

July 17, 2007

Ostrom's Farms 8323 Steilacoom Road SE Lacey, Washington 98512

Attention: Chris Street

Report
Subsurface Environmental Assessment
Ostrom's Mushroom Farm
Steilacoom, Washington
File No. 0335-01-03

## INTRODUCTION

Insight Geologic, Inc. is pleased to provide this report regarding our subsurface investigation activities at the Ostrom's Farms Mushroom Facility located at 8322 Steilacoom Road SE in Lacey, Washington. The Ostrom's Farm property is located northeast of the intersection between Marvin Road SW and SW Steilacoom Road in the city of Lacey. The property occupies approximately 34 acres of land zoned as low-density residential. The site is generally flat with a gentle slope to the north. Site elevations range from approximately 230 feet above mean sea level (MSL) in the southern portion to about 212 MSL at the northern property line. The majority of the property has been cleared of trees for the development of the growing facility buildings, drive areas and compost production. Surrounding land use consists of single family residential housing to the north and east, Nisqually Middle School is located to the west of the facility across Marvin Road. The site is shown relative to surrounding physical features in the Vicinity Map, Figure 1.

The facility is operated for the commercial production of mushrooms. Included in the operation is the production of compost used as the growing media for the mushrooms. Water is supplied by a water supply well and through an intertie with the City of Lacey. Sanitary wastes are disposed of through onsite septic tanks and drainfields. Stormwater is either recycled and used for compost production or is used to spray irrigate landscaped areas. Growing room wash down water is generally disposed of to ground.

Various chemicals are used and stored on site. They include malathion, diazinon, permethrin, formaldehyde, "BFW-31" a corrosion inhibitor, various drums of sanitizers, bulk lubricating oil and diesel fuel. During the investigation and remediation of spent mushroom compost disposed of on the south side of Steilacoom Road the following pesticides were detected: aldrin, alpha-BHC, chlordane, DDT, DDD, DDE, dieldrin, endosulfan I and II,

1015 EAST 4TH AVENUE, OLYMPIA, WASHINGTON 98501 PHONE: 360.943-5003 endrin, heptachlor epoxide and methoxychlor. The detection of these compounds in and near the spent mushroom compost indicates that they have been used in the past at the production facility.

Insight Geologic performed a Phase I Environmental Site Assessment (ESA) of Ostrom's Farms' Lacey, Washington growing facility in March 2007. The results of our Phase I ESA indicated several areas of potential environmental concern including:

- 1. The facility has had a series of underground storage tanks located on the property. Some have been removed, others have been abandoned in place and at least one is still active for standby boiler fuel. Because of the exempt status of the tanks for agricultural purposes, periodic tightness testing is not conducted. No information could be found in the Washington State Department of Ecology (Ecology) files regarding the closure of underground tanks at the site, and therefore, no information is available regarding soil and/or ground water conditions adjacent to the tanks.
- At least one spill of diesel fuel from the existing above ground storage tank has occurred. The fuel reportedly flowed to a catch basin that drains to the septic system in the northwest portion of the site.
- Several batteries were observed in the fueling area exposed to the elements. Metals, particularly lead, can leach from the batteries and enter the stormwater system or migrate to ground water.
- 4. Soil outside the bulk lubricating oil storage area was observed to be heavily stained with oil, likely as the result of spills during deliveries.
- 5. A series of historic and active infiltration areas for wash water and stormwater are, or have been, located in the northern portion of the property. These infiltration facilities are unlined and the influent does not receive treatment prior to discharge. These facilities have the potential to have historically received water containing pesticides including DDT.
- Treated soil from previous environmental remediation projects in the early 1990s was used in landscape berms in several areas of the property.

At the request of Ostroms Farms, Insight Geologic performed subsurface sampling and analysis of soil and ground water samples from the areas identified during the Phase I ESA.

## **SCOPE OF SERVICES**

The purpose of our services was to evaluate soil and ground water conditions in the areas of the identified environmental concerns on the property. We conducted the following tasks for this phase of the project:

1. Prepare a Health and Safety Plan for Insight Geologic's representatives while on site.

- Conduct utility location at the site to assess the presence of potential subsurface obstructions.
- 3. Drill 12 exploratory borings on the site using a truck mounted drilling rig to collect representative soil and ground water samples from the borings.
- 4. Collect representative soil samples from 12 hand-augered borings in the area of the waste water disposal ponds and treated soil stockpiles (berms).
- 5. Provide for the chemical analysis of selected soil and ground water samples for the presence of gasoline-range hydrocarbons using Ecology method NWTPH-Gx, diesel- and oil-range hydrocarbons using Ecology Method NWTPH-Dx (extended), volatile organic compounds (VOCs) using EPA Method 8260, chlorinated pesticides using EPA Method 8081 and lead using EPA 7000 series methodology.
- 6. Evaluate the laboratory results with respect to current Ecology Model Toxics Control Act (MTCA) Method A cleanup levels.

## **SUMMARY OF ACTIVITIES**

## **GENERAL**

We visited the site on June 14 and 20 2007 to collect representative soil and ground water samples from several areas of potential environmental concern identified on the property during our Phase I ESA conducted in March 2007. The areas of environmental concern included the former maintenance shop, the former boiler house, the current fueling area, the current underground storage tank for the existing boiler, and areas containing treated petroleum-containing soil used for landscaping. Borings were drilled using an AMS Power Probe rig that uses a combination of hydraulic and vibratory methods to advance a 4-foot long sampler having acetate liners into the ground. Upon retrieval, the sampler is opened and the soil contained inside the sampler is observed for visual and olfactory indications of contamination. A representative sample is collected from each sampled interval, placed into a jar which is sealed, labeled and placed into an ice chest for storage pending analysis. The soil from the sampled interval is described by the field geologist in general accordance with the Unified Soil Classification System on boring logs. The logs of the borings conducted at the Ostrom's Farm facility are contained in Attachment A to this report.

If ground water was encountered in a boring, a sample was collected using polyethylene tubing inserted down the inside of the drill string and connected to a peristaltic pump. The water was pumped from the boring until it was relatively clear and free of suspended sediment. When purging was complete, representative ground water samples were collected into laboratory-supplied containers appropriate for the intended analyses. The samples were delivered to an on-site mobile laboratory for analysis operated by Libby Environmental of Olympia, Washington.

## SOIL

Sixteen borings and 12 hand auger borings were conducted at the site in the locations depicted in Figure 2. In general, the soils encountered in the borings consisted of loose to dense sand and gravel containing variable amounts of silt. The materials encountered appeared to be glacial outwash and ablation till deposited during the waning stages of the Vashon Stade of the Fraser glaciation which ended between 10,000 and 15,000 years ago.

## **GROUND WATER**

Ground water was encountered at depths between about 10 and 15 feet below ground surface in two borings (B-11 and B-12) located near the waste water disposal pond in the northeastern portion of the site. Ground water samples were collected from each of the borings and submitted for analysis. Ground water was not encountered in any of the other borings conducted.

## CHEMICAL ANALYSIS

Soil and ground water samples were analyzed by Libby Environmental for the presence of gasoline-, diesel- and oil-range hydrocarbons using Ecology Method NWTPH-G and NWTPH-Dx (extended), for volatile aromatic hydrocarbons (VOCs) using EPA Method 8260 and for lead using EPA method 7000 series methodology. Selected soil and ground water samples were also analyzed for the presence of chlorinated pesticides using EPA Method 8081. Laboratory reports are contained in Attachment B. Laboratory results are summarized in Tables 1-5.

## **RESULTS**

## SOIL

Laboratory reports indicated the presence of diesel-range hydrocarbons in the soil sample collected from boring B-6 at a depth of 4 feet below ground surface in the fueling area at a concentration of 7,900 milligrams per kilogram (mg/kg). The Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A cleanup level for diesel in soil is 2,000 mg/kg. Oil-range hydrocarbons were detected in boring B-11 near the wastewater disposal pond at a depth of 8 feet below ground surface at a concentration of 4,100 mg/kg. The MTCA Method A cleanup level for oil-range hydrocarbons is 2,000 mg/kg. Diesel- and oil-range hydrocarbons either were not detected or were detected at concentrations less than the respective cleanup levels in the remaining samples analyzed. Gasoline-range hydrocarbons were not detected in any of the soil samples. Lead and VOCs either were not detected, or were detected at concentrations less than individual cleanup levels. The chlorinated pesticide DDT (dichloro-diphenyl-trichloroethane) and breakdown products DDD (dichloro-diphenyl-dichloroethylene) and DDE (dichloro-diphenyl-dichloroethene) were detected in the four soil samples analyzed from borings B-11 and B-12 in the area of the

wastewater disposal pond at concentrations less than Ecology's MTCA Method A cleanup level of 3.0 mg/kg for the sum of the three compounds.

