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ExxonMobil Pipeline Company

SCAT Area Transition Report for B07

Silvertip Pipeline Incident
Laurel, Montana

October 20, 2011

SCAT Area Transition Report for B07

Silvertip Pipeline Incident
Laurel, Montana

Prepared for:
ExxonMobil Pipeline Company

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

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1. Executive Summary of Oil Removal Activities

This Shoreline Cleanup Assessment Technique (SCAT) Area Transition Report provides a summary of the SCAT surveys conducted to determine the extent of oiling along the riverbanks and floodplain within SCAT Area B07, 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 B07. 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 B07, 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 B07 is 41.3. There were no access issues for this area.

1.2 Cultural, Historic, and Natural Resource Constraints

No historic properties or cultural resources have been identified within this area that would affect oil removal activities.

Figure 2 summarizes the natural resources identified in this segment. International Bird Rescue and Resource Advisors from U.S. Fish and Wildlife Service conducted regular inspections of Area B07. No oiled wildlife was observed or recovered. No Wildlife Priority Cleanup Areas were identified. Three potential great blue heron nests were observed on B07 Island but no bird activity was noted. Buffer zones were not established around these nests.

1.3 Summary of Environmental Sampling

Table 1 (below) summarizes samples collected within Area B07. 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 B07 are provided on Figure 3.

Table 1 Environmental Sampling Summary

Agency	Sample Num	Date	Matrix	Location	Latitude	Longitude
CTEH	BIMT0708DW201	08-Jul-11	Water_Drinking	BIMT_289_DW003	45.703504	-108.618498
CTEH	BIMT0708DW4006	08-Jul-11	Water_Drinking	BIMT_289_DW001	45.704995	-108.618254
CTEH	BIMT0708DW4007	08-Jul-11	Water_Drinking	BIMT_289_DW004	45.702297	-108.617583
CTEH	LAMT0708DW104	08-Jul-11	Water_Drinking	LAMT_289_DW104	45.70376	-108.617382
CTEH	LAMT08155O401	15-Aug-11	Soil_River	SO-B07-1	45.70181	-108.61715
CTEH	LAMT08155O407	15-Aug-11	Soil_River	SO-B07-1	45.70181	-108.61715
MDEQ	B11070821-061	14-Jul-11	Water_Irrigation	ST-ML-03	45.70112	-108.62126
MDEQ	B11070821-062	14-Jul-11	Water_Irrigation	ST-ML-03	45.70112	-108.62126
MDEQ	ST-071811-ML-IW	18-Jul-11	Water_Irrigation	ST-ML-03	45.70112	-108.62126
EPA	SPSE110_071311	13-Jul-11	Sediment	SPSE110	45.7012672	-108.6180863
EPA	SPSO120D01_071411	14-Jul-11	Soil_Surface	SPSO120	45.7007626	-108.622063
EPA	SPSO121D01_071411	14-Jul-11	Soil_Surface	SPSO121	45.7012361	-108.6181943
EPA	SPSO122D01_071411	14-Jul-11	Soil_Surface	SPSO122	45.7004638	-108.6204447

Appendix A contains a summary of sample results with detections for this sample set. Detections with a result above the screening level are highlighted; for this set, there were seven exceedances for analytes including: benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene.

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 B07 are included in Appendix B. Figure 4 provides the maximum oiling zones observed by the SCAT team during the initial surveys of Area B07.

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. 25, CTR No. 35, and CTR No. 41).

1.6 Oil Removal Activities

Oil removal activities were conducted within Area B07 in accordance with the ATMs identified in the CTRs. Appendix I of the Summary of Assessment and Oil Removal Activities report presents this data including: date range/days worked, average number of people working per day, equipment used, and various types of bags removed: oily

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

1.7 Pre-Inspection Survey Transmittal

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

1.8 Post-Inspection Survey Transmittal

SCAT Operations liaisons performed an inspection of the remediated areas of SCAT Area B07 and developed a Post-Inspection Survey Transmittal (POST) associated with the island within Area B07, which is presented in Appendix D.

1.9 Summary of Final SCAT Surveys

Figure 5 shows the oiling conditions within Area B07 following completion of oil removal activities. The SCAT team performed final surveys of the island, left bank, and right bank within SCAT Area B07 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 B07, no further treatment is recommended for these segments. SCAT Segment Sign-Off Forms are included as Appendix F.

2. Transition Sign-Off Form

SCAT Area Transition Report for B07

Prepared for:

Unified Command

_____

Date

_____

Unified Command – RP

SCAT Area Transition Report for B07

Prepared for:

Unified Command

_____

Date

_____

Unified Command – FOSC

SCAT Area Transition Report for B07

Prepared for:

