

ExxonMobil Pipeline Company

**SCAT Area Transition Report
for C12**

Silvertip Pipeline Incident
Laurel, Montana

October 25, 2011



SCAT Area Transition Report for C12

Silvertip Pipeline Incident
Laurel, Montana

Prepared for:
ExxonMobil Pipeline Company

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Our Ref.:
B0085883.1103

Date:
October 25, 2011

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

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1. Executive Summary of Oil Removal Activities

This Shoreline Cleanup Assessment Technique (SCAT) Area Transition Report provides a summary of the SCAT surveys conducted to determine the extent of oiling along the riverbanks and floodplain within SCAT Area C12, 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 C12. 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 C12, 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 C12 is 149.9. There were access issues for portions of the left bank, right bank, and island.

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 C12 due to the low level of oiling in Division C. No oiled wildlife was observed or recovered. No Wildlife Priority Cleanup Areas were identified. No active migratory bird nests were identified in Area C12.

1.3 Summary of Environmental Sampling

Table 1 (below) summarizes samples collected within Area C12. 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 C12 are provided on Figure 3.

Table 1 Environmental Sampling Summary

Area	Agency	Sample Num	Date	Matrix	Location	Latitude	Longitude
C12		No Samples Collected*					

Appendix A contains a summary of sample results with detections for this sample set. Detections with a result above the screening level are highlighted. However, to date, no samples have been collected in this area.

1.4 Summary of Initial SCAT Surveys

The SCAT teams used systematic evaluation criteria and treatment method tables approved by the National Oceanic and Atmospheric Administration to provide a standard approach for data collection and conducting field surveys. The forms and sketches from the initial SCAT surveys performed along the river bank (water edge) and floodplain within Area C12 are included in Appendix B. Figure 4 provides the maximum oiling zones observed by the SCAT team during the initial surveys of Area C12.

1.5 Applicable Compiled Treatment Recommendations

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

1.6 Oil Removal Activities

Oil removal activities were conducted within Area C12 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 C12 following completion of oil removal activities. The SCAT team performed final surveys of the left bank, right bank, and island within SCAT Area C12 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 left bank, right bank, and island within Area C12, no further treatment is recommended for these segments. SCAT Segment Sign-Off Forms are included as Appendix F.



**SCAT Area Transition
Report for C12**

Silvertip Pipeline Incident
Laurel, Montana

2. Transition Sign-Off Form

SCAT Area Transition Report for C12

Prepared for:

Unified Command

Date

Unified Command – RP



**SCAT Area Transition
Report for C12**

Silvertip Pipeline Incident
Laurel, Montana

SCAT Area Transition Report for C12

Prepared for:

Unified Command

Date

Unified Command – FOSC



**SCAT Area Transition
Report for C12**

Silvertip Pipeline Incident
Laurel, Montana

SCAT Area Transition Report for C12

Prepared for:

Unified Command

Date

Unified Command – MDEQ

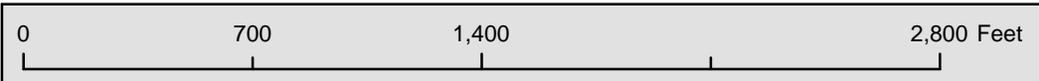
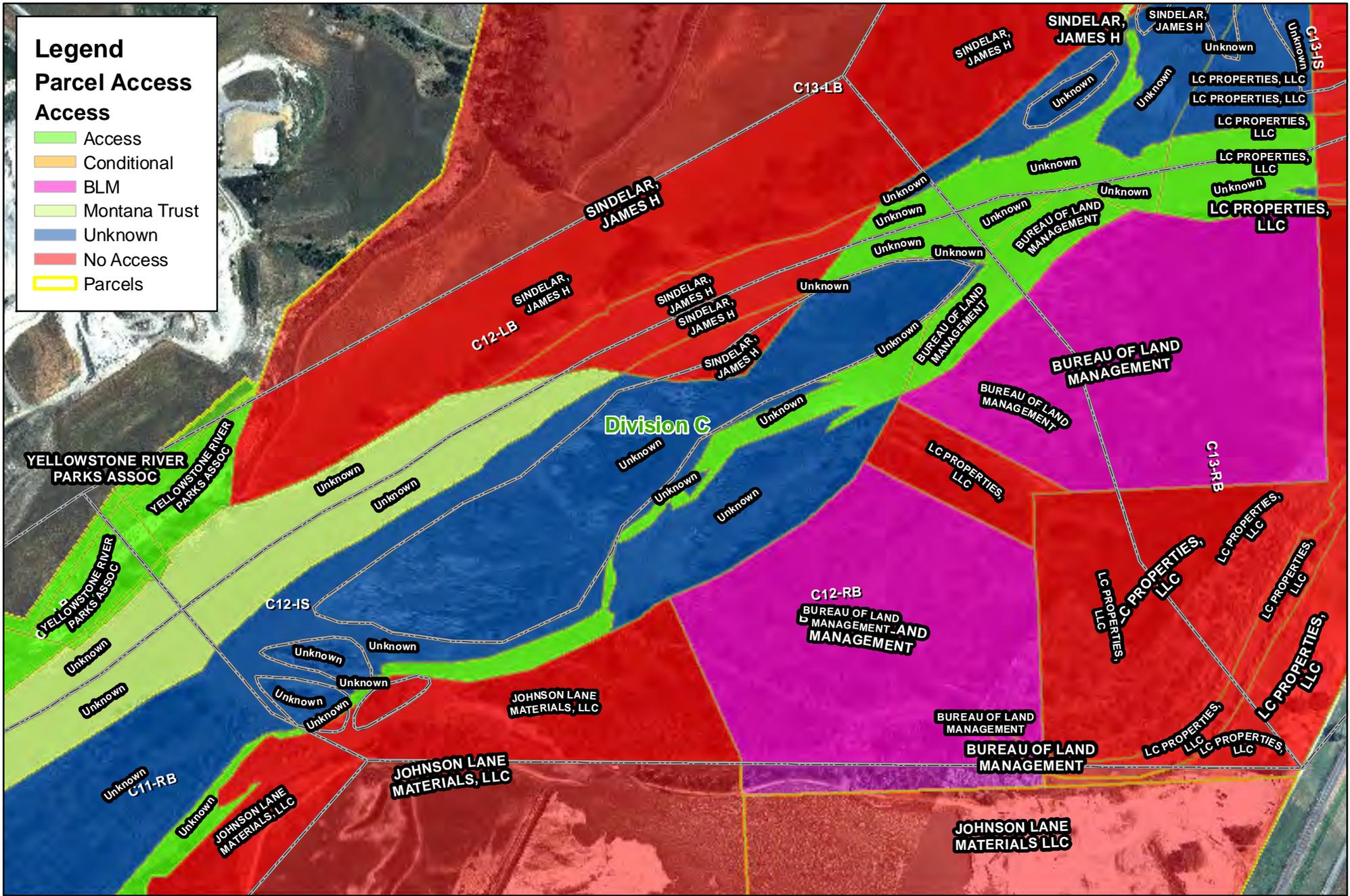