## **GROUND WATER**

DDT, DDD and DDE were detected in the two ground water samples collected from borings B-11 and B-12 at concentrations less than Ecology's MTCA Method A cleanup level of 0.3 micrograms per liter ( $\mu g/l$ ) for the sum of the three compounds. Gasoline-, diesel- and oil-range hydrocarbons were not detected in the water samples. VOCs and lead were not detected in the water samples.

## CONCLUSIONS

Insight Geologic has performed a subsurface investigation of suspected areas of environmental concern at the Ostrom's Farms Mushroom Facility in Lacey, Washington. The subsurface investigation was performed following our completion of a Phase I environmental site assessment of the property in March 2007.

The results of our subsurface investigation indicate the presence of diesel-range hydrocarbons in shallow soil in the fueling area of the property at concentrations exceeding Ecology's MTCA Method A cleanup level of 2,000 mg/kg. We understand that a fuel spill occurred in the fueling area several years ago and it is our opinion that this is the likely source of contamination in this area.

Oil-range hydrocarbons were detected in soil at a depth of 8 feet below ground surface in the area of the wastewater disposal pond at concentrations exceeding Ecology's MTCA Method A cleanup level of 2,000 mg/kg. We understand that storm water flows from the concrete apron area outside the maintenance building to stormwater catch basins and then to the wastewater disposal pond without any pre treatment. It appears that oil-range hydrocarbons from spills and maintenance conducted on the apron area have migrated to the waste water disposal pond and impacted shallow soils. Ground water in this area does not appear to have been affected by fuel or oil-range hydrocarbons, VOCs or lead.

DDT, DDD and DDE were detected in soil and ground water samples collected from the area of the waste water disposal pond at concentrations slightly less than their respective cleanup levels. These compounds appear to be relics of the historic use of DDT on the property prior to 1972 when it was banned for use in the United States.

Soil in the area of the former maintenance shop, the former boiler house and underground storage tank, and the present boiler house and stand-by fuel tank does not appear to have been impacted by fuel- or oil-range hydrocarbons, VOCs or lead.

Soil remediated in the early 1990s to remove petroleum hydrocarbons and subsequently used in landscape berms in the north and east portions of the property does not appear to contain petroleum hydrocarbons, VOCs or lead at concentrations greater than Ecology's MTCA Method A cleanup levels for these compounds.

Ostrom's Farms July 17, 2007 Page 6

Based on the results of our subsurface investigation, we recommend remediation of petroleum-contaminated soil detected in the fueling area and in the waste water disposal pond. Remediation should be conducted under Ecology's oversight through the Voluntary Cleanup Program (VCP) so that a determination of "No Further Action" (NFA) may be obtained when remediation is completed. Given the relatively shallow depth of the impacted soil, excavation and disposal appears to be the most cost effective option for cleanup.

## LIMITATIONS

We have prepared this report for use by Ostrom's Farms regarding the subsurface investigation of areas of suspected environmental concern at their mushroom growing facility located at 8322 Steilacoom Road SE in Lacey, Washington. This report may be made available to regulatory agencies.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted environmental science practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

Please refer to Attachment C titled "Report Limitations and Guidelines for Use" for additional information pertaining to use of this report.

4 4 1-

We trust this report meets your current requirements. Please contact us if you have questions regarding information presented in this report, or if you require additional information. We appreciate the opportunity to be of service to you on this project.

Yours very truly,

INSIGHT GEOLOGIC, INC

William E. Halbert, L.G, L.HG.

Principal Hydrogeologist

Attachments

TABLE 1
Summary of Chemical Analytical Results - Soil<sup>1</sup>
Ostrom's Farms
Lacey, Washington

| Sample      | Sample         | Depth  | Gasoline-range            | Volat   | ile Organ | ic Compo | unds <sup>3</sup> | 1,3,5-Trimethyl- | Isopropyl-           |                      | Lead <sup>7</sup> |
|-------------|----------------|--------|---------------------------|---------|-----------|----------|-------------------|------------------|----------------------|----------------------|-------------------|
| Number      | Date           | (feet) | Hydrocarbons <sup>2</sup> | В       | E         | Т        | Х                 | benzene⁴         | toluene <sup>5</sup> | benzene <sup>6</sup> |                   |
| B1-14'      | 6/14/07        | 14.0   | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| B1-20'      | 6/14/07        | 20.0   | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| B2-14'      | 6/14/07        | 14.0   | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| B2-20'      | 6/14/07        | 20.0   | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| B3-16'      | 6/20/07        | 16.0   | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| B4-20'      | 6/20/07        | 20.0   | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| B5-12'      | 6/20/07        | 12.0   | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| B6-4'       | 6/20/07        | 4.0    | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | 0.1200           | 0,0600               | 0.100                | <5.0              |
| B7-12'      | 6/20/07        | 12.0   | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| B8-20       | 6/20/07        | 20.0   | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| B11-8'      | 6/14/07        | 8.0    | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| B11-15      | 6/14/07        | 15.0   | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5,0              |
| B12-11'     | 6/14/07        | 11.0   | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| B12-16'     | 6/14/07        | 16.0   | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| TP1A-4'     | 6/14/07        | 4.0    | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| TP1B-3.5'   | 6/14/07        | 3.5    | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| TP2A-3,5'   | 6/14/07        | 3,5    | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| TP2B-4'     | 6/14/07        | 4.0    | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| TP3A-2.5    | 6/14/07        | 2.5    | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| TP3B-3'     | 6/14/07        | 3.0    | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | 5.6               |
| TP3C-2.5'   | 6/14/07        | 2.5    | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| TP3D-2'     | 6/14/07        | 2.0    | <10.0                     | <0.0200 | <0,0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | 6.0               |
| TP4A-1'     | 6/14/07        | 1.0    | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| TP4B-1'     | 6/14/07        | 1.0    | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| HA1-1'      | 6/14/07        | 1.0    | <10.0                     | <0.0200 | <0.0300   | 0.3100   | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| HA2-1'      | 6/14/07        | 1.0    | <10.0                     | <0.0200 | <0.0300   | <0.0200  | <0.030            | <0.0200          | <0.0200              | <0.0200              | <5.0              |
| MTCA Method | A cleanup leve | s      | 30/100                    | 0.03    | 6.0       | 7.0      | 9.0               | N/A              | N/A                  | N/A                  | 250               |

## Notes:

- Laboratory analysis of all samples conducted by Libby Environmental Chemistry Laboratories in Champia; Washington
- <sup>2</sup>Analysis of gasaline-cange hydrocarbans was conducted using method NWTPH-Gx:
- Analysis of valetile organic compounds was conducted using EPA method 8260B
- Analysis of 1,3,5-Trimethylbenzene was conducted using EPA method 8260B.
- Analysis of isopropyltoluene was conducted using EPA method 8260B
- Analysis of n-Bulyberzens was conducted using EPA method 5260B
- Analysis of lead was conducted using EPA 7000 saries methodology.
- The lower of the two cleanup levels shown for gasoline-range hydrocarbons applies if benzene is present in the same sample.
- All analytical results presented in the above table are expressed in milligrams per klipgram (mg/kg).
- B-benzene, E-ethylbenzene, T-toluene, X-total xylenes
- "<5.00" Indicates that the analyte was not detected above the concentration shown.
- Values shown in bold indicate that the analyte was detected at this concentration.
- Shaded values indicate exceedences of the respective MTCA Method A cleanup level.