Unified Command

_____

Date

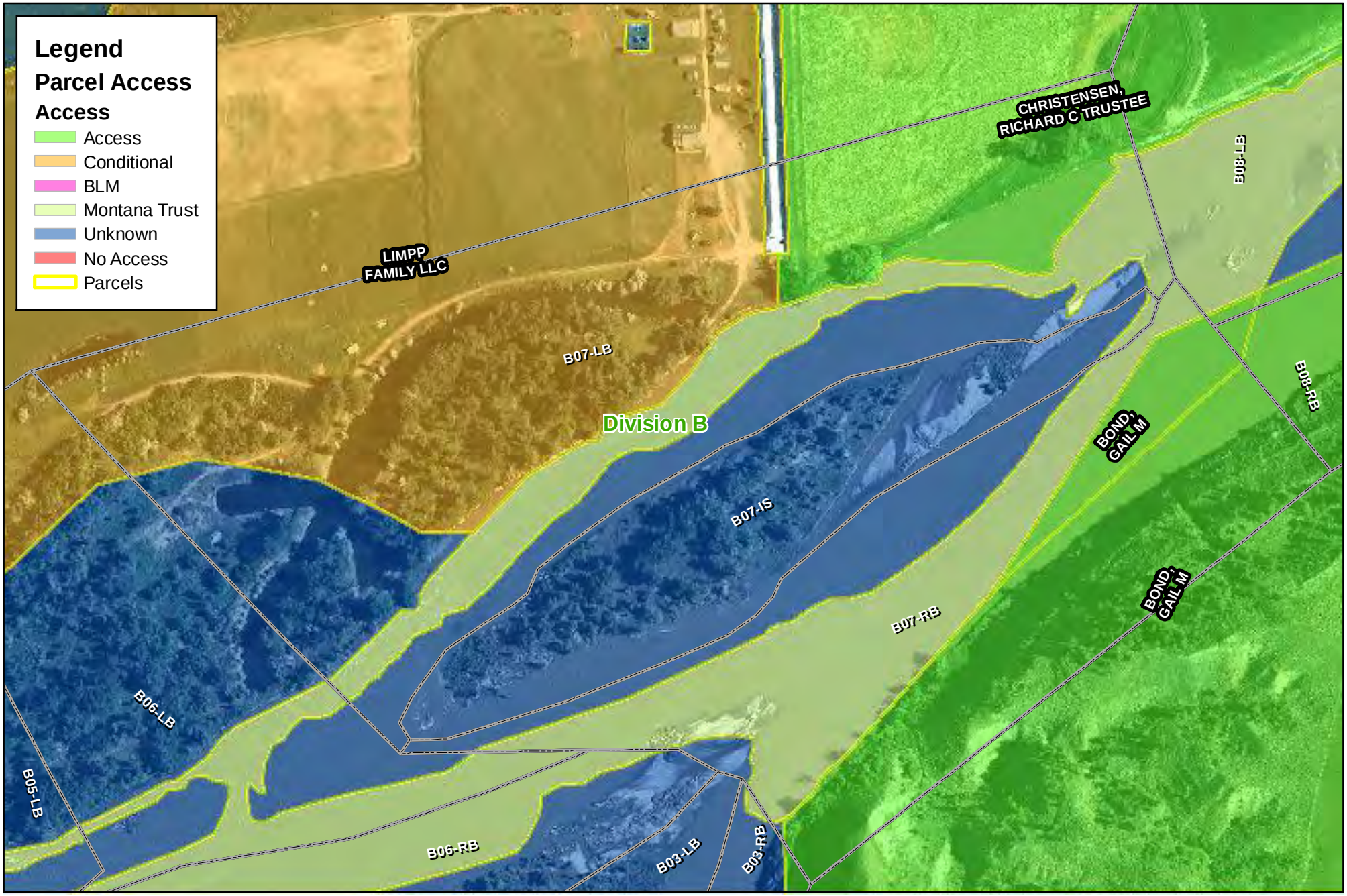
_____

Unified Command – MDEQ

Silvertip Pipeline Incident
Area Transition Report Map - Parcels
Segment - B7

9/27/2011

1:4,000



0 400 800 1,600 Feet

Figure 1

Date: 9/27/2011 Time: 12:02:14 PM

Path: P:\GIS\MXD's\Area_Transition_Figures\A1-Fig1-Parcels.mxd

Silvertip Pipeline Incident
SCAT Area Transition Report Map
Area - B7

ExxonMobil Pipeline

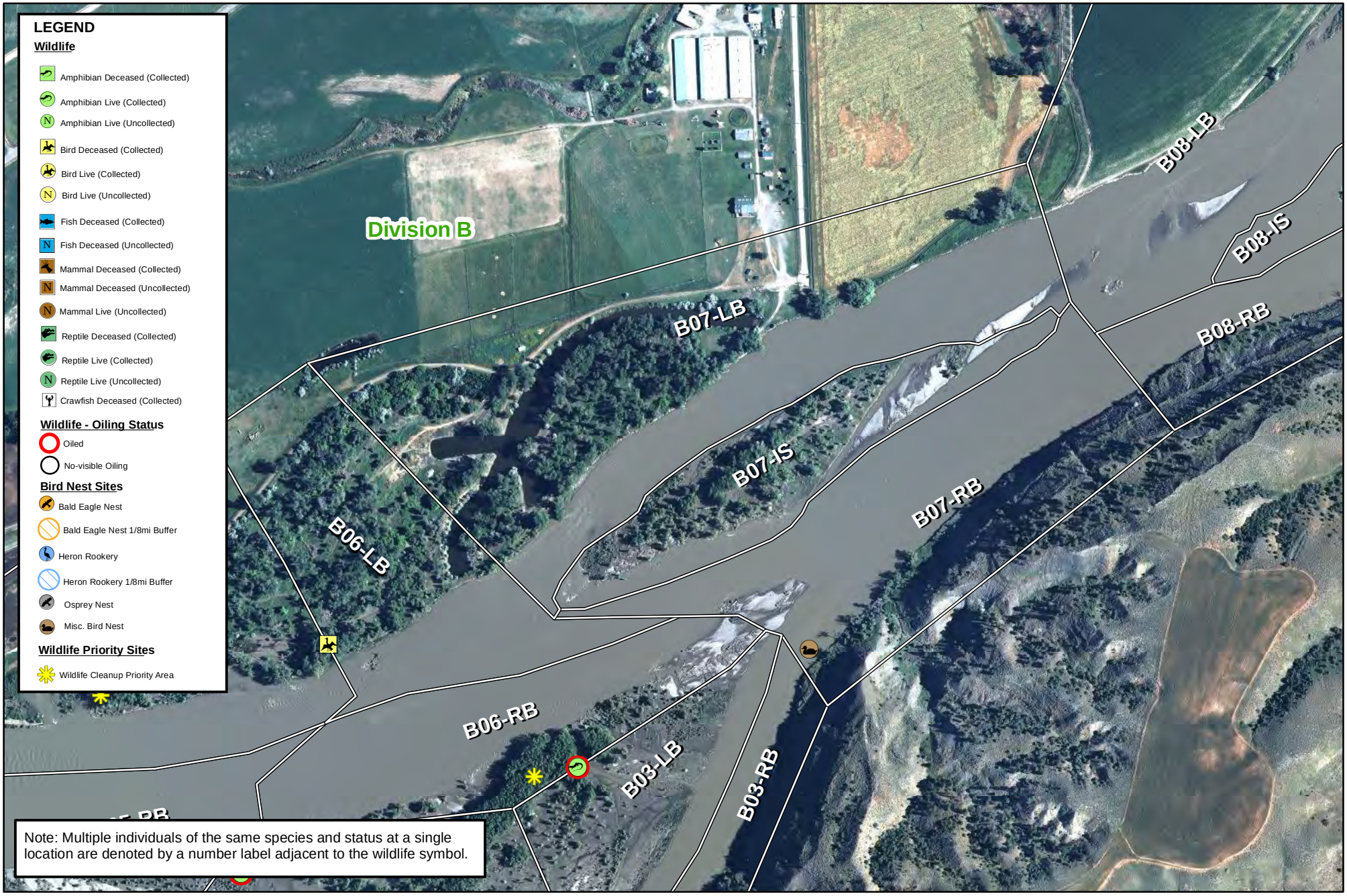
N

1:6,000

9/25/2011

The Response Group

Path: P:\GIS\MXD's\Wildlife\ATR Maps - Figure 2\ATR Map_Div.B_Fig2_09252011.mxd

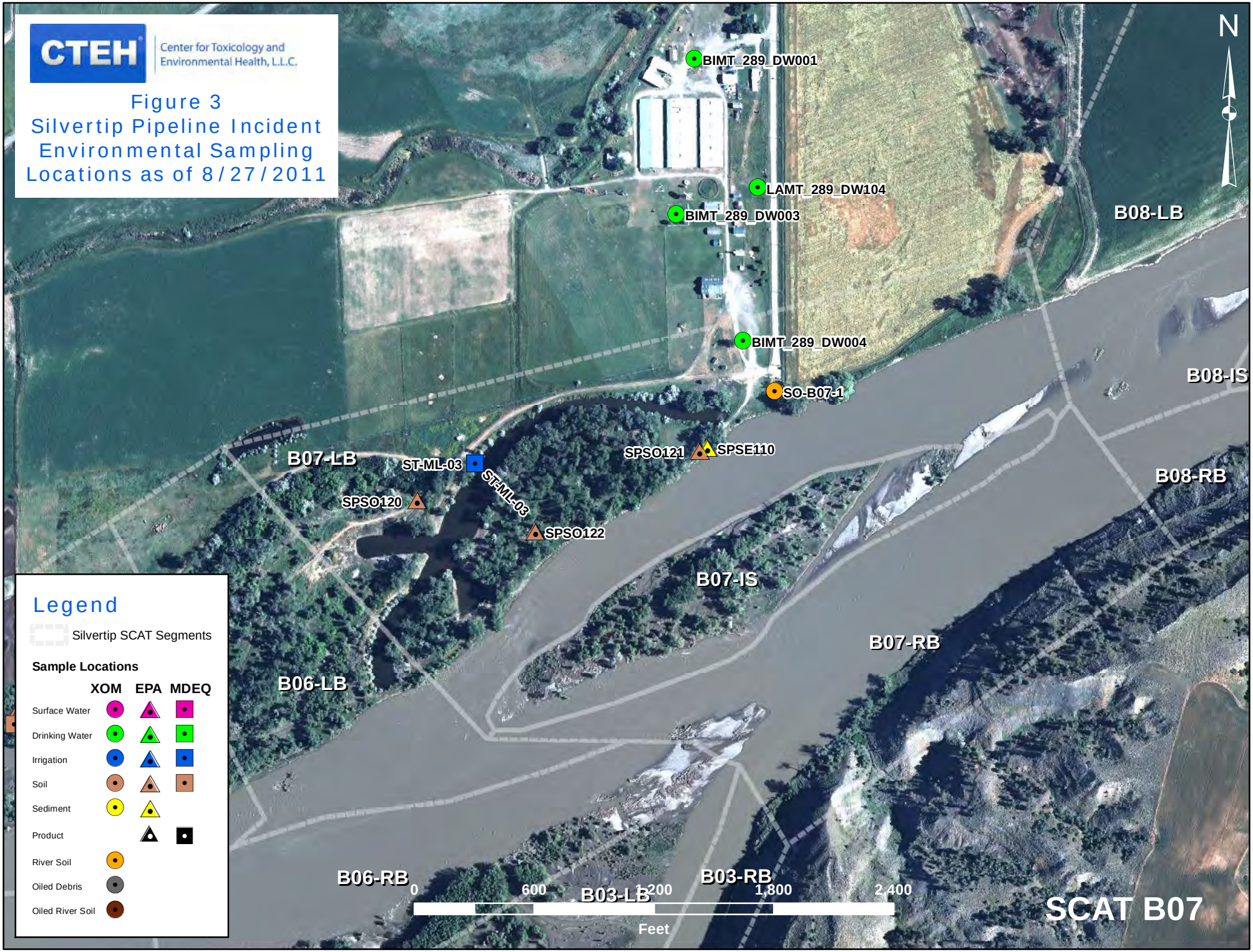


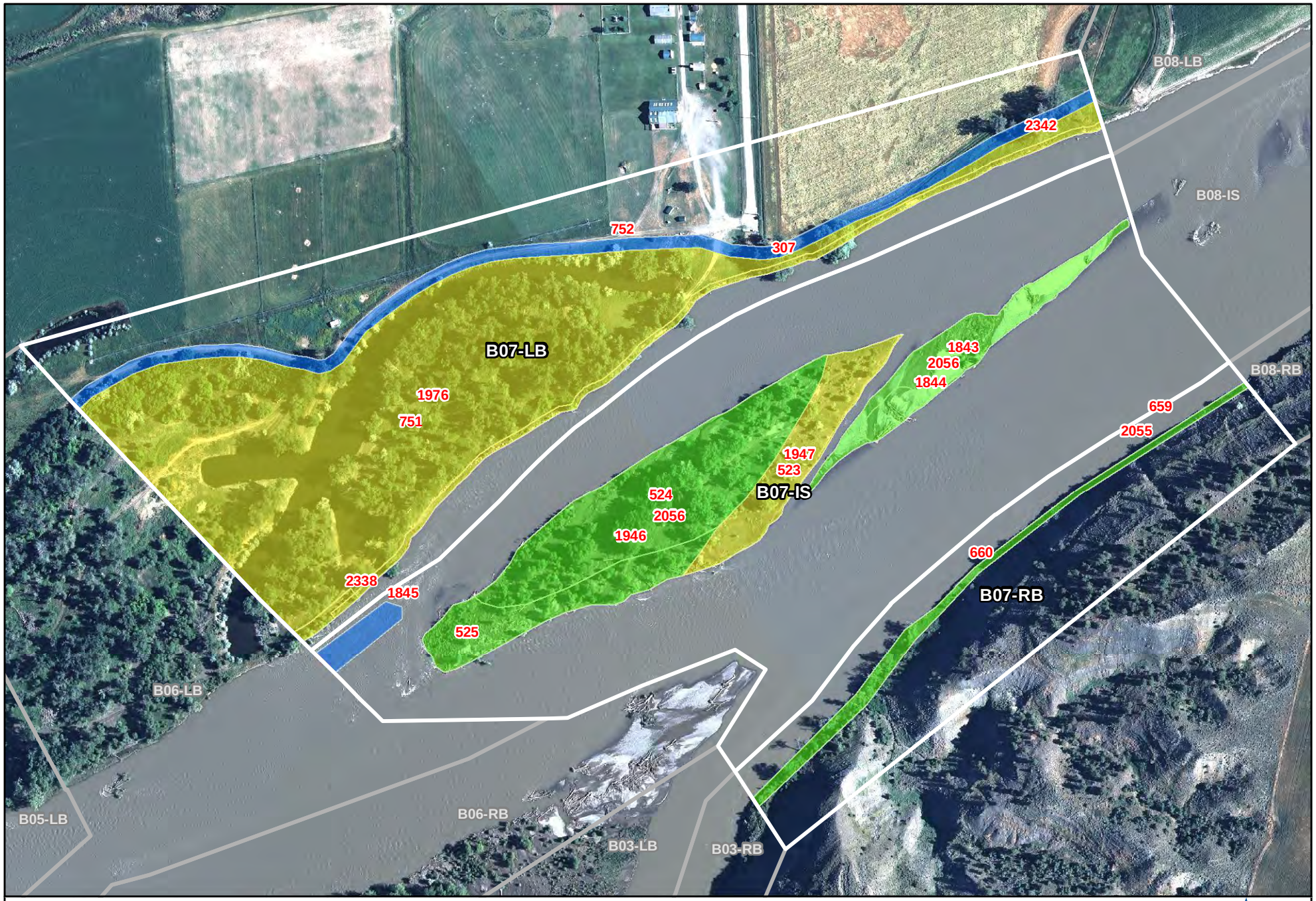
Note: Multiple individuals of the same species and status at a single location are denoted by a number label adjacent to the wildlife symbol.

0 625 1,250 2,500 Feet

Figure 2
Wildlife Resources

Date: 9/25/2011 Time: 11:46:00 AM


CTEH
Center for Toxicology and Environmental Health, L.L.C.
Figure 3
Silvertip Pipeline Incident Environmental Sampling Locations as of 8/27/2011
N
BIMT_289_DW001
LAMT_289_DW104
BIMT_289_DW003
BIMT_289_DW004
SO-B07-1
SPSO121
SPSE110
ST-ML-03
ST-ML-03
SPSO120
SPSO122
B08-LB
B08-IS
B08-RB
B07-LB
B07-IS
B07-RB
B06-LB
B06-RB
B03-LB
B03-RB
0
600
1,200
1,800
2,400
Feet
SCAT B07
Legend
Silvertip SCAT Segments
Sample Locations
XOM
EPA
MDEQ
Surface Water
Drinking Water
Irrigation
Soil
Sediment
Product
River Soil
Oiled Debris
Oiled River Soil