Figure 1

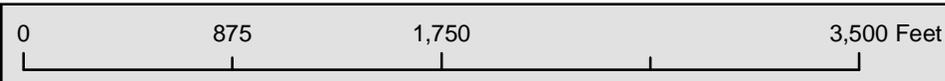
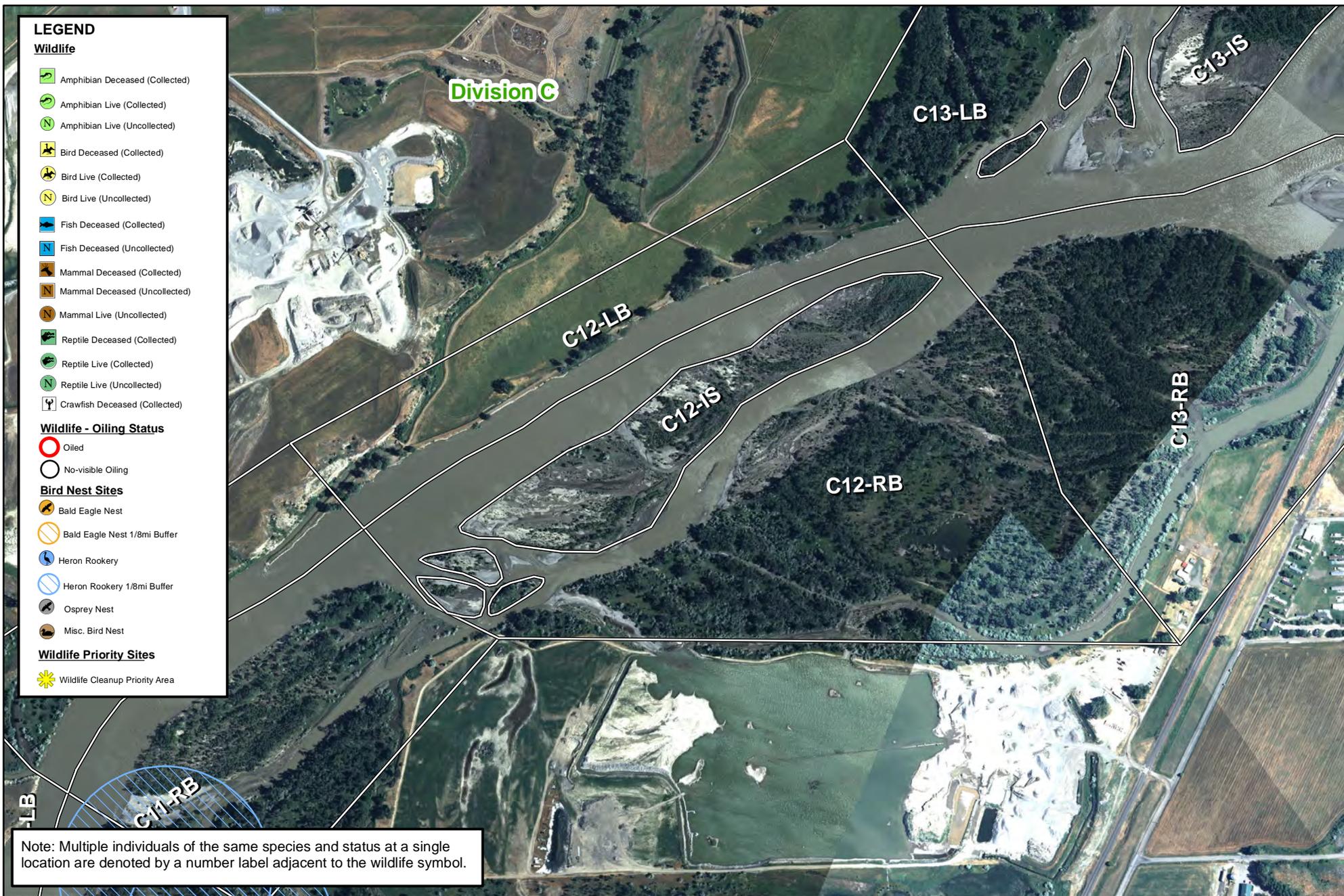
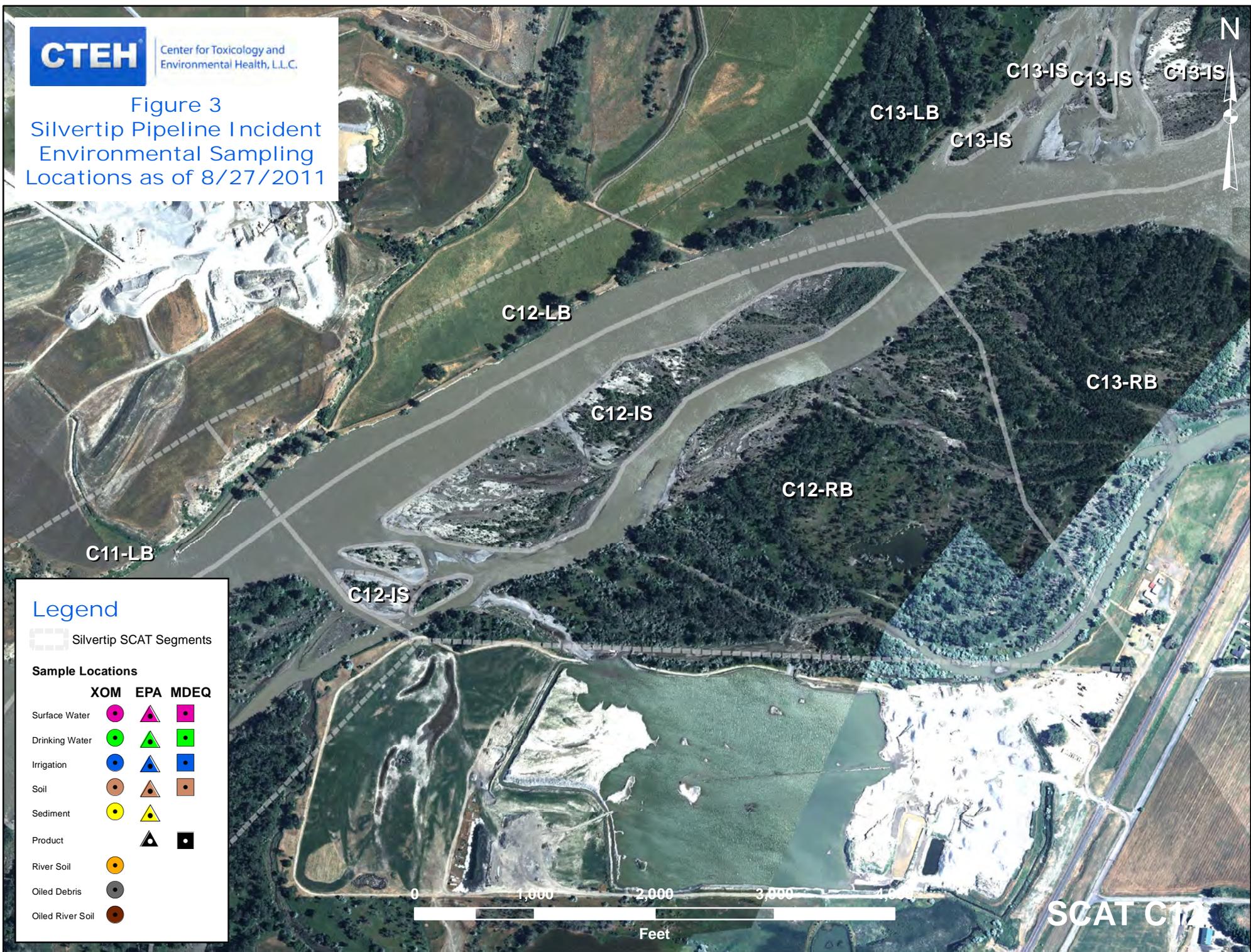


Figure 2
Wildlife Resources

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 C11



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

Figure 4 - Maximum SCAT Observations For SCAT Area: C12

430 0 430 860
 Feet



- 9999 Oiling Zone ID
- Heavy Oiling
- Moderate Oiling

- Light Oiling
- Very Light Oiling
- No Oil Observed



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





Appendix A

Sample Detection Summary



Sample Results For
SCAT Area C12

Printed 10/13/2011

NA - Not Available

Detected Above Screening Level

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



Appendix B

Initial SCAT Survey Forms
and Sketches

DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page 1 of 1

1 GENERAL INFORMATION

Segment/Reach ID: C12 Left Bank / Right Bank / Island

Operations Division:

Survey by: Foot / ATV / Boat / Helicopter / Overlook / (Sun) Clouds / Fog / Rain / Snow / Windy / Calm

Date (dd/mm/yy) ~~08/09/2011~~ 09/08/2011

Time (24h): std / daylight 0920 hrs to 1408 hrs

Water Level low - mean - bankfull - overbank

falling steady - rising

Air Temp +/- 33 deg C

2 SURVEY TEAM # 6

Name	Organization	Signature
Chris Arredondo	CardnoENTRIX	
Dominic Ventura	EPA	
Jay Watson	FWP	
Mark Denny	THPO Crow Tribe	
Ernie McKenzie	BLM	

3 SEGMENT Total Segment/Reach Length 1175 m Segment/Reach Length Surveyed 988 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 _____ P Pebble/Cobble _____ S Boulder _____ Peat/Organic _____

Sediment Flat: Clay/Mud _____ Sand _____ Mixed/Coarse _____ Other: _____

Vegetated Bank: (S) Wooded Upland: S

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 _____ complete for primary

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

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: < 1m 1-10m 10-100m >100m 160m

shoal(s) present Y/N point bar present Y/N est. water depth: <1m 1-3m 3-10m >10m _____ m

seasonal water level: low / mean / bank full / overbank flow

bar-shoal substrate: silt / sand / gravel / cobble / boulder / bedrock / debris

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 0 bags or 0 trucks access restrictions There is a gravel quarry to the south that is the only means of access. Need to check with operations foreman to see if he will grant access through the quarry to conduct cleanup operations.

Oiled trees/shrubs Y/N River Current strong Y/N Other Features: There are two gravel bars that need to be forded in order to access the zones that need oil removed. Refer to map.