TABLE 2
Summary of Chemical Analytical Results - Soil
Ostrom's Farms
Lacey, Washington

| Sample           | Sample       | Depth  | Diesel-range              | Heavy Oil-range           | Mineral Oil               |
|------------------|--------------|--------|---------------------------|---------------------------|---------------------------|
| Number           | Date         | (feet) | Hydrocarbons <sup>2</sup> | Hydrocarbons <sup>3</sup> | Hydrocarbons <sup>4</sup> |
| B1-14'           | 6/14/07      | 14.0   | <10.0                     | <25.0                     | <40                       |
| B1-20'           | 6/14/07      | 20.0   | <10.0                     | <25.0                     | <40                       |
| B2-14'           | 6/14/07      | 14.0   | <10.0                     | <25.0                     | <40                       |
| B2-20'           | 6/14/07      | 20.0   | <10.0                     | <25.0                     | <40                       |
| B3-16'           | 6/20/07      | 16.0   | <10.0                     | <25.0                     | <40                       |
| B4-20'           | 6/20/07      | 20.0   | <10.0                     | <25.0                     | <40                       |
| B5-12'           | 6/20/07      | 12.0   | 64                        | <25.0                     | <40                       |
| B6-4'            | 6/20/07      | 4.0    | 7,900                     | <25.0                     | <40                       |
| B7-12'           | 6/20/07      | 12.0   | <10.0                     | <25.0                     | <40                       |
| B8-20'           | 6/20/07      | 20.0   | <10.0                     | <25.0                     | <40                       |
| B11-8'           | 6/14/07      | 8.0    | <10.0                     | 4,100                     | <40                       |
| B11-15'          | 6/14/07      | 15.0   | <10.0                     | <25.0                     | <40                       |
| B12-11'          | 6/14/07      | 11.0   | <10.0                     | <25.0                     | <40                       |
| B12-16'          | 6/14/07      | 16.0   | <10.0                     | <25.0                     | <40                       |
| TP1A-4'          | 6/14/07      | 4.0    | <10.0                     | <25.0                     | <40                       |
| TP1B-3.5'        | 6/14/07      | 3.5    | <10.0                     | <25.0                     | <40                       |
| TP2A-3.5'        | 6/14/07      | 3.5    | <10.0                     | <25.0                     | <40                       |
| TP2B-4'          | 6/14/07      | 4.0    | <10.0                     | <25.0                     | <40                       |
| TP3A-2.5'        | 6/14/07      | 2.5    | <10.0                     | <25.0                     | <40                       |
| TP3B-3'          | 6/14/07      | 3.0    | <10.0                     | <25.0                     | <40                       |
| TP3C-2.5'        | 6/14/07      | 2.5    | <10.0                     | <25.0                     | <40                       |
| TP3D-2'          | 6/14/07      | 2.0    | <10.0                     | <25.0                     | <40                       |
| TP4A-1'          | 6/14/07      | 1.0    | <10.0                     | <25.0                     | <40                       |
| TP4B-1'          | 6/14/07      | 1.0    | <10.0                     | <25.0                     | <40                       |
| HA1-1'           | 6/14/07      | 1.0    | <10.0                     | <25.0                     | <40                       |
| HA2-1'           | 6/14/07      | 1.0    | <10.0                     | <25.0                     | <40                       |
| MTCA Method A cl | leanup Level |        | 2,000                     | 2,000                     | 4,000                     |

## Notes:

Values shown in **bold** indicate that the analyte was detected at this concentration.

Shaded values indicate exceedences of the respective MTCA Method A cleanup level.

<sup>&</sup>lt;sup>1</sup>Laboratory analysis of all samples conducted by Libby Environmental Chemistry Laboratories in Olympia, Washington.

<sup>&</sup>lt;sup>2</sup>Analysis of diesel-range hydrocarbons was conducted using method NWTPH-Dx.

<sup>&</sup>lt;sup>3</sup>Analysis of heavy oil-range hydrocarbons was conducted using method NWTPH-Dx Extended.

<sup>&</sup>lt;sup>4</sup>Analysis of mineral oil-range hydrocarbons was conducted using method NWTPH-Dx Extended.

All analytical results presented in the above table are expressed in milligrams per kilogram (mg/kg).

<sup>&</sup>quot;<10.00" - indicates that the analyte was not detected above the concentration shown.

<sup>&</sup>quot;--" - indicates that the sample was not analyzed for this compound.

TABLE 3
Summary of Chemical Analytical Results - Ground Water<sup>1</sup>
Ostrom's Farms

Lacey, Washington

| ec                          | s Lead                    | <2.5    | <2.5           | <2.5    | 15                          |
|-----------------------------|---------------------------|---------|----------------|---------|-----------------------------|
| Heavy O                     | Hydrocarbons              | <500    | <500           | <500    | 200                         |
| Diesel-range                | Hydrocarbons <sup>4</sup> | <250    | <b>625</b> 0   | <250    | 200                         |
| unds³                       | ×                         | <3.0    | 3.0            | <3.0    | 1,000                       |
| Volatile Organic Compounds3 | Τ                         | <2.0    | <b>4</b> 5.0   | <2.0    | . 1,000                     |
| ile Organi                  | Ξ                         | <1.0    | <u>۸</u><br>0. | ۰۲.0    | 700                         |
| Volat                       | В                         | <1.0    | ر<br>مراره     | 4.0     | 5.0                         |
| Gasoline-range              | Hydrocarbons <sup>2</sup> | . <100  | ×100           | <100    | 800                         |
| Sample                      | Date                      | 6/20/07 | 6/14/07        | 6/14/07 | nup Level                   |
| Sample                      | Number                    | B4W-20  | B11-W          | B12-W   | MTCA Method A cleanup Level |

|      | _  |     |  |  |               |  |     |  |   |  |  |     |                                       |   |  |              |  |   |   |  |
|------|--|-----|--|--|---------------|--|-----|--|---|--|--|-----|---------------------------------------|---|--|--------------|--|---|---|--|
|      | nerio  |     |  |  |               |  |     |  |   |  |  |     |                                       |   |  |              |  |   |   |  |
|      | us P   |     |  |  |               |  |     |  |   |  |  |     |                                       |   |  |              |  |   |   |  |
|      | 5  |     |  |  |               |  |     |  |   |  |  |     |                                       |   |  |              |  |   |   |  |
|      |  |     |  |  |               |  |     |  |   |  |  |     |                                       |   |  |              |  |   |   |  |
|      | Q  |     |  |  |               |  |     |  |   |  | Š  |     |                                       |   |  |              |  |   |   |  |
|      | rato   |     |  |  |               |  |     |  |   |  | 3  |     |                                       |   |  |              |  |   |   |  |
|      | l abs  |     | Ö  | 'n   |               | ×  | í   | Ž  |   |  |  |     |                                       |   | É  |              |  |   |   | 97.40                                    |
|      | Str  | 1   | E  | 5  | 1             | Ť  | Ī   | į  |   |  | 9  |     |                                       |   | 5  |              |  | ation to  |   | in in                                    |
|      | hem  | i   | Ž  | Ĭ  | Ì             | ξ  |     | Ž  |   |  | To the   |     |                                       |   | 2  |              |  |   |   | 200                                      |
|      | lai c  |     |  | 1  |               | Z  |     | HOOL   |   |  |  |     |                                       |   |  |              |  | Š   |   | 4  |
|      |  |     |  | YOU  | į.            | neth   |     | Ē  |   |  |  |     |                                       | ļ |  | 100          |  | This  |   | Mah                                      |
|      | 250  |     | 经  | - Final  | 2             | Ē  | •   | Š  |   | Ž  |  |     |                                       |   | Š  |              | į  | 100   | 1 | 9  |
|      | 1  |     | 8  | 7  |               | X  |     |  |   | 9  |  |     | ø                                     | ļ |  | 9            |  |   |   | A. B.4                                   |
|      | 海で   |     | 3  | ŀ  |               | ğ  |     |  |   | Met                                      | al de  |     |                                       |   | 8  |              | į  | Case  |   | nemble                                   |
|      | É  | i   | 98 E   |  | }             | 8  |     | 93.0   | i | T.                                       |  |     | Ī                                     | į |  | į            |  | 30  |   | Poor                                     |
|      | - E  |     | 30.5   | S. Label   |               | SEW  |     | SE.  |   |  | D S  | ,   | Į                                     |   |  | Sales .      |  | anak  | ļ | 9  |
|      | Calcula  |     | arbo   | Ì  | 1             | 2003   |     |  |   | er c                                     | 89   |     |                                       |   | 70.0   |              | 2  | Pho   |   | 200                                      |
|      | Police   |     | ğ  |  | į             | 00<br>00<br>00   |     |  |   |  | -  |     | į.                                    | Ì | Mile   |              |  | 114   |   | Accept                                   |
|      | de af all samples marchiched by Liston Frownmental Chemistry Laboratory Okmble. Washington |     | ne-range hydrocarbons was conducted using method NW (PM-G. | BOSCHART ATTENDED AND AND AND AND THE THE THE PARTY AND TH | <u>۲</u><br>۲ | -range hydrocarbons was conducted using method NWTPH-Dx. |     | rejeango nyakeratabans was espanored rishog mehog nyakereken |   | SECTIVES CONTROLLING LICHT METROD 17421. | is:presented in the above lable are expressed in micrograms per dust (1991 |     | ndenzene, i toluene, Atokal aylenes : |   | trial the distribute was this circles appare the competition showing | 7            | וניות עם מפון לחום אנקס זוותו סיופוואכבר זמני חיום לימו וואסמו ומי | and include that the unality saw detected at this conceptation. |   | 9  |
|      | E Ju   |     | Lan.   | Ì  | Š.            | 밀  |     |  |   | *  |  |     |                                       |   |  | and the same | P.   | Š   |   | 40.00                                    |
|      |  |     |  | 1  | 7:            | 무금   |     | @<br><u>}</u>  |   |  |  |     |                                       |   | 8  | 1            | ğ  | 2   |   | of the last                              |
|      | 200  |     | r gas  |  | Ž             | Pille  |     | 1.Deg  |   | 101                                      | <u>8</u>   | į   | Ц                                     |   |  | 1            | g.   | 44  |   | . local.                                 |
|      |  |     | 50.54  |  | )<br>A        | als o  |     | SIS 20   |   | <u>0.85</u>                              | <u> </u>   |     | 900                                   |   | Ě  | Ì            | •  | 0   | } | Section 2                                |
| Selo | ahmatan analys   |     | Analysis of gasp   | Physical cole. No. S. Beller   |               | riativ   |     | Analysis of he   |   | Analysis of total                        | Alicamalytical result  |     | D-Derizone, n-min                     |   |  |              |  | Walities almount in the   | ĺ | 日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日 |
| 5    | Ť  |     | 4  | 7  |               | ٧  |     |  |   | <u>ح</u>                                 | ₹  | t   | ά                                     |   | *  |              |  | 17  |   | Č  |
|      | • • •  | • • | • •  | • •  |               |  | • • |  |   | •  | <br>   | • • | •                                     |   | <u>-</u>   | -            |  |   | • |  |