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

270 0 270 540 Feet

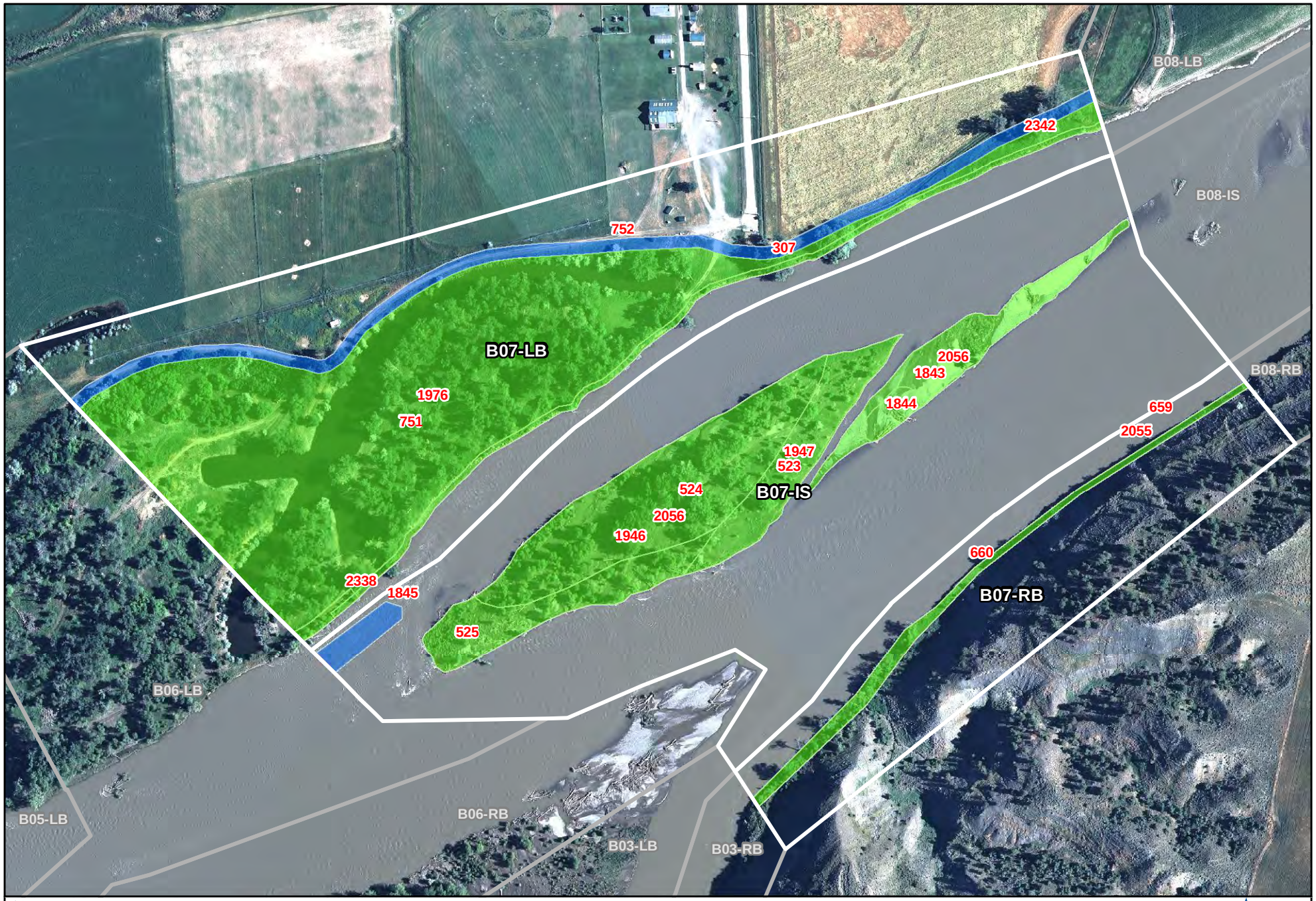
Figure 4 - Maximum SCAT Observations For SCAT Area: B07

POLARIS APPLIED SCIENCES, INC.

Aerial Photography Dated July 20, 2011

O:\GIS\SCAT Mapping\Maps\Area Transition Reports MXD\ATR Fig 4 - Max_SCAT_Observations_DataPages.mxd

Printed: 10/12/2011 5:00:10 PM



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

270 0 270 540 Feet

Figure 5 - Final SCAT Observations For SCAT Area: B07

POLARIS APPLIED SCIENCES, INC.

Aerial Photography Dated July 20, 2011

O:\GIS\SCAT Mapping\Maps\Area Transition Reports MXD\ATR Fig 5 - Final_SCAT_Observations_DataPages.mxd

Printed: 10/12/2011 5:02:28 PM

Appendix A

Sample Detection Summary

Detections in Samples Collected in SCAT Area B07

NA - Not Available

Detected Above Screening Level

Sample Num	Date	Sample Type	Matrix	Analytical Method	Analyte	Detected	Result	Screening Level	Result Qualifier	Units	Above?
B11070821-061		Field	Water_Irrigation	8260B	1,2-Dichloroethane-d4	Y	92	NA		%	no
B11070821-061		Field	Water_Irrigation	8260B	Dibromofluoromethane	Y	101	NA		%	no
B11070821-061		Field	Water_Irrigation	8260B	p-Bromofluorobenzene	Y	88	NA		%	no
B11070821-061		Field	Water_Irrigation	8260B	Toluene-d8	Y	102	NA		%	no
B11070821-062		Field	Water_Irrigation	8260B	1,2-Dichloroethane-d4	Y	92	NA		%	no
B11070821-062		Field	Water_Irrigation	8260B	Benzene	Y	0.16	5	J	ug/l	no
B11070821-062		Field	Water_Irrigation	8260B	Dibromofluoromethane	Y	99	NA		%	no
B11070821-062		Field	Water_Irrigation	8260B	m,p-Xylene	Y	0.46	10000	J	ug/l	no
B11070821-062		Field	Water_Irrigation	8260B	o-Xylene	Y	0.22	10000	J	ug/l	no
B11070821-062		Field	Water_Irrigation	8260B	p-Bromofluorobenzene	Y	85	NA		%	no
B11070821-062		Field	Water_Irrigation	8260B	Toluene	Y	0.6	1000	J	ug/l	no
B11070821-062		Field	Water_Irrigation	8260B	Toluene-d8	Y	104	NA		%	no
B11070821-062		Field	Water_Irrigation	8260B	Xylene	Y	0.67	10000	J	ug/l	no
BIMT0708DW201	07/08/2011	Field	Water_Drinking	E524.2	Methylene chloride	Y	0.31	5		ug/L	no
BIMT0708DW4006	07/08/2011	Field	Water_Drinking	E524.2	Chloroform	Y	0.28	70	J	ug/L	no
BIMT0708DW4006	07/08/2011	Field	Water_Drinking	E524.2	m+p-Xylenes	Y	0.4	10000	J	ug/L	no
BIMT0708DW4006	07/08/2011	Field	Water_Drinking	E524.2	Toluene	Y	0.6	1000		ug/L	no
BIMT0708DW4006	07/08/2011	Field	Water_Drinking	MADEP VPH	Toluene	Y	0.67	1000		ug/L	no
BIMT0708DW4006	07/08/2011	Field	Water_Drinking	E524.2	Trihalomethanes, Total	Y	0.28	100	J	ug/L	no
BIMT0708DW4006	07/08/2011	Field	Water_Drinking	E524.2	Xylenes, Total	Y	0.4	10000	J	ug/L	no
BIMT0708DW4007	07/08/2011	Field	Water_Drinking	E524.2	Chloroform	Y	1.3	70		ug/L	no
BIMT0708DW4007	07/08/2011	Field	Water_Drinking	E524.2	Trihalomethanes, Total	Y	1.3	100		ug/L	no
LAMT0708DW104	07/08/2011	Field	Water_Drinking	E524.2	Toluene	Y	0.19	1000		ug/L	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Anthracene	Y	51.3	2000000		ug/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 6010	Arsenic	Y	15.2	40		mg/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 6010	Barium	Y	120	820		mg/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Benzo(a)anthracene	Y	120	200		ug/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Benzo(a)pyrene	Y	**99.4**	20		ug/kg	YES
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Benzo(b)fluoranthene	Y	**463**	200		ug/kg	YES
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Benzo(k)fluoranthene	Y	107	2000		ug/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 6010	Cadmium	Y	1.2	3.8		mg/kg	no

Detections in Samples Collected in SCAT Area B07

NA - Not Available

Detected Above Screening Level

Sample Num	Date	Sample Type	Matrix	Analytical Method	Analyte	Detected	Result	Screening Level	Result Qualifier	Units	Above?
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 6010	Chromium	Y	19	280		mg/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Chrysene	Y	320	20000		ug/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Dibenz(a,h)anthracene	Y	**43.2**	20		ug/kg	YES
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Fluoranthene	Y	476	300000		ug/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	Y	122	200		ug/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 6010	Lead	Y	10.1	400		mg/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 9060	Mean Total Organic Carbon	Y	13300	NA		mg/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 6010	Nickel	Y	15.1	150		mg/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Pyrene	Y	317	200000		ug/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 9060	RSD%	Y	9.7	NA		%	no
LAMT0815SO401	08/15/2011	Field	Soil_River	MADEP EPH	Total Extractable Hydrocarbons	Y	27.7	200		mg/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 9060	Total Organic Carbon	Y	14900	NA		mg/kg	no
LAMT0815SO401	08/15/2011	Field	Soil_River	EPA 6010	Vanadium	Y	33	39		mg/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Anthracene	Y	41.7	2000000		ug/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 6010	Arsenic	Y	15	40		mg/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 6010	Barium	Y	136	820		mg/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Benzo(a)anthracene	Y	99.5	200		ug/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Benzo(a)pyrene	Y	**78.5**	20		ug/kg	YES
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Benzo(b)fluoranthene	Y	**383**	200		ug/kg	YES
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270	Benzo(b)fluoranthene	Y	**503**	200		ug/kg	YES
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Benzo(k)fluoranthene	Y	96.1	2000		ug/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 6010	Cadmium	Y	1.2	3.8		mg/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 6010	Chromium	Y	21.4	280		mg/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270	Chrysene	Y	389	20000		ug/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Chrysene	Y	280	20000		ug/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Dibenz(a,h)anthracene	Y	**36.6**	20		ug/kg	YES
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270	Fluoranthene	Y	537	300000		ug/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Fluoranthene	Y	384	300000		ug/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	Y	102	200		ug/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 6010	Lead	Y	11	400		mg/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 9060	Mean Total Organic Carbon	Y	11400	NA		mg/kg	no

Detections in Samples Collected in SCAT Area B07

NA - Not Available

Detected Above Screening Level

Sample Num	Date	Sample Type	Matrix	Analytical Method	Analyte	Detected	Result	Screening Level	Result Qualifier	Units	Above?
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 6010	Nickel	Y	17	150		mg/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270 by SIM	Pyrene	Y	264	200000		ug/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 8270	Pyrene	Y	386	200000		ug/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 9060	RSD%	Y	4.3	NA		%	no
LAMT0815SO407	08/15/2011	Field	Soil_River	MADEP EPH	Total Extractable Hydrocarbons	Y	28.1	200		mg/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 9060	Total Organic Carbon	Y	11800	NA		mg/kg	no
LAMT0815SO407	08/15/2011	Field	Soil_River	EPA 6010	Vanadium	Y	35.4	39		mg/kg	no
ST-071811-ML-IW		Field	Water_Irrigation	8260B	1,2-Dichloroethane-d4	Y	108	NA		%	no
ST-071811-ML-IW		Field	Water_Irrigation	8270C	2,4,6-Tribromophenol	Y	70	NA		%	no
ST-071811-ML-IW		Field	Water_Irrigation	8270C	2-Fluorobiphenyl	Y	57	NA		%	no
ST-071811-ML-IW		Field	Water_Irrigation	8260B	Dibromofluoromethane	Y	109	NA		%	no
ST-071811-ML-IW		Field	Water_Irrigation	8270C	Nitrobenzene-D5	Y	65	NA		%	no
ST-071811-ML-IW		Field	Water_Irrigation	8270C	o-Fluorophenol	Y	35	NA		%	no
ST-071811-ML-IW		Field	Water_Irrigation	8015M-MDEQ-REM	o-Terphenyl	Y	76	NA		%	no
ST-071811-ML-IW		Field	Water_Irrigation	8260B	p-Bromofluorobenzene	Y	116	NA		%	no
ST-071811-ML-IW		Field	Water_Irrigation	8270C	Phenol-d5	Y	28	NA		%	no
ST-071811-ML-IW		Field	Water_Irrigation	8270C	Terphenyl-d14	Y	66	NA		%	no
ST-071811-ML-IW		Field	Water_Irrigation	8260B	Toluene-d8	Y	112	NA		%	no