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	%																			
A				X	1043	230	5			<u>(X)</u>	X											
B				X	465	43	1			X								X				Shrubs, debris grass
C				X	660	500												X				Grass, debris
D				X	58	125	5			X								X				Shrubs, grass

1367
1368
1369
1370

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: Cut and remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter. Wipe larger oil coated vegetation and debris.~~

Zone B: Cut and remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter. Wipe larger oil coated vegetation and debris.

Zone C: No treatment required.

Zone D: Cut and remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter. Wipe larger oil coated vegetation and debris.

Sketch Yes / No Photos Yes / No Frames _____

Photographer Chris Arredondo/Jay Watson

LINE INCIDENT Team 6 8/9/2011
the River Segment C12 Right Bank



*Data Current through 08/05/2011



DB/G/15

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy) <u>08/09/2011</u>	Time (24h): std / daylight <u>0920</u> hrs to <u>1408</u> hrs	Water Level low - mean - <u>bankfull</u> - overbank <u>falling</u> steady - rising
Segment/Reach ID: <u>C12</u> Left Bank / <u>Right Bank</u> / Island		Operations Division:		
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook / _____		<u>(Sun)</u> Clouds / Fog / Rain / Snow / Windy / Calm		
Air Temp +/- <u>33</u> deg C				

2 SURVEY TEAM # <u>6</u>	Name	Organization	Signature
	Chris Arredondo	CardnoENTRIX	
	Dominic Ventura	EPA	
	Jay Watson	FWP	
	Mark Denny	THPO Crow Tribe	
	Ernie McKenzie	BLM	

3 SEGMENT Total Segment/Reach Length 1175 m Segment/Reach Length Surveyed 988 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 P Pebble/Cobble S 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 _____ confined or leveed _____ Substrate Type: Mixed

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 0 bags or 0 trucks access restrictions There is a gravel quarry to the south that is the only means of access. Need to check with operations foreman to see if he will grant access through the quarry to conduct cleanup operations.

Oiled trees/shrubs Y / N River Current strong Y / N Other Features: There are two gravel bars that need to be forded in order to access the zones that need oil removed. Refer to map.

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	1043	230	5			X	X						X					Shrubs, debris, grass
B				X	465	43	1			X							X					Grass, debris
C				X	660	500														X		
D				X	58	125	5			X							X					Shrubs, grass

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: Cut and remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter. Wipe larger oil coated vegetation and debris.

Zone B: Cut and remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter. Wipe larger oil coated vegetation and debris.

Zone C: No treatment required.

Zone D: Cut and remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter. Wipe larger oil coated vegetation and debris.

Split between RB + IS

Sketch Yes / No Photos Yes / No Frames _____ Photographer Chris Arredondo/Jay Watson

DB/6/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>C12</u>	<input checked="" type="radio"/> Left Bank / <input type="radio"/> Right Bank / <input type="radio"/> Island	<u>27/07/11</u>	<u>9:33</u> hrs to <u>9:39</u> hrs	low - mean - bankfull - overbank
Operations Division: <u>C</u>				<input checked="" type="radio"/> falling - <input type="radio"/> steady - <input type="radio"/> rising
Survey by: <input 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 / <input type="radio"/> Clouds / <input type="radio"/> Fog / <input type="radio"/> Rain / <input type="radio"/> Snow / <input type="radio"/> Windy / <input type="radio"/> Calm			Air Temp +/- <u>30</u> deg C

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

3 SEGMENT Total Segment/Reach Length 1200 m Segment/Reach Length Surveyed 1200 m

Start GPS: LATITUDE 45 deg. 51°07.69 min. LONGITUDE 108 deg. 24°01.25 min. Datum: wgs 84

End GPS: LATITUDE 45 deg. 50°51.10 min. LONGITUDE 108 deg. 24°51.79 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: 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 160m 110 est. water depth: <1m 1-3m 3-10m >10m ___ m

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

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

5 OPERATIONAL FEATURES

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

Debris: Y / N oiled Y / N amount ___ 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

933
934

OIL ZONE ID	RIVER BANK ZONE				OIL COVER			OIL THICKNESS								OIL CHARACTER								SUBST. TYPE(S)
	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR	AP	NO				
A			<input checked="" type="radio"/>	<input checked="" type="radio"/>	310	2	60			<input checked="" type="radio"/>	<input checked="" type="radio"/>											S/LH		
B			<input checked="" type="radio"/>	<input checked="" type="radio"/>	870	2	0													<input checked="" type="radio"/>		S/LH		

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					

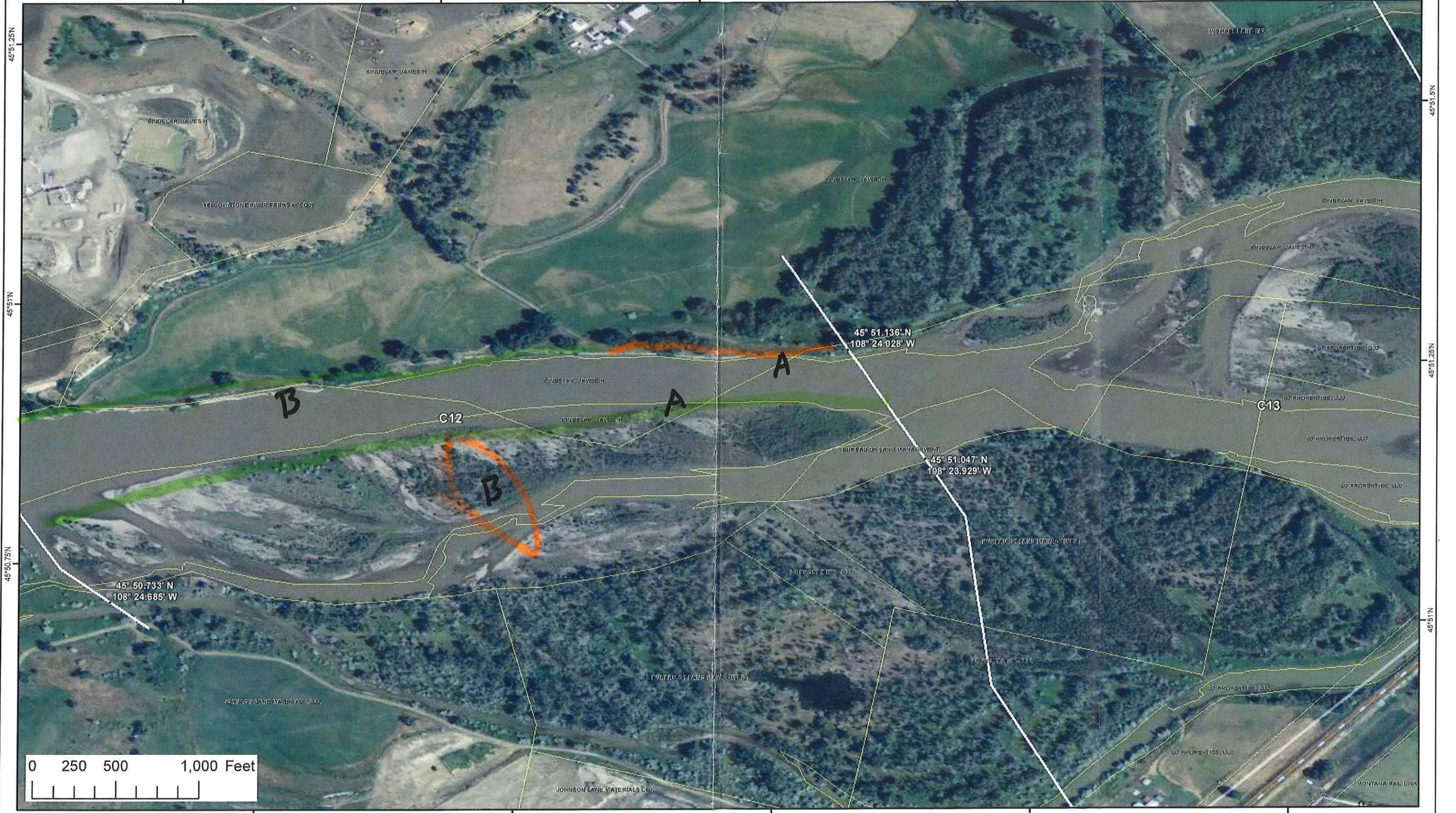
8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

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

Zone A has stand cut cold veg (Pearly Grass).
Veg needs to be cut and/or stand cut needs removed.



