

**ExxonMobil Pipeline Company**

**SCAT Area Transition Report  
for C47**

Silvertip Pipeline Incident  
Laurel, Montana

October 22, 2011



## **SCAT Area Transition Report for C47**

Silvertip Pipeline Incident  
Laurel, Montana

Prepared for:  
ExxonMobil Pipeline Company

Prepared by:  
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Our Ref.:  
B0085883.1103

Date:  
October 22, 2011

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

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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 C47, 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 C47. 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 C47, 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 C47 is 150.1. There were no access issues other than conditional access for the 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 C47 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 C47.

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

Table 1 (below) summarizes samples collected within Area C47. 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 C47 are provided on Figure 3.

**Table 1 Environmental Sampling Summary**

| Agency | Sample Num    | Date      | Matrix        | Location       | Latitude  | Longitude   |
|--------|---------------|-----------|---------------|----------------|-----------|-------------|
| CTEH   | WOMT0825SW201 | 8/25/2011 | Water_Surface | WOMT_399_SW201 | 45.991662 | -108.096039 |
| CTEH   | WOMT0825SW202 | 8/25/2011 | Water_Surface | WOMT_399_SW202 | 45.996073 | -108.108528 |

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, no detections were reported and therefore no exceedances.

#### **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 C47 are included in Appendix B. Figure 4 provides the maximum oiling zones observed by the SCAT team during the initial surveys of Area C47.

#### **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. 61](#)).

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

Oil removal activities were conducted within Area C47 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 C47 following completion of oil removal activities. The SCAT team performed final surveys of the island within SCAT Area C47 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 initial SCAT survey, only very light oiling was observed on a portion of the left bank, right bank, and island, and no oiling was observed in the remainder of Area C47. The very light oiling zones will be addressed through natural attenuation. Based on the final SCAT surveys performed on the island within Area C47, no further treatment is recommended for the area surveyed. SCAT Segment Sign-Off Forms are included as Appendix F.

**2. Transition Sign-Off Form**

**SCAT Area Transition Report for C47**

**Prepared for:**

**Unified Command**

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Date

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Unified Command – RP



**SCAT Area Transition  
Report for C47**

Silvertip Pipeline Incident  
Laurel, Montana

**SCAT Area Transition Report for C47**

**Prepared for:**

**Unified Command**

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Date

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Unified Command – FOSC



**SCAT Area Transition  
Report for C47**

Silvertip Pipeline Incident  
Laurel, Montana

**SCAT Area Transition Report for C47**

**Prepared for:**

**Unified Command**

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Date

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Unified Command – MDEQ

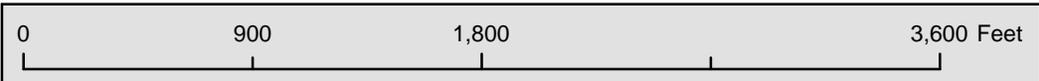
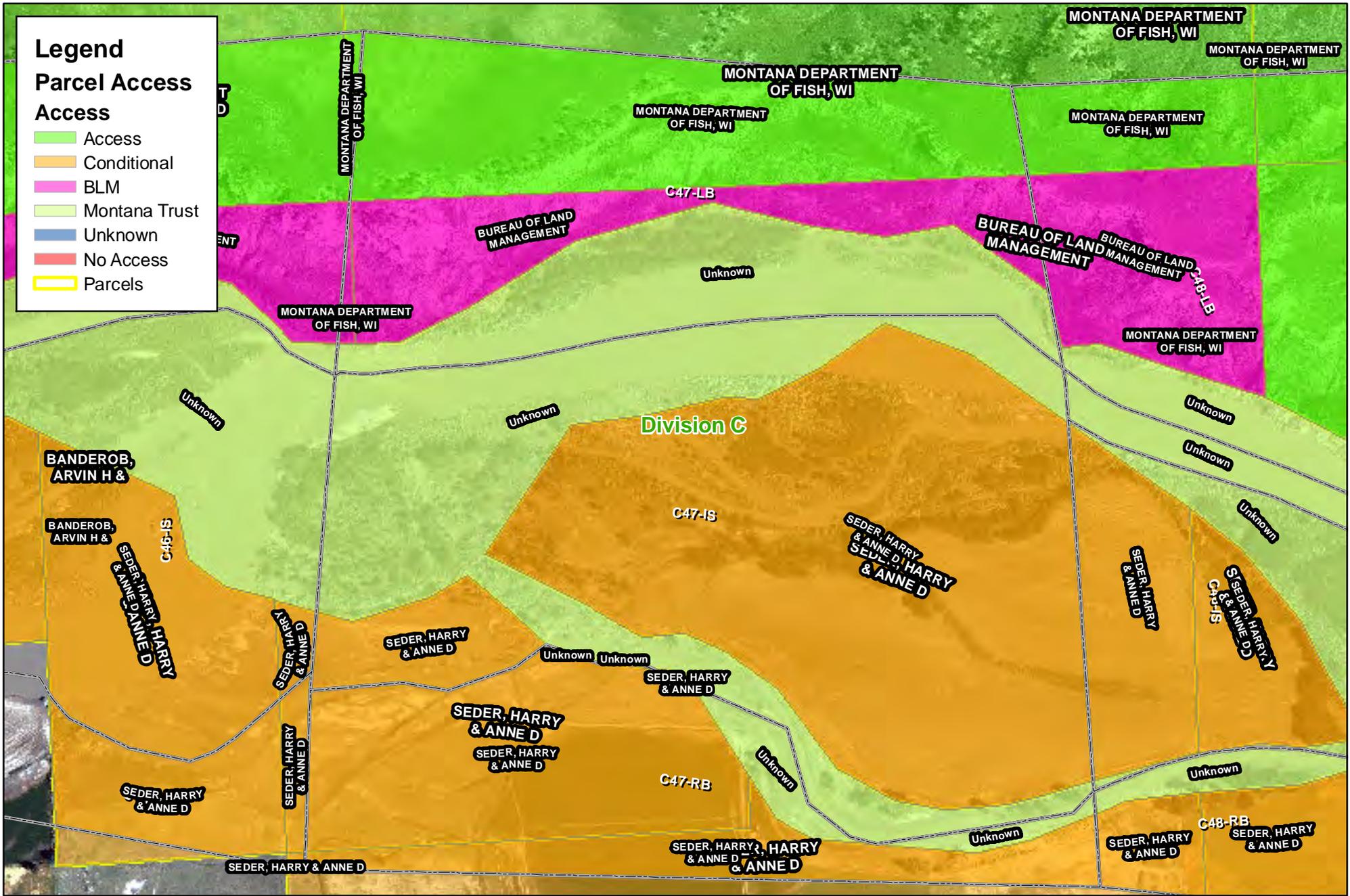