Appendix B

Initial 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: B07 Left Bank / Right Bank / **Island**	21-Jul-2011		low - mean - **bankfull** - overbank
Operations Division: B		0900 hrs to 0949 hrs	**falling** - steady – rising
Survey by: **Foot** / ATV / Boat / Helicopter / Overlook / _____	**Sun** / Clouds / Fog / Rain / Snow / **Windy** / Calm		Air Temp + / - **31** deg C

2 SURVEY TEAM # 1 & 5

name	organization	contact phone number
Pete Lee	Polaris	
Bob Nailon	Cardno ENTRIX	
Andy Johnson	USCG	
John Beach	EPA	
Jenny Chambers	MTDEQ	
Jay Watson	MTFWP	

3 SEGMENT Total Segment/Reach Length _____ m Segment/Reach Length Surveyed 510 m

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

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

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

Bedrock: Cliff/Ramp_____ Shelf_____ | Manmade: Solid___ Permeable___ (type)_____ | Wetland: Swamp_____ Bog/Fen_____ Marsh _____

Sediment Bank: Clay/Mud_____ Sand_____ Mixed S___ Pebble/Cobble S___ Boulder_____ Peat/Organic_____ | Vegetated Bank: S | Wooded Upland: P

Sediment Flat: Clay/Mud_____ Sand_____ Mixed/Coarse_____ | Other: _____ | If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate | complete for primary

Cliff or Bluff:____Est Height _____m | canyon_____ manmade_____ meander _____ confined or leveed _____ | Substrate Type: mixed

Sloped:___(>5°)(15°)(30°) | straight P___ braided S___ oxbow_____ flood plain valley_____ | Forested / **Vegetated** / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width : < 1m 1–10 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 / **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 10 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	
523 A				X	240	30	50			X	X		X								Grass, trees, debris
524 B				X	440	60	<1			X	X		X								Grass, trees,debris
525 C				X	240	30														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	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	Yes / No	

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

Oil band heights: Zone A – 50cm; Zone B – 50cm

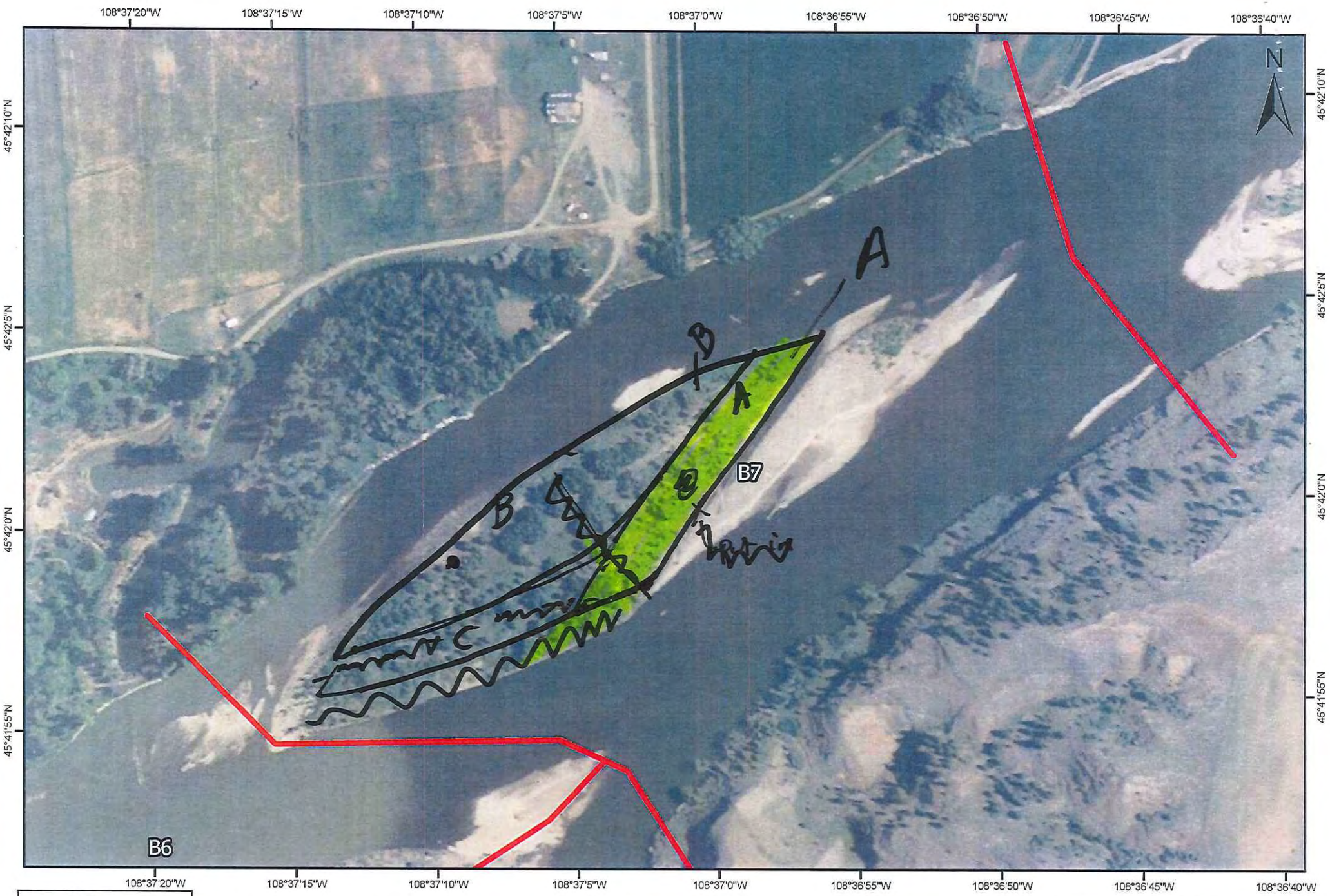
Treatment Recommendations:

Zone A: Cut & remove oil coated vegetation smaller than 1" diameter Wipe larger oil coated vegetation and debris.

Zone B : Cut & remove oil coated vegetation smaller than 1" diameter. Remove oil coated debris smaller than 4" diameter. Wipe larger oil coated vegetation and debris. The Technical Advisory Group will need to be consulted for alternative treatment methods for oiled debris.

*Refer to current approved treatment methods #1 (Cutting of Vegetation), #2 (Dead Vegetation and Small Debris), #3 (Large Woody Debris), #6 (Sorbent Use), # (Unconsolidated Sediments)

Sketch **Yes** / No Photos **Yes** / No Frames 1422-1447 (Lee)



B07 -
(L/R/I)??

DATE:

TEAM:

COMMENTS:

0 40 80 120 160
Meters

DB/G

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION

Segment/Reach ID: B 7 Left Bank / Right Bank / Island

Operations Division: B

Date (dd/mm/yy): 25/08/11

Time (24h): std / daylight 0913 hrs to ~~13~~ 1535 hrs

Water Level: low - mean - bankfull - overbank; falling - steady – rising

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

Air Temp + / - 26 deg C

2 SURVEY TEAM # 2

Name	Organization	Signature
Joe Boyle	Cardno Entrix	[signature]
Dave Hergenrider	FWP	Dave Hergenrider
Nathan Hammond	Cardno Entrix	Nathan Hammond

3 SEGMENT Total Segment/Reach Length 740 m Segment/Reach Length Surveyed 385 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 P oxbow ____ flood plain valley ____ Forested / Vegetated / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: < 1m 1–10 m 10–100 m >100m ~~100m~~ est. water depth: <1 m 1-3 m 3-10 m >10 m ____ m

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

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

5 OPERATIONAL FEATURES Suitable backshore staging Y / N Access: Direct from backshore Y / N Alongshore from next segment Y / N

Debris: Y / N oiled Y / N amount ____ bags or ____ trucks access restrictions

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

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 MS	LB	UB	OB	OIL COVER Length m	Width m	Distrib. %	OIL THICKNESS TO	CV	CT	ST	FL	OIL CHARACTER FR	MS	TB	PT	TC	SR	AP	NO	SUBST. TYPE(S)
1843	A	X				385	50	0													✓	
1844	B	X				60	20	<1			S	P						X				Veg. Debris
1845	C	X				60	10	0													✓	
1845																						

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

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

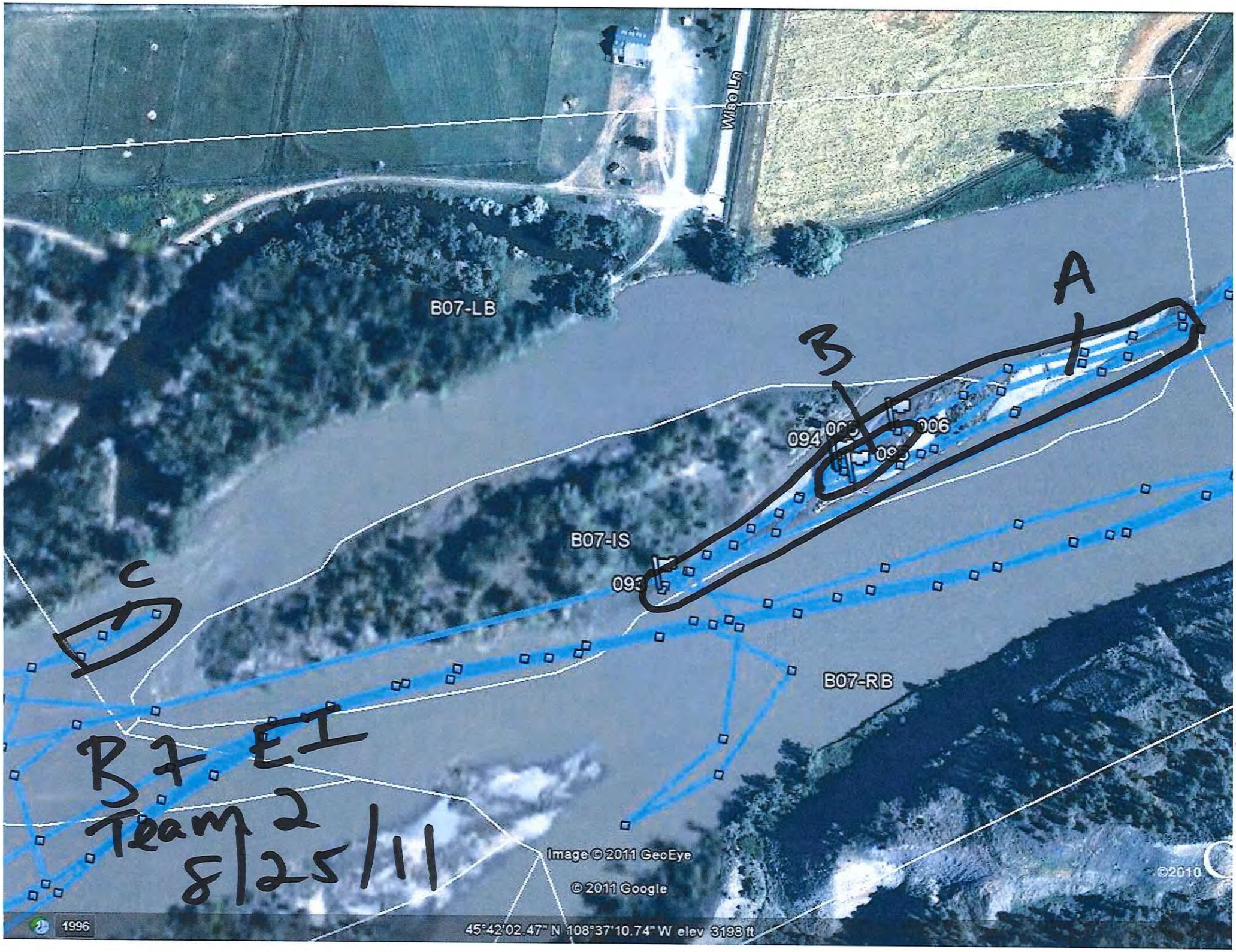
Overbank Survey Required Y / N Overbank Survey Completed Y / N Shoreline Survey Completed Y / N