TABLE 4
Summary of Chemical Analytical Results - Soil<sup>1</sup>
Ostrom's Farms
Lacey, Wäshington

| Sample                      | Sample                     | Depth  | olho    | Chlorinated Pesticides <sup>2</sup> | des <sup>2</sup> | Sum of listed |
|-----------------------------|----------------------------|--------|---------|-------------------------------------|------------------|---------------|
| Number                      | Date                       | (feet) | 4,4-DDD | 4,4-DDE                             | 4,4-DDT          | constituents  |
| B11-8'                      | 6/14/07                    | 8.0    | 1.68    | 0.419                               | 0.04             | 2.139         |
| B11-15                      | 6/14/07                    | 15.0   | 0.007   | 0.009                               | 0.007            | 0.023         |
| B12-11                      | 6/14/07                    | 11.0   | 0.005   | 0.005                               | 0,009            | 0.019         |
| B12-16                      | 6/14/07                    | 16.0   | 0.004   | 0.005                               | 0.007            | 0.016         |
| MTCA Method A Cleanup Level | Sleanup Level <sup>3</sup> |        |         |                                     |                  | 3.00          |

| L**.*.*.*.*.*.*.*.*.*.   |
|--|
| 200000000000000000000000000000000000000  |
|  |
|  |
|  |
|  |
| 1990年1999  |
| [10] (10) (10) (10) (10) (10) (10) (10) (10)   |
| [1995] 高级的   |
| 100 miles  |
|  |
| 00005000   |
| R0000000000000000000000000000000000000   |
| 100  |
| 100 (1750 (1860 (1 |
|  |
| 10000 優(400)   |
| 4 · · · · · ·  |
| Transaction Contraction  |
| 10000 E0000  |
|  |
| 10.  |
| rein rein  |
| 1000 N = 1000  |
|  |
|  |
| 10000000000  |
| P. 19 2 1 1 1  |
| [1000] 秦2000   |
|  |
| Harris Television  |
|  |
| 1000 最大会   |
| · · · · · ×22 · · • • • • • • • • • • • • • • • • •  |
| nnístry Labo<br>8081   |
| ⊩∷∵a∵∞   |
| [ · · · · · = · · · 6  |
| oz   |
| <u>≂</u> ∷.≅   |
| 28.5   |
| - C01  |
| F: :: : : : : : : : : : : : : : : : : :  |
|  |
| 10000000000000000000000000000000000000   |
| bby Environment<br>veing methad Sv   |
| 5.15   |
| 1990年 2015年  |
| 100000 <b>4</b> 000 <b>9</b>   |
|  |
| ucted by Libby<br>conducted usi  |
|  |
|  |
| <b>1</b>   |
| 6 1  |
| <b>医抗毒素</b>  |
|  |
| 대한민준민준   |
| 4 · · · · · · · · · · · · · · · · · · ·  |
| conducted by Libby Environmental Chemistry Laboratoria was conducted using method SW846 8081   |
| [·······2····@   |
| D 6  |
| F  |
| D  |
|  |
| F : 그 교 교  |
| E 2  |
| 100000 湯 1 湯   |
| 1  |
|  |
| 10000000000000000000000000000000000000   |
| 1  |
|  |
|  |
| T : ::: : : : : : : : : : : : : : : : :  |
| 28.5   |
| 一一一  |
| 10000万0万   |
| 100  |
| 拉拉各语   |
| I GOVE   |
|  |
| F  |
| 1:2:2:5  |
| T. 数 法 : 12  |
| 12:3:2   |
| 10.7   |
| Notes: 'Laboratory arralysis of all samples or 'Analysis of Chlorogatal Pesticides w   |
|  |
|  |
|  |

\*Compined constituents levels of 4.4-DDD, 4,4-DDE and 4.4-DDT must be grater than listed valve. All analytical results presented in the above table are expressed in iniligirants per kilogram (mg/kg).

"<10.00" Indicates that the analyte was not detected above the concentration shown.

"- " - findicates that the sample was not analyzed for this compound

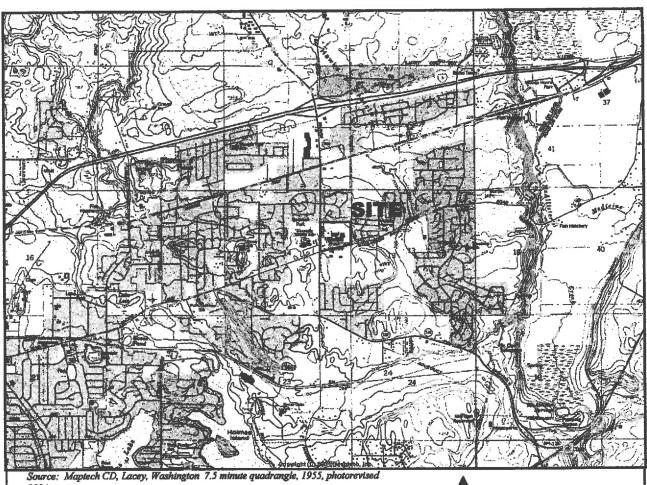
Values shown in bold indicate that the analyte was detected at this concentration.

Shaded values indicate exceedences of the respective MTCA Method A obstrup level.

# TABLE 5 Summary of Chemical Analytical Results - Water Ostrom's Farms Lacey, Wäshington

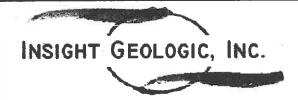
| Sample      | Sample                     | Depth  | Chlo    | Chlorinated Pesticides | des <sup>2</sup> | Sum of listed |
|-------------|----------------------------|--------|---------|------------------------|------------------|---------------|
| Number      | Date                       | (feet) | 4,4-DDD | 4,4-DDE                | 4,4-DDT          | constituents  |
| B11-W       | 6/14/07                    | 15.0   | 0.049   | 0.045                  | 0.023            | 0.117         |
| B12-W       | 6/14/07                    | 11.0   | 0.036   | 0.047                  | 0.062            | 0.145         |
| MTCA Method | TCA Method A Cleanup Level | ıvel³  |         |                        |                  | 0.3 µg/L      |

