

ExxonMobil Pipeline Company

**SCAT Area Transition Report
for C02**

Silvertip Pipeline Incident
Laurel, Montana

October 22, 2011



SCAT Area Transition Report for C02

Silvertip Pipeline Incident
Laurel, Montana

Prepared for:
ExxonMobil Pipeline Company

Prepared by:
ARCADIS G&M of North Carolina, Inc.
11000 Regency Parkway
West Tower, Suite 205
Cary, North Carolina 27518-8518
Tel 919.469.1952
Fax 919.469.5676

Our Ref.:
B0085883.1103

Date:
October 22, 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.

1. Executive Summary of Oil Removal Activities	1
1.1 Land Ownership and Access Issues	1
1.2 Cultural, Historic, and Natural Resource Constraints	1
1.3 Summary of Environmental Sampling	1
1.4 Summary of Initial SCAT Surveys	2
1.5 Applicable Compiled Treatment Recommendations	2
1.6 Oil Removal Activities	2
1.7 Pre-Inspection Survey Transmittal	3
1.8 Post-Inspection Survey Transmittal	3
1.9 Summary of Final SCAT Surveys	3
1.10 SCAT Area Conclusions	3

2. Transition Sign-Off Form **4**

Table

Table 1	Environmental Sampling Summary	2
---------	--------------------------------	---

Figures

Figure 1	Aerial Map with Parcel Boundaries
Figure 2	Wildlife Resources
Figure 3	Sample Location Map
Figure 4	Maximum SCAT Observations
Figure 5	Final SCAT Observations

Appendices

A	Sample Detection Summary
B	Initial SCAT Survey Forms and Sketches
C	Pre-Inspection Survey Transmittal
D	Post-Inspection Survey Transmittal
E	Final SCAT Survey Forms and Sketches
F	Completed SCAT Segment Sign-Off Forms

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 C02, 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 C02. 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 C02, 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 C02 is 27.1. There were no access issues for the island, left bank, and right 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 limited inspections of Area C02 due to the low level of oiling in Division C. No oiled wildlife was observed or recovered. No Wildlife Priority Cleanup Areas were identified. A bald eagle (*Haliaeetus leucocephalus*) nest was identified in Area C02 and a buffer zone to protect the nest was provided to Operations. In addition, an Osprey (*Pandion haliaetus*) nest was identified on the boundary between Area C01 and Area C02.

1.3 Summary of Environmental Sampling

Table 1 (below) summarizes samples collected within Area C02. 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 C02 are provided on Figure 3.

Table 1 Environmental Sampling Summary

Area	Agency	Sample Num	Date	Matrix	Location	Latitude	Longitude
C02	CTEH	BIMT0831SO504A*	8/31/2011	Soil_River	C2	45.807834	-108.461698
C02	CTEH	BIMT0831SO503A*	8/31/2011	Soil_River	C2	45.807834	-108.461698
C02	CTEH	BIMT0831SO502A*	8/31/2011	Soil_River	C2	45.807834	-108.461698
C02	CTEH	BIMT0831SO501A*	8/31/2011	Soil_River	C2	45.807834	-108.461698
C02	CTEH	BIMT0831SO501	8/31/2011	Soil_River	C2	45.807834	-108.461698
C02	CTEH	BIMT0714IW201 DUP	7/14/2011	Water_Irrigation	BIMT_363_IW201	45.806654	-108.458580
C02	CTEH	BIMT0714IW201	7/14/2011	Water_Irrigation	BIMT_363_IW201	45.806654	-108.458580

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 was one exceedance 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 C02 are included in Appendix B. Figure 4 provides the maximum oiling zones observed by the SCAT team during the initial surveys of Area C02.

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. 30](#) and [CTR No. 57](#)).

1.6 Oil Removal Activities

Oil removal activities were conducted within Area C02 in accordance with the ATMs identified in the CTRs. [Appendix I](#) of the Summary of Assessment and Oil Removal Activities report presents this data including: date range/days worked, average number of people working per day, equipment used, and various types of bags removed: oily

debris, personal protective equipment (PPE), plastic, trash, super sacks, wood chips, and contaminated wood.

1.7 Pre-Inspection Survey Transmittal

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

1.8 Post-Inspection Survey Transmittal

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

1.9 Summary of Final SCAT Surveys

Figure 5 shows the oiling conditions within Area C02 following completion of oil removal activities. The SCAT team performed final surveys of the island, left bank, and right bank within SCAT Area C02 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 island, left bank, and right bank within Area C02, no further treatment is recommended for these segments. SCAT Segment Sign-Off Forms are included as Appendix F.



**SCAT Area Transition
Report for C02**

Silvertip Pipeline Incident
Laurel, Montana

2. Transition Sign-Off Form

SCAT Area Transition Report for C02

Prepared for:

Unified Command

Date

Unified Command – RP



**SCAT Area Transition
Report for C02**

Silvertip Pipeline Incident
Laurel, Montana

SCAT Area Transition Report for C02

Prepared for:

Unified Command

Date

Unified Command – FOSC



**SCAT Area Transition
Report for C02**

Silvertip Pipeline Incident
Laurel, Montana

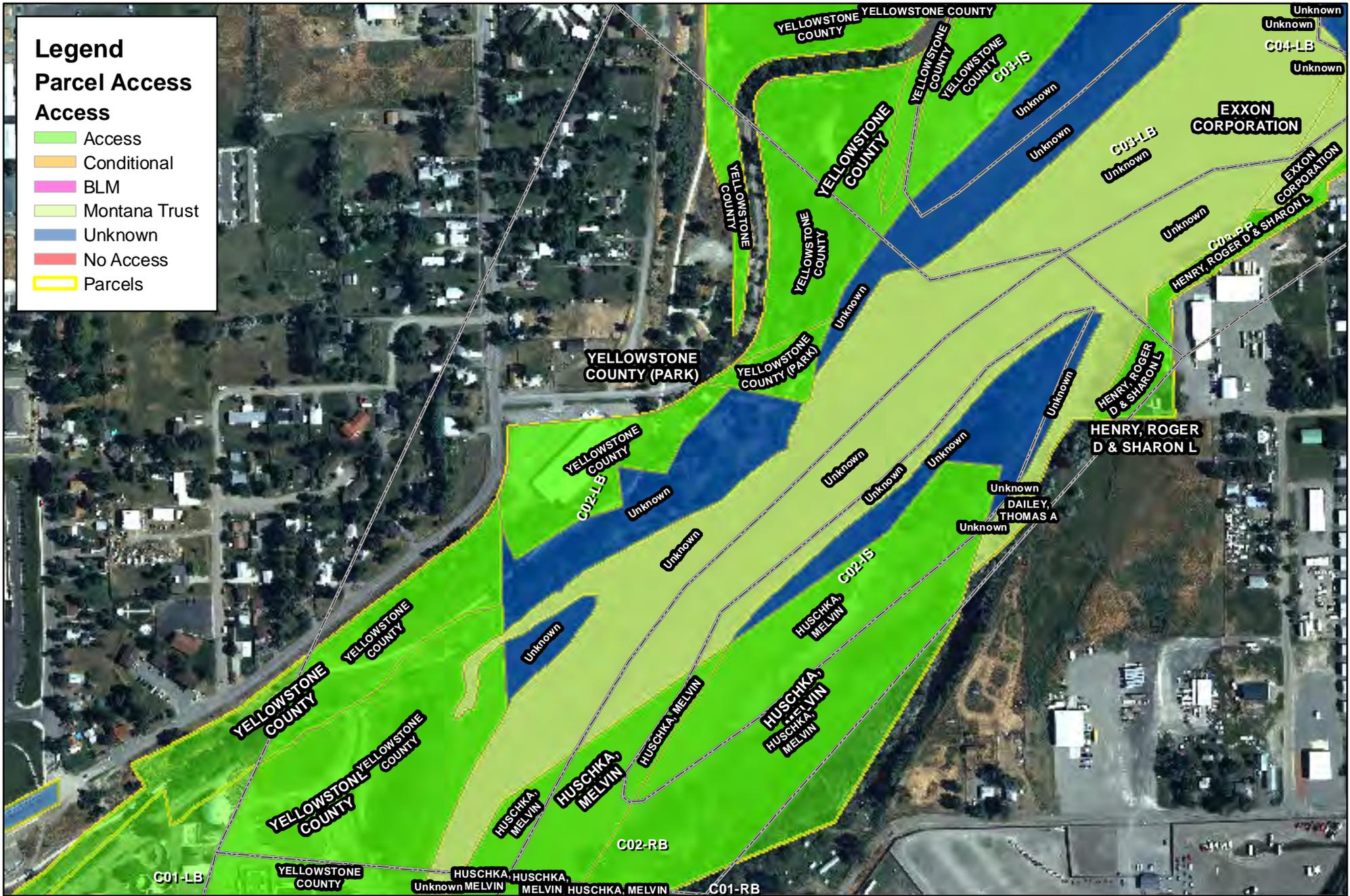
SCAT Area Transition Report for C02

Prepared for:

Unified Command

Date

Unified Command – MDEQ



Legend

Parcel Access

Access

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

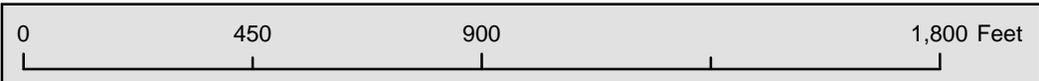


Figure 1

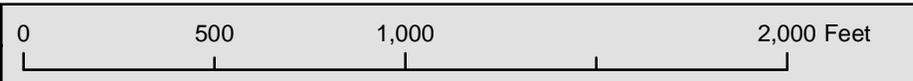
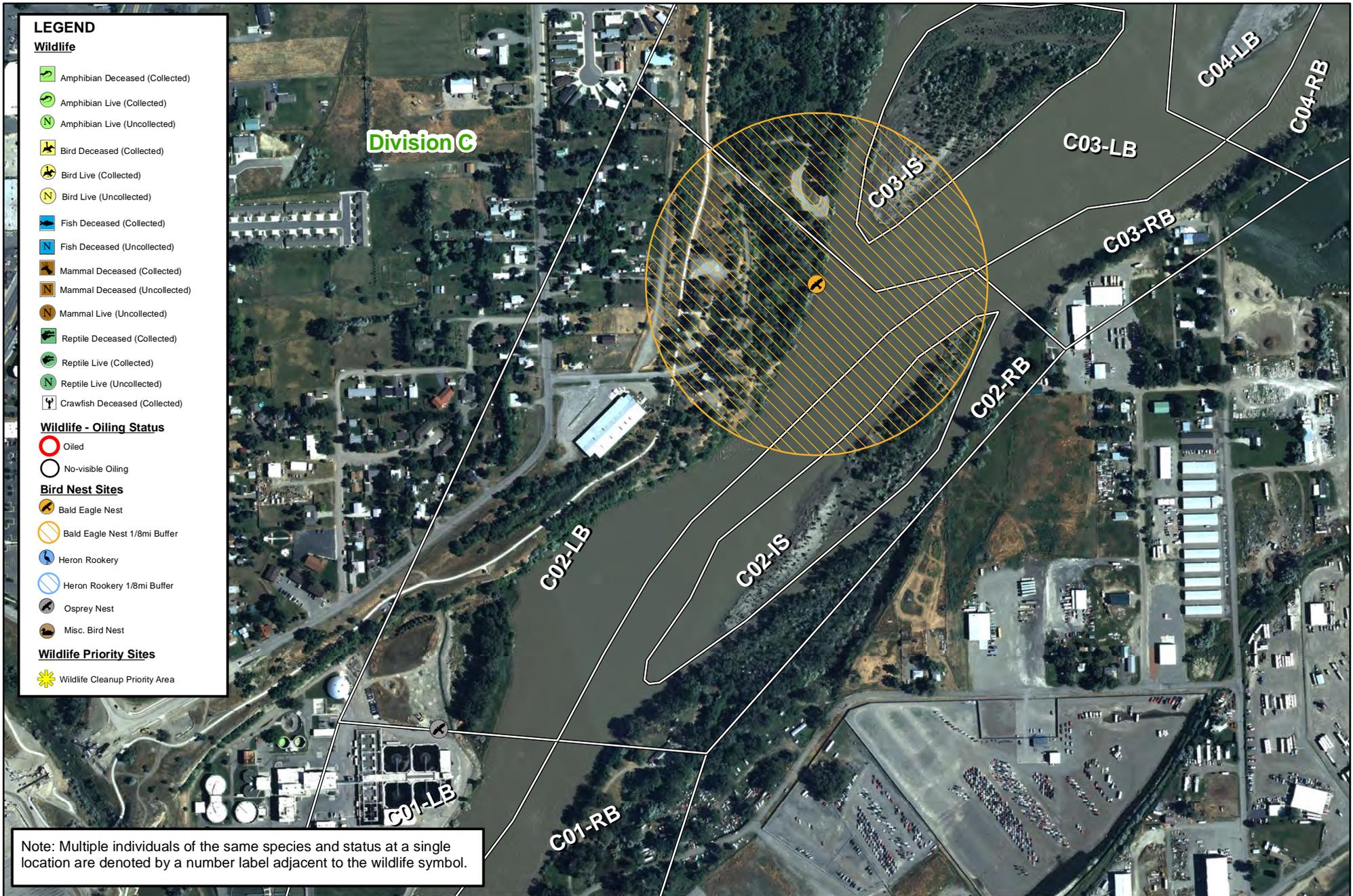
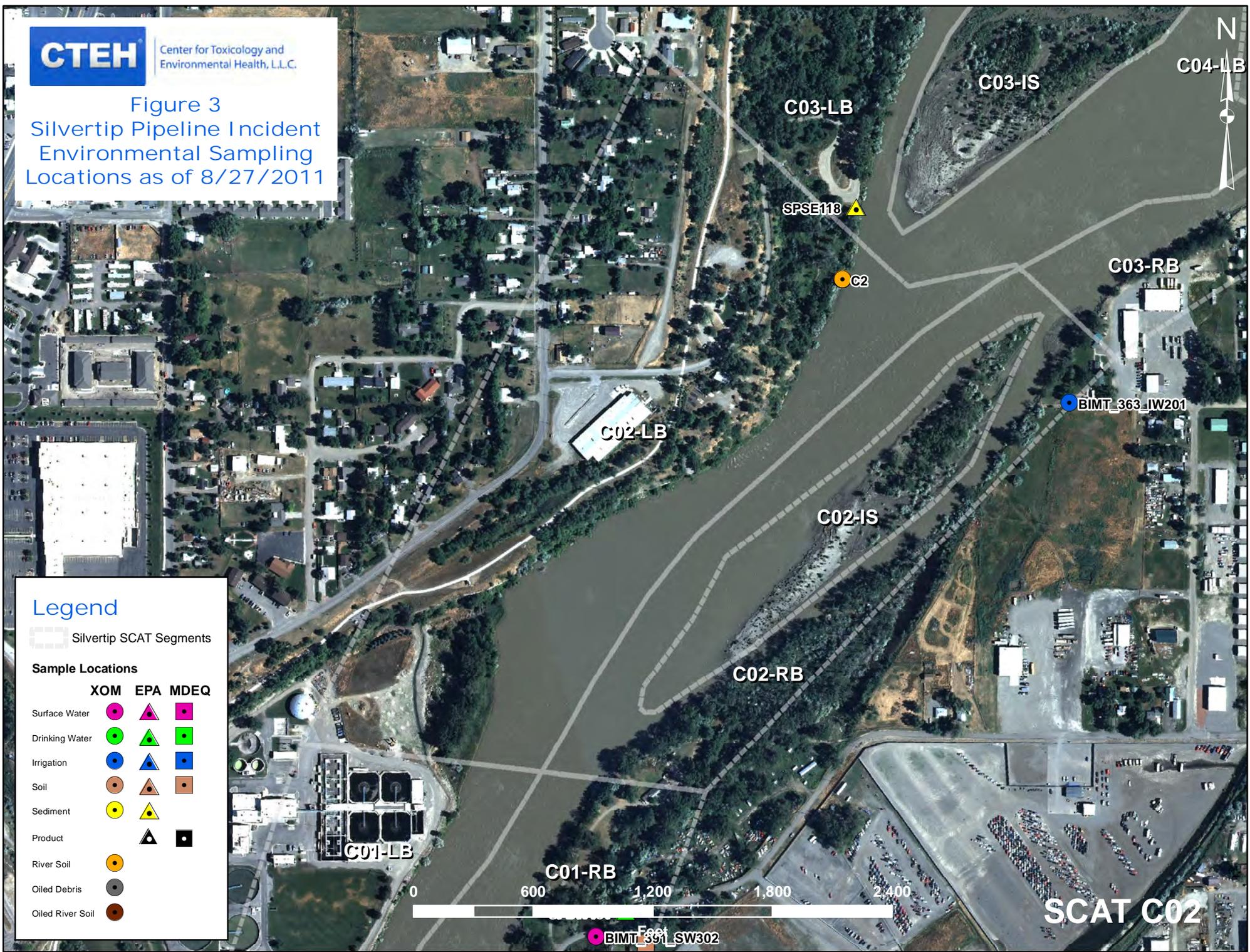


Figure 2
Wildlife Resources

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



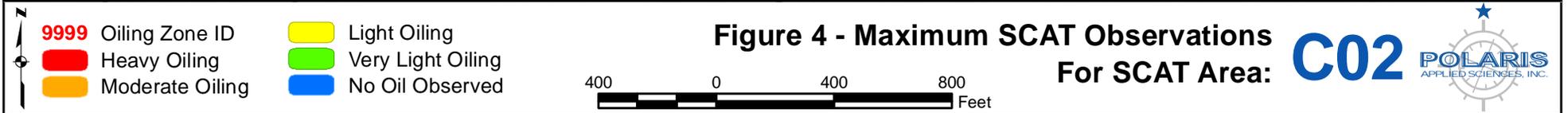
Legend

Silvertip SCAT Segments

Sample Locations

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

SCAT C02





<p>9999 Oiling Zone ID</p> <p>Heavy Oiling</p> <p>Moderate Oiling</p>	<p>Light Oiling</p> <p>Very Light Oiling</p> <p>No Oil Observed</p>	<p>Figure 5 - Final SCAT Observations</p> <p>For SCAT Area: C02</p>	
-----------------------------------------------------------------------	---------------------------------------------------------------------	-----------------------------------------------------------------------------------	--

400 0 400 800 Feet



Appendix A

Sample Detection Summary



Detections in Samples Collected in SCAT Area C02

NA - Not Available

Detected Above Screening Level

Sample Num	Date	Sample Type	Matrix	Analytical Method	Analyte	Detected	Result	Screening Level	Result Qualifier	Units	Above?
BIMT0714IW201	07/14/2011	Field	Water_Irrigation	EPA 8260	Tetrachloroethene	Y	1.8	5		ug/L	no
BIMT0714IW201 DUP	07/14/2011	Field	Water_Irrigation	EPA 8260	Tetrachloroethene	Y	1.9	5		ug/L	no
BIMT0831SO501	08/31/2011	Field	Soil_River	EPA 6010	Arsenic	Y	16.9	40		mg/kg	no
BIMT0831SO501	08/31/2011	Field	Soil_River	EPA 6010	Barium	Y	126	820		mg/kg	no
BIMT0831SO501	08/31/2011	Field	Soil_River	EPA 6010	Cadmium	Y	1.1	3.8		mg/kg	no
BIMT0831SO501	08/31/2011	Field	Soil_River	EPA 6010	Chromium	Y	20.6	280		mg/kg	no
BIMT0831SO501	08/31/2011	Field	Soil_River	EPA 6010	Lead	Y	8.1	400		mg/kg	no
BIMT0831SO501	08/31/2011	Field	Soil_River	EPA 9060	Mean Total Organic Carbon	Y	1530	NA		mg/kg	no
BIMT0831SO501	08/31/2011	Field	Soil_River	EPA 6010	Nickel	Y	12.8	150		mg/kg	no
BIMT0831SO501	08/31/2011	Field	Soil_River	EPA 9060	RSD%	Y	14.4	NA		%	no
BIMT0831SO501	08/31/2011	Field	Soil_River	EPA 9060	Total Organic Carbon	Y	1840	NA		mg/kg	no
BIMT0831SO501	08/31/2011	Field	Soil_River	EPA 6010	Vanadium	Y	42.7	39		mg/kg	YES



