" W elev 3129 ft

B35-RB

DB/6/5

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page 1 of 1

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>B35</u> Left Bank / Right Bank <u>(Island)</u>		<u>28/07/11</u>	<u>1206</u> hrs to <u>1240</u> hrs	low - mean <u>(bankfull)</u> overbank
Operations Division:				<u>(falling)</u> steady - rising
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook /		Sun / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp +/- <u>28</u> deg C

2 SURVEY TEAM # <u>2</u>		Name <u>SAK</u> Organization <u>Cardno Centix</u>	Signature <u>Steve Kennedy</u>
<u>Steve Kennedy</u>	<u>Cardno Centix</u>	<u>Steve Kennedy</u>	
<u>Gary Riley</u>	<u>USEPA</u>	<u>[Signature]</u>	
<u>Courtney Tyree</u>			

3 SEGMENT Total Segment/Reach Length 550 m Segment/Reach Length Surveyed 550 m

Start GPS: LATITUDE 45° 44.889 deg. _____ min. LONGITUDE 108° 29.911 deg. _____ min. Datum: WGS 84

End GPS: LATITUDE 45° 44.976 deg. _____ min. LONGITUDE 108° 29.608 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 N/A Manmade: Solid _____ Permeable _____ (type) N/A Wetland: Swamp _____ Bog/Fen _____ Marsh _____ N/A

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

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

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

Cliff or Bluff: _____ Est Height 3 m canyon _____ manmade _____ meander S confined or leveed _____ Substrate Type: _____

Sloped: S (>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 (S100m) 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 none

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			<u>P</u>	<u>S</u>	<u>550</u>	<u><3</u>	<u><5</u>			<u>P</u>	<u>S</u>		<u>P</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

B-35 zone A u.sporadic st of CT. Stain along shore-line grasses and CT on shrubs inland.

* no action recommended.

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

108°30'5"W 108°30'0"W 108°29'55"W 108°29'50"W 108°29'45"W 108°29'40"W 108°29'35"W 108°29'30"W 108°29'25"W 108°29'20"W



B36

ZONE A

B35

45°45'5"N

45°45'5"N

45°45'0"N

45°45'0"N

45°44'55"N

45°44'55"N

45°44'50"N

45°44'50"N

45°44'45"N

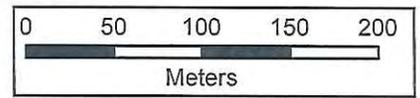
45°44'45"N

108°30'5"W 108°30'0"W 108°29'55"W 108°29'50"W 108°29'45"W 108°29'40"W 108°29'35"W 108°29'30"W 108°29'25"W 108°29'20"W

B35 -
(L/R/I)??

DATE:
TEAM:

COMMENTS:





Appendix C

Pre-Inspection Survey Transmittal

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



Appendix D

Post-Inspection Survey Transmittal

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



Appendix E

Final SCAT Survey Forms and
Sketches

DB/6

1 GENERAL INFORMATION		Date (9-2-11)	Time (24h): std / daylight	Water Level
Segment/Reach ID: B35 Left Bank / Right Bank / Island				low - <u>mean</u> - bankfull - overbank
Operations Division: B			1545 hrs to 1610 hrs	falling - steady - rising
Survey by: <u>Foot / ATV / Boat / Helicopter / Overlook /</u>		<u>Sun /</u> Clouds / Fog / Rain / Snow / Windy / <u>Calm</u>		Air Temp +/- 80 F deg C

2 SURVEY TEAM # 4	Name	Organization	Signature
Michael Dirks	Cardno ENTRIX		<i>Michael D. Dirks</i>
David Eric Harlow	Cardno ENTRIX		<i>David Harlow</i>
Larisa Leonova	EPA		<i>Larisa Leonova</i>
Brad Olszeski	FWP		<i>Brad Olszeski</i>

3 SEGMENT Total Segment/Reach Length 730 m Segment/Reach Length Surveyed 43 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) riprap _____ 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

Sloped: _____ (>5°)(15°)(30°) straight braided _____ oxbow _____ flood plain valley Substrate Type: Sand _____ 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: Motorcycle track

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	
2095 A			P	S	43	40	1			S	P						X					Grass & debris in riprap

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

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

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

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

Rescat of area treated by OPS. Only surveyed small section with access.

Zone A: 2-3 patches (.3mx.3m) with oiled grass and debris- stains, coat, tar consistency. Transferable. Material collected- NFT.