|   |   | ı |
|---|---|---|
|   |   | ı |
|   |   | ı |
|   |   | ı |
| -1-1-1-1 <u>-1-1</u> -1   |   | ı |
| 化砂压砂  |   | П |
| ं ं ख   |   | ŀ |
| 100 Table   |   | ı |
|   |   | ı |
| <del> </del>  |   | ı |
| 11.11.1 <b>78</b> 1.11  | 6855555555555555555555555   | ı |
| 心心治療心   |   | ı |
| - 2   |   | ı |
| 100   |   | 1 |
|   |   | ı |
| 10  |   |   |
| - : : :   |   | ı |
| ***** <b>=</b> **   |   | ı |
| のの原の  | ************************  | 1 |
|   |   | ı |
|   | ***** <b>*</b> **************   | 1 |
|   |   | ı |
| S. S.   |   | L |
| 0000 <del>00</del> 0  | arani20auzuranananidah  | ı |
|   |   | ł |
| <u> </u>  |   | l |
|   | TO CONTRACT OF THE PROPERTY OF  | 1 |
| 2   |   | 1 |
| 90  |   | ı |
| <b>7</b>  |   | ۱ |
| <b></b>   | 4.0.0(學)(基本)為10.0000000 <del>页</del> 。  | ı |
|   |   | ۱ |
| <u></u>   | いい。但は最い者といい。  | ۱ |
|   | (0)の質の質(2)質(2)違う(3)と違う(質)   | 1 |
| ···≥  |   | ı |
|   |   | 1 |
|   | ** O - F - B E - B  | 1 |
| F-1   | W. W. B. B. W. S. W.  | ŧ |
| - 20  | · · · · · · · · · · · · · · · · · · ·   | t |
|   | 97 - T. 197 - E   | П |
| <del>।</del>  | I 6 2 2 4   | П |
|   | .要:音:数:面:: 美:之  | 1 |
|   |   | 1 |
| · · · · · · · · · · · · · · · · · · ·   |   | 1 |
|   | ・27、1年に、東京の中に置い、東京会   | 1 |
|   |   | 1 |
|   | 0 7 m a 0 7 5   | 1 |
|   | (達・日本語の達・重・報・章)   | ı |
|   | · 景· 表: 6 · 吾: 6 · 二: 4   | 1 |
|   | · 是 ·   | 1 |
| 1111 <b>(5</b> 1)   | · C · V · · · · · · · · · · · · · · · ·   | 1 |
|   | · 表、 是 · · 宋 · · 夏 · · 西 · · 基  | 1 |
|   |   | 1 |
| 2   | · 是 · 语 · 3 · . 何 · 正 · 最 ·   | 1 |
|   | (2017年) (2017年  | 4 |
| 3000 <u>- 1</u> 0   |   | 1 |
|   | · ひ・ ロ・・ 思・ お・ と・ 姫・ ・ ひ  | 4 |
| 0000  |   |   |
| ····  |   | ı |
|   | (大) (大) 海川道(高川岩)道(島   |   |
| 상하를   | は、子、古、色、ま、ま、ま   |   |
| - 6   | 10 14 15 15 15 15 15 15 15 15 15 15 15 15 15  |   |
| 8   | duct<br>fable<br>for a fable<br>for a f |   |
| cte d   | anduca<br>re table<br>of det  |   |
| ucted to  | Conduction 4.4-1  The table of details analyze or religion with the responsibility of th  |   |
| ducted to   | DD: 4.4-1<br>DD: 4.4-1<br>sove table<br>s not det<br>analyze<br>analyze v   |   |
| nducted t   | SE CONTROL OF A 14-1<br>TENNE (BA)<br>AS TOOL CHECK<br>AS TOOL CHECK<br>SE WING WE WANTED   |   |
| onducted b  | cas candoc<br>DDD, 4.4-1<br>above table<br>was not det<br>not arralyzed<br>to the resp.   |   |
| canducted b   | was conduct<br>4-DDB - 4-4-1<br>e above table<br>was not det<br>not analyze<br>the analyze so of the resp   |   |
| s canducted to  | s was conduct<br>4.4-DD2.4.4-<br>the above table<br>to was not det<br>is not analyze<br>it the analyze w  |   |
| es conducted t  | the standard A4-1000  |   |
| iles candacted fr   | of 4.4. DDB. 4.4. In the above table lin the above table layer was not defined was not analyze that the analyze of the respences of the respences of the resp   |   |
| ibles conducted t   | cides was canduct so to 4.4.1003. 4.4.1 in the above table nature was not arrayzee, e.was not arrayzee. 4 that the arralyse we denoes of the resp   |   |
| mples conducted t   | tickles was conduct is of 4.4-fbb2,   |   |
| amples conducted t  | eticides was canduction of 4.4. Dibb. 4.4. Interfect in the above table a snalyte was not analyze ripe was not analyze rate that the analyse was advantable was advantable was advantable was advantable was advantable was only the resp.  |   |
| saiubles conducted t  | vestroides was canduct<br>snels of 4.4-LDB 4.4-<br>arted in the above table<br>he artalyte was not arralyze<br>traple was not arralyze<br>togle that the arralyze w   |   |
| ili samples conducted t   | Pesticides was canduct levels of 4,4-1002, 4,4-1 wanted in the above table the analyte was not analyze arriple was not analyze circate that the analyse woosedences of the resp   |   |
| all samples conducted t   | 1 Pesticities was conduct a levels of 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000. 4.4-1000.   |   |
| fall samples conducted b  | of Pesticides was conduct the levels of 4.4-1303. 4.4-1sesented in the atome table at the analyte was not are sample, was not are sample was not arrabyzed inclosite that the analyte we conduct the treatment of the respections of the resp   |   |
| of all samples conducted b  | thed Prestricties was canduct<br>into levels of 4.4.1002. 4.4.<br>presented in the above table<br>that the analyte was not analyze<br>its sample was not analyze<br>depretate that the analyse was<br>de increadences of the resp   |   |
| s of all samples conducted b  | rated Pesticides was conduct<br>lents levels of 4.4-1303, 4.4-1<br>s presented in the atome table<br>is that the analyte was not det<br>the sample was not analyze<br>aid indicate that the analyte weals exceedences of the resp   |   |
| sis of all samples conducted to   | trated Pesticides was conduct tuents levels of 4.4.1002. 4.4. Its presented in the above table is that the analyte was not analyze the sample was not analyze beid indicate that the analyse will be analyze beid indicate acceleroes of the respinster.  |   |
| ysis of all samples conducted to  | ortrated Pesticides was canduct iffluents levels of 4.4-IDD3. 4.4-IDD9. 4.4-ID9. 4.4-IDD9. 4.4-IDD9. 4.4-IDD9. 4.4-IDD9. 4.4-I  |   |
| ilysis of all samples conducted to  | Notinated Pesticides was conduct saffuents levels of 4.4.1002, 4.4. stults presented in the above table take that the analyse was not analyze that the sample was not analyze in baild inclose that the analyse with this inclose that the analyse withoute proceedences of the respirations.   |   |
| halysis of all samples conducted t  | injorinated Pesticides was conduct instituents levels of 4.4-1006. 4.4-esuits presented in the above table teates that the analyte was not analyzer in boid inclose that the analyse was not analyzer in boid inclose that the analyse is boid inclose that the analyse is tridicale acceedences of the resp  |   |
| malysis of all samples conducted to   | Chlorinated Pesticides was canduct constituents levels of 4.4-1002, 4.4-insuite presented in the above table dictates that the analyte was not analyze in the boild inclicate that the analyse in in boild inclicate that the analyse was midicate exceedences of the respire was indicate exceedences of the respire was indicate exceedences of the respired was indicated that the exceedences of the respired was indicated that the exceedences of the respired to the exceedences of the exceede  |   |
| enalysis of all samples conducted to  | f Chlorinated Pesticides was canduct constituents levels of 4.4.1002. 4.4-in results presented in the above table high-airs that the analyte was not arrayize with its baid indicate that the analyte was not analyze with baid indicate that the analyte will be baid indicate that the analyte will be will be analyte.   |   |
| ny analysis of all samples conducted to   | of Chlorinated Pesticities was canduct constituents levels of 4.4-LDB -4.4-Cal results presented in the above table holicaiss that the analyse was not analyze conver in beild insticate that the sample was not analyze conver in beild insticate that the analyse was lauss wickloste analyze.  |   |
| ory enalysis of all samples conducted t   | s of Chlotrated Pesticides was canduct red constituents levels of 4.4.1003. 4.4-tical results presented in the above table. • Indicates that the analyte was not array discrete that the sample was not arrayzed from in bold indicate that the analyte was very analyte was not arrayzed thour in bold indicate that the analyte was walloss indicate accessences of the respiratory.  |   |
| story analysis of all samples conducted t   | als of Chlorinated Pesticides was canduct heet constituents levels of 4.4-IDD3. 4.4-IDD9. 4.4-ID  |   |
| ratory analysis of all samples conducted t  | rais of Chlothated Pesticides was conduct breed constituents levels of 4.4.1002, 4.4. alphical results presented in the above table 10°- indicates that the analyte was not arrange indicates that the sample was not arrange indicates that the sample was of analyze a strown in beind indicate that the analyte was dividual modular proceedences of the respective was motivate accessed.   |   |
| ovatory analysis of all samples conducted to  | typis or Chloritated Pesticides was conduct inhined constituents levels of 4.4-1DD2. 4.4-instytical results presented in the above table 100°- indicates that the analyte was not analyzer inticates that the semple was not analyzer as shown in bold incloate that the analyte wild-values indicate acceedences of the respice of the respical values indicate acceedences of the respical control o  |   |
| S:<br>iowatory analysis of all samples conducted to   | alysis of Chlorinated Pesticides was conduct ombried constituents levels of 4.4.1002. 4.4. snalytical results presented in the above table (0.00° - indicates that the analyse was not analyze uses shown in botid incloate that the analyse was not analyze uses shown in botid incloate that the analyse was ded values indicate exceedences of the respace?  |   |
| 85.<br>abwatory analysis of all samples conducted t   | tratysis of Chlotrated Pesticides was canduct<br>combined constituents levels of 4.4.1DD2. 4.4-<br>Il analytical results presented in the above table<br>10.00°- indicates that the analyte was not arbital<br>"-indicates that the sample was not arrayzed<br>alues shown in baid indicate that the analyte whacked values wholeate acceedences of the respirate<br>haded values midicate acceedences of the respirate.  |   |
| fest<br>Laboratory analysis of all samples conducted to   | Analysis of Chlorinated Pesticides was conducted using method SW Combred constituents levels of 4.4-DDB, 4.4-DDE and 4.4-DDE and 4.4-DDE analytical results presented in the above table are expressed in minimalytical results that the analyte was not detected at both the choice  |   |
| Ofes:<br>*Labovatory analysis of all samples conducted to   | Analysis of Chlorinated Pesticides was canducted using method SWB46 8081  *Combred constituents levels of 4.4-DD2. 4.4-DDE and 4.4-DD1 must be greter than listed value.  All analytical results presented in the above table are expressed in misrograms par liter (ugfL).  *-10.00° - indicates that the analyte was not detected above the concentration shown.  indicates that the sample was not analyzed for this compound.  Values shown in bold indicate that the analyse was detected at this concentration.  Shaded values indicate accessed one of the respective MTCA Method A ideanup level.   |   |
| Noties:<br>*Laboratory analysis of all samples conducted by Libby Environmental chemistry Laboratories in Olympia, Washington | *Ahalysis of Chloricated Pesticides was canducted using method SW846 8081.  *Combined constituents levels of 4.4-IDDC -4.4-IDDC and 4.4-DDT must be grater than listed All analytical results presented in the above table are expressed in misrograms per liter (ught).  *-10.00° - indicates that the analyte was not descreted above the concertificin shown.  |   |
| Notes:<br>*Laboratory analysis of all samples conducted to  | Analysis of Chlotrated Pesticides was canduct *Combred constituents levels of 4.4.1003. 4.4-All analytical results presented in the above table *10.00° - Indicates that the analyte was not are reconstituted to the sample was not analyze values shown in bold indicate that the analyte w Shaded values wildcate proceedences of the resp   |   |
| Notes: **Labovatory analysis of all samples conducted to  | *Analysis of Chlorinated Pesticides was conduct *Combined constituents levels of 4.4-1DD2. 4.4-1D2. 4.4-1D2. 4.4-1D2. 4.4-1D2. 4.4-1D2. 4.4-1D2. 4.4-1D2. 4.4-1D2. 4.4  |   |
| Notes: 'Laboratory analysis of all samples conducted to   | *Analysis of Chlotrated Peeticides was conduct *Combred constituents levels of 4.4.1503. 4.4. All analytical results presented in the above table *-10.00** - Indicates that the analyte was not are the "- indicates that the sample was not analyze viauses strown in beild indicate that the analyte will have strown in beild indicate that the analyte will shad values indicate acceleroes of the resp.   |   |
| Notes: **Laboratory analysis of all samples conducted to  | Analysis of Chlomated Pestoddes was conduct *Combined constituents levels of 4.4-1006. 4.4-106. 4  |   |