Zone A - NOO; No Further Treatment

Zone B - Trace Oiling on veg and debris; ATM 7; No Further Treatment

Zone C - NOO

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


Wise Ln
B07-LB
A
B
C
094
006
B07-IS
B07-RB
B7 EI
Team 2
8/25/11
Image © 2011 GeoEye
© 2011 Google
©2010
1996
45°42'02.47" N 108°37'10.74" W elev 3198 ft

DB/G/SC

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

Page 1 of 1

1 GENERAL INFORMATION

Segment/Reach ID: B7 (Left Bank / Right Bank / Island)

Operations Division: B

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

Date (dd/mm/yy): 18/07/11

Time (24h): std / daylight 1227 hrs to 1254 hrs

Water Level: low - mean - bankfull - overbank (falling) - steady - rising → In between

Air Temp + / - 33 deg C

2 SURVEY TEAM # 6

name		organization	contact phone number
Chelsea Murphy	[signature]	Cardno ENTRIX	775-313-3976
Joe Boyle	[signature]	Cardno ENTRIX	386 214 6858
Bob Roll	[signature]	DEQ	208-871-8274
John Beach	[signature]	EPA	707-364-0491
Joe Boyle	[signature]		

3 SEGMENT

Total Segment/Reach Length 770 m Segment/Reach Length Surveyed 410 m

Start GPS: LATITUDE 45.70163 deg. ___ min. LONGITUDE 108.61736 deg. ___ min. Datum: WGS84

End GPS: LATITUDE 45.69941 deg. ___ min. LONGITUDE 108.62143 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: ___

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

4B RIVER VALLEY CHARACTER

select as appropriate

Cliff or Bluff: ___ Est Height ___ m | canyon ___ manmade ___ meander S confined or leveed ___

Sloped: 60° (>5°)(15°)(30°) | straight ___ braided P oxbow ___ flood plain valley ___

complete for primary: Substrate Type: mud | Forested / (Vegetated) / Bare

4C RIVER CHANNEL CHARACTER

circle or select as appropriate

est. width: <1m 1–10 m 10–100 m (>100m) ~220 m

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

shoal(s) present (Y) / N point bar present (Y) / N → In between

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: Access + staging great from backshore. Road along shoreline.

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 MS	LB	UB	OB	OIL COVER Length m	Width m	Distrib. %	OIL THICKNESS TO	CV	CT	ST	FL	OIL CHARACTER FR	MS	TB	PT	TC	SR	AP	NO	SUBST. TYPE(S)
307 A		S	P	S	410	5	50				P	S	P								mud/veg
2338 B		X	P	X	60	10	20				P	S	P								mud
2342 C			P	S	260	5	30				P	S	P								veg/riprap mud

Added from B6 AA 9/21/11

7 SUBSURFACE OILING CONDITIONS

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

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

8 COMMENTS

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

only 1 Zone (A) Zone C: NFT

Recommendations - Cut by hand any veg that is stained - hand crews only.

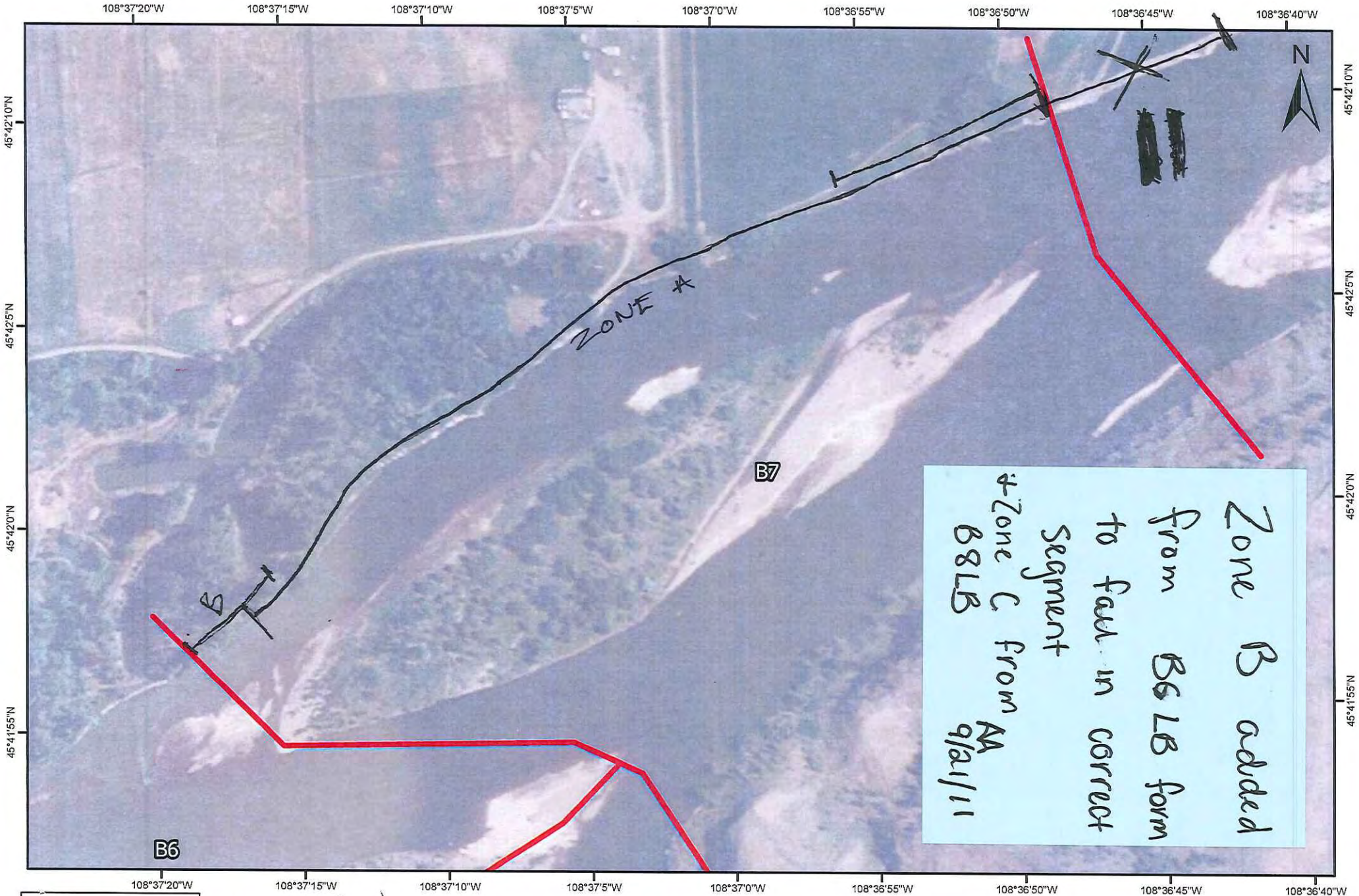
Zone B - Hand removal of grasses and debris - cutting of veg. to remove bath tub ring. Leave rings on trees

(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# ___

PR# 85-91

Ver. 04 July 2011



B07 - (L/R/I)??

DATE: 07/18/11

TEAM: Chelsea 6

COMMENTS:

0 40 80 120 160
Meters

DB/G/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident Page 1 of 1

1 GENERAL INFORMATION	Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: B07 (Left Bank) / Right Bank / Island	25 july 2011	10:00 hrs to 13:30 hrs	low - (mean) - bankfull - overbank
Operations Division: SCAT			(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 # 4

Name	Organization	Signature
John Matousek	Cadno ENTRIX	[signature]
Mike Ruggles	MT FWP	[signature]
LEE BURROUGHS	MT FWP	[signature]
JANICE WITUL	US EPA	[signature]

3 SEGMENT Total Segment/Reach Length 770 m Segment/Reach Length Surveyed 770 m

Start GPS: LATITUDE 45 deg. 41.949 min. LONGITUDE 108 deg. 37.310 min. Datum: LGS84

End GPS: LATITUDE 45 deg. 42.150 min. LONGITUDE 108 deg. 36.807 min.

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

Bedrock: Cliff/Ramp____ Shelf____ | Manmade: Solid___ Permeable___ (type)____ | Wetland: Swamp____ Bog/Fen____ Marsh____

Sediment Bank: Clay/Mud P Sand____ Mixed____ Pebble/Cobble____ Boulder____ Peat/Organic____ | Vegetated Bank: (P) | Wooded Upland: S

Sediment Flat: Clay/Mud____ Sand____ Mixed/Coarse____ | Other: ____ | If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate | complete for primary

Cliff or Bluff:____Est Height ____m | canyon____ manmade____ meander P confined or leveed ____ | Substrate Type: Veg

Sloped:___(>5°)(15°)(30°) | straight____ braided S oxbow____ flood plain valley____ | Forested / (Vegetated) / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

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

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

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

5 OPERATIONAL FEATURES Suitable backshore staging (Y) / N | Access: Direct from backshore (Y) / N Alongshore from next segment Y / N

Debris: (Y) / N oiled (Y) / N amount ____bags or ____trucks | access restrictions

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

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

OIL ZONE ID	RIVER BANK ZONE MS	LB	UB	OB	OIL COVER Length m	Width m	Distrib. %	OIL THICKNESS TO	CV	CT	ST	FL	OIL CHARACTER FR	MS	TB	PT	TC	SR	AP	NO	SUBST. TYPE(S)
75 l A			S	P	770	155	5			P	S						P				
75d B				P	770	10	0													Noo	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 MS	LB	UB	OB	MAX. PIT DEPTH cm	OILED ZONE cm-cm	SUBSURFACE OIL CHARACTER SAP	OP	PP	OR	OF	TR	NO	WATER TABLE cm	SHEEN COLOUR B, R, S, N	CLEAN BELOW Yes / No	SUBST. TYPE(S)