108°24.75'W 108°24.5'W 108°24.25'W 108°24'W 108°23.75'W



45°51.25'N
45°51'N
45°50.75'N

45°51.5'N
45°51.25'N
45°51'N



108°24.5'W 108°24.25'W 108°24'W 108°23.75'W

DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident COMPLETE SURVEY

1 GENERAL INFORMATION		Date (dd/mm/yy) 11/08/2011	Time (24h): std / daylight 910 hrs to 1037 hrs	Water Level low - <u>mean</u> - bankfull - overbank falling - steady - rising
Segment/Reach ID: C12 <u>Left Bank</u> / Right Bank / Island		Operations Division:		
Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook /		<u>Sun</u> / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp + / - <u>25</u> deg C

2 SURVEY TEAM # 3	Name	Organization	Signature
Richard Marty		Polaris	<i>Richard Marty</i>
Travis Cain		USEPA	<i>Travis Cain</i>
Tom Bovington		State of Montana, DEQ	<i>Tom Bovington</i>

3 SEGMENT Total Segment/Reach Length _____ m Segment/Reach Length Surveyed 1181 m

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

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

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

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

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

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

4B RIVER VALLEY CHARACTER select as appropriate complete for primary

Cliff or Bluff: Est Height _____ m canyon _____ manmade _____ meander _____ confined or leveed X Substrate Type: Silt/mud

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 100 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 _____ bags or _____ trucks access restrictions: Must have landowner permission

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	<u>X</u>	604	5	0														X	All
B			X		202	2	<1				x						x					Vegetation
C			X	<u>X</u>	155	20	0														X	All
D				X	85	4	<1			S	P						X					Plants and debris
E				X	135	10	5				X						X					Grass

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

TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER						WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes / No	SUBST. TYPE(S)						
	MS	LB	UB	OB			SAP	OP	PP	OR	OF	TR					NO					
None																						

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

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

Oiling in Zones B, D, and E is primarily staining on vegetation. Natural Attenuation is appropriate for these zones.

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

DB/G/S

1 GENERAL INFORMATION		Date (dd/mm/yy) 13/08/11	Time (24h): std / daylight 1000 hrs to 1100 hrs	Water Level low - mean <u>bankfull</u> overbank falling - steady - rising
Segment/Reach ID: <u>C12</u> (Left Bank) Right Bank / Island		Operations Division: <u>C</u>		
Survey by: <u>Foot</u> / Boat / Helicopter / Overlook /		<u>(Sun)</u> Clouds / Fog / Rain / Snow / Windy / <u>(Calm)</u>		Air Temp +/- <u>30</u> deg C

2 SURVEY TEAM # <u>4</u>	Name	Organization	Signature
	<u>Nathan Hammond</u>	<u>Cardno Entrix</u>	<u>[Signature]</u>
	<u>Damien Korte</u>	<u>Cardno Entrix</u>	<u>[Signature]</u>
	<u>John Hunziker</u>	<u>FLUP</u>	<u>[Signature]</u>
	<u>Lance Richman</u>	<u>EPA</u>	<u>[Signature]</u>

3 SEGMENT Total Segment/Reach Length 1212 m Segment/Reach Length Surveyed 1212 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: 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: _____

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 _____ bags or _____ trucks access restrictions Agriculture land

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

1507
1508
1509
1510

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>9.25</u>	<u>15</u>	<u>0</u>															✓
B			<u>P</u>	<u>S</u>	<u>170</u>	<u>20</u>	<u>0</u>															✓
C			<u>P</u>	<u>S</u>	<u>65</u>	<u>5</u>	<u><1</u>			<u>S</u>	<u>P</u>		<u>X</u>									brass
D			<u>P</u>	<u>S</u>	<u>5.2</u>	<u>20</u>	<u>0</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				

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

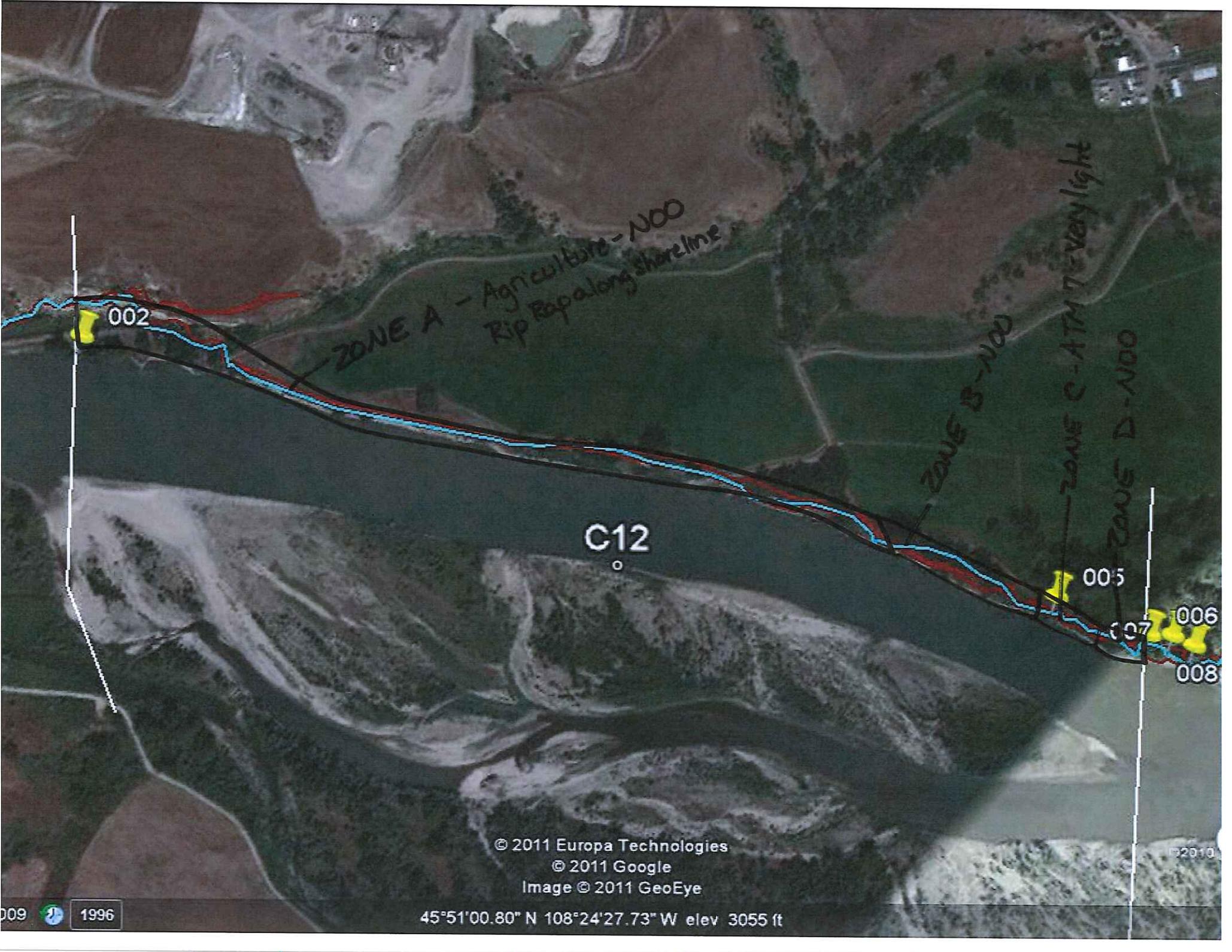
Overbank Survey Required (Y) (N) Overbank Survey Completed (Y) (N) Shoreline Survey Completed (Y) (N)

Zone A - Agriculture land; NDO when traversing

Zone B and D - NDO

Zone C - AT47 = Natural attenuation

Sketch (Yes) / No Photos (Yes) / No Frames/Photographer: [Signature]



ZONE A - Agriculture - NOD
Rip Rap along shoreline

ZONE B - NOD

ZONE C - ATM 7 - Very light

ZONE D - NOD

002

C12

005

006

007

008

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Image © 2011 GeoEye

2010

009 1996

45°51'00.80" N 108°24'27.73" W elev 3055 ft

DB/16

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident Page of

1 GENERAL INFORMATION

Segment/Reach ID: C12 Left Bank / Right Bank / Island Island Date (dd/mm/yy) 27/10/11 Time (24h): std / daylight 10:05 hrs to 10:55 hrs Water Level low - mean - bankfull overbank low - mean - bankfull

Operations Division: C Survey by: Foot / ATV / Boat Helicopter / Overlook / Boat Sun Clouds / Fog / Rain / Snow / Windy / Calm falling - steady - rising Air Temp + / - 30 deg C

2 SURVEY TEAM #1

Name	Organization	Signature
<u>Chuck Pons</u>	<u>Coastal ENTRIX</u>	<u>[Signature]</u>
<u>Jay Watson</u>	<u>MFWP</u>	
<u>Ernie McKenzie</u>	<u>US BLM</u>	