Appendix B

Initial SCAT Survey Forms
and Sketches

DB/G/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy) <u>30/07/11</u>	Time (24h): std / daylight <u>12:40</u> hrs to <u>13:35</u> hrs	Water Level low - mean - bankfull - overbank falling - steady - rising <u>bankfull</u>
Segment/Reach ID: <u>C2</u> Left Bank / Right Bank / (Island)		Operations Division:		
Survey by: (Foot) / ATV / Boat / Helicopter / Overlook / _____		(Sun) / Clouds / Fog / Rain / Snow / Windy / Calm		
Air Temp + / - <u>36</u> deg C				

2 SURVEY TEAM # <u>1</u>	Name	Organization	Signature
	<u>Rich Marty</u>	<u>RP/ Polaris</u>	<u>Richard Marty</u>
	<u>Darcey Miller</u>	<u>RP/ Cardno ENTRIX</u>	<u>Darcey B. Miller</u>
	<u>John Beach</u>	<u>EPA</u>	<u>John Beach</u>
	<u>Aaron Anderson</u>	<u>MT DEC</u>	

3 SEGMENT Total Segment/Reach Length 710 m Segment/Reach Length Surveyed 554 m

Start GPS: LATITUDE 45 deg. 48.459 min. LONGITUDE 108 deg. 27.511 min. Datum: _____

End GPS: LATITUDE +0845 deg. 27.511 min. LONGITUDE 108 deg. 27.904 min.

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

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

Sediment Bank: Clay/Mud _____ Sand P Mixed _____ Pebble/Cobble S Boulder _____ Peat/Organic _____ Vegetated Bank: S 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 _____ meander _____ confined or leveed _____ Substrate Type: Sand

Sloped: _____ (>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 1-10 m 10-100 m >100m 125m 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 S sand S gravel S cobble S 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	304	80	82				P		X										sand/gr/cobble
B				X	250	80	35			S	P		X										Sand/gr

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 - Fewer than 10 small areas of small woody debris. Approx 10% of area covered with shrubs w/very light staining on leaves. Recommend hand removal of small debris. No action on vegetation.

Zone B - Patchy oiled vegetation (grasses) - recommend hand removal. Also remove small woody debris that was oiled by hand.

Sketch Yes / No Photos Yes / No Frames D. Miller 12, B. Marty, J. Beach #1456-1468 Photographer Miller, Marty, Beach

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION
 Segment/Reach ID: C2 Left Bank / Right Bank / Island
 Date (dd/mm/yy) 30/07/11 Time (24h): std / daylight 12:40 hrs to 13:35 hrs
 Water Level low - mean - bankfull - overbank
 Operations Division: falling - steady - rising
 Survey by: (Foot) / ATV / Boat / Helicopter / Overlook / (Sun) / Clouds / Fog / Rain / Snow / Windy / Calm Air Temp +/- 30 deg C

2 SURVEY TEAM # 1 Name Richard Marty Organization RP / Polaris Signature Richard Marty
Darcey Miller RP / Cardno ENTIX Darcey B. Miller
John Beach EPA John Beach
Aaron Anderson MT DEQ Aaron Anderson

3 SEGMENT Total Segment/Reach Length 710 m Segment/Reach Length Surveyed 554 m
 Start GPS: LATITUDE 45 deg. 48.459 min. LONGITUDE 108 deg. 27.511 min. Datum: _____
 End GPS: LATITUDE 45 deg. 27.511 min. LONGITUDE 108 deg. 27.904 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) _____ Welland: Swamp _____ Bog/Fen _____ Marsh _____
 Sediment Bank: Clay/Mud _____ Sand P Mixed _____ Pebble/Cobble S Boulder _____ Peat/Organic _____ Vegetated Bank: (S) 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 _____ meander _____ confined or leveed _____ Substrate Type: Sand
 Sloped: (>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 125m 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					304	80	82				P		X									sand/gr/cobble		
B					250	80	85			S	P		X									sand/gr		

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

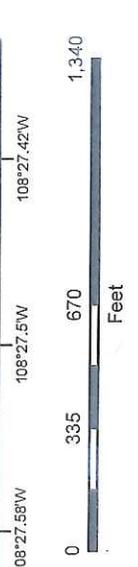
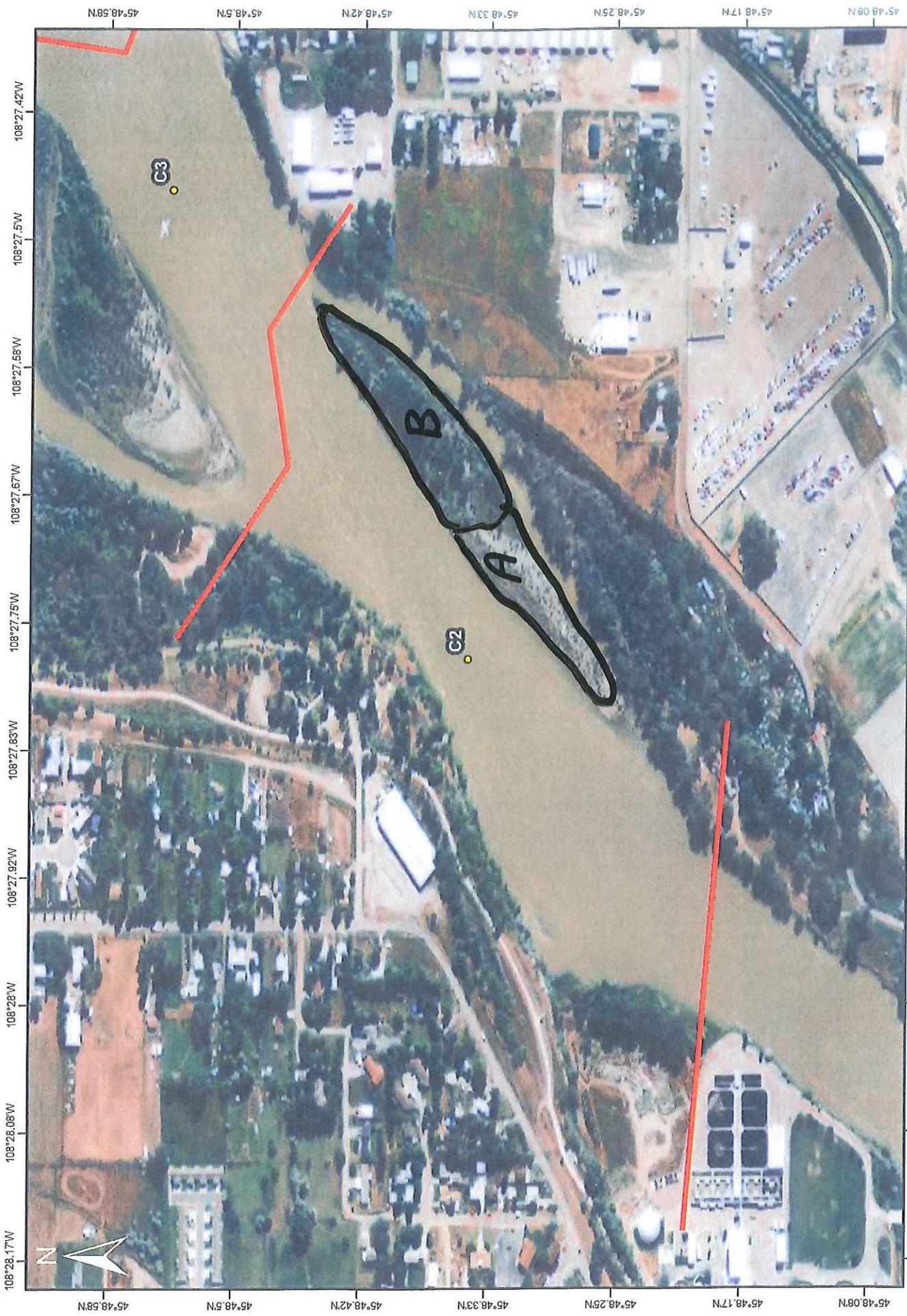
TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER						WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes/No	SUBST. TYPE(S)	
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR					NO

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 - Fewer than 10 small areas of small woody debris. Approx 10% of area covered with shrubs w/very light staining on leaves. Recommend hand removal of small debris.
 Zone B - No action on vegetation. Patchy oiled vegetation (grasses) - recommend hand removal. Also remove small woody debris that was oiled by hand.

Sketch (Yes/No) _____ Photos (Yes/No) _____ Frames D. Miller 12, 13 Photographer Miller, Marty, Beach

R. Marty
 J. Beach *456-1468



C2-
(L/R/I)??

DB/6/15

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>C2</u> (Left Bank / Right Bank / Island)		<u>24/07/11</u>	<u>1100</u> hrs to <u>1300</u> hrs	low - mean - bankfull - overbank
Operations Division:				(falling) - steady - rising
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook /		<u>Sun</u> / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp +1 - <u>27</u> deg C

2 SURVEY TEAM # <u>1</u>	Name	Organization	Signature
	<u>John Bayer</u>	<u>Polaris</u>	<u>[Signature]</u>
	<u>Larry Alheim</u>	<u>DEQ</u>	<u>[Signature]</u>
	<u>Austin West</u>	<u>USCG</u>	<u>[Signature]</u>

3 SEGMENT Total Segment/Reach Length 705 m Segment/Reach Length Surveyed 250 m

Start GPS: LATITUDE 45 deg. 48.193 min. LONGITUDE 108 deg. 28.021 min. Datum: WGS 84

End GPS: LATITUDE 45 deg. 48.489 min. LONGITUDE 108 deg. 27.685 min.