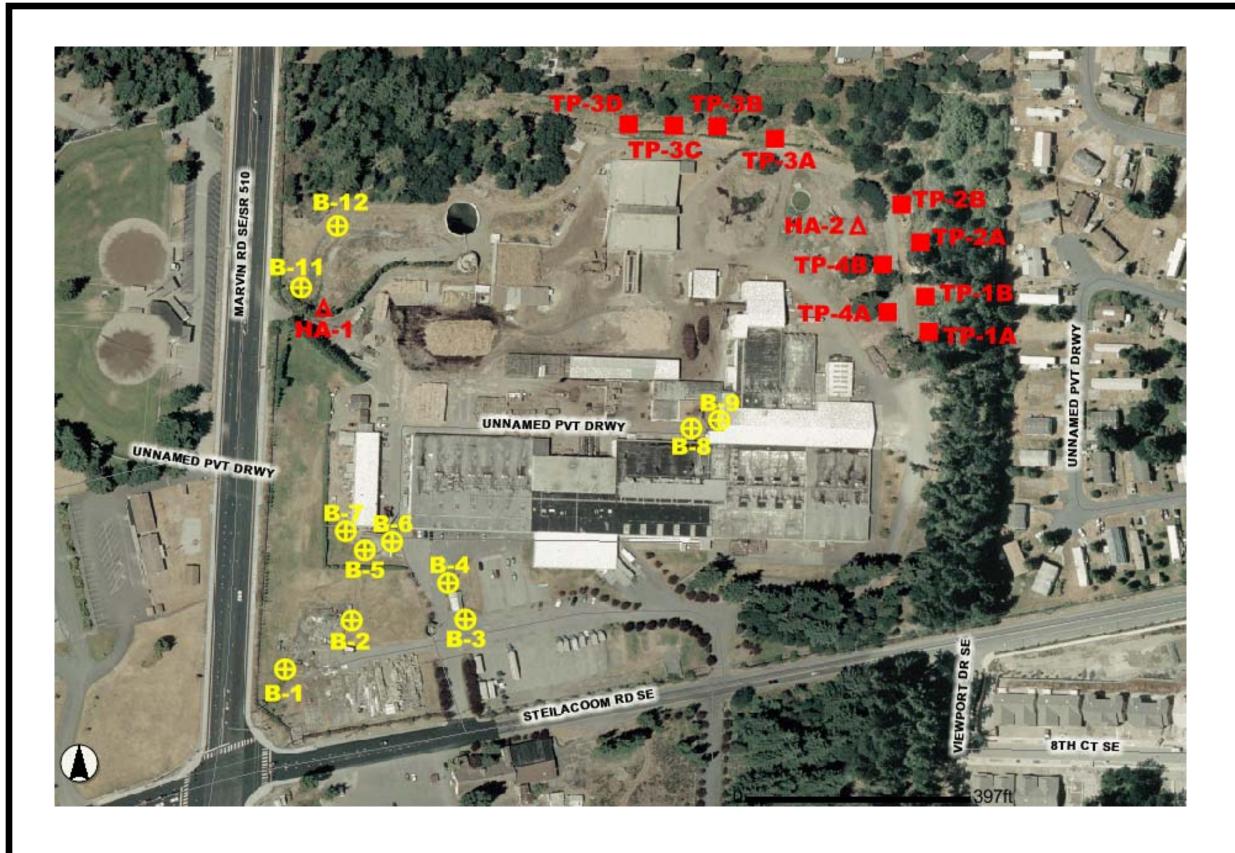
NORTH

Approximate Scale 1 inch = 4,000 feet



VICINITY MAP

FIGURE 1





SUBSURFACE EXPLORATION LOCATIONS

**FIGURE** 

# ATTACHMENT A BORING LOGS

## **SOIL CLASSIFICATION SYSTEM**

|                              | MAJOR DIVISION                   | s                    | GROUP<br>SYMBOL | GROUP NAME                                |
|------------------------------|----------------------------------|----------------------|-----------------|---|
|                              |                                  |                      | GW              | WELL-GRADED GRAVEL, FINE TO COARSE GRAVEL |
| COARSE                       | GRAVEL                           | CLEAN GRAVEL         | GP              | POORLY-GRADED GRAVEL                      |
| GRAINED<br>SOILS             | More Than 50% of Coarse Fraction | GRAVEL.              | GM              | SILTY GRAVEL                              |
|                              | Retained<br>on No. 4 Sieve       | GRAVEL<br>WITH FINES | GC              | CLAYEY GRAVEL                             |
|                              |                                  |                      | sw              | WELL-GRADED SAND, FINE TO COARSE SAND     |
| More Than 50%                | SAND                             | CLEAN SAND           | SP              | POORLY-GRADED SAND                        |
| Retained on<br>No. 200 Sieve | More Than 50% of Coarse Fraction | SAND                 | SM              | SILTY SAND                                |
| ů?                           | Passes No. 4 Sieve               | WITH FINES           | \$C             | CLAYEY SAND                               |
|                              |                                  |                      | ML              | SILT                                      |
| GRAINED                      | FINE SILT AND CLAY GRAINED       | INORGANIC            | CL              | CLAY                                      |
| SOILS                        | Liquid Limit<br>Less Than 60     | ORGANIC              | OL              | ORGANIC SILT, ORGANIC CLAY                |
| 0 .                          |                                  | MAD AND              | MH              | SILT OF HIGH PLASTICITY, ELASTIC SILT     |
| More Than 50%<br>Passes      | SILT AND CLAY                    | INORGANIC            | СН              | CLAY OF HIGH PLASTICITY, FAT CLAY         |
| No. 200 Sleve                | Liquid Limit<br>50 or More       | ORGANIC              | ОН              | ORGANIC CLAY, ORGANIC SILT                |
|                              | HIGHLY ORGANIC SOIL              | s                    | PT              | PEAT                                      |

## NOTES:

- Field classification is based on visual evaluation of soil in general accordance with ASTM D2488-90.
- Descriptions of solt density or consistency are based on interpretation of blow count data, visual appearance of soils, and/or test data.