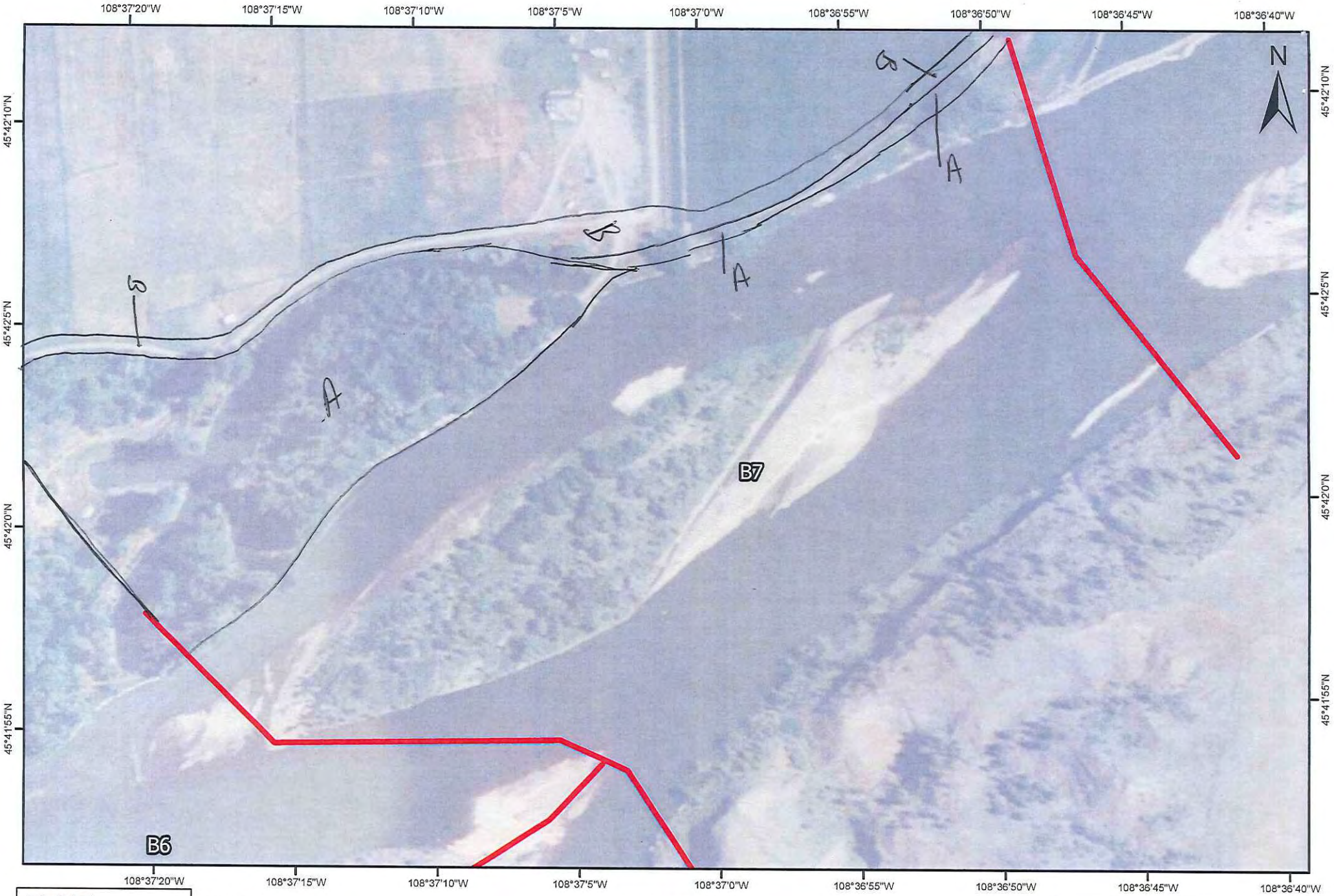
8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

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

Zone A - Very scattered oiled areas. Recommend removal of vegetation and small piles of oiled debris

Zone B - no oil

Sketch (Yes) / No Photos (Yes) / No Frames____ Photographer____



B07 -

(L/R/I)??

DATE:

TEAM:

COMMENTS:

0 40 80 120 160

Meters

DB/G/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION	Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: B7 Left Bank / Right Bank / Island	19 / 07 / 11	1217 hrs to 1228 hrs	low - mean - bankfull - overbank
Operations Division: B			falling / steady - rising
Survey by: Foot / ATV / Boat / Helicopter / Overlook / _____	Sun / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp + / - 35 deg C

2 SURVEY TEAM # 5

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

3 SEGMENT Total Segment/Reach Length 520 m Segment/Reach Length Surveyed 520 m

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

End GPS: LATITUDE N ____ deg. ____ min. LONGITUDE W ____ deg. ____ min.

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

Bedrock: Cliff/Ramp____ Shelf____ | Manmade: Solid___ Permeable___ (type)____ | Wetland: Swamp____ Bog/Fen____ Marsh ____

Sediment Bank: Clay/Mud S Sand P Mixed S Pebble/Cobble____ Boulder____ Peat/Organic____ | Vegetated Bank: P | Wooded Upland: ____

Sediment Flat: Clay/Mud____ Sand____ Mixed/Coarse____ | Other: ____ | If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate | complete for primary

Cliff or Bluff:____ Est Height 150 m | canyon____ manmade____ meander ____ confined or leveed ____ | Substrate Type: ____

Sloped:___(>5°)(15°)(30°) | straight X braided ____ oxbow____ flood plain valley____ | Forested / Vegetated / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width : < 1m 1–10 m 10–100 m >100m 150 m | est. water depth : <1 m 1-3 m 3-10 m >10 m ____ m

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

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

5 OPERATIONAL FEATURES Suitable backshore staging Y/N | Access: Direct from backshore Y / N Alongshore from next segment Y / N

Debris Y / N oiled Y / N amount 200 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	
659 A				X	250	1														✓	Veg bank
660 B				X	270	1	30			P			✓								Veg bank

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

TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH	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	Yes / No	

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

OSR = Y OSC = unk SSC = unk

there is an island in B7, no boat access to channel with access to right bank of the island

5351 - 5354; 5391 - 5395

(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#

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident Page 1 of 1

1 GENERAL INFORMATION	Date (dd/mm/yy)	Time (24h): std / daylight	Water Level
Segment/Reach ID: B09.6 **Left Bank** / Right Bank / Island	19-Jul-2011	1214 hrs to 1212 hrs	low - mean - **bankfull** - overbank
Operations Division: B			**falling** - steady – rising
Survey by: Foot / ATV / **Boat** / Helicopter / Overlook / _____	**Sun** / Clouds / Fog / Rain / Snow / **Windy**/ Calm		Air Temp + / - **31** deg C

2 SURVEY TEAM # 1	name	organization	contact phone number
	Pete Lee	Polaris	
	Larry Alheim	MTDEQ	
	Andy Johnson	USCG	

3 SEGMENT *Total Segment/Reach Length* _____ *m* *Segment/Reach Length Surveyed* ~~410~~ 230 *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 S (type) Riprap | *Wetland:* Swamp_____ Bog/Fen_____ Marsh _____

Sediment Bank: Clay/Mud_____ Sand_____ Mixed S___ Pebble/Cobble _____ Boulder_____ Peat/Organic_____ | *Vegetated Bank: P* | Wooded Upland: S

Sediment Flat: Clay/Mud_____ Sand_____ Mixed/Coarse_____ | *Other:* _____ | If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER *select as appropriate* | *complete for primary*

Cliff or Bluff:___Est Height _____m | canyon_____ manmade_____ meander _____ confined or leveed _____ | Substrate Type: mixed

Sloped:___(>5°)(15°)(30°) | straight P___ braided S___ oxbow_____ flood plain valley_____ | Forested / **Vegetated** / Bare

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

est. width : < 1m 1–10 m (10–100 m) ~~>100m~~ ~~170 m~~ 25 | **est. water depth :** <1 m 1-3 m **3-10 m** >10 m ____ m

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

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

5 OPERATIONAL FEATURES Suitable backshore staging Y / N | **Access:** Direct from backshore Y / N Alongshore from next segment Y / N

Debris: (Y) / N oiled (Y) / N amount 80 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	~~410~~ 230	1	100			X	X		X							X	Grass, trees, debris, riprap

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

TRENCH or PIT NO.	RIVER BANK ZONE				MAX. PIT DEPTH	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	Yes / No	

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

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

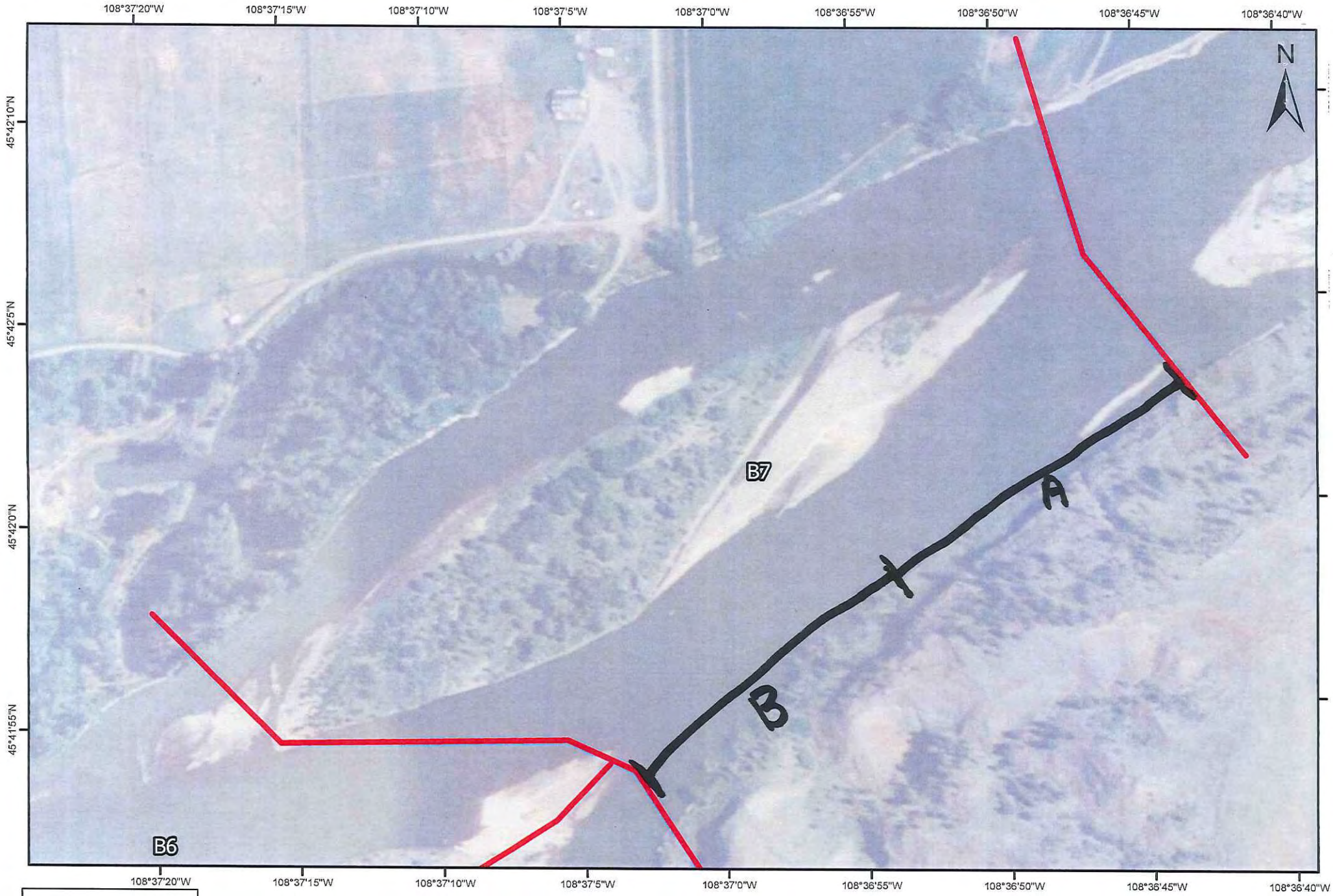
Oil band heights: ~~NO~~ 30

Treatment Recommendations:

Zone A: No oil observed; no treatment required.

1315 - 1317

Sketch Yes / No **Photos** (Yes) / No **Frames** None



B07 -

(L/R/I)??