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

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

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

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

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

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

Sloped X (>5°)(15°)(30°) straight P braided S oxbow flood plain valley S 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 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

633
634

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	200	1	2%		X	X	X		X								VEG
B				X	400									NOT SURVEYED							
C				X	135	1	1%		X	X	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

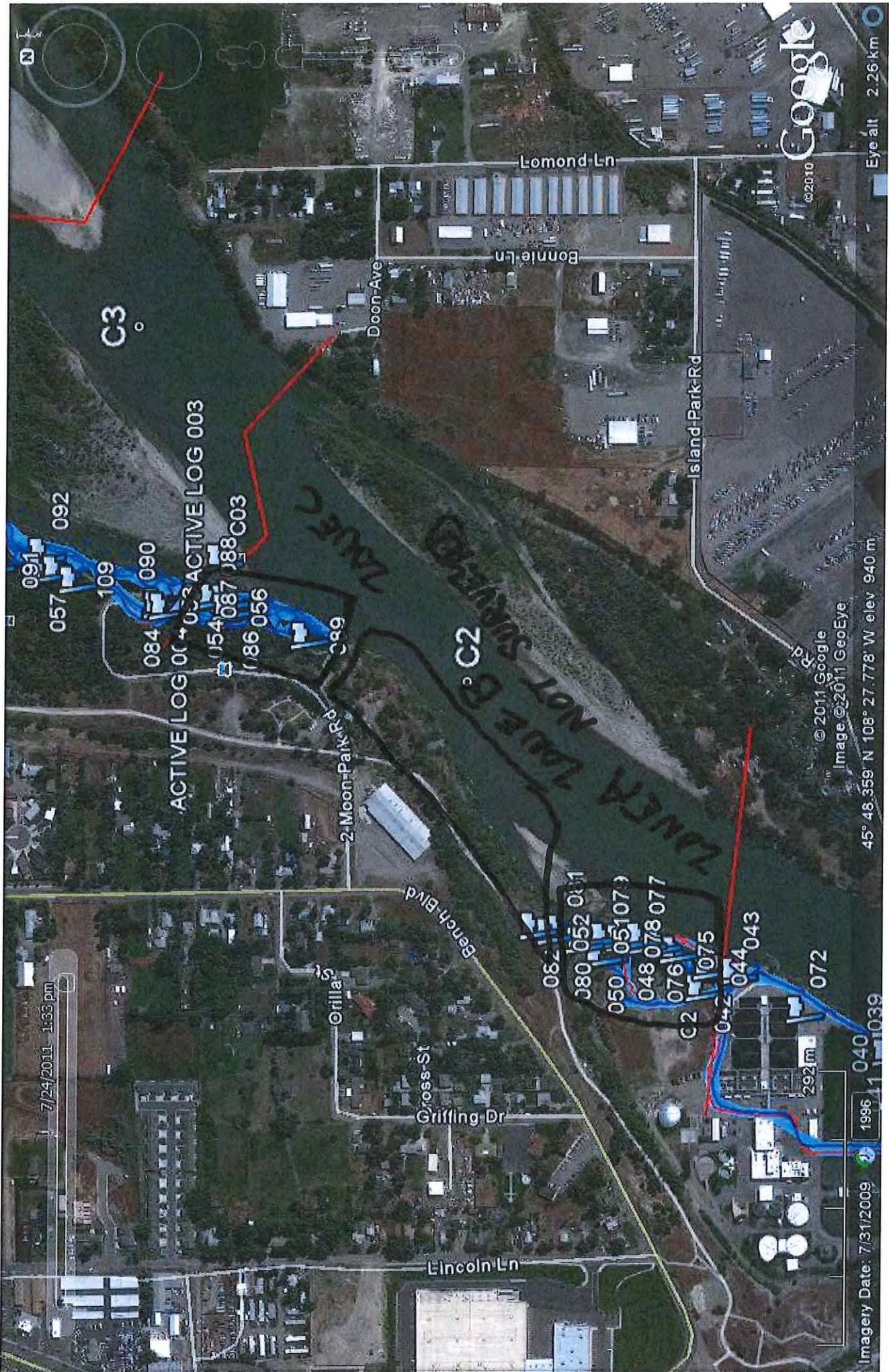
Overbank Survey Required Y/N Overbank Survey Completed Y/N Shoreline Survey Completed Y/N

Zone A ^{to C} cut + remove oil coated vegetation less than 1 inch. Remove oil coated debris smaller than 4" - wipe large oil debris.

Zone B - ~~NOT~~ NOT SURVEYED DUE TO STEEP SLOPE

* Zone C is part of Two Moon park

C2 L 24 JUL 2011 TEAM 1 2 of 2



DB/

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page _____ of _____

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>C2</u>	Left Bank / Right Bank / Island	<u>27/07/11</u>	<u>948</u> hrs to <u>949</u> hrs	low - mean - bankfull - overbank
Operations Division: <u>C</u>				falling - steady - rising
Survey by: Foot / ATV / Boat / Helicopter / Overlook /	Sun / Clouds / Fog / Rain / Snow / Windy / Calm			Air Temp +/- <u>30</u> deg C

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

3 SEGMENT Total Segment/Reach Length 645 m Segment/Reach Length Surveyed 645 m

Start GPS: LATITUDE 45 deg. 48'22.070 min. LONGITUDE 108 deg. 27'39.07 min. Datum: WGS87

End GPS: LATITUDE 45 deg. 48'11.45 min. LONGITUDE 108 deg. 27'35.52 min.

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

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

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

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

4B RIVER VALLEY CHARACTER select as appropriate

Cliff or Bluff: ___ Est Height ___ m canyon ___ manmade ___ meander ___ confined or leveed ___ Substrate Type: S-116y

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

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m (100m) 100m 110 est. water depth: <1m (1-3m) 3-10m >10m ___ m

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

seasonal water level: low / mean / bank full / overbank flow est. change over next 7 days: (C) 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

883
884

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	X	165	20	60															
B			X	X	490	2	0															
A					490	2	0														X	
B					155	2	60															

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

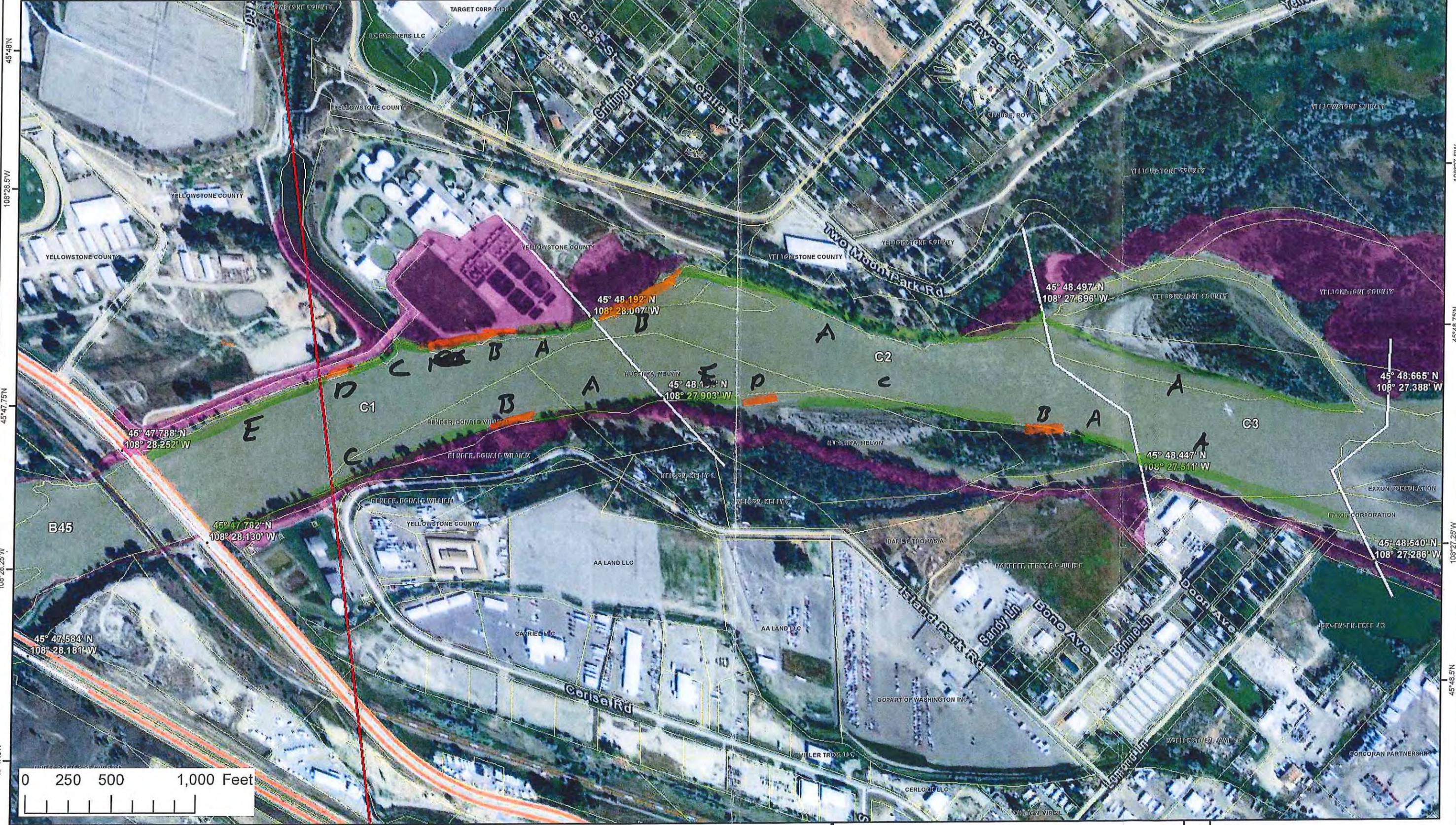
Zone B has strand + could veg (primarily grass)

veg needs to be cut and/or treated and removed

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



108°28.5'W 45°48.25'N 108°28.25'W 45°48.5'N 108°28'W 45°48.75'N 108°27.75'W



DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page _____ of _____

1 GENERAL INFORMATION		Date (dd/mm/yy) 07/30/2011	Time (24h): std / daylight 1245 1315 hrs to hrs	Water Level low - mean - <u>bankfull</u> - overbank <u>falling</u> - steady - rising
Segment/Reach ID: C2 (Left Bank/ Right Bank / Island)		Operations Division: A		
Survey by: Foot / ATV / <u>Boat</u> / Helicopter / Overlook / _____		(Sun) Clouds / Fog / Rain / Snow / Windy / <u>Calm</u>		Air Temp +/- <u>35</u> deg C