3 SEGMENT Total Segment/Reach Length 1200 m Segment/Reach Length Surveyed 1200 m

Start GPS: LATITUDE 45 deg. 51°05.52 min. LONGITUDE 108 deg. 23°55.22 min. Datum: wgs 87

End GPS: LATITUDE 45 deg. 50°48.32 min. LONGITUDE 108 deg. 24°48.65 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: Forested / Vegetated / Bare

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

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

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

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

935
936

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	1200	2	0														X	Silt/ln		
B			X	Y	295	140	cl			S	P			X								Silt/Cobbles		

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 - no oil observed

Zone B - Partially Surveyed w/ BLM rep. Small isolated areas of stunted rooted debris and veg. Debris is to be picked up and veg cut either hand or removed (logged)

DB/16

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>C12</u> Left Bank / <u>Right Bank</u> / Island		<u>27/07/11</u>	<u>1005</u> hrs to <u>10:55</u> hrs	low - mean - bankfull - overbank
Operations Division: <u>C</u>				<u>falling</u> - steady - rising
Survey by: <u>Foot</u> / <u>ATV</u> / <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>[Signature]</u>
	<u>Jay Watson</u>	<u>MFWP</u>	
	<u>Ernie McKenzie</u>	<u>US BLM</u>	

3 SEGMENT Total Segment/Reach Length 1200 m Segment/Reach Length Surveyed 1200 m

Start GPS: LATITUDE 45 deg. 51°05.52 min. LONGITUDE 108 deg. 23°53.22 min. Datum: WGS 87

End GPS: LATITUDE 45 deg. 50°48.32 min. LONGITUDE 108 deg. 24°48.65 min.

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

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

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

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 [X] / N point bar present [X] / 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 [X] / N Access: Direct from backshore [X] / N Alongshore from next segment [X] / N

Debris: [X] / N oiled [X] / N amount 2 bags or _____ trucks access restrictions _____

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

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

OIL ZONE	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER							SUBST. TYPE(S)			
	ID	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR		AP	NO	
<u>A</u>				<u>X</u>	<u>X</u>	<u>1200</u>	<u>2</u>	<u>0</u>														<u>X</u>	<u>Silt/ln</u>
<u>B</u>				<u>X</u>	<u>X</u>	<u>295</u>	<u>140</u>	<u>cl</u>			<u>S</u>	<u>P</u>		<u>X</u>									<u>Sand/Colly.</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	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 [X] / N Overbank Survey Completed Y / [N] Shoreline Survey Completed [X] / N

Zone A - no oil observed

Zone B - Partial survey w/ BLM rep. Small isolated areas of stunted root/dobbs and veg. Debris is to be picked up and vs cut either found and removed (logged)

Sketch [X] / No Photos [X] / No Frames _____ Photographer _____



108°24.75'W 108°24.5'W 108°24.25'W 108°24'W 108°23.75'W



1 GENERAL INFORMATION		Date (dd/mm/yy) 08/09/11 09/08/11 PA	Time (24h): std / daylight 0920 hrs to 1408 hrs	Water Level low - mean - bankfull overbank falling - steady - rising
Segment/Reach ID: <u>C10</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>33</u> deg C

2 SURVEY TEAM # <u>6</u>	Name	Organization	Signature
	Chris Arredondo	Gardno Envirox	See attached
	Dominic Ventura	EPA	
	Jay Watson	FWP	
	Mark Danny	THPO CrewTribe	
	Ernie McKenzie	BLM	

3 SEGMENT Total Segment/Reach Length _____ m Segment/Reach Length Surveyed 988 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 P Pebble/Cobble S 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 _____ confined or leveed _____ Substrate Type: mixed

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

4C RIVER CHANNEL CHARACTER circle or select as appropriate

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

shoal(s) present (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: see attached

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	
2128 A				X	1043	530	5			X	X						X					shrubs, debris, grass

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 - Cut and remove oil coated veg smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter. Wipe larger oil coated veg and debris.

* Removed from RB

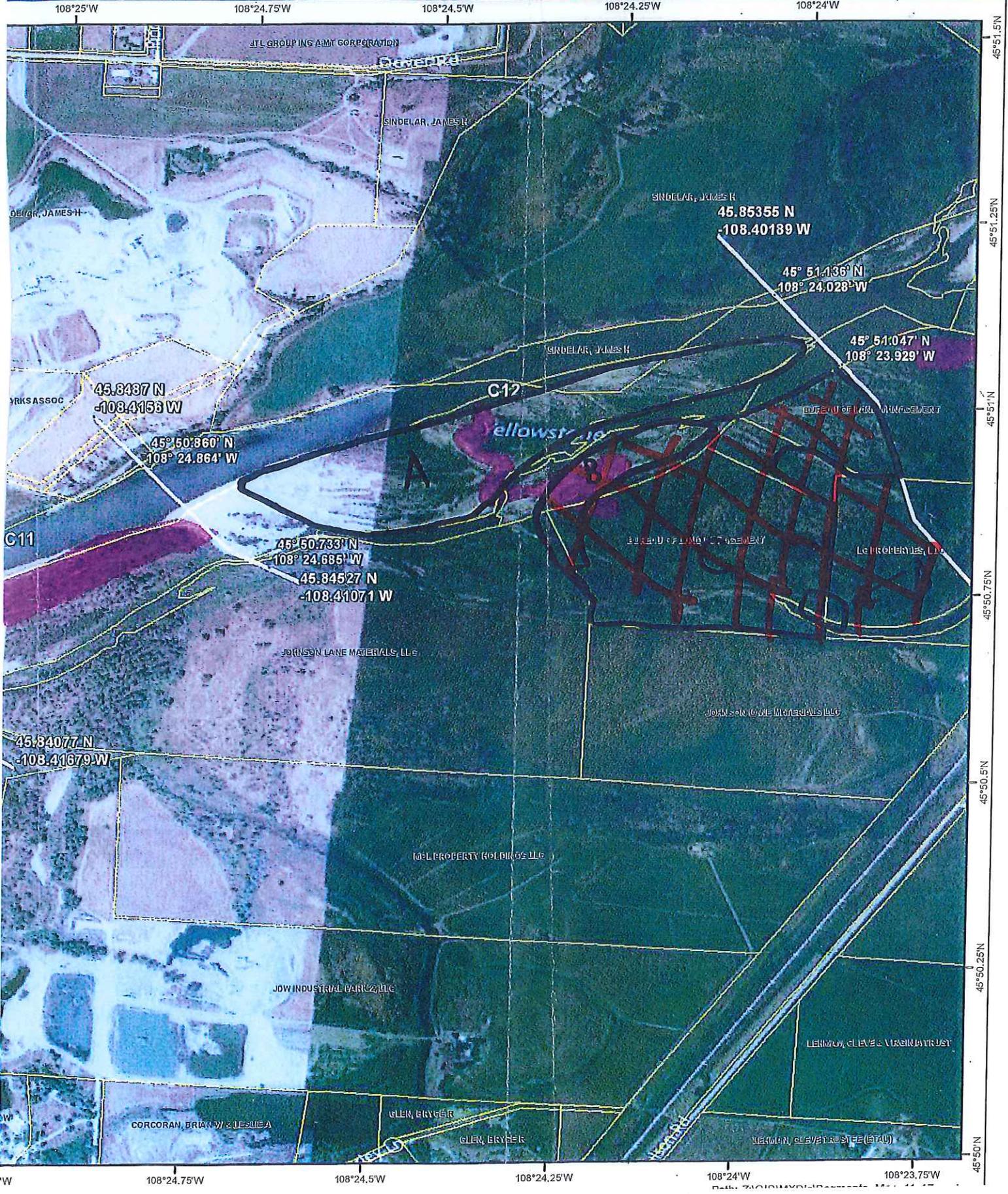
~~8 Sept 2011~~
9 Aug 2011

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

LINE INCIDENT Team 6 8/9/2011
the River
29 Segment C12 Right Bank



*Data Current through 08/05/2011



DB/G/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy) <u>08/09/2017</u>	Time (24h): std / daylight <u>0920</u> hrs to 1408 hrs	Water Level low - mean - <u>bankfull</u> - overbank <u>(falling)</u> steady - rising
Segment/Reach ID: <u>C12</u> Left Bank / <u>Right Bank</u> / Island				
Operations Division:				
Survey by: <u>Foot / ATV / Boat / Helicopter / Overlook /</u>		<u>(Sun)</u> Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp +/- <u>3.3</u> deg C

2 SURVEY TEAM # <u>6</u>	Name	Organization	Signature
	Chris Arredondo	CardnoENTRIX	
	Dominic Ventura	EPA	
	Jay Watson	FWP	
	Mark Denny	THPO Crow Tribe	
	Ernie McKenzie	BLM	

3 SEGMENT Total Segment/Reach Length 1175 m Segment/Reach Length Surveyed 988 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 _____ P Pebble/Cobble _____ S 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 _____ confined or leveed _____ Substrate Type: Mixed

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

4C RIVER CHANNEL CHARACTER circle or select as appropriate

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

shoal(s) present 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 0 bags or 0 trucks access restrictions There is a gravel quarry to the south that is the only means of access. Need to check with operations foreman to see if he will grant access through the quarry to conduct cleanup operations.