DATE:

TEAM:

COMMENTS:

0 40 80 120 160

Meters

DB

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

1 GENERAL INFORMATION

Segment/Reach ID: B7 Left Bank / Right Bank / Island

Operations Division: B

Survey by: Foot / ATV / Boat / Helicopter / Overlook / _____

Date (dd/mm/yy): 29/08/11

Time (24h): std / daylight 1145 hrs to 1300 hrs

Sun / Clouds / Fog / Rain / Snow / Windy / Calm

Water Level: low - mean - bankfull - overbank; falling - steady – rising

Air Temp + / - 30 deg C

2 SURVEY TEAM # 2

Name	Organization	Signature
Pete Lee	Polaris	PLee
Eric Harlow	Cardno ENTRIX	David Eric Harlow
Griff Miller	USEPA	[illegible]
Larry Alheim	MTDEQ	[illegible]

3 SEGMENT Total Segment/Reach Length 450 m Segment/Reach Length Surveyed 450 m

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

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

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

Bedrock: Cliff/Ramp____ 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 X | Forested / Vegetated / Bare

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: < 1m 1–10 m 10–100 m >100m m

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

shoal(s) present Y / N point bar present Y / N

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

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

est. change over next 7 days: falling — same — rising

5 OPERATIONAL FEATURES Suitable backshore staging Y / N

Access: Direct from backshore Y / N Alongshore from next segment Y / N

Debris Y / N oiled Y / N amount ____ bags or ____ trucks

Access restrictions: Boat 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 MS	LB	UB	OB	OIL COVER Length m	Width m	Distrib. %	OIL THICKNESS TO	CV	CT	ST	FL	OIL CHARACTER FR	MS	TB	PT	TC	SR	AP	NO	SUBST. TYPE(S)
1946	A				X	~~80~~	80	<1				X						X				Grass, trees, debris
1947	B				X	210	40	<1			X	X						X				"
						400																

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

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

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

Oil height: 30 - 60 cm

RESCAT

Treatment recommendations:

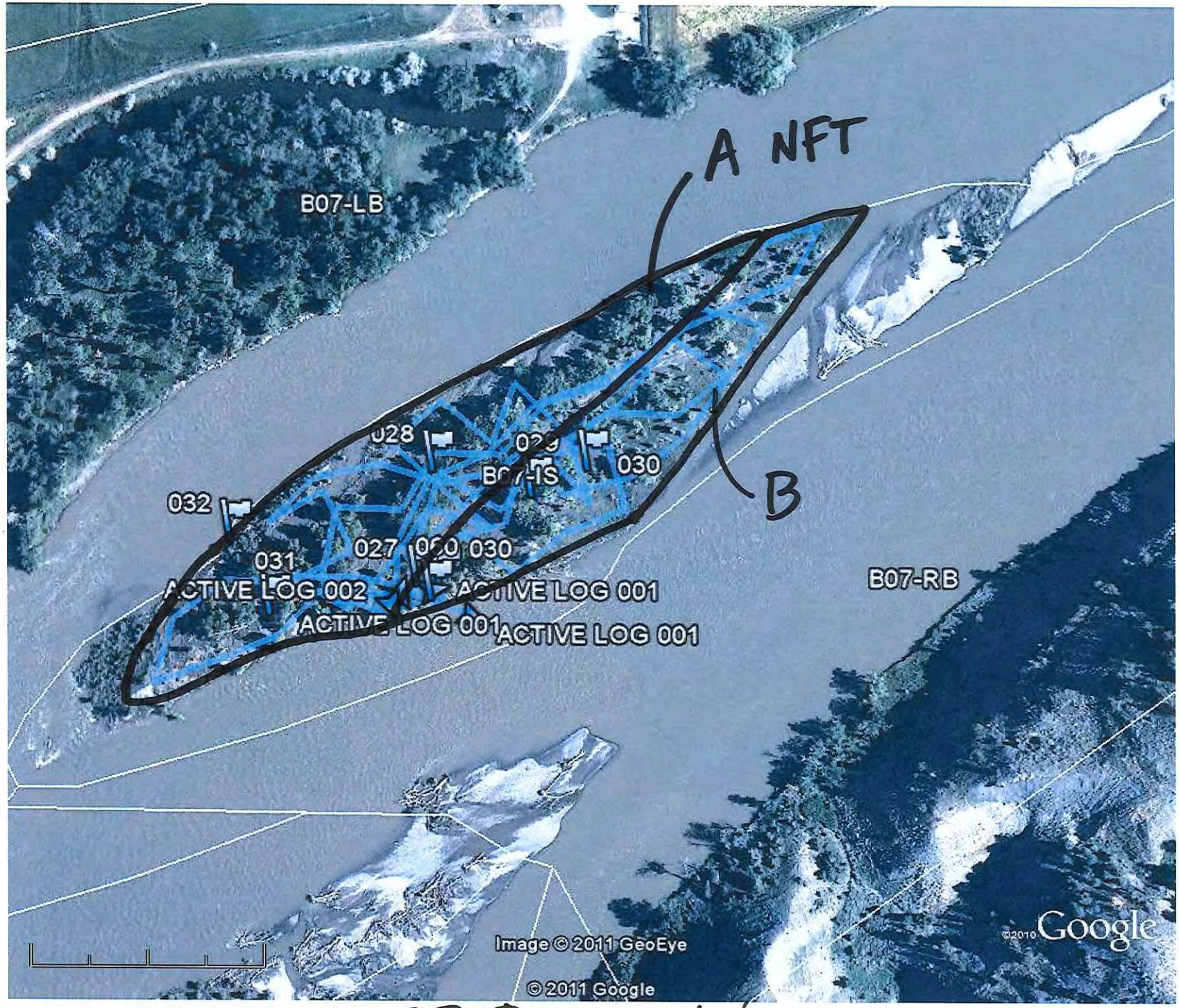
Zone A : No further treatment required.

Zone B : Cut coated vegetation (ATM #1); remove coated debris (ATM #2)

Ops Hot Shot (Rich Jessup)

Removed 6 bags; estimated 40-50 bags remaining, 1 day of Ops

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



B7 Is. 8/29/11 Team 2 Partial

Appendix C

Pre-Inspection Survey Transmittal

ARCADIS

A Pre-Inspection Survey was not conducted for this area

Appendix D

Post-Inspection Survey Transmittal

POST

Post Inspection Survey Transmittal

Segment B7 Island

Date of Survey 8/29/11

SCAT Team Member Pete Lee Signed: PBLee

SCAT Team Member Eric Harlow Signed: Eric Harlow

SCAT Team Member Griff Miller Signed: [illegible]

SCAT Team Member Larry Alheim Signed: [illegible]

Segment FAILED ReSCAT ☐

Segment Conditionally PASSES ReSCAT ☒

→ **Referred to Ops For Further Treatment**

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

Describe the zone requiring further treatment. Based on the CTR(s), comment on oiling conditions, the appropriate ATMs to use, GPS waypoints, additional comments, attach a map, etc.

Zone B consists of trace oil-coated grass, trees and debris on the southeast side of the island between the bank and an alongshore internal channel. Most target areas are flagged. Coated vegetation and debris is transferrable. Use ATM #1 and #2 with a weedeater.

Zone Dimensions: Length 210 Width 40 (required) **GPS Waypoint:** Lat. N 45° 42.019' Long. W 108° 37.005' (center of zone)

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

Sign Name | Print Name/ Affiliation | Date

SCAT/Ops Liaison (SCAT RP Representative)

Appendix E

Final SCAT Survey Forms and Sketches

D13/6

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: B-07 Left Bank / Right Bank / Island	02/09/11	11:00 hrs to 13:00 hrs	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 + / - 26 deg C

2 SURVEY TEAM # 1	name	organization	contact phone number
Tom Freeman		Polaris App. Sciences	Tom Freeman
Jeffrey Herrick		MT DEQ	Jeffrey Herrick
Griff Miller		CDA	

3 SEGMENT Total Segment/Reach Length 695 m Segment/Reach Length Surveyed 695 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 X Mixed X Pebble/Cobble X Boulder____ Peat/Organic____ | Vegetated Bank: Yes | Wooded Upland: ____

Sediment Flat: Clay/Mud____ Sand____ Mixed/Coarse____ | Other: ____ | If snow and ice use Winter River SOS

4B RIVER VALLEY CHARACTER select as appropriate — complete for primary

Cliff or Bluff: ___ Est Height ____m | canyon____ manmade____ meander ____ confined or leveed ____ | Substrate Type: MIXED

Sloped: ___ (>5°)(15°)(30°) | straight____ braided X 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 _____m | est. water depth: <1 m 1-3 M 3-10 m >10 m ____ m

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

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

5 OPERATIONAL FEATURES Suitable backshore staging Y/N | Access: Direct from backshore Y / N Alongshore from next segment Y / N

Debris: Y / N oiled Y / N amount ____ bags or ____ trucks | access restrictions

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

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

OIL ZONE ID	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER								SUBST. TYPE(S)
	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR	AP	NO	
2056 A				X	695	100	<1			S	P						X				Veg/Debris
																					~~Veg/Debris~~

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

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

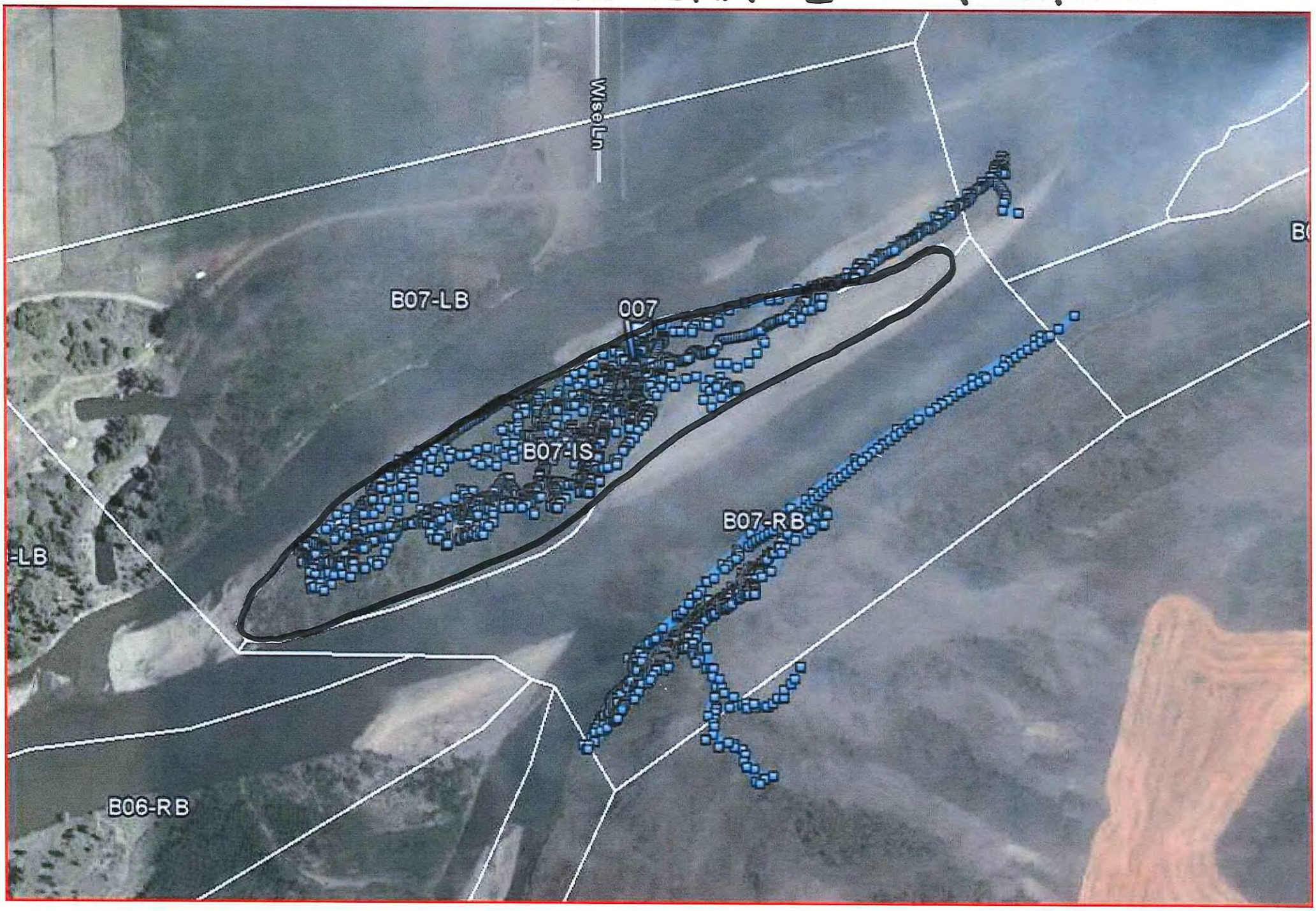
8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

Zone A: NFT - Hot Shots removed ≈ 6 bags to clear the segment. Product removed was on vegetation and small woody debris.