2 SURVEY TEAM #	name	organization	contact phone number
Bruce Kvam	<i>Bruce Kvam</i>	Polaris Applied Sciences, LLC	(206) 953-6904
Mark Peterson	<i>Mark Peterson</i>	MTDEQ	(406) 498-4835
Peter Reich	<i>Peter Reich</i>	USEPA	(415) 595-8352

3 SEGMENT Total Segment/Reach Length 740 m Segment/Reach Length Surveyed 411 m

Start GPS: LATITUDE 45 deg. 4817 min. LONGITUDE 108 deg. 2758 min. Datum: WGS 84

End GPS: LATITUDE 45 deg. 4825 min. LONGITUDE 108 deg. 2743 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 _____ braided P oxbow _____ flood plain valley S Forested / Vegetated / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m 187 m est. water depth: <1m 1-3 m 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 2 bags or _____ trucks access restrictions steep, high bank

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

1105
1106

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	197	1	5			X	X		X									Shrubs, trees, grass
B				X	214	1															X	

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

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

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

Treatment Recommendations:

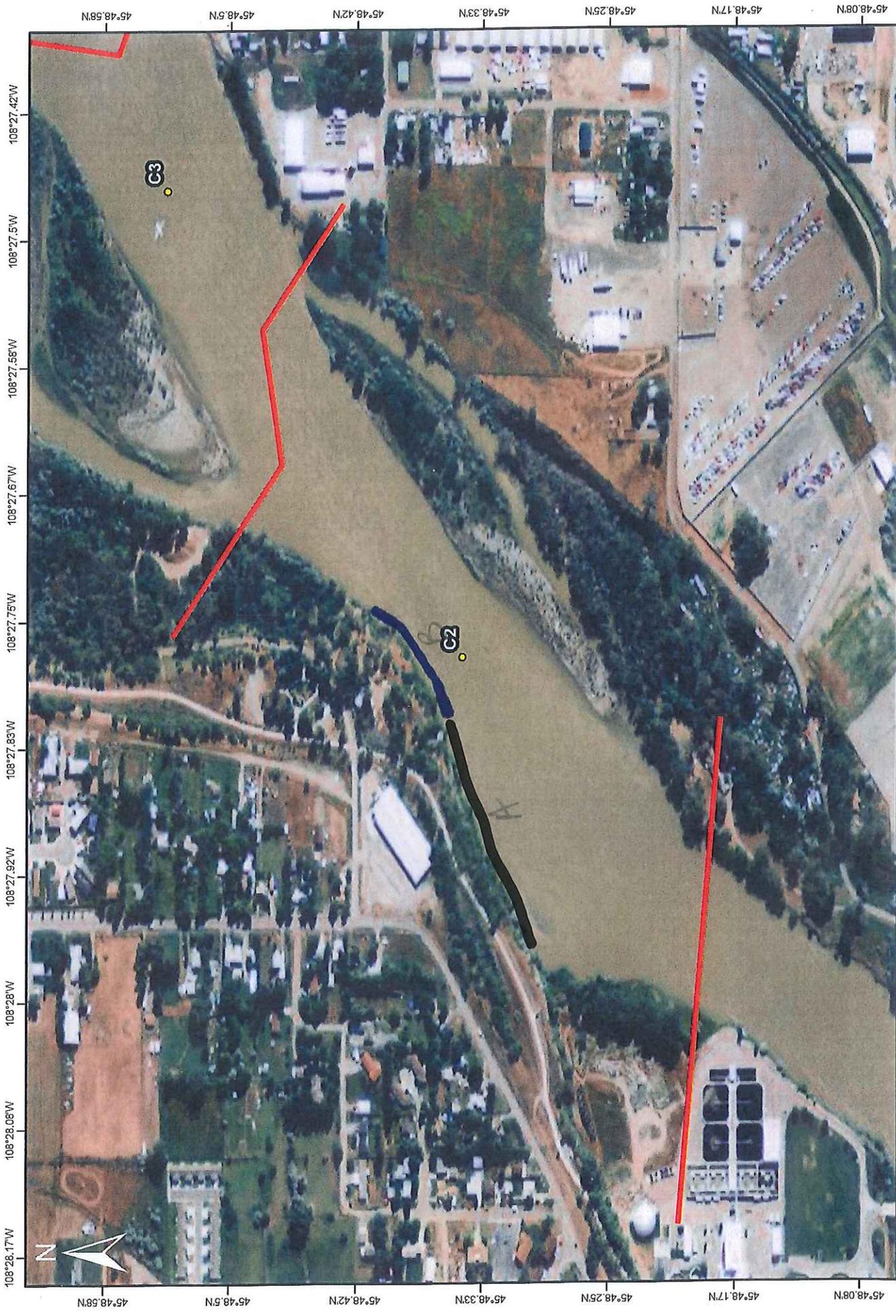
Zone A: Cut and remove oil coated vegetation smaller than 1" diameter. Oiling on trees and shrubs is 7' above current water surface elevation and shrubs and trees are growing from high, near vertical bank.

Zone B: No treatment necessary.

*28 20
EBK 07/30/11 - 07/30/11 1105-1106*

(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 # _____)



108°28.17'W 108°28.06'W 108°28'W 108°27.92'W 108°27.83'W 108°27.75'W 108°27.67'W 108°27.58'W 108°27.5'W 108°27.42'W
 45°48.08'N 45°48.17'N 45°48.25'N 45°48.33'N 45°48.42'N 45°48.5'N 45°48.58'N

0 335 670 1,340
 Feet

C2-
 7/30/2011
 Zones A + B
 Team 2
 QR(1)??

DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page 1 of 1

1 GENERAL INFORMATION		Date (dd/mm/yy) <u>24/07/11</u>	Time (24h): std / daylight <u>1040</u> hrs to <u>1137</u> hrs	Water Level low - mean <u>bankfull</u> - overbank falling - steady - rising
Segment/Reach ID: <u>C2</u> Left Bank / Right Bank / Island		Operations Division: <u>C</u>		
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook /		Sun / Clouds / Fog / Rain / Snow / Windy / Calm		
Air Temp + / - <u>24</u> deg C				

2 SURVEY TEAM # <u>10</u>	Name	Organization	Signature
	<u>Chelsea Murphy</u>	<u>Cardno ENTRIX</u>	<u>[Signature]</u>
	<u>John Brown</u>	<u>MDFG</u>	<u>[Signature]</u>
	<u>Ron Lynn, Jr</u>	<u>USCG</u>	<u>[Signature]</u>
	<u>Steve Kennedy</u>	<u>Cardno Entrix</u>	<u>Steve Kennedy</u>

3 SEGMENT Total Segment/Reach Length 685 m Segment/Reach Length Surveyed 685 m

Start GPS: LATITUDE 45° 803178 deg. min. LONGITUDE 108° 464562 deg. min. Datum: WGS 84

End GPS: LATITUDE 45° 801452 deg. min. LONGITUDE 108° 458241 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 S Boulder Peat/Organic Vegetated Bank: (P) Wooded Upland:

Sediment Flat: Clay/Mud Sand Mixed/Coarse Other: S Rip-Rap If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

Cliff or Bluff: Est Height 0 m canyon manmade meander confined or leveed P Substrate Type: pebble/mud

Sloped: (0) (>5°) (15°) (30°) straight S 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 160m est. water depth: <1m 1-3m 3-10m >10m

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

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 Private property

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

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

OIL ZONE	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER						SUBST. TYPE(S)		
	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR		AP	NO
A			<u>P</u>		<u>685</u>	<u><1</u>	<u><1%</u>			<u>P</u>	<u>S</u>		<u>P</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 - Recommendation - NFT - will do more damage to remove - leave - so sporadic + trace amounts.