Oiled trees/shrubs Y / N River Current strong Y / N Other Features: There are two gravel bars that need to be forded in order to access the zones that need oil removed. Refer to map.

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

367
368
369
170

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	1043	230	5			<u>(X)</u>	X						X					Shrubs, debris, grass
B				X	465	43	1			X							X					Grass, debris
C				X	660	500														X		
D				X	58	125	5			X							X					Shrubs, grass

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: Cut and remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter. Wipe larger oil coated vegetation and debris.

Zone B: Cut and remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter. Wipe larger oil coated vegetation and debris.

Zone C: No treatment required.

Zone D: Cut and remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter. Wipe larger oil coated vegetation and debris.

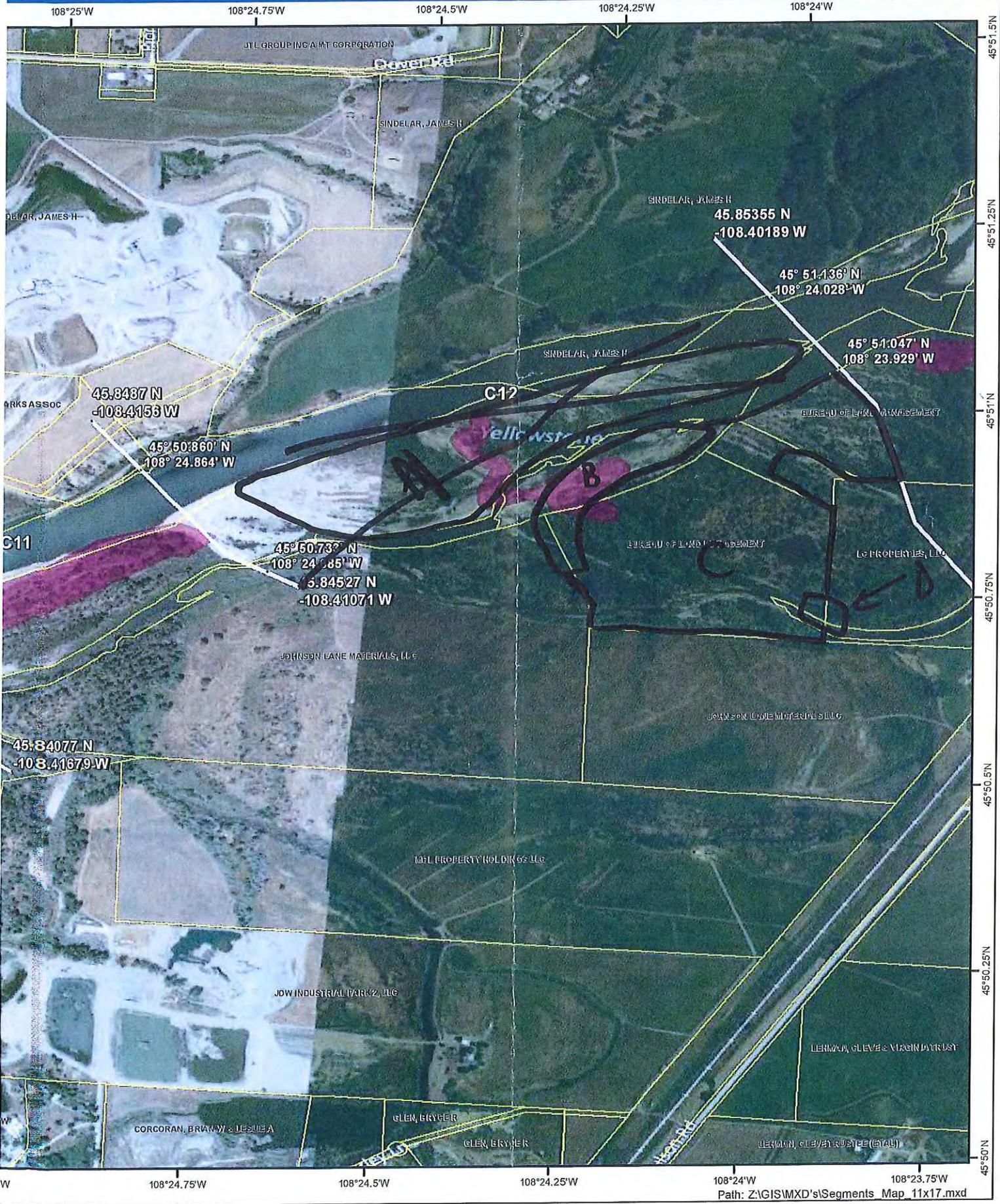
Split between RB + IS

Sketch Yes / No Photos Yes / No Frames _____ Photographer Chris Arredondo/Jay Watson

LINE INCIDENT Team 6 8/9/2011
 e River Segment C12 Right Bank

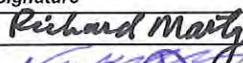


*Data Current through 08/05/2011



DB 16

1 GENERAL INFORMATION		Date (dd/mm/yy) 06/09/2011	Time (24h): std / daylight 1115 hrs to 1130 hrs	Water Level low - mean - <u>bankfull</u> - overbank falling - steady - rising
Segment/Reach ID: C12 Left Bank / Right Bank / Island		Operations Division: C		
Survey by: <u>Foot / ATV / Boat / Helicopter / Overlook /</u>		Sun / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp +/- <u>28</u> deg C

2 SURVEY TEAM #	NA	Name	Organization	Signature
		Richard Marty	Polaris	
		Ernie McKenzie	US Bureau of Land Management	
		Lee Burroughs	Montana FWP	

3 SEGMENT	Total Segment/Reach Length _____ m	Segment/Reach Length Surveyed <u>725</u> m
Start GPS: LATITUDE _____ deg. _____ min.	LONGITUDE _____ deg. _____ min.	Datum: _____
End GPS: LATITUDE _____ deg. _____ min.	LONGITUDE _____ deg. _____ min.	

4A RIVER BANK TYPE SELECT only one primary (P) shoreline type and any number of secondary (S) types. CIRCLE those OILED			
Bedrock: Cliff/Ramp _____ Shelf _____	Manmade: Solid _____ Permeable _____ (type) _____	Wetland: Swamp _____ Bog/Fen _____ Marsh _____	
Sediment Bank: Clay/Mud S _____ Sand _____ Mixed _____	Pebble/Cobble _____ Boulder _____ Peat/Organic _____	Vegetated Bank: <u>P</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>p</u>	confined or leveed _____	Substrate Type: <u>mud/sand/grvl</u>
Sloped: _____ (>5°)(15°)(30°)	straight _____ braided <u>s</u>	oxbow _____ flood plain valley _____	Forested / <u>Vegetated</u> / Bare

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

5 OPERATIONAL FEATURES		Suitable backshore staging <u>Y</u> / N	Access: Direct from backshore <u>Y</u> / N Alongshore from next segment Y / <u>N</u>
Debris: <u>Y</u> / N oiled Y / <u>N</u> amount _____ bags or _____ trucks	access restrictions:		
Oiled trees/shrubs <u>Y</u> / N	River Current strong <u>Y</u> / N	Other Features:	

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

2136

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	725	155	<1			X								X				Debris, plants

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				
None																

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

Land is not owned by Johnson Lane Materials, LLC. The Johnson Lane Materials LLC representative was not sure who the land belonged to.