B35RB
9/2/11
Team 4

DBG

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>B35</u> (Left Bank) / Right Bank / Island		<u>23/08/11</u>	<u>1230</u> hrs to <u>1600</u> hrs	low - mean - bankfull - overbank
Operations Division: <u>B</u>		Survey by: <u>Foot / ATV / Boat / Helicopter / Overlook /</u> <u>Sun</u> / Clouds / Fog / Rain / Snow / Windy / Calm		falling - steady - rising
				Air Temp + / - <u>31</u> deg C

2 SURVEY TEAM # <u>132</u>	Name	Organization	Signature
	<u>Joe Boyle</u>	<u>Cardno ENTRIX</u>	<u>[Signature]</u>
	<u>John Brown</u>	<u>MDER</u>	<u>[Signature]</u>
	<u>Nathan Hammond</u>	<u>Cardno Entrix</u>	<u>[Signature]</u>
	<u>Cherie Fox</u>	<u>Cardno Entrix</u>	<u>[Signature]</u>
	<u>Lance Richman</u>	<u>US EPA</u>	<u>[Signature]</u>

3 SEGMENT Total Segment/Reach Length 560 m Segment/Reach Length Surveyed 560 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 _____ Pebble/Cobble S 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

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

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 200 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 3 bags or _____ trucks access restrictions backshore channel

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	S	P	S	S	450	170	L1	S	P	S							P				veg
<u>BA</u>			<u>S</u>	<u>P</u>	<u>560</u>	<u>260</u>	<u>L1</u>	<u>S</u>	<u>P</u>	<u>S</u>							<u>P</u>				<u>veg</u>

1810

CK 8/24/11

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: trace distr oil coated / stained / covered veg & debris~~
CK 8/24/11 hot shot crew cleaned - NFT

Zone B: trace distr oil coated / stained / covered veg & debris
hot shot crew cleaned - NFT

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

8/23/2011 3:42:24 pm



4-LB

R35-LB

007

006

009

010

003

016

001

ACTIVE LOG 002

008

R35-IS

B35
SCAT 1+2
23 Aug 2011

4-LB

005

ACTIVE LOG 003

R35-RB

004

005

006

~~B35-LB~~

018

1996

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45°45'01.76" N 108°29'50.31" W elev 3133 ft

DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page 1 of 4

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>B35</u>	Left Bank / Right Bank / Island	<u>23/08/11</u>	<u>1230</u> hrs to <u>1600</u> hrs	low - mean - bankfull - overbank
Operations Division: <u>B</u>	<u>CK 8/24/11</u>			falling - steady - rising
Survey by: <u>Foot</u> ATV / Boat / Helicopter / Overlook /	<u>Sun</u> Clouds / Fog / Rain / Snow / Windy / Calm			Air Temp +/- <u>31</u> deg C

2 SURVEY TEAM # <u>152</u>	Name	Organization	Signature
	<u>Joe Boyle</u>	<u>Cardno ENTRIX</u>	<u>[Signature]</u>
	<u>John Brogan</u>	<u>MOER</u>	<u>[Signature]</u>
	<u>Nathan Hammond</u>	<u>Cardno Entrix</u>	<u>[Signature]</u>
	<u>Chris Pa</u>	<u>Cardno Entrix</u>	<u>[Signature]</u>
	<u>Lance Richman</u>	<u>US EPA</u>	<u>[Signature]</u>

3 SEGMENT Total Segment/Reach Length 560 m Segment/Reach Length Surveyed 560 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 _____ Pebble/Cobble S 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

Cliff or Bluff: Est Height _____ m canyon _____ manmade _____ meander 2 confined or leveed _____

Sloped: >5° (5°) (15°) (30°) straight _____ braided 2 oxbow _____ flood plain valley _____

Substrate Type: Sand

Forested (Vegetated) / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m 160m 200 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 Access: Direct from backshore Y Alongshore from next segment Y

Debris: Y N oiled Y N amount 3 bags or _____ trucks access restrictions backshore channel

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>A</u>		<u>S</u>	<u>P</u>	<u>S</u>	<u>450</u>	<u>170</u>	<u>L</u>		<u>S</u>	<u>P</u>	<u>S</u>						<u>P</u>				<u>red</u>
B			S	P	560	260	L		S	P	S						P				red

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: trace distr oil coated / stained / covered veg & debris hotshot crew cleaned - NFT

Zone B: ~~trace distr oil coated / stained / covered veg & debris hotshot crew cleaned - NFT~~

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

8/23/2011 3:42:24pm



B35-LB

007

006

009

010

016

01

ACTIVE LOG 002

008

B35-IS

B35-IS
SCAT 1+2
23 Aug 2011

ACTIVE LOG 003

005

007

B35-RB

~~B35-LB~~

Image © 2011 GeoEye
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45°45'01.76" N 108°29'50.31" W elev 3133 ft

1996



Appendix F

Completed SCAT Segment Sign-Off
Forms

SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

SILVERTIP PIPELINE RELEASE

Segment B35 RB Date of Survey 9/2/11

Dates of Initial SCAT Assessments 4/20/11 7/19/11
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment 42

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

Segment Assessment Complete¹ - No Access to Motorcycle Club Land
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).

Larisa Leonova LARISA LEONOVA 9/3/11
Sign Name Print Name/ Affiliation Date
Federal Representative (EPA/USCG)

Brad Olszewski BRAD OLSEWSKI / FWP 9/2/11
Sign Name Print Name/ Affiliation Date
State Representative (DEQ/FWP)

David Eric Harlow David Eric Harlow 9/2/11
Sign Name Print Name/ Affiliation Cardno ENTRIX 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.