Figure 1

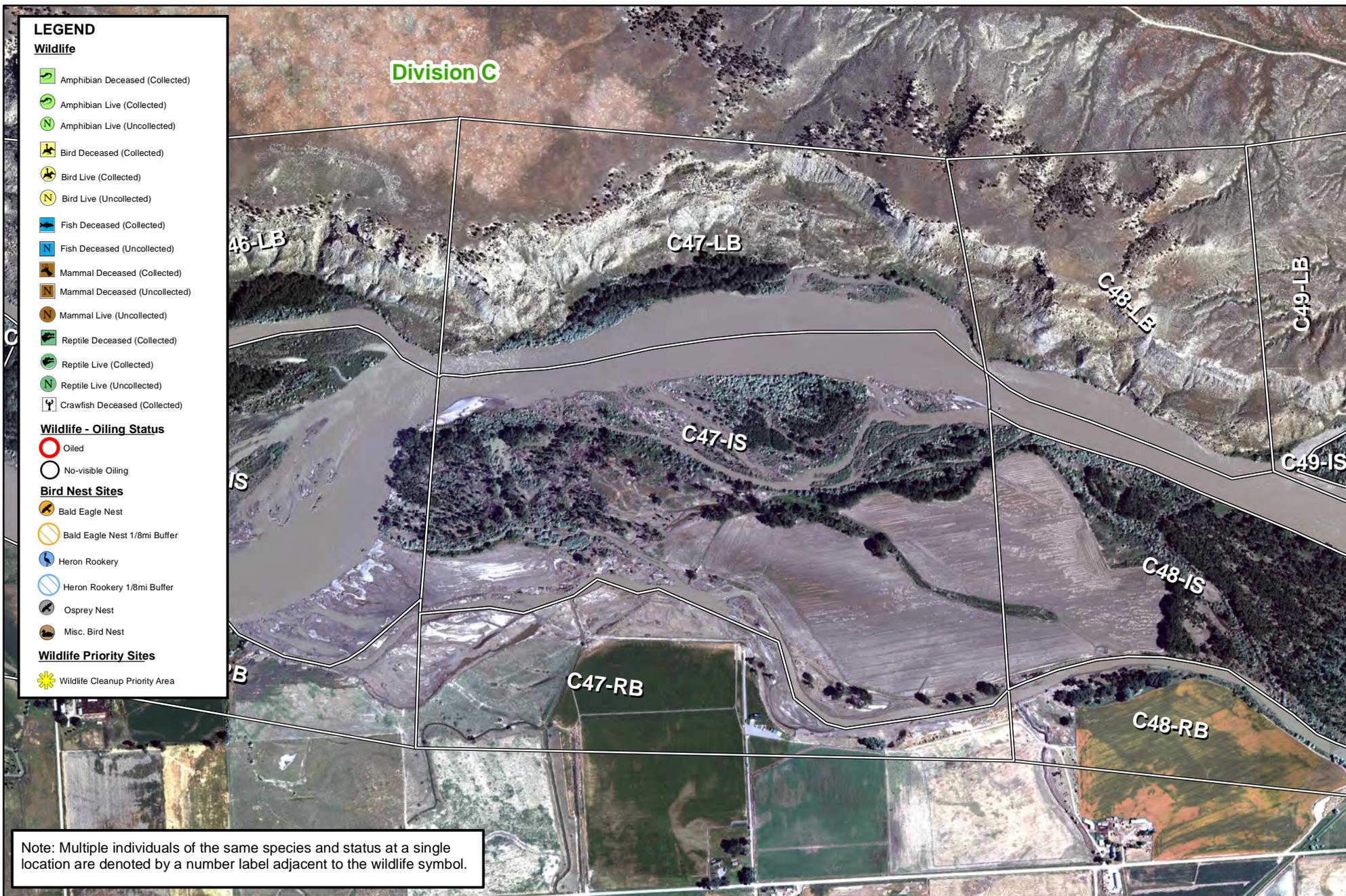
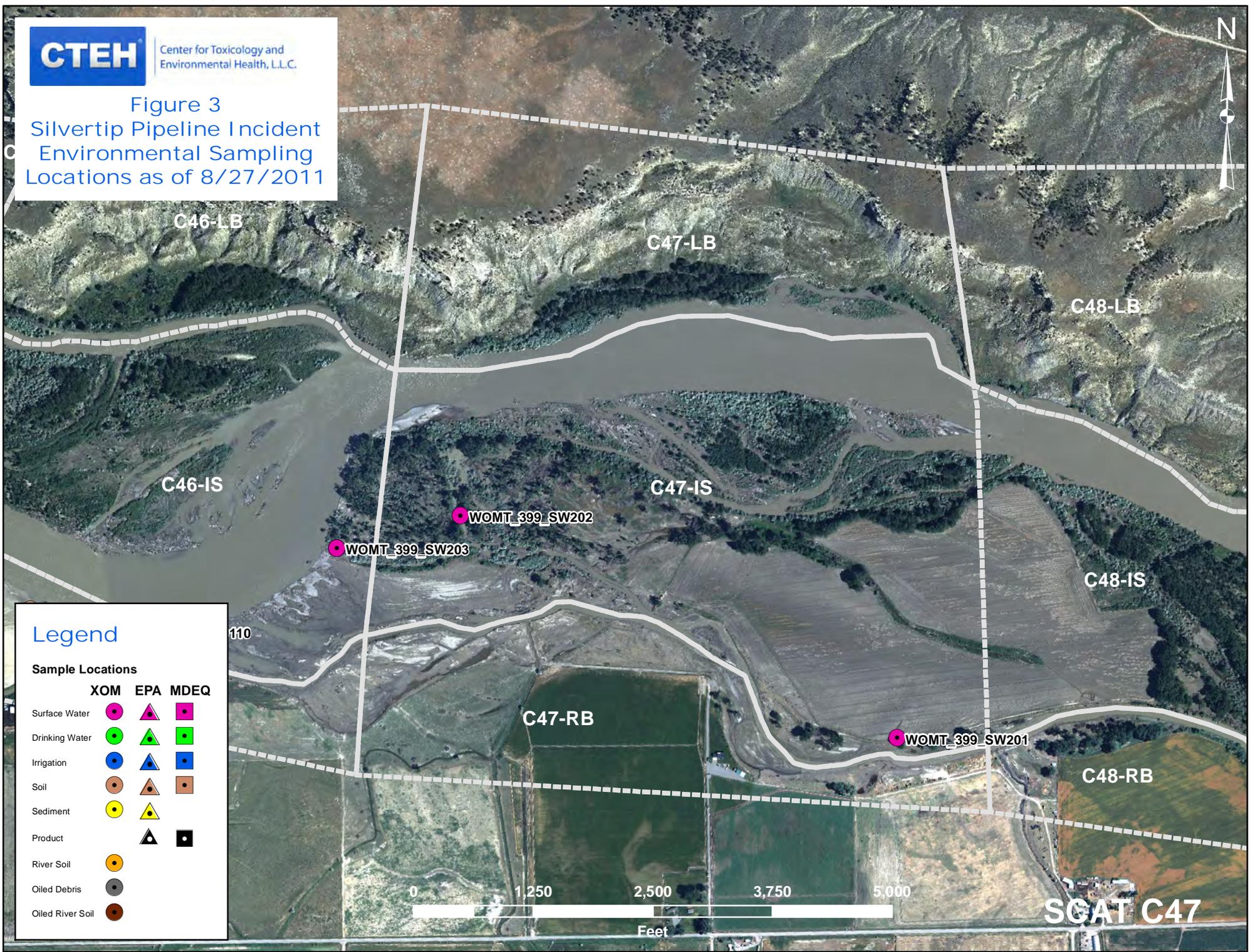