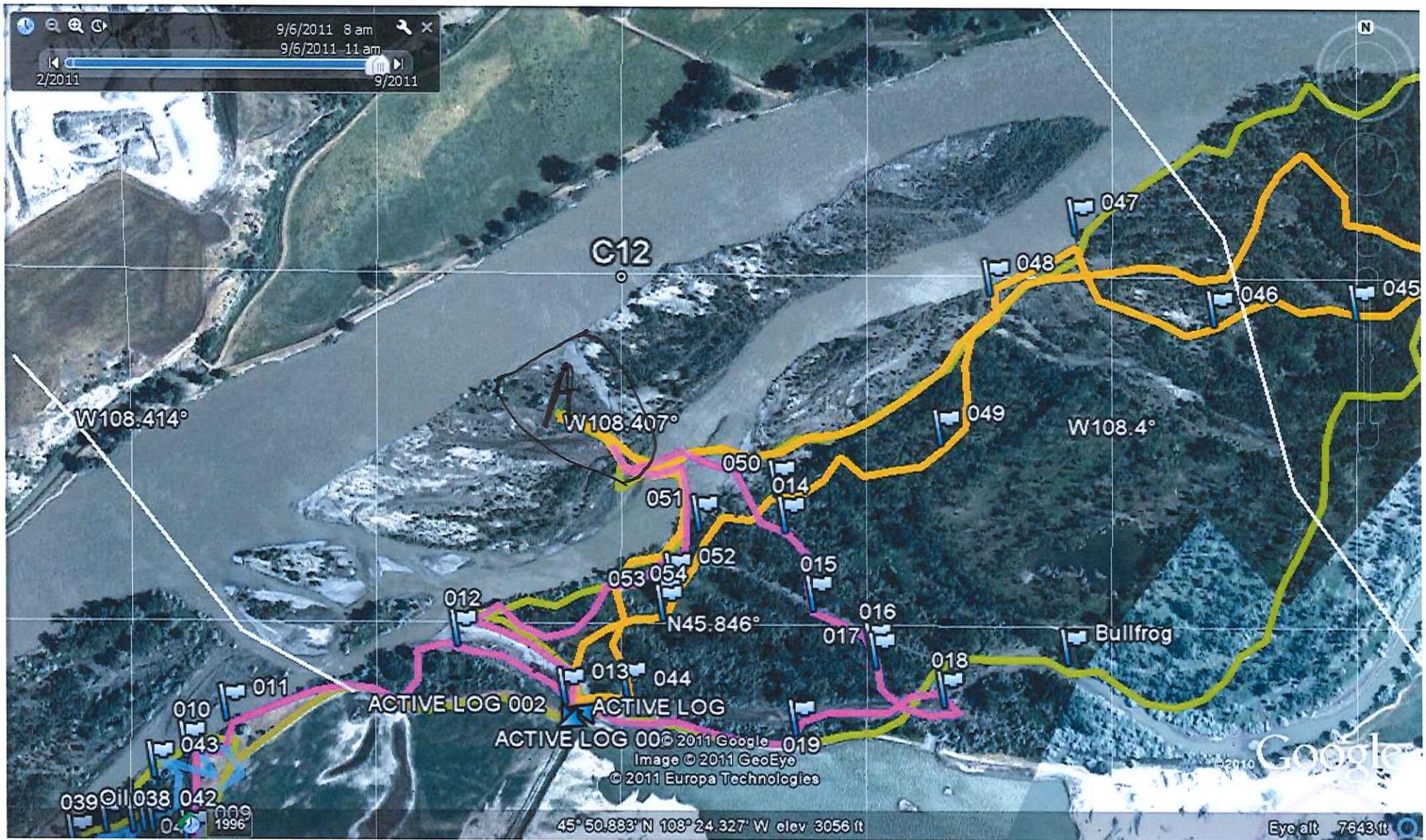
A – Recover and remove oiled debris.

Zone A appears untreated since the last survey (27 July 2011) and needs to be treated to address oiling. Survey was limited to this zone because most of the rest of the island was mapped as NOO during the 27 July survey.

Sketch Yes / No Photos Yes / No Frames None Photographer _____

C12 Island.
06 Sept. 2011

Partial Survey
Team 2





Appendix C

Pre-Inspection Survey Transmittal

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



Appendix D

Post-Inspection Survey Transmittal

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



Appendix E

Final SCAT Survey Forms
and Sketches

DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>012</u>	Left Bank / <u>Right Bank</u> / Island	<u>08/09/11</u>	<u>0900</u> hrs to <u>1120</u> hrs	low - <u>mean</u> - bankfull - overbank
Operations Division: <u>C</u>				falling - steady - rising
Survey by: <u>Foot/ATV / Boat / Helicopter / Overlook /</u>	<u>Sun</u> / Clouds / Fog / Rain / Snow / Windy / <u>Calm</u>			Air Temp +/- <u>30</u> deg C

2 SURVEY TEAM # <u>4</u>	Name	Organization	Signature
	<u>P.O. DALLAS</u>	<u>USCG</u>	
	<u>BRAD OLSZEKI</u>	<u>MTFWP</u>	
	<u>MICHAEL DIRKS</u>	<u>Cardno ENTRIX</u>	

3 SEGMENT Total Segment/Reach Length _____ m Segment/Reach Length Surveyed 635 m

Start GPS: LATITUDE _____ deg. _____ min. LONGITUDE _____ deg. _____ min. Datum: N6584

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

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

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

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

Sediment Flat: Clay/Mud _____ Sand _____ Mixed/Coarse 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: MIXED

Sloped: (>5°)(15°)(30°) straight _____ braided X 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) 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: BUM LAND SURROUNDED BY NO ACCESS

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

2200
2201

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	102	70	<1			P	S						X					brush & GRASSES
B		T	P	S	533	113	<1			P	S						X					COBBLE FOREST

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

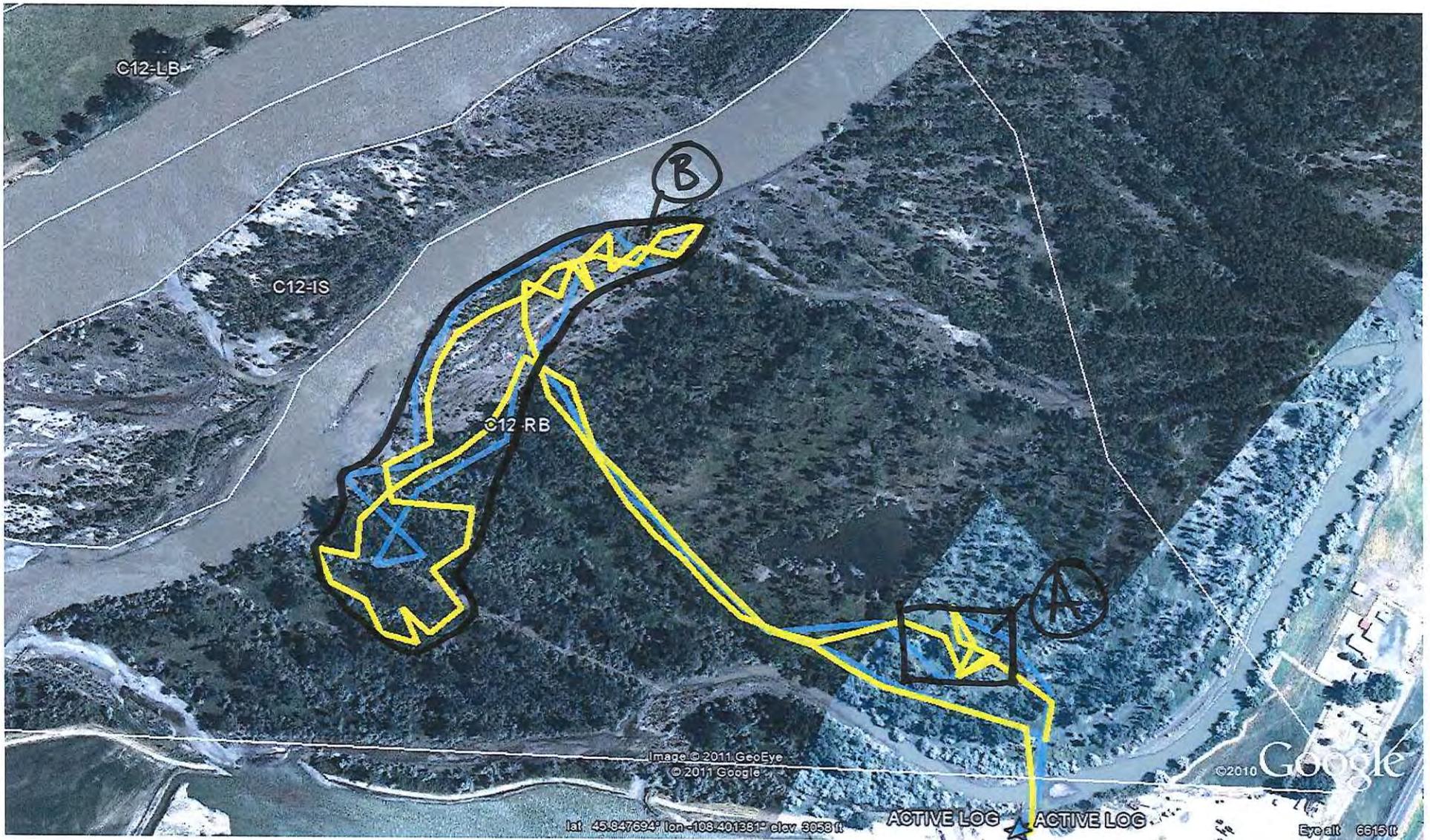
RE-SCAT

ZONE A: NO OPERATIONS ACTIVITY EVIDENT. REMOVED DEBRIS & COATED RUSSIAN OLIVE BRANCHES w/ HOT SHOT TEAM.