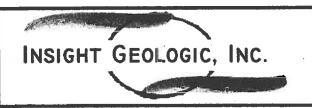
## **SOIL MOSTURE MODIFIERS:**

Dry - Absence of moisture, dusty, dry to the touch

Moist - Damp, but no visible water

Wet - Visible free water or saturated, usually soil is obtained from below

water table



**SOIL CLASSIFICATION SYSTEM** 

FIGURE A-1

|    | Project Name: Ostrom's Farm                      | Well No.: B1         |                        |
|----|--|----------------------|------------------------|
|    | Location: Ostrom's Farm                          | Total Depth: 20 Feet |                        |
|    | Drilling Contractor : NW Probe                   | St                   | INSIGHT GEOLOGIC, INC. |
| 10 | Drilling Equipment : Power Probe 9630            | 0                    | INSIGHT SECLOSIC, DIC. |
|    | Driller : Rob Warren                             |                      |                        |
|    | Logged By: Kevin Vandehey                        |                      |                        |
|    | Date : 6/14/07                                   |                      |                        |
|    | Depth to water : N/A                             |                      |                        |
|    | Depth/Feet Lithology Inches Driven Recovery USCS | SOIL DESCRIPTION     | 0                      |

|         | 0 48/16 GM   | GRAVEL WITH SAND: Light gray, fine to coarse gravel with fine to coarse sand and silt, loose, moist |
|---------|--|---|
| 5<br> - | 48/31  |   |
| — 10    | 000000000000000000000000000000000000000  | Grades medium dense   |
|         | 0 48/42<br>0 0 0 0<br>0 0 0 0 | Grades dense  |
|         | 48/41 ML   | GRAVELLY SILT: Light gray silt with fine to medium gravel, very dense, moist                        |

| Project Name: Ostrom's Farms                                  | Well No.: B2         |                        |
|---|----------------------|------------------------|
| Location : Ostrom's Farms                                     | Total Depth: 20 Feet |                        |
| Drilling Contractor : NW Probe                                |                      | INSIGHT GEOLOGIC, INC. |
| Drilling Equipment : Power Probe 9630                         |                      | Thought occurry in.    |
| Driller: Rob Warren   |                      |                        |
| Logged By: Kevin Vandehey                                     |                      |                        |
| Date : 6/14/07  |                      |                        |
| Depth to water: N/A   | ¥                    | 9                      |
| Depth/Feet<br>Lithology<br>Inches Driven<br>/Recovery<br>USCS | SOIL DESCRIPTION     |                        |

| De |             | 5 K   | Š    | SOIL DESCRIPTION   |
|----|-------------|-------|------|--|
| _° | (%) (*)<br> | 48/12 | SP   | SAND: Dark brown, silty, fine to medium sand with fine to medium gravel, loose,  |
| -  |             |       |      | moist  |
| -  |             |       | tg   |  |
| -  |             | ,     |      |  |
|    |             | 48/17 | GM   |  |
| -5 | 0.0         | 40/17 | GIVI | GRAVEL WITH SAND: Brown, fine to medium gravel with fine to coarse sand and silt, loose, moist   |
|    | 0000        |       |      |  |
|    | 0-00        |       |      | c  |
|    | 0.0         |       |      |  |
| -  | 0 0         | 48/25 |      | Grades medium dense  |
| -  | 0.00        |       |      | <u>~</u>   |
| 10 | 070         |       |      |  |
| -  | 0 - C       |       |      | 4,   |
|    | 0.00        | 48/34 |      |  |
|    |             | 40/54 |      | Grades very dense  |
|    | 070         |       |      | et a second and a second a second and a second a second and a second a second and a |
|    | 000         |       |      | **   |
| 15 | 0-00-0      |       |      |  |
| -  | 0000        | 48/48 |      |  |
| -  | 0-0         |       |      |  |
| -  | 979         |       |      |  |
| -  | 070         |       |      | i de la companya de  |
| 20 |             | 2     |      | 2  |

| Project Name: Ostrom's Farm                       | Well No.: B3           |                        |
|---|------------------------|------------------------|
| Location: Ostrom's Farm                           | Total Depth: 16 Feet   |                        |
| Drilling Contractor : NW Probe                    | INSIGHT GEOLOGIC, INC. |                        |
| Drilling Equipment : Power Probe 9630             |                        | ingrent ococoate, inc. |
| Driller: Rob Warren                               |                        |                        |
| Logged By : Kevin Vandehay                        |                        |                        |
| Date : 6/20/07                                    |                        |                        |
| Depth to water: N/A                               |                        |                        |
| Depth/Feet Lithology Inches Driven /Recovery USCS | SOIL DESCRIPTION       | ħ.                     |

| <b>┌</b> °      | Och   | 48/23 | GM | CDAVELL light grow fine to come with fine to continue and sit leave wrist           |
|-----------------|---|-------|----|---|
| _               |   |       |    | GRAVEL: Light gray fine to coarse, with fine to medium sand, and silt, loose, moist |
|                 |   |       |    |   |
|                 |   |       |    |   |
| -               |   |       |    |   |
|                 | 0.00  |       |    | GRAVEL: Light gray fine to coarse, with fine to medium sand, and silt, loose, moist |
|                 | 0.50  | 48/25 | GM |   |
| -5              | 000   |       |    | ·   |
| _               | 1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>1000<br>100 |       |    |   |
|                 | 7050  |       |    | <sup>10</sup>   |
|                 |   |       |    |   |
| -               |   | 48/26 | GM | GRAVEL: Light gray fine to coarse, with fine to medium sand, and silt, loose, moist |
| _               |   |       |    |   |
|                 | OP/S  |       |    |   |
| <del>- 10</del> | Ô.  |       |    |   |
| _               |   |       |    |   |
|                 | O P   |       |    | GRAVEL: Light gray fine to coarse, with fine to medium sand, and silt, loose, moist |
|                 | 2007  | 48/30 | GM |   |
| <u> </u>        | 0000  |       |    | =   |
| _               | 0000  |       |    |   |
| 4.              | 0000  |       |    |   |
| 15<br>·         | 000   |       |    |   |
| -               | CFC   |       |    | 3)  |
|                 |   |       |    |   |
|                 |   |       |    | ·   |
|                 |   |       |    | = **  |
| _               |   |       |    |   |
|                 | ·   |       |    |   |
| 20              |   |       |    |   |

| Project Na              | ame: Ostro                 | m's Farm        | Well No. : B4          |                       |
|-------------------------|----------------------------|-----------------|------------------------|-----------------------|
| Location :              | Ostrom's F                 | arm             | Total Depth: 20 Feet   |                       |
| Drilling Co             | ontractor : N              | N Probe         | INSIGHT GEOLOGIC, INC. |                       |
| Drilling Eq             | quipment : Po              | ower Probe 9630 |                        | indigiti dedenta indi |
| Driller: R              | lob Warren                 |                 |                        |                       |
| Logged B                | y: Kevin Va                | ndehey          |                        |                       |
| Date : 6/2              | 0/07                       |                 |                        | <u>.</u>              |
| Depth to v              | water: N/A                 |                 |                        |                       |
| Depth/Feet<br>Lithology | Inches Driven<br>/Recovery | nscs            | SOIL DESCRIPTION       | 5                     |