Figure 3  
 Silvertip Pipeline Incident  
 Environmental Sampling  
 Locations as of 8/27/2011



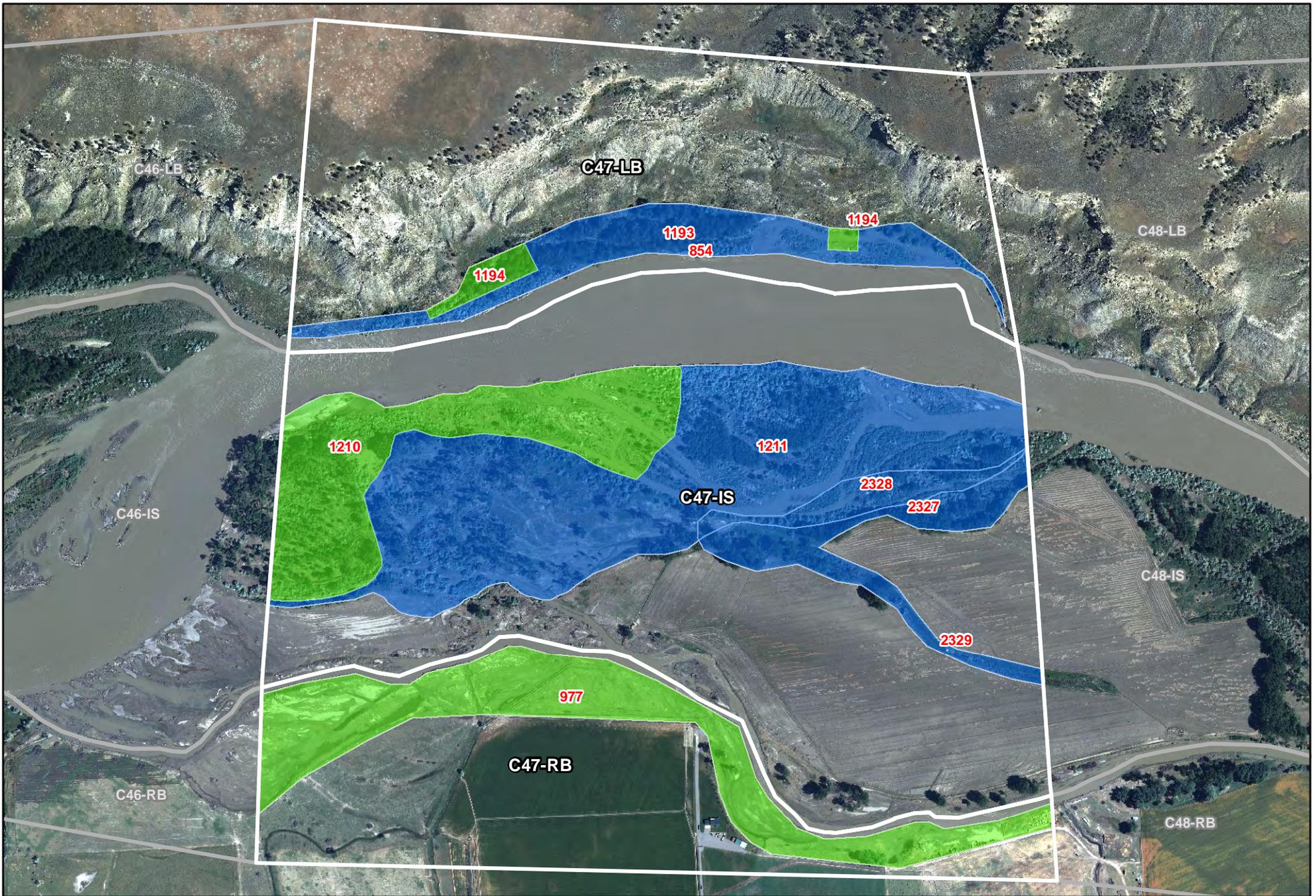
**Legend**

**Sample Locations**

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



SCAT C47

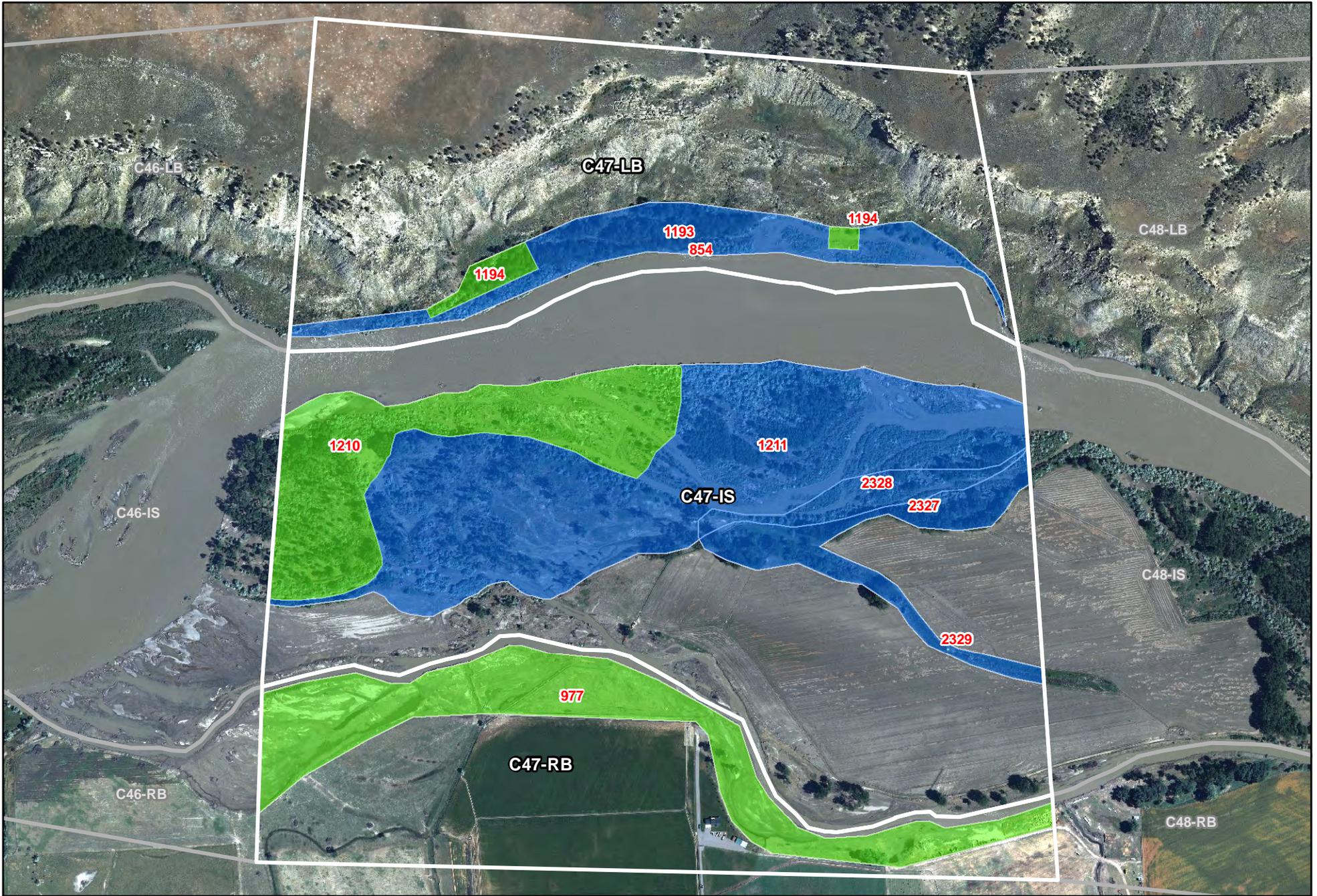


- 9999 Oiling Zone ID
- Heavy Oiling
- Moderate Oiling

- Light Oiling
- Very Light Oiling
- No Oil Observed

**Figure 4 - Maximum SCAT Observations  
For SCAT Area:**





- 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





## **Appendix B**

Initial SCAT Survey Forms  
and Sketches

DB

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

|                                                                |  |                                                 |                            |                                  |  |
|----------------------------------------------------------------|--|-------------------------------------------------|----------------------------|----------------------------------|--|
| <b>1 GENERAL INFORMATION</b>                                   |  | Date (dd/mm/yy)                                 | Time (24h): std / daylight | <b>Water Level</b>               |  |
| Segment/Reach ID: <u>C-477</u> Left Bank / Right Bank / Island |  | <u>26/02/11</u>                                 | <u>1545</u> hrs to         | low - mean - bankfull - overbank |  |
| Operations Division:                                           |  |                                                 | hrs                        | falling - steady - rising        |  |
| Survey by: Foot / ATV / Boat / Helicopter / Overlook /         |  | Sun / Clouds / Fog / Rain / Snow / Windy / Calm |                            | Air Temp +/- deg C               |  |

| 2 SURVEY TEAM # | Name               | Organization   | Signature |
|-----------------|--------------------|----------------|-----------|
|                 | <u>CARY REITER</u> | <u>POSARIS</u> |           |