(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#_____

B-07 Island SCAT TEAM #1 Sept 2, 2011



D13/6

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident Page 1 of 3

1 GENERAL INFORMATION	Date (31/Aug/11)	Time (24h): std / daylight	Water Level
Segment/Reach ID: B07 Left Bank / Right Bank / Island			low - mean - bankfull - overbank
Operations Division:		12:20 hrs to 13:20 hrs	falling - steady – rising
Survey by: Foot / ATV / Boat / Helicopter / Overlook /	Sun / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp + / - 8 8 F deg C

2 SURVEY TEAM # 2	Name	Organization	Signature
	David Eric Harlow	Cardno ENTRIX	David Harlow
	Pete Lee	Polaris	PBLee
	Stephen Ball	EPA	S. Ball
	Larry Alheim	DEQ	

3 SEGMENT Total Segment/Reach Length 802 m Segment/Reach Length Surveyed 802 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 x Mixed x Pebble/Cobble x 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: ____

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

4C RIVER CHANNEL CHARACTER circle or select as appropriate

est. width: < 1m 1–10 m 10–100 m >100m | est. water depth: <1 m 1-3 m 3-10 m >10 m ____ m

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

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

5 OPERATIONAL FEATURES Suitable backshore staging Y / N | Access: Direct from backshore Y / N Alongshore from next segment Y / N

Debris: Y / N oiled Y / N amount ____ bags or ____ trucks | access restrictions

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

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	
1976 A				X	802	150	<1%			x	p						x				Grass, shrubs, trees

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

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

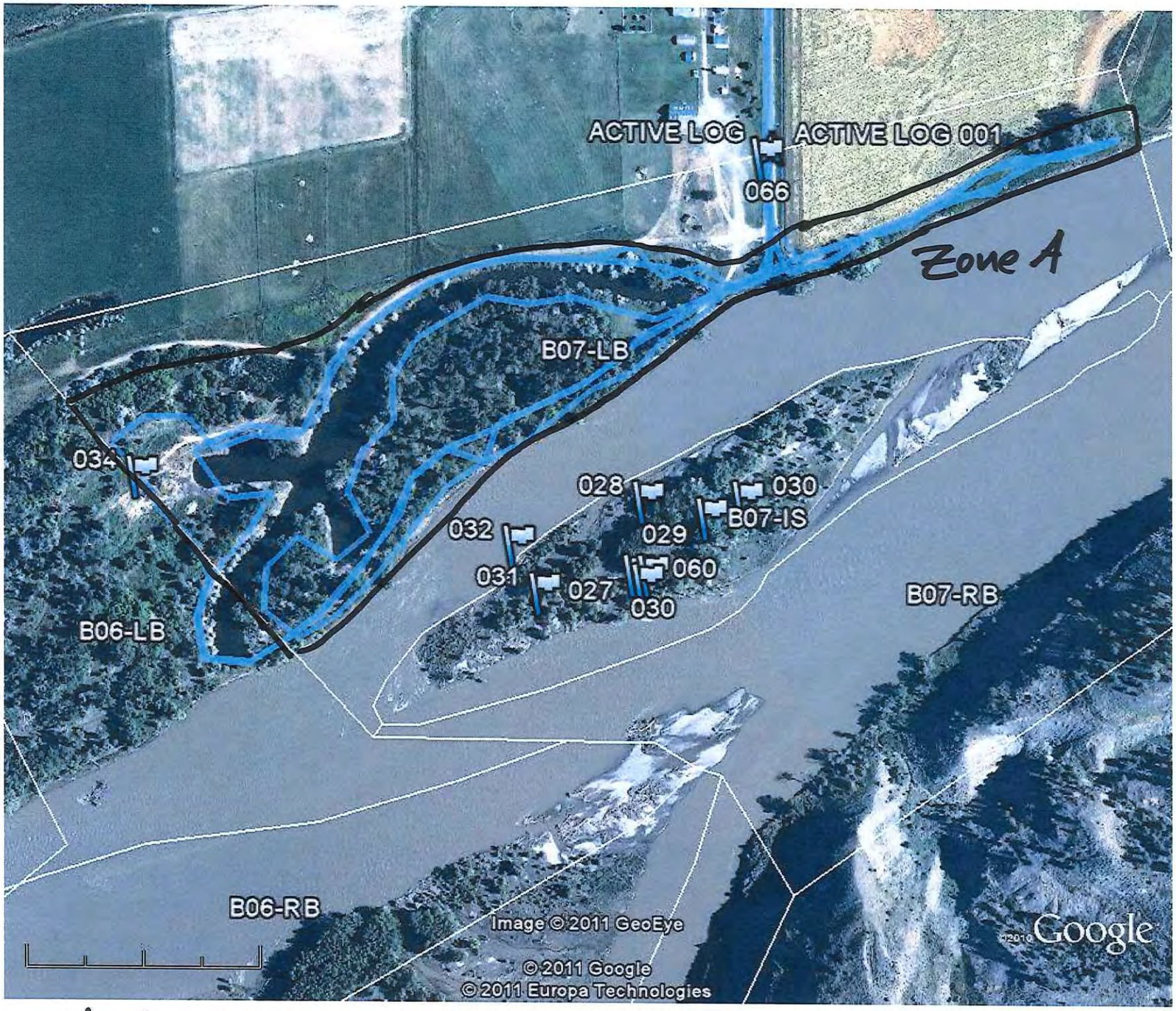
8 COMMENTS ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

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

RESCAT

Zone A: About 5 small (<1m) areas with weathered stains and coat. Treated by hotshot team. NFT.

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



8/31/11 Team 2 ReScat BØ7 LB

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: B-07 Left Bank / Right Bank / Island	02/09/11		low - MEAN - bankfull - overbank
Operations Division:		1300 hrs to 1500 hrs	falling - STEADY - rising
Survey by: Foot / ATV / Boat / Helicopter / Overlook / _____	Sun / Clouds / Fog / Rain / Snow / Windy / Calm		Air Temp + / - 26 deg C

2 SURVEY TEAM # 1

name	organization	contact phone number
Tom Freeman	Polaris Applied Sciences	
Jeffrey Herrick	MT DEQ	
Griff Miller	EPA	

3 SEGMENT Total Segment/Reach Length 530 m Segment/Reach Length Surveyed 530 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 X ___ Mixed X ___ Pebble/Cobble X ___ Boulder____ Peat/Organic____ | **Vegetated Bank: Yes** | **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 75 m | canyon____ manmade____ meander ____ confined or leveed ____ | Substrate Type: MIXED

Sloped: 50 (>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 1–10 m 10–100 m >100m _____m | **est. water depth:** <1 m 1-3 M 3-10 m >10 m ____ m

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

seasonal water level: low / MEAN / bank full / overbank flow | **est. change over next 7 days:** falling - SAME - rising

5 OPERATIONAL FEATURES Suitable backshore **staging** Y / N | **Access:** Direct from backshore Y / N Alongshore from next segment Y N

Debris: Y / N oiled Y / N amount _____ bags or _____ trucks | access restrictions

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

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

OIL ZONE ID	RIVER BANK ZONE				OIL COVER			OIL THICKNESS					OIL CHARACTER								SUBST. TYPE(S)
	MS	LB	UB	OB	Length m	Width m	Distrib. %	TO	CV	CT	ST	FL	FR	MS	TB	PT	TC	SR	AP	NO	
2055 A				X	530	5	<1			S	P						X				Veg/Debris
																					~~Veg/Debris~~

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

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

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

Zone A: Small amount (≈3 bags) of oiled vegetation and roots were removed by Hot Shot Team.

(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# _____

B-07 RB SCAT TEAM 1 Sept 2, 2011

Appendix F

Completed SCAT Segment Sign-Off Forms

SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

SILVERTIP PIPELINE RELEASE

Segment B7 Island Date of Survey 8/29/11

Dates of Initial SCAT Assessments _____ (to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment 35

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

Segment Assessment Complete[1] ☐

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).

Sign Name	Print Name/ Affiliation	Date
	Griff Miller / EPA	8-29-11

Federal Representative (EPA/USCG)

Sign Name	Print Name/ Affiliation	Date
	Larry Alheim DEQ	8/29/11

State Representative (DEQ/FWP)

Sign Name	Print Name/ Affiliation	Date
PBLee	Pete Lee / Polaris	8/29/11

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 B-07 Island Date of Survey Sept 2, 2011

Dates of Initial SCAT Assessments 21 JUL 11 (ID)
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment CTR #35

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

Segment Assessment Complete[1] ☒

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).

Sign Name	Print Name/ Affiliation	Date
	Giff Miller	9-2-11

Federal Representative (EPA/USCG)

Sign Name	Print Name/ Affiliation	Date
	Jeffrey Frank Herrick	02 Sep 2011

State Representative (DEQ/FWP)

Sign Name	Print Name/ Affiliation	Date
Tom Freeman	Tom Freeman / Polaris	Sept 2, 2011

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 B07LB Date of Survey 8/31/11

Dates of Initial SCAT Assessments _____
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment 41

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

Segment Assessment Complete[1] ☑

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).

Sign Name	Print Name/ Affiliation	Date
	Stephen Ball EPA	8/31/11

Federal Representative (EPA/USCG)

Sign Name	Print Name/ Affiliation	Date
	Larry Alheim MT DEQ	8/31/11

State Representative (DEQ/FWP)

Sign Name	Print Name/ Affiliation	Date
David Eric Harlow	David Harlow Cardno ENTRIX	8/31/11

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 B-07 RB

Date of Survey Sept 2, 2011

Dates of Initial SCAT Assessments 19JUL11 (IC)
(to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment CTR # 25

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

Segment Assessment Complete[1] ☒

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).

Sign Name	Print Name/ Affiliation	Date
	Griff Miller / EPA	9-2-11

Federal Representative (EPA/USCG)

Sign Name	Print Name/ Affiliation	Date
	Jeffrey Frank Herrick	02 Sep. 2011

State Representative (DEQ/FWP)

Sign Name	Print Name/ Affiliation	Date
Tom Freeman	Tom Freeman	Sept 2, 2011

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.