Sketch Yes / No Photos Yes / No Frames #3 Photographer Steve Kennedy

7/24/2011 2:57 pm

C2

4
FRONT

© 2011 Europa Technologies
© 2011 Google
Image © 2011 GeoEye

45°48'17.43" N 108°27'44.96" W elev 3087 ft

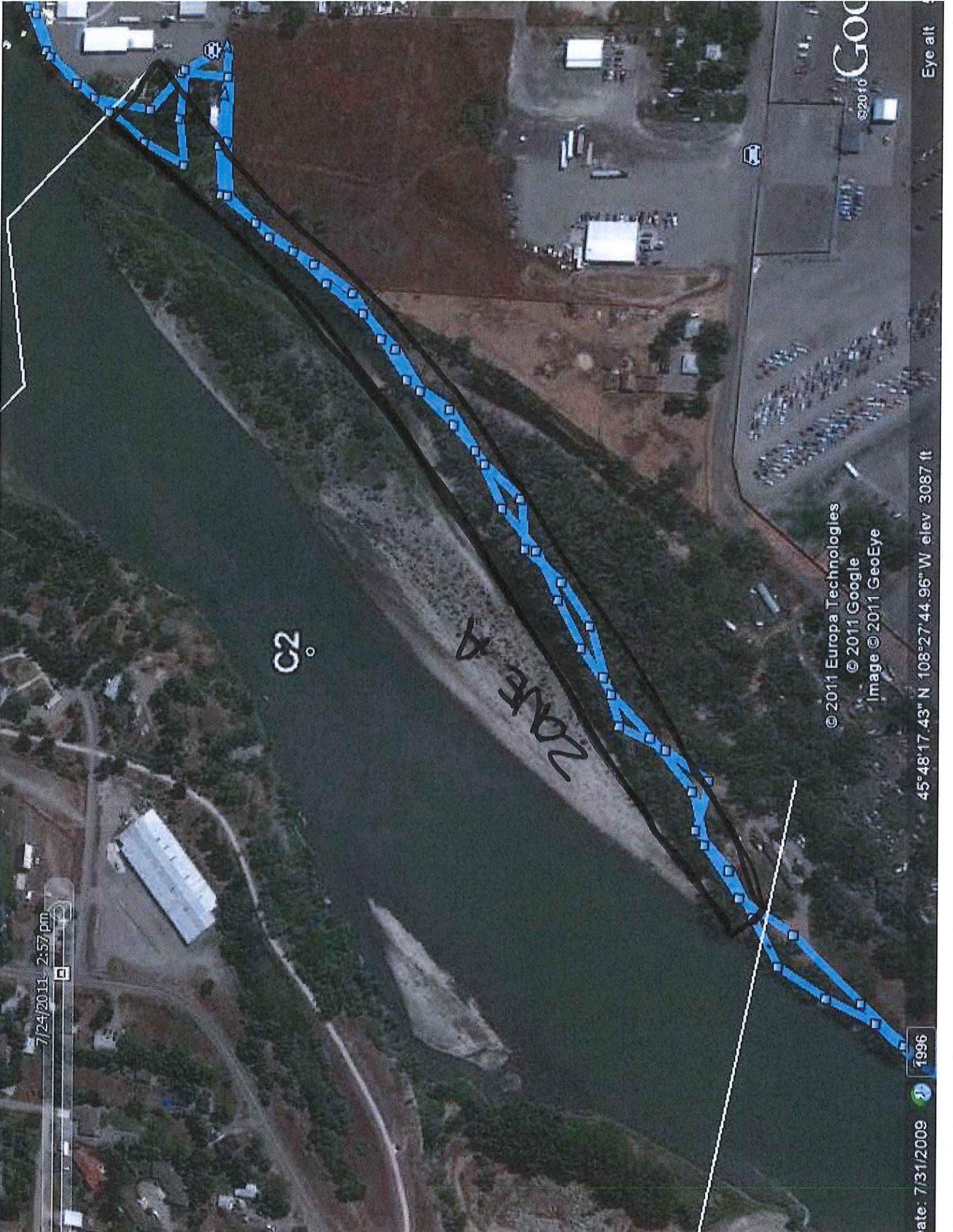
1996

Date: 7/31/2009



GOO

Eye alt



DB/

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page _____ of _____

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>C2</u> Left Bank / Right Bank / Island		<u>27/07/11</u>	<u>1221</u> hrs to <u>1223</u> hrs	low - mean - bankfull - overbank
Operations Division: <u>C</u>				falling - steady - rising
Survey by: Foot / ATV / <u>Boat</u> / Helicopter / Overlook / _____		<u>Sun</u> Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp + / - <u>30</u> deg C

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

3 SEGMENT Total Segment/Reach Length 645 m Segment/Reach Length Surveyed 645 m

Start GPS: LATITUDE 45 deg. 48°27.64 min. LONGITUDE 109 deg. 27°32.06 min. Datum: WGS 84

End GPS: LATITUDE 45 deg. 48°11.07 min. LONGITUDE 108 deg. 27°54'82 min.

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

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

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

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

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

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

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

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m 100m 100m 110 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

885
886
887
888
889

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					50	2	0														X	Sand/veg
B					80	2	60			S	P			X								
C					40	2	0														X	
D					65	2	60			S	P			X								
E					75	2	0														X	

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

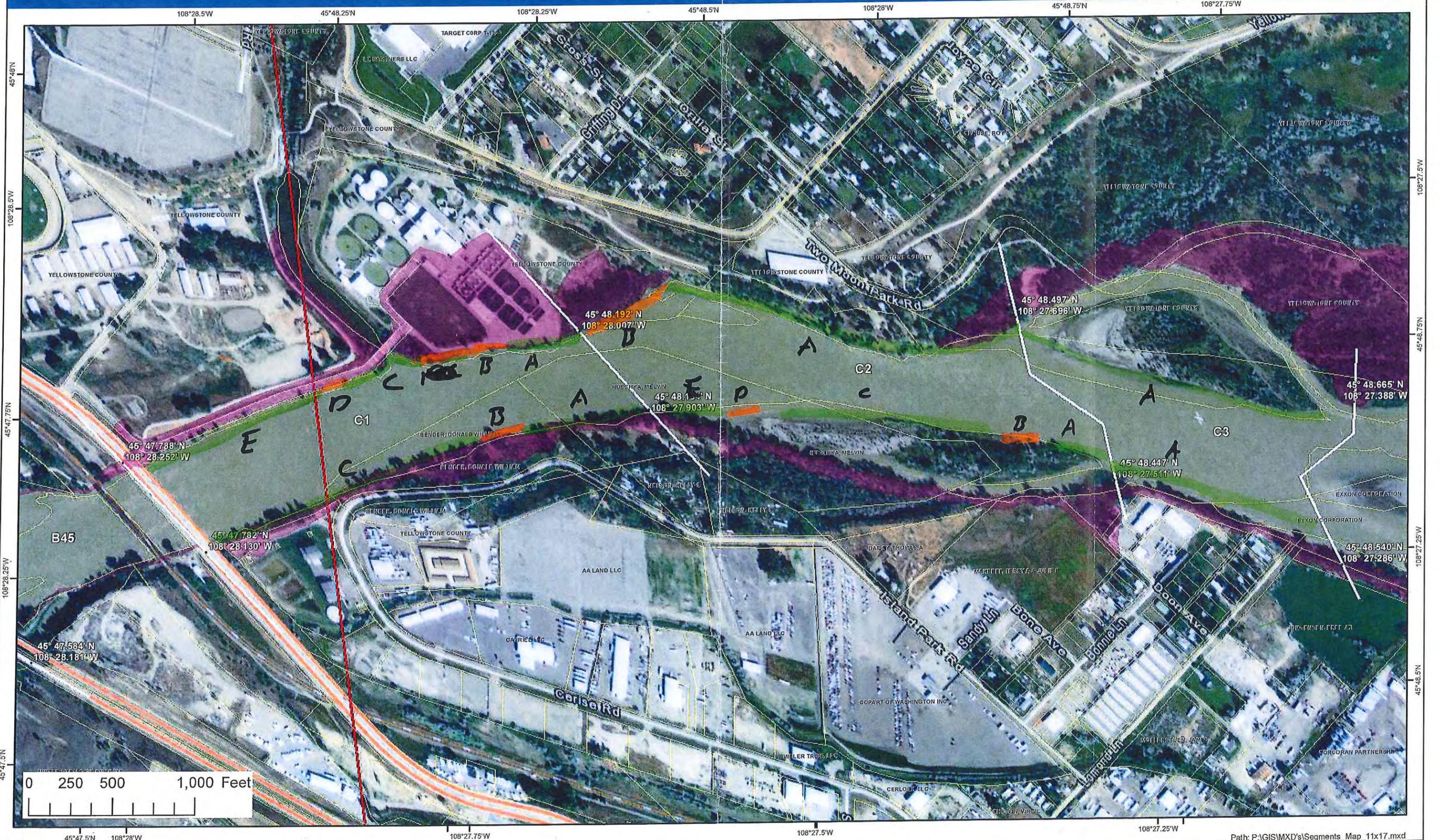
TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER						WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes / No	SUBST. TYPE(S)	
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR					NO

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 B+D have stand+cut veg (primarily grass)

Vegetation needs to be cut out for travel and removal





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

DB16

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: C02 Left Bank / Right Bank (Island)		05/09/11	1436 hrs to 1575 hrs	low (mean) bank full - overbank
Operations Division: C				falling - steady - rising
Survey by: (Foot) / ATV / Boat / Helicopter / Overlook /		(Sun) / Clouds / Fog / Rain / Snow / Windy / (Calm)		Air Temp +/- 25 deg C

2 SURVEY TEAM #	Name	Organization	Signature
6	Nathan Hammond	Cardno Entrix	<i>Nathan Hammond</i>
	Austin West	USCG	<i>Austin West</i>
	Betsy Howda	DEQ	<i>Betsy Howda</i>

3 SEGMENT Total Segment/Reach Length 590 m Segment/Reach Length Surveyed 590 m

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

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

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

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

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

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

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m 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 Island

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		46.4	40	0														✓
B		S	P		16.1	62	21			S	P						X				Veg. Debris

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

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

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

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

Zone A - NOO - No Treatment Required

Zone B - Hot Shot Crew removed one bag of veg. & debris utilizing ATM1, ATM2, ATM9; ATM7 recommended for any oil that may remain. No Further Treatment.

ReSCAT

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

9/5/2011 5:11 pm
6 pm



DB/6

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: C02 (Left Bank / Right Bank / Island)		02/09/11	0805 hrs to 1240 hrs	low (mean) - bankfull - overbank
Operations Division: C		(Sun) Clouds / Fog / Rain / Snow / Windy / Calm		(falling) - steady - rising
Survey by: (Foot) ATV / Boat / Helicopter / Overlook /				Air Temp +/- 24 deg C

2 SURVEY TEAM #	Name	Organization	Signature
6	Nathan Hammond	Cardno Entrix	<i>Nathan Hammond</i>
	Austin West	USCG	<i>Austin West</i>
	Jay Watson	FWP	<i>Jay Watson</i>

3 SEGMENT Total Segment/Reach Length 710 m Segment/Reach Length Surveyed 351 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) Rip Rap Wetland: Swamp _____ Bog/Fen _____ Marsh _____

Sediment Bank: Clay/Mud _____ 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 (C) Est Height 40 m canyon _____ manmade _____ meander _____ confined or leveed _____ Substrate Type: _____

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

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m 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 7 bags or _____ trucks access restrictions Water Treatment Plant; Cliffs

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

2065
2066

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	184	35	<1			S	P						X					Var, Debris
B			S	P	167	30	0															✓

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 - Hot Shot Crew utilized ATM1, ATM2, and ATM9 in the removal of seven bags of oil coated debris; SCAT team confident ATM 7 will suffice for oil remaining within zone. No Further Treatment, due to safety concerns

Zone B - NOO - No Treatment required.

Area not SCAT'ed on foot was viewed on CTR as NOO, but ReSCAT recommended by SCAT team to confirm oiling condition.