|                 | <u>JOAN PATINO</u> | <u>USCG</u>    |           |
|                 |                    |                |           |
|                 |                    |                |           |

**3 SEGMENT** Total Segment/Reach Length \_\_\_\_\_ m Segment/Reach Length Surveyed \_\_\_\_\_ m

Start GPS: LATITUDE 45 deg. 59.38 min. LONGITUDE 108 deg. 06.05 min. Datum: \_\_\_\_\_

End GPS: LATITUDE \_\_\_\_\_ deg. \_\_\_\_\_ min. LONGITUDE \_\_\_\_\_ deg. \_\_\_\_\_ min.

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

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

Sediment Bank: Clay/Mud \_\_\_\_\_ Sand \_\_\_\_\_ Mixed \_\_\_\_\_ Pebble/Cobble \_\_\_\_\_ Boulder \_\_\_\_\_ Peat/Organic \_\_\_\_\_ Vegetated Bank: \_\_\_\_\_ Wooded Upland: \_\_\_\_\_

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

**4B RIVER VALLEY CHARACTER** select as appropriate

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

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

Substrate Type: \_\_\_\_\_ 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: \_\_\_\_\_

**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           |                 |    |    | <input checked="" type="checkbox"/> |           |         | <1         |               |    | <input checked="" type="checkbox"/> |    |    |               |    |    |    | <input checked="" type="checkbox"/> |    |    |                |    |  |
|             |                 |    |    |                                     |           |         |            |               |    |                                     |    |    |               |    |    |    |                                     |    |    |                |    |  |

**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

Way points  
 1. 45° 59' 34.5" N 108° 06' 22.9" W PICTURE 1  
 2. 45° 59' 35.5" N 108° 06' 22.2" W PICTURE 2  
 3. 45° 59' 35.11" N 108° 06' 22.34" W PICTURE 3  
 4. 45° 59' 35.43" N 108° 05' 34.9" W PICTURE 4