ZONE B: NO OPERATIONS ACTIVITY EVIDENT. REMOVED DEBRIS, COATED GRASSES & LOADED BRANCHES w/ HOT SHOT TEAM.

RECOM: No additional Treatment Needed

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

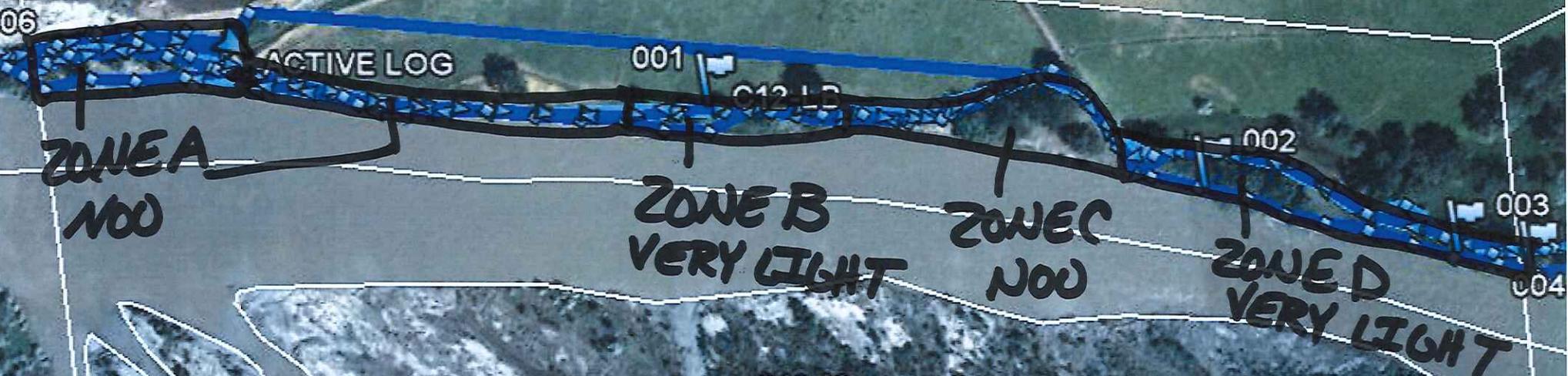


09/08/11
SCAT 4

ZONES A & B: NFT

9/6/2011 5:14pm

Team 6
C12LB
9/6/11



© 2011 Google
Image © 2011 GeoEye

© 2010

1996

45°51'02.55" N 108°24'29.06" W elev. 3055 ft

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: <u>C12</u> Left Bank / Right Bank / Island <u>(Island)</u>		<u>12/09/11</u>	<u>1245</u> hrs to <u>1545</u> hrs	low - <u>mean</u> - bankfull - overbank
Operations Division: <u>C</u>				<u>(falling)</u> - steady - rising
Survey by: <u>(Foot)</u> / <u>(ATV)</u> / <u>(Boat)</u> / <u>(Helicopter)</u> / <u>(Overlook)</u> / _____		<u>(Sun)</u> / Clouds / Fog / Rain / Snow / Windy / <u>(Calm)</u>		Air Temp + / - <u>26</u> deg C

2 SURVEY TEAM # <u>4</u>	Name	Organization	Signature
	<u>Nathan Hammond</u>	<u>Cardon Entic</u>	<u>Nathan Hammond</u>
	<u>Marcile Sigler</u>	<u>DEC</u>	<u>Marcile Sigler</u>

3 SEGMENT Total Segment/Reach Length 1147 m Segment/Reach Length Surveyed 1147 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: (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: _____

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 6 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	
<u>2273</u> <u>2274</u> A		<u>S</u>	<u>P</u>		<u>401</u>	<u>211</u>	<u>0</u>															<u>✓</u>
B		<u>S</u>	<u>P</u>		<u>753</u>	<u>105</u>	<u><1</u>			<u>S</u>	<u>P</u>						<u>X</u>					<u>veg; Debris</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				

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 - ATM1, ATM2, ATM9 utilized by hotshot crew to remove 6 bags of oiled material. No Further Treatment.

Re SCAT

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

Team 4
Claris
9/12/11

ZONE A
NOO

ZONE B
VERY LIGHT

C12-LB

C12-IS

C12-RB

ACTIVE LOG

01

008

009

010

011
AC

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page _____ of _____

DB/G

1 GENERAL INFORMATION		Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: <u>C12</u> Left Bank / Right Bank / (Island)		<u>26/09/11</u>	<u>1000</u> hrs to <u>1100</u> hrs	low - <u>mean</u> - bankfull - overbank
Operations Division: <u>C</u>				<u>falling</u> - steady - rising
Survey by: <u>Foot</u> / 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 # <u>1</u>	Name	Organization	Signature
	<u>TODD FARRAR</u>	<u>POLARIS</u>	<u>[Signature]</u>
	<u>MATTHEW KENT</u>	<u>MIDEQ</u>	<u>[Signature]</u>
	<u>LAUREN GLUSHIK</u>	<u>POLARIS</u>	<u>[Signature]</u>

3 SEGMENT Total Segment/Reach Length 415 m Segment/Reach Length Surveyed 415 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 P 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 _____ m canyon _____ manmade _____ meander _____ confined or leveed _____ Substrate Type: SILT

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

4C RIVER CHANNEL CHARACTER circle or select as appropriate

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

shoal(s) present 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 boat access only

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

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

OIL ZONE ID	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER							SUBST. TYPE(S)		
	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR	AP		NO	
A				<u>X</u>	<u>415</u>	<u>228</u>	<u>41</u>			<u>S</u>	<u>P</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				

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

Sporadic stain and coat on vegetation and debris.
Hot shot crew removed oiled material.
No further treatment required (NFT)

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

9/26/2011 - 11 am

Team 1
Sept. 26, 2011
C12 IS

C12-LB

None
C12-IS

C12-RB

274

ACTIVE LOG C02
26-SEP-11 10:30:34 AM

© 2011 Google
© 2011 Europa Technologies

Image © 2011 GeoEye

45°50'57.27" N 108°24'18.28" W elev 3055 ft

Go

Eye alt

7/31/2009 1996



Appendix F

Completed SCAT Segment
Sign-Off Forms

SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

SILVERTIP PIPELINE RELEASE

Segment C12 RB Date of Survey 09/08/11

Dates of Initial SCAT Assessments 09 AUG 11 (IL)
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment 60

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

Segment Assessment Complete¹

Partial Segment Assessment

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

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

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

[Signature] JAMEL H. DALLS 9/2/11
Sign Name Print Name/ Affiliation Date
Federal Representative (EPA/USCG)

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

[Signature] MIKE DIRKS / Cardinal ENTRIX 09/08/11
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 C12LB Date of Survey 9/6/11

Dates of Initial SCAT Assessments 27 JUL 11 (D)
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment N/A

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 USCG 9/6/11
Sign Name Print Name/ Affiliation Date
Federal Representative (EPA/USCG)

Betsy Horva Betsy Horva DEQ 9/6/11
Sign Name Print Name/ Affiliation Date
State Representative (DEQ/FWP)

Nathan Hammond Nathan Hammond/Carolina Entix 9/6/11
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 C12 IS Date of Survey 9/12/11

Dates of Initial SCAT Assessments 27 JUL 11 (EC)
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment 60

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

Segment Assessment Complete¹

Partial Segment Assessment

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

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

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

No federal rep.

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

Marcie Sigler/DEQ Marcie Sigler 9/12/11
Sign Name _____ Print Name/ Affiliation _____ Date _____
State Representative (DEQ/FWP)

Nathan Hammond/Carbon Capture Nathan Hammond/Carbon Capture 9/12/11
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 C12 ISLAND Date of Survey Sept. 26, 2011

Dates of Initial SCAT Assessments 27 Jul 11 (RB)
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment 60

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

Segment Assessment Complete¹
 Partial Segment Assessment

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

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

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

No Federal Rep Present

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

Matthew Kay MATTHEW KAY / DEQ 9/27/2011
 Sign Name Print Name/ Affiliation Date
 State Representative (DEQ/FWP)

Todd Farrar Todd Farrar / Polaris 9/26, 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.