ReSCAT

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



2 am

9/2/2011 5:45 pm

5 pm

Onilla St

Bench Blvd

2 Moon Park Rd

C02-LB

C02-IS

102 003

102 007

102 006

103

104

101 103

098

007 091

096

ZONE A VERY URM

ZONE B

TEAM 6 B
C02 RB
9/2/11

© 2011 Europa Technologies

© 2011 Google

Image © 2011 GeoEye

45°48'21.51" N 108°27'52.25" W elev 3159 ft

1996

009

©2010

DB/6

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>02</u> <u>Left Bank</u> / Right Bank / Island		<u>05/09/11</u>	<u>1430</u> hrs to <u>1435</u> hrs	low - <u>mean</u> - bankfull - overbank
Operations Division:		(Sun) <u>Clouds</u> / Fog / Rain / Snow / Windy <u>Calm</u>		falling - steady - rising
Survey by: Foot / ATV <u>Boat</u> / Helicopter / Overlook /				Air Temp +/- <u>25</u> deg C

2 SURVEY TEAM # <u>6</u>	Name	Organization	Signature
	<u>Nathan Hammond</u>	<u>Cardno Entrex</u>	<u>Nathan Hammond</u>
	<u>Austin West</u>	<u>USCG</u>	<u>Austin West</u>
	<u>Betsy Hovda</u>	<u>DEC</u>	<u>Betsy Hovda</u>

3 SEGMENT Total Segment/Reach Length 253-690 m Segment/Reach Length Surveyed 253 m

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

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

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

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

Sediment Bank: Clay/Mud _____ Sand _____ Mixed X Pebble/Cobble _____ Boulder _____ Peat/Organic _____ Vegetated Bank: 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 (Bluff) Est Height 70 m canyon _____ manmade _____ meander _____ confined or leveed _____ Substrate Type: _____

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

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: <1m 1-10m 10-100m >100m 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 Cliff

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

2125

OIL ZONE	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER							SUBST. TYPE(S)	
	MS	LB	UB	OB	Length	Width	Distrib.	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR	AP		NO
A		<u>S</u>	<u>P</u>		<u>253</u>	<u>10</u>	<u>0</u>														<u>✓</u>

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

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

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

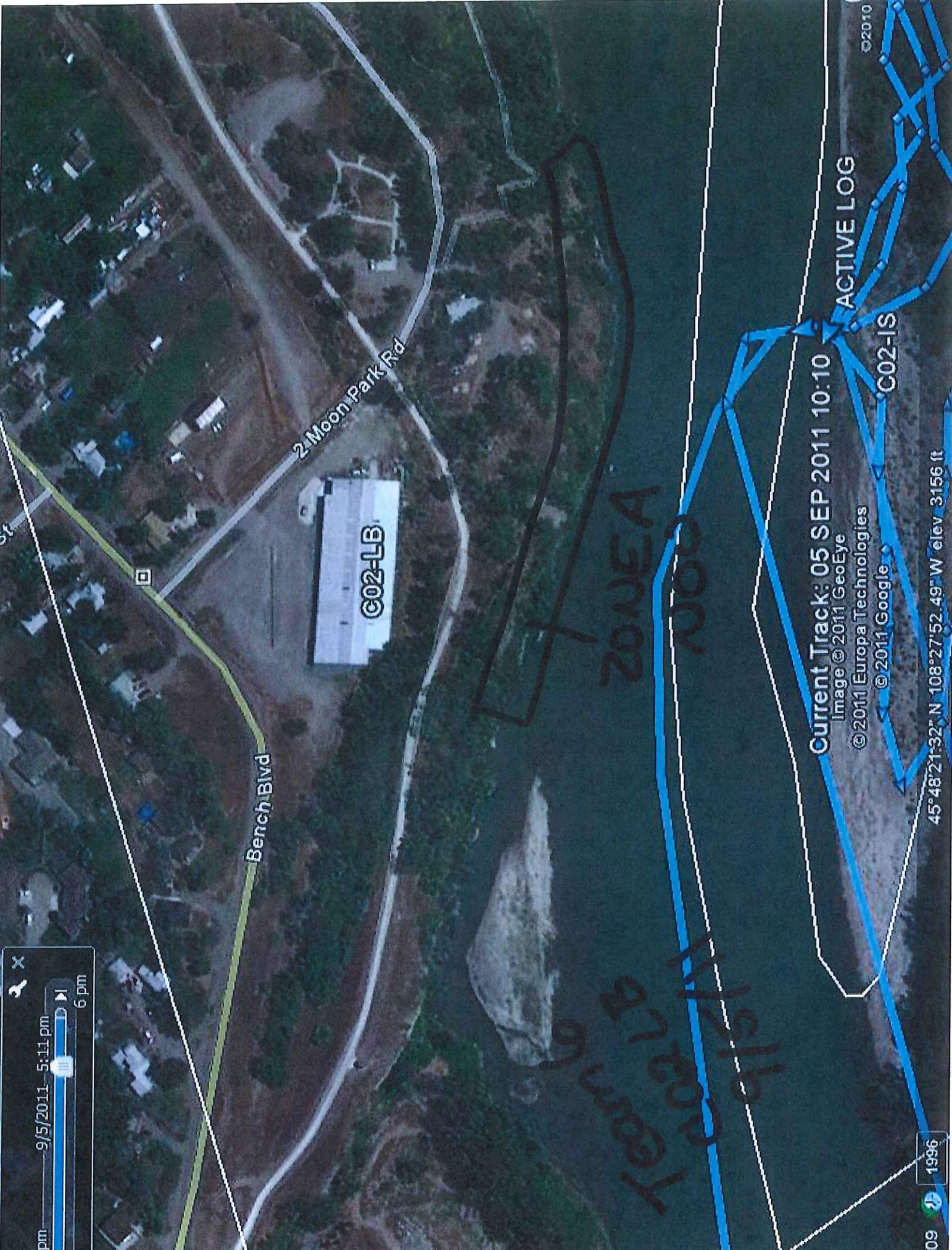
Overbank Survey Required Y (N) Overbank Survey Completed Y (N) Shoreline Survey Completed Y (N)

Zone A - No - No Treatment Required

ResCAT

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

9/5/2011 5:11 pm
6 pm



2 Moon Park Rd

C02-LB

Bench Blvd

Zone A

Team 60
9/5/11

Current Track: 05 SEP 2011 10:10

Image © 2011 GeoEye

© 2011 Europa Technologies

© 2011 Google

ACTIVE LOG

C02-IS

1996

45° 48' 21.32" N 108° 27' 52.49" W elev 3156 ft

© 2010

DB/G

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>CO2</u> (Left Bank / Right Bank / Island)		<u>20/09/2011</u>	<u>13:30</u> hrs to <u>14:00</u> hrs	<u>low</u> - mean - bankfull - overbank
Operations Division: <u>C</u>		<u>Sun</u> Clouds / Fog / Rain / Snow / Windy / Calm		falling - steady - rising
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook /				Air Temp +/- <u>18</u> deg C
2 SURVEY TEAM # <u>2</u>	Name	Organization	Signature	
	<u>Herlo GAUVREAU</u>	<u>Polaris</u>	<u>[Signature]</u>	
	<u>Jay Watson</u>	<u>FWP</u>	<u>[Signature]</u>	
	<u>MARK Peterson</u>	<u>DEQ</u>	<u>[Signature]</u>	

3 SEGMENT Total Segment/Reach Length 700 m Segment/Reach Length Surveyed 312 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 _____ Boulder _____ Peat/Organic _____ Vegetated Bank: S Wooded Upland: P

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

4B RIVER VALLEY CHARACTER select as appropriate

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

2349

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	312	70	L			S	P							X				Vg, Db

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

A: Re SCAT for fill-in with Ops Hot Shots
 oiled debris, cleaned by hot shots
 Meet the conditions of the CTR, NPT