Property owned by Wm + ARLENE HEIN / son Jim  
 406 806 3770

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

DBIG/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

|                                                               |  |                                                 |                                                                  |                                                                                   |
|---------------------------------------------------------------|--|-------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>1 GENERAL INFORMATION</b>                                  |  | Date (dd/mm/yy)<br><u>29/07/11</u>              | Time (24h): std / daylight<br><u>1030</u> hrs to <u>1145</u> hrs | Water Level<br>low - mean <u>bankfull</u> - overbank<br>falling - steady - rising |
| Segment/Reach ID: <u>C47</u> Left Bank / Right Bank / Island  |  | Operations Division:                            |                                                                  |                                                                                   |
| Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook / |  | Sun / Clouds / Fog / Rain / Snow / Windy / Calm |                                                                  | Air Temp + / - <u>36</u> deg C                                                    |

| 2 SURVEY TEAM # <u>3</u> | Name                  | Organization         | Signature          |
|--------------------------|-----------------------|----------------------|--------------------|
|                          | <u>Loni Williams</u>  | <u>Cardno ENTRIX</u> | <u>[Signature]</u> |
|                          | <u>John Beach</u>     | <u>US EPA</u>        | <u>[Signature]</u> |
|                          | <u>MIKE DIRKS</u>     | <u>Cardno ENTRIX</u> | <u>[Signature]</u> |
|                          | <u>Brandon Owens</u>  | <u>Cardno ENTRIX</u> | <u>[Signature]</u> |
|                          | <u>Aaron Anderson</u> | <u>DEA</u>           | <u>[Signature]</u> |

**3 SEGMENT** Total Segment/Reach Length 1402 m Segment/Reach Length Surveyed 1402 m

Start GPS: LATITUDE 45 deg. 59.605 min. LONGITUDE 108 deg. 6.677 min. Datum: WGS84

End GPS: LATITUDE 45 deg. 59.486 min. LONGITUDE 108 deg. 5.605 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 S Mixed Pebble/Cobble Boulder Peat/Organic Vegetated Bank (P) Wooded Upland:

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

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

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

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

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<br>m | Width<br>m | Distrib.<br>% | TO            | CV | CT | ST       | FL | FR            | MS | TB | PT | TC | SR |                | AP | NO |  |                   |
|                 |                 |    |    |          |             |            |               |               |    |    |          |    |               |    |    |    |    |    |                |    |    |  |                   |
| <u>977</u><br>A |                 |    |    | <u>X</u> | <u>1402</u> | <u>142</u> | <u>&lt;1</u>  |               |    |    | <u>X</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<br>cm | OILED ZONE<br>cm-cm | SUBSURFACE OIL CHARACTER |    |    |    |    |    | WATER TABLE<br>cm | SHEEN COLOUR<br>B, R, S, N | CLEAN BELOW<br>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 → very light sporadic oiling throughout segment, approx. 2-5 spots less than 0.5m x 2m

Recommendation: Natural attenuation

Island needs to be surveyed by boat

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

108°6.5'W 108°6.25'W 108°5'W 108°5.75'W 108°5.5'W

STATE OF MT TRUST LAND

MONTANA DEPARTMENT OF FISH & WILDLIFE

BUREAU OF LAND MANAGEMENT

C47

SEPER, (TERRY WATTS)

Zone A

0 250 500 1,000 Feet

108°6.75'W Date: 7/22/2011 Time: 8:38:09 PM

108°6.5'W

108°6.25'W

108°5'W

108°5.75'W

108°5.5'W

Path: P:\GIS\WXD's\Segments\_Map 11x17.mxd

45°0'25"N

45°0'N

45°0'25"N

45°0'25"N

45°0'N

45°0'25"N

D/B/G/S

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

|                                                               |  |                                                 |                                                  |                                                                             |
|---------------------------------------------------------------|--|-------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------------------|
| <b>1 GENERAL INFORMATION</b>                                  |  | Date (dd/mm/yy)<br>26/07/11                     | Time (24h): std / daylight<br>102 hrs to 104 hrs | Water Level<br>low - mean - bankfull - overbank<br>falling steady -- rising |
| Segment/Reach ID: C <u>47</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>2.8</u> deg C                                               |

| 2 SURVEY TEAM # 1 | Name         | Organization | Signature    |
|-------------------|--------------|--------------|--------------|
|                   | Pete Lee     | Polaris      | 225.892.6459 |
|                   | John Beach   | US EPA       | 415.972.3347 |
|                   | Larry Alheim | MT DEQ       | 406.461.7516 |

**3 SEGMENT** Total Segment/Reach Length 1240 m Segment/Reach Length Surveyed 1240 m

Start GPS: LATITUDE 45 deg. 59.912 min. LONGITUDE 108 deg. 5.240 min. Datum: \_\_\_\_\_

End GPS: LATITUDE 45 deg. 59.925 min. LONGITUDE 108 deg. 6.625 min.

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

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

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

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 65 m canyon \_\_\_\_\_ manmade \_\_\_\_\_ meander \_\_\_\_\_ confined or leveed \_\_\_\_\_ Substrate Type: \_\_\_\_\_

Sloped: (>5°)(15°)(30°) >60° straight \_\_\_\_\_ braided \_\_\_\_\_ oxbow \_\_\_\_\_ flood plain valley  Forested / Vegetated / Bare

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

est. width: <1m 1-10m 10-100m >100m 100m / 50m est. water depth: <1m 1-3m 3-10m >10m \_\_\_\_\_ m

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

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

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

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

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

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

| OIL ZONE | RIVER BANK ZONE |                                     |    |                                     | OIL COVER |       |          | OIL THICKNESS |    |    |    |    | OIL CHARACTER |    |    |    |    | SUBST. TYPE(S) |    |                                     |
|----------|-----------------|-------------------------------------|----|-------------------------------------|-----------|-------|----------|---------------|----|----|----|----|---------------|----|----|----|----|----------------|----|-------------------------------------|
|          |                 |                                     |    |                                     | Length    | Width | Distrib. | TO            | CV | CT | ST | FL | FR            | MS | TB | PT | TC |                | SR | AP                                  |
| ID       | MS              | LB                                  | UB | OB                                  | m         | m     | %        |               |    |    |    |    |               |    |    |    |    |                |    |                                     |
| A        |                 | <input checked="" type="checkbox"/> |    | <input checked="" type="checkbox"/> | 1240      | 1     |          |               |    |    |    |    |               |    |    |    |    |                |    | <input checked="" type="checkbox"/> |

**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) |
|-------------------|-----------------|--|--|--|-------------------|------------------|--------------------------|----|----|----|----|----------------|-------------------------|----------------------|----------------|
|                   |                 |  |  |  |                   |                  | 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

Oil height:

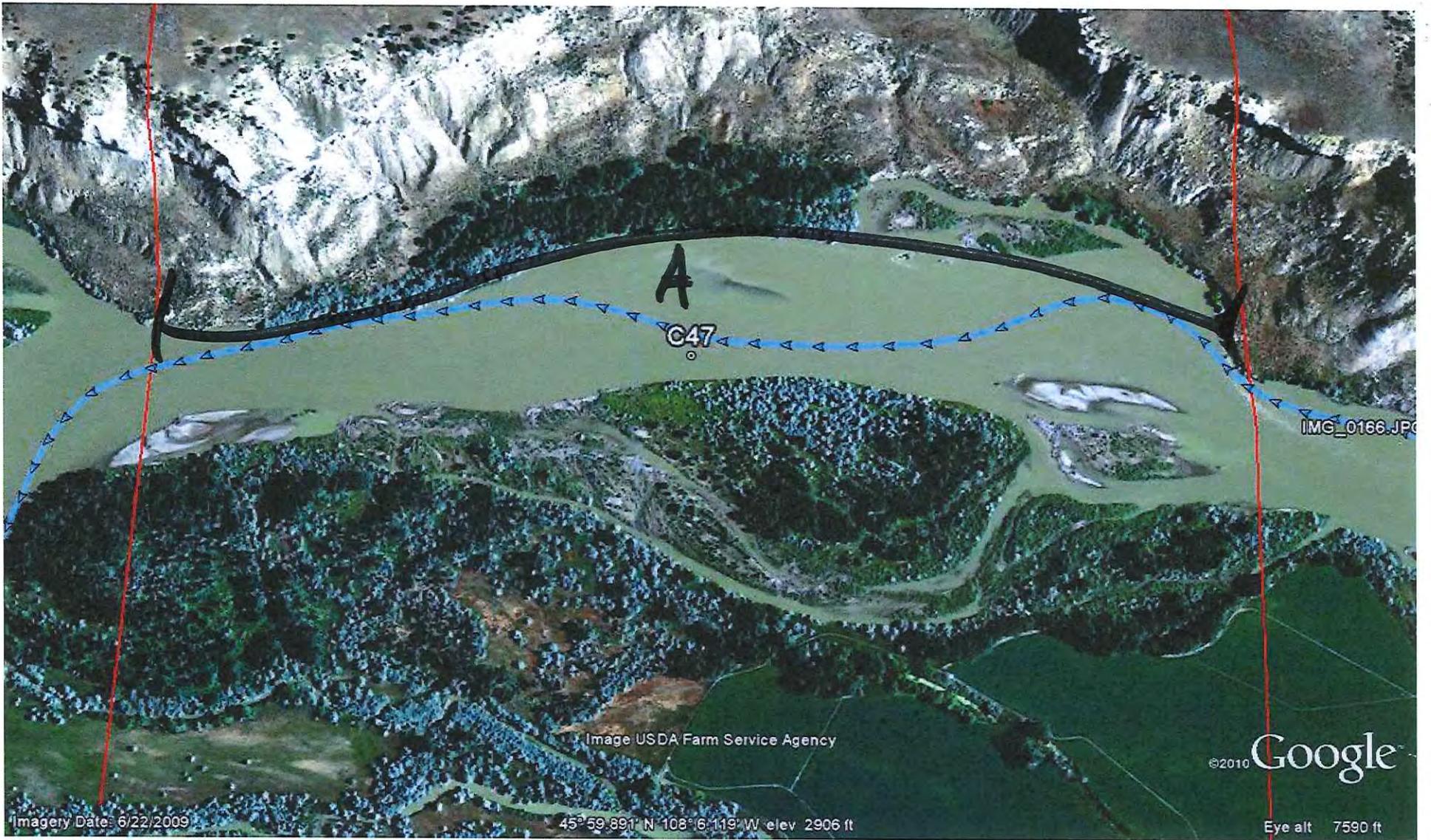
Treatment recommendations:

Zone A : No oil observed; no treatment required.

Zone \_\_\_\_\_ : Cut & remove oil coated vegetation smaller than 1" diameter. Remove debris smaller than 4" diameter. Wipe larger oil coated vegetation.

\*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  Photographer \_\_\_\_\_



A

C47

IMG\_0166.JPG

Image USDA Farm Service Agency

©2010 Google

Imagery Date: 6/22/2009

45° 59.891' N 108° 6.119' W elev 2906 ft

Eye alt 7590 ft

PB 16

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

|                                                               |  |                                                 |                                                    |                                                                                            |
|---------------------------------------------------------------|--|-------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------|
| <b>1 GENERAL INFORMATION</b>                                  |  | Date (dd/mm/yy)<br>08/04/2011                   | Time (24h): std / daylight<br>0845 hrs to 1230 hrs | Water Level<br>low - mean - <b>bankfull</b> - overbank<br><u>(falling)</u> steady - rising |
| Segment/Reach ID: C47 <u>Left Bank</u> / Right Bank / Island  |  | Operations Division:                            |                                                    |                                                                                            |
| Survey by: <u>Foot</u> / ATV / Boat / Helicopter / Overlook / |  | Sun / Clouds / Fog / Rain / Snow / Windy / Calm |                                                    | Air Temp +/- 37 deg C                                                                      |

|                          |                   |              |                        |
|--------------------------|-------------------|--------------|------------------------|
| <b>2 SURVEY TEAM # 4</b> | Name              | Organization | Signature              |
| Bruce Kvam               | <u>Bruce Kvam</u> | Polaris      | <u>Bruce Kvam</u>      |
| Chris Arredondo          |                   | CardnoEntrix | <u>Chris Arredondo</u> |
| John Davis               |                   | USCG         | <u>John Davis</u>      |
| Jay Watson               |                   | FWP          | <u>Jay Watson</u>      |
| Jay Parks                |                   | BLM          | <u>Jay Parks</u>       |
| Larry Padden             |                   | BLM          | <u>Larry Padden</u>    |

**3 SEGMENT** Total Segment/Reach Length 1278 m Segment/Reach Length Surveyed 1278 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 P \_\_\_\_\_ Sand S \_\_\_\_\_ Mixed \_\_\_\_\_ Pebble/Cobble \_\_\_\_\_ Boulder S \_\_\_\_\_ 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: Clay/Mud

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 \_\_\_\_\_

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

1193  
1194

| OIL ZONE | RIVER BANK ZONE |    |    |    | OIL COVER |       |          | OIL THICKNESS |    |    |    |    | OIL CHARACTER |    |    |    |    |    | SUBST. TYPE(S) |    |                             |
|----------|-----------------|----|----|----|-----------|-------|----------|---------------|----|----|----|----|---------------|----|----|----|----|----|----------------|----|-----------------------------|
|          | MS              | LB | UB | OB | Length    | Width | Distrib. | TO            | CV | CT | ST | FL | FR            | MS | TB | PT | TC | SR |                | AP | NO                          |
| A        |                 |    |    | X  | 1008      | 68    |          |               |    |    |    |    |               |    |    |    |    |    |                | X  |                             |
| B        |                 |    |    | X  | 270       | 30    | <1       |               |    |    | X  |    |               |    |    |    |    | X  |                |    | Grass, shrubs, woody debris |

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

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

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

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

Zone A: No treatment required.