20/9/2011 15:24

2/2 20/09/2011

Team #2

CO2LB

NFT

ACTIVE LOG

ACTIVE LOG

ACTIVE LOG

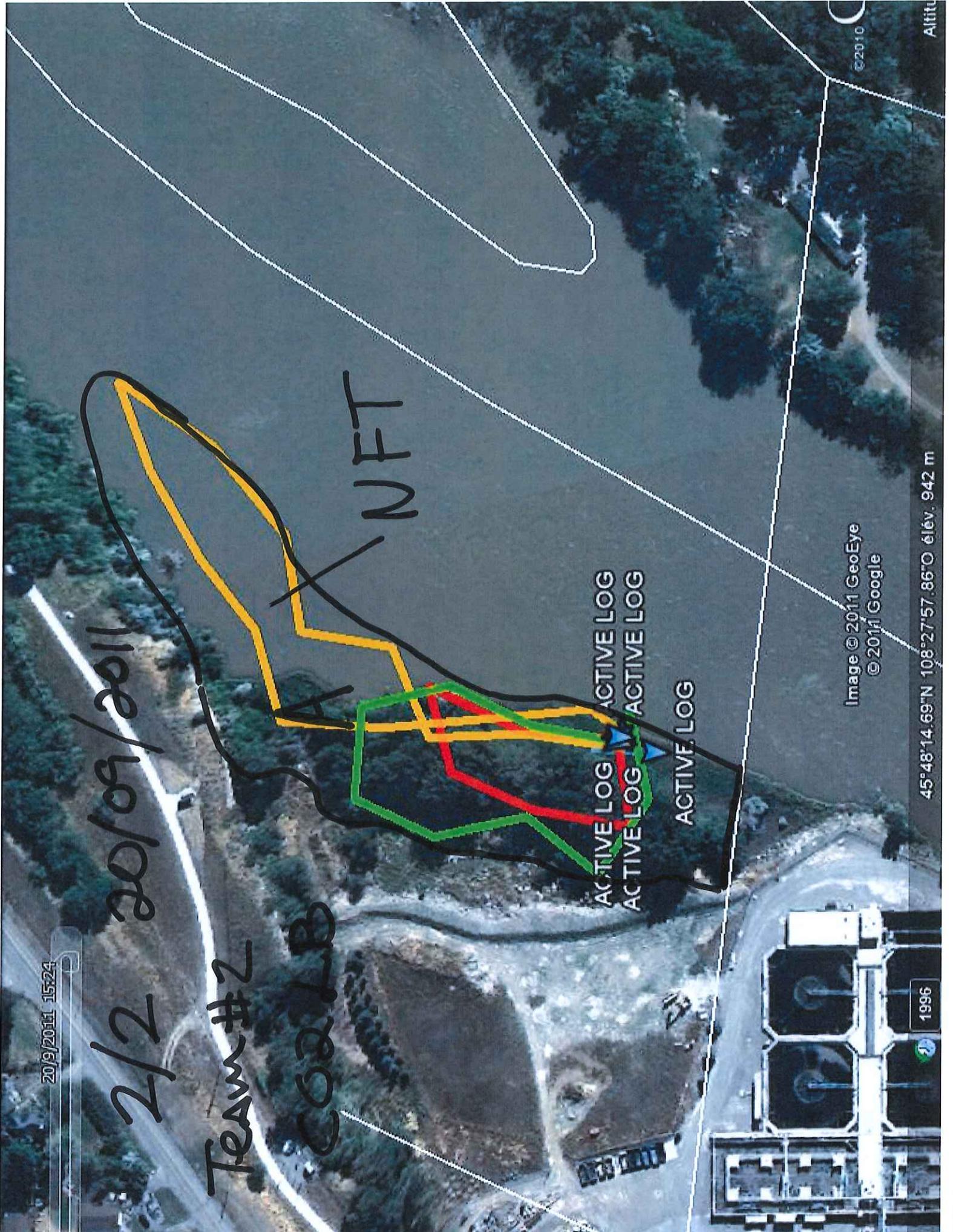
Image © 2011 GeoEye
© 2011 Google

1996

45°48'14.69"N 108°27'57.86"E élév. 942 m

©2010

Altitu



DB/6

R

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy) 27/AUG/2011	Time (24h): std / daylight 11:20 hrs to 12:28 hrs	Water Level low - mean - bankfull - overbank falling - steady - rising
Segment/Reach ID: C02 Left Bank / Right Bank / Island				
Operations Division: C02 RB				
Survey by: Foot / ATV / Boat / Helicopter / Overlook /		Sun / Clouds / Fog / Rain / Snow / Windy / Calm	Air Temp +/- 30 deg C	

2 SURVEY TEAM # 5	name	organization	contact phone number
Ariel Blanc		Polaris	<i>Ariel Blanc</i>
Daniel Elefant		Cardno ENTRIX	<i>Daniel Elefant</i>
Earl Radonski		DEQ - MFWP	<i>Earl Radonski</i>
Darrick Turner		DEQ	<i>Darrick Turner</i>
Larisa Leonova		EPA	<i>Larisa Leonova</i>
Stephen Ball		EPA	<i>Stephen Ball</i>

3 SEGMENT Total Segment/Reach Length _____ m Segment/Reach Length Surveyed 692 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 P (type) rip-rap _____ Wetland: Swamp _____ Bog/Fen _____ Marsh _____

Sediment Bank: Clay/Mud _____ Sand _____ Mixed S Pebble/Cobble _____ Boulder _____ Peat/Organic _____ Vegetated Bank: S 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 2-3 m canyon _____ manmade _____ meander S confined or leveed P Substrate Type: cement

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

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	692	19	<1			X	(X)						X					veg
B			X	(X)	738	2	<1			X	(X)						X					veg

1910
1911

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

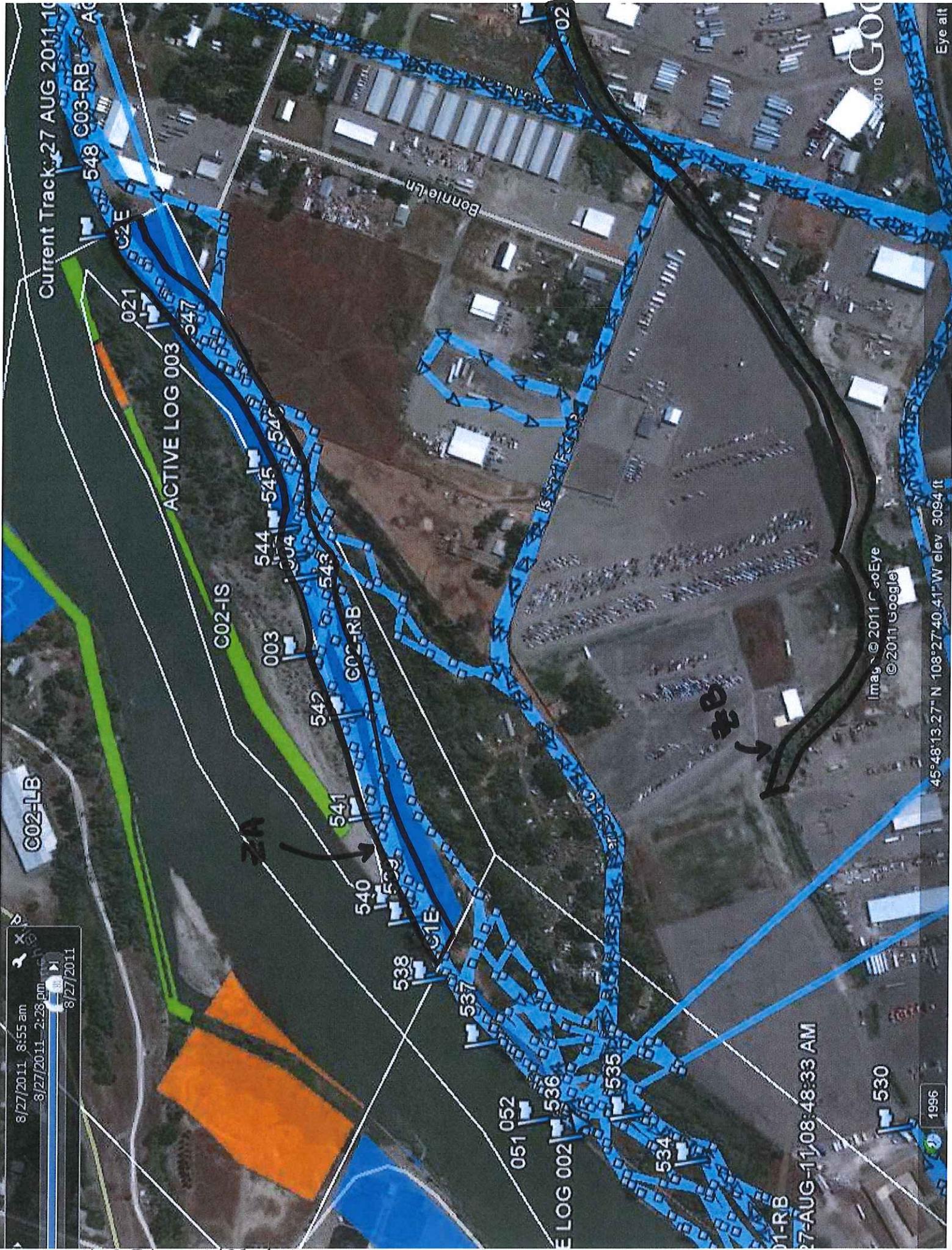
8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

ReSCAT
 DEAD Fox - WP#23 CALLED INTO WILDLIFE HOTLINE (45.404715, -108.7545027).
 Zone A: Trace oiled vegetation. Hotshot crew accompanied ReSCAT team. Remaining transferable oil removed during ReSCAT
 Zone B: Backshore stream. Trace oiled veg. Hotshot crew removed remaining transferable oil during ReSCAT. Segment #111415 meets operational endpoints. NPT

(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# _____)

8/27/2011 8:55 am
 8/27/2011 2:28 pm
 8/27/2011





Appendix F

Completed SCAT Segment
Sign-Off Forms

SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

SILVERTIP PIPELINE RELEASE

Segment CO2 IS Date of Survey 9/5/11

Dates of Initial SCAT Assessments 30 JUL 11 (IL)
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment 57

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

Segment Assessment Complete¹

Partial Segment Assessment

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

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

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

Alex White AUSTIN WILES USEG 9/5/11
Sign Name Print Name/ Affiliation Date
Federal Representative (EPA/USCG)

Betsy Hovda Betsy Hovda DEQ 9/5/11
Sign Name Print Name/ Affiliation Date
State Representative (DEQ/FWP)

Nathan Hammond Nathan Hammond / Carbon Entry 9/5/11
Sign Name Print Name/ Affiliation Date
RP Representative (SCAT RP Representative)

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

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

SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

SILVERTIP PIPELINE RELEASE

Segment CO2LB Date of Survey 9/2/11

Dates of Initial SCAT Assessments 24 JUL 11 IS
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment 57

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

Segment Assessment Complete¹

Partial Segment Assessment

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

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

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

[Signature] AUSTIN WES USCG 9/2/11
Sign Name Print Name/ Affiliation Date
Federal Representative (EPA/USCG)

[Signature] JAY WATSON FWP 9/2/11
Sign Name Print Name/ Affiliation Date
State Representative (DEQ/FWP)

[Signature] Nathan Hammond / Cardio Entix 9/2/11
Sign Name Print Name/ Affiliation Date
RP Representative (SCAT RP Representative)

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

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

SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

SILVERTIP PIPELINE RELEASE

Segment CO2LB Date of Survey 9/5/11

Dates of Initial SCAT Assessments 24 JUL 11 (IL)
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment 57

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

Segment Assessment Complete¹

Partial Segment Assessment

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

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

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

Austin West Austin West USEL 9/5/11
Sign Name Print Name/ Affiliation Date
Federal Representative (EPA/USCG)

Betsy Hovda Betsy Hovda DEQ 9/5/11
Sign Name Print Name/ Affiliation Date
State Representative (DEQ/FWP)

Nathan Hammond Nathan Hammond / Chevron Enrix 9/5/11
Sign Name Print Name/ Affiliation Date
RP Representative (SCAT RP Representative)

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

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

SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

SILVERTIP PIPELINE RELEASE

Segment CO2LB Date of Survey 20/09/2011

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

CTR(s) Associated with SCAT Segment 57

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

Segment Assessment Complete¹
Partial Segment Assessment

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

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

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

No Federal Rep Present

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

[Signature] _____ JAY WATSON/FWP _____ 9/20/11 _____
Sign Name _____ Print Name/ Affiliation _____ Date _____
State Representative (DEQ/FWP)

[Signature] _____ Henri Caswell Polaris _____ 20/09/2011 _____
Sign Name _____ Print Name/ Affiliation _____ Date _____
RP Representative (SCAT RP Representative)

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

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