Zone B: No treatment recommended.

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



C47- L  
(L/R/I)??

Team #4  
08/04/2011

DB 16

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

**1 GENERAL INFORMATION**

Segment/Reach ID: C47 Left Bank (Right Bank) Island 05/08/11 Date (dd/mm/yy)

Operations Division: C Time (24h): std / daylight 1200 hrs to 1425 hrs Water Level: low - mean - (bankfull) - overbank

Survey by: (Foot/ATV/Boat) Helicopter / Overlook / (Sun/Clouds) Fog / Rain / Snow / Windy (Calm) Air Temp +/- 23 deg C

**2 SURVEY TEAM # 1**

| Name                  | Organization        | Signature             |
|-----------------------|---------------------|-----------------------|
| <u>Nathan Hammond</u> | <u>Cardno Entix</u> | <u>Nathan Hammond</u> |
| <u>Adam Bausch</u>    | <u>Cardno Entix</u> | <u>Adam Bausch</u>    |
| <u>Pete Lee</u>       | <u>Polaris</u>      | <u>Pete Lee</u>       |
| <u>Peter Reich</u>    | <u>EPA</u>          | <u>Peter Reich</u>    |
| <u>Mark Ewanic</u>    | <u>DEQ</u>          | <u>Mark Ewanic</u>    |
| <u>Jack Smith</u>     | <u>USCG</u>         | <u>Jack Smith</u>     |
| <u>Betsy Howda</u>    | <u>DEQ</u>          | <u>Betsy Howda</u>    |

**3 SEGMENT** Total Segment/Reach Length 1305 m Segment/Reach Length Surveyed 1305 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: S Wooded Upland: (P)

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

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

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

Sloped: (>5°)(15°)(30°) straight \_\_\_\_\_ 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 point bar present Y bar-shoal substrate: silt / sand / gravel / cobble / boulder / bedrock / debris

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

**5 OPERATIONAL FEATURES**

Suitable backshore staging (X) Access: Direct from backshore (X) Alongshore from next segment (Y) N

debris (Y) N oiled (Y) N amount 10 bags or \_\_\_\_\_ trucks access restrictions \_\_\_\_\_

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

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

| OIL ZONE 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>650</u>  | <u>293</u> | <u>&lt;1</u> |               |    | <u>S</u> | <u>P</u> |    | <u>X</u>      |    |    |    |    |    |    |                |    | <u>Yes, Trees debris</u> |
| B           |                 | <u>X</u> | <u>X</u> |          | <u>655</u>  | <u>277</u> | <u>0</u>     |               |    |          |          |    |               |    |    |    |    |    |    |                |    | <u>✓</u>                 |
|             |                 |          |          |          | <u>1149</u> |            |              |               |    |          |          |    |               |    |    |    |    |    |    |                |    |                          |

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

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

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

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

Zone A - NTR

Zone B - WOOD

DB 16

RIVER BANK OILING SUMMARY FORM for Silvertip Pipeline Incident

|                                                               |                               |                                                          |                                    |                                         |
|---------------------------------------------------------------|-------------------------------|----------------------------------------------------------|------------------------------------|-----------------------------------------|
| <b>1 GENERAL INFORMATION</b>                                  |                               | Date (dd/mm/yy)                                          | Time (24h): std / daylight         | Water Level                             |
| Segment/Reach ID: <u>C47</u>                                  | Left Bank (Right Bank) Island | <u>05/08/11</u>                                          | <u>1200</u> hrs to <u>1425</u> hrs | low - mean - <u>bankfull</u> - overbank |
| Operations Division: <u>C</u>                                 |                               |                                                          |                                    | falling - steady - rising               |
| Survey by: <u>Foot / ATV / Boat / Helicopter / Overlook /</u> |                               | <u>(Sun / Clouds / Fog / Rain / Snow / Windy / Calm)</u> |                                    | Air Temp +/- <u>23</u> deg C            |

|                                   |                       |                      |                       |
|-----------------------------------|-----------------------|----------------------|-----------------------|
| <b>2 SURVEY TEAM #</b> <u>1aB</u> | Name                  | Organization         | Signature             |
|                                   | <u>Nathan Hammond</u> | <u>Cardno Entrix</u> | <u>Nathan Hammond</u> |
|                                   | <u>Adam Bausch</u>    | <u>Cardno Entrix</u> | <u>Adam Bausch</u>    |
|                                   | <u>Pete Lee</u>       | <u>Blaris</u>        | <u>Pete Lee</u>       |
|                                   | <u>Peter Reich</u>    | <u>EPA</u>           | <u>Peter Reich</u>    |
|                                   | <u>Mark Ewanic</u>    | <u>DEQ</u>           | <u>Mark Ewanic</u>    |
|                                   | <u>Jack Smith</u>     | <u>USCG</u>          | <u>Jack Smith</u>     |
|                                   | <u>Betsy Honda</u>    | <u>DEQ</u>           | <u>Betsy Honda</u>    |

**3 SEGMENT** Total Segment/Reach Length 1305 m Segment/Reach Length Surveyed 1305 ✓ 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:** S **Wooded Upland:** P

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

**4B RIVER VALLEY CHARACTER** select as appropriate

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

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 X N Alongshore from next segment Y N

Debris Y N oiled Y N amount 10 bags or \_\_\_\_\_ trucks access restrictions \_\_\_\_\_

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

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

| OIL ZONE ID      | RIVER BANK ZONE |    |          |          | OIL COVER                 |            |              | OIL THICKNESS |    |          |          |    | OIL CHARACTER |    |    |    |    |    |    | SUBST. TYPE(S) |                          |
|------------------|-----------------|----|----------|----------|---------------------------|------------|--------------|---------------|----|----------|----------|----|---------------|----|----|----|----|----|----|----------------|--------------------------|
|                  | MS              | LB | UB       | OB       | Length                    | Width      | Distrib.     | TO            | CV | CT       | ST       | FL | FR            | MS | TB | PT | TC | SR | AP |                | NO                       |
|                  |                 |    |          |          | m                         | m          | %            |               |    |          |          |    |               |    |    |    |    |    |    |                |                          |
| <u>1210</u><br>A |                 |    |          | <u>X</u> | <u>650</u>                | <u>293</u> | <u>&lt;1</u> |               |    | <u>S</u> | <u>P</u> |    | <u>X</u>      |    |    |    |    |    |    |                | <u>Yes, trees debris</u> |
| <u>1211</u><br>B |                 |    | <u>X</u> | <u>X</u> | <u>650</u><br><u>1149</u> | <u>277</u> | <u>0</u>     |               |    |          |          |    |               |    |    |    |    |    |    |                | <u>✓</u>                 |

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

| TRENCH or PIT NO. | RIVER BANK ZONE |    |    |    | MAX. PIT DEPTH 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 |  |                |                         |                      |                |
|                   |                 |    |    |    |                   |                  |                          |    |    |    |    |    |    |  |                |                         |                      |                |
|                   |                 |    |    |    |                   |                  |                          |    |    |    |    |    |    |  |                |                         |                      |                |

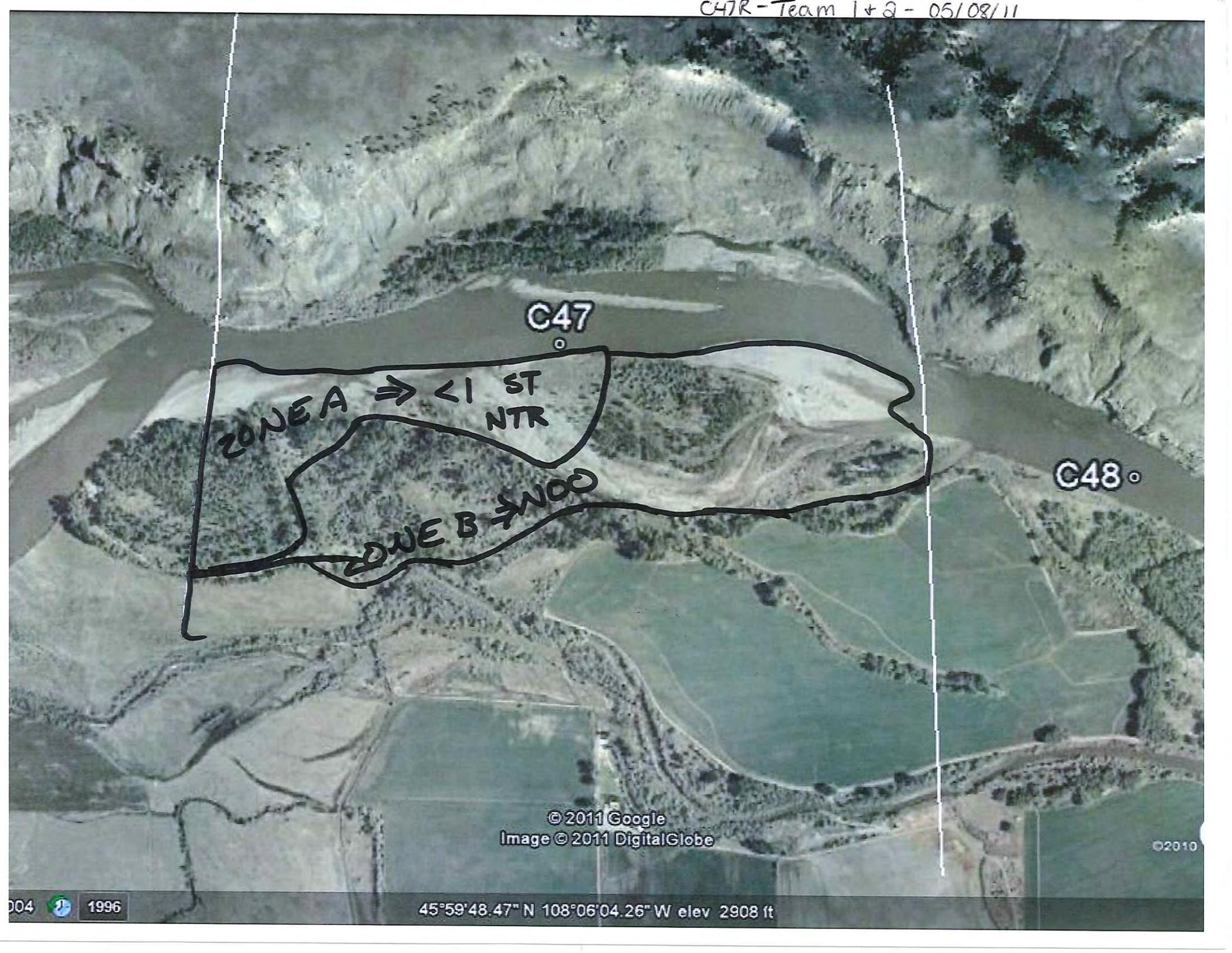
**8 COMMENTS** ecological/recreational/cultural/economic constraints - shorezone biota and wildlife observations - cleanup recommendations

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

Zone A - NTR

Zone B - WOU

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



C47

ZONE A ⇒ <1 ST  
NTR

ZONE B ⇒ N00

C48

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Image © 2011 DigitalGlobe

©2010



## **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



5:1 am 9/17/2011 3:58 pm 5 pm

TEAMS  
C47IS  
9/17/11

C47-RB

ZONE B  
VERY LIGHT

ACTIVE L

ZONE A  
NOO

C47-IS

004

ZONE C  
VERY LIGHT

Image © 2011 DigitalGlobe

© 2011 Google

1996

45°59'42.72" N 108°06'07.38" W elev 2914 ft



## **Appendix F**

Completed SCAT Segment  
Sign-Off Forms

# SCAT SEGMENT OPERATIONS COMPLETION SIGN-OFF SHEET

## SILVERTIP PIPELINE RELEASE

Segment C47 IS

Date of Survey 9/17/11

Dates of Initial SCAT Assessments

05 Aug 2011 (to be filled out by SCAT Data Management)

CTR(s) Associated with SCAT Segment

61

Segment has been treated by Operations or an Operations Hotshot Team

YES

NO

Segment Assessment Complete<sup>1</sup>

Partial Segment Assessment

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

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

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

No Federal Representative

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

[Signature] John Braen MDER 9/17/11  
Sign Name \_\_\_\_\_ Print Name/ Affiliation \_\_\_\_\_ Date \_\_\_\_\_  
**State Representative (DEQ/FWP)**

[Signature] Nathan Hernandez / Castro Entix 9/17/11  
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.

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