| _0             |   |       |    |   |
|----------------|---|-------|----|---|
|                |   | 48/20 | SP | SAND: Dark brown, silty, fine to medium sand with fine to medium gravel, loose, moist                           |
| 5              | 000000000000000000000000000000000000000 | 48/22 | GM | GRAVEL WITH SAND: Light brown, fine to medium gravel with fine to coarse sand and silt, medium dense, moist     |
| _<br>_<br>_ 10 | 00000000000000000000000000000000000000  | 48/12 |    | Grades dense  |
| - 15           |   | 48/26 |    | SAND: Light gray, fine to coarse sand with fine gravel, trace silt, dense, moist                                |
|                | 000000000000000000000000000000000000000 | 48/32 | GM | GRAVEL WITH SAND: Light gray, fine to medium gravel with fine to coarse sand and silt, very dense, moist to wet |

| Proje                     | ct Name:                   | Ostr     | om's Farm        | Well No.:     | B5          |                          |
|---------------------------|----------------------------|----------|------------------|---------------|-------------|--------------------------|
| Local                     | tion : Ost                 | rom's    | Farm             | Total Depth : | 18 Feet     |                          |
| Drillir                   | ng Contrac                 | tor: N   | W Probe          |               |             | INSIGHT GEOLOGIC, INC.   |
| Drillir                   | ng Equipm                  | ent : F  | Power Probe 9630 |               |             | Indiciti Ceceotte, iiic. |
| Drille                    | r: Rob W                   | arren    |                  | <del></del> - |             |                          |
| Logged By: Kevin Vandehey |                            |          |                  |               |             |                          |
| Date                      | : 6/20/07                  |          |                  |               |             | 1                        |
| Dept                      | h to water                 | : N/A    | \                |               |             | ]                        |
| Depth/Feet                | Lithology<br>Inches Driven | Recovery | nscs             | SOIL          | DESCRIPTION |                          |

|          |      | 48/17 | SM | SILTY SAND: Dark brown, silty, fine sand with fine gravel, loose, moist                             |
|----------|------|-------|----|---|
| -        |      |       |    |   |
|          |      |       |    | >=  |
|          | 譯    |       |    |   |
|          |      |       |    | 40  |
| -        | 諈    | 48/19 | GM |   |
| _5       | 0000 |       |    | GRAVEL WITH SAND: Light gray, fine to medium gravel with coarse to fine sand and silt, loose, moist |
|          | 0 0  |       |    |   |
| <b>+</b> | 0,0  |       | 1  |   |
| -        | 000  |       |    |   |
|          | 0000 |       |    | ·   |
|          | 0.0  | 48/31 |    | Grades medium dense   |
| -        | 000  |       |    |   |
| 10       | 000  |       |    |   |
|          |      |       |    |   |
|          | 0.00 |       | ۸  | W 48  |
| -        |      | 48/18 |    | Grades dense  |
|          | 000  |       |    | Grades dense  |
|          | 000  |       |    | est est   |
|          | 0.00 |       |    |   |
| - 15     |      |       |    | 2   |
|          | 3,0  |       |    | ×   |
|          | 000  | 24/24 |    | Grades very dense   |
| -        | 0.00 |       |    |   |
| L        | SOC  |       |    |   |

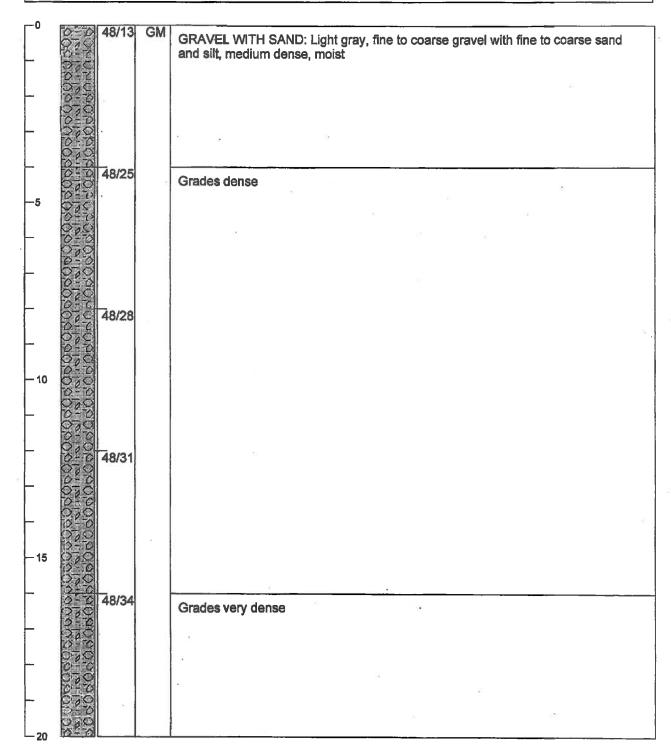
| Project Nam             | e: Ostrom's Farm              | Well No.: B6           |                         |
|-------------------------|-------------------------------|------------------------|-------------------------|
| Location : 0            | Ostrom's Farm                 | Total Depth: 16 Feet   |                         |
| Drilling Cont           | ractor : NW Probe             | INSIGHT GEOLOGIC, INC. |                         |
| Drilling Equi           | pment : Power Proba 9630      |                        | (Noidill Orontolo, inc. |
| Driller: Rob            | Warren                        |                        |                         |
| Logged By:              | Kevin Vandehey                |                        |                         |
| Date : 6/20/0           | 07                            |                        | *:                      |
| Depth to wat            | ter: N/A                      |                        |                         |
| DepttvFeet<br>Lithology | Inches Driven //Recovery USCS | SOIL DESCRIPTION       | a a                     |

| _0 |      |       |    | on a contract to the contract |
|----|------|-------|----|---|
|    |      | 48/10 | ML | SILT: Dark brown silt with fine to medium gravel, loose, moist, slight oil smell  |
|    |      |       |    |   |
|    |      |       |    | 12  |
| L' |      |       |    |   |
|    |      |       |    |   |
| _  |      |       |    |   |
|    |      |       |    | · ·   |
| -  |      | 48/14 | GM |   |
|    | 000  |       |    | GRAVEL WITH SAND: Light gray, fine to coarse gravel with fine to coarse sand and silt, medium dense, moist  |
| -5 | 0-0  |       |    |   |
|    | 0,0  |       |    |   |
| -  | 0-0  |       |    |   |
|    | 1    |       |    |   |
|    | 300  |       | -  |   |
|    | 000  | N.    |    |   |
|    | 0.00 | 48/28 |    | Grades dense  |
| -  | 0.0  |       |    |   |
|    | 000  |       |    |   |
| 10 | 2    |       |    | H .   |
|    | 376  |       |    |   |
| -  | 0.0  |       |    |   |
|    | 000  |       |    |   |
| -  | 000  | 48/32 |    | Grades very dense   |
|    | 0-0  |       |    | oldes very defise   |
|    | 0.00 | :41   |    |   |
|    | 070  |       |    | *   |
|    | 000  |       |    |   |
| 15 | 0.0  |       |    |   |
|    | 0.0  |       | ,  | >   |
|    | 300  |       |    |   |

| Project Name            | : Ostro                    | m's Farm                       |                        | Well No. : | B7          |          |
|-------------------------|----------------------------|--------------------------------|------------------------|------------|-------------|----------|
| Location: O             | strom's F                  | om's Farm Total Depth: 16 Feet |                        |            |             |          |
| Drilling Contr          | actor : N                  | N Probe                        | INSIGHT GEOLOGIC, INC. |            |             |          |
| Drilling Equip          | ment : P                   | ower Probe 96                  | insigni sectore, inc.  |            |             |          |
| Driller: Rob            | Warren                     |                                |                        |            |             |          |
| Logged By:              | Kevin Va                   | ndehey                         |                        |            |             |          |
| Date : 6/20/0           | 7                          |                                |                        |            |             | <u>.</u> |
| Depth to water          | er: N/A                    |                                |                        |            |             |          |
| Depth/Feet<br>Lithology | Inches Driven<br>/Recovery | nscs                           | 9                      | SOIL       | DESCRIPTION |          |

| <b>[</b> 0. |              | 48/18 | SM  | SILTY SAND: Dark brown, silty, fine to medium sand with fine gravel, loose, moist                          |
|-------------|--------------|-------|-----|--|
| - "         |              |       |     | . 8  |
|             | ·            |       |     |  |
|             |              |       |     |  |
| -           |              |       |     |  |
| 25          | 177          |       |     |  |
|             | 000          | 48/16 | GM  | GRAVEL WITH SAND: Light gray, fine to medium gravel with fine to coarse sand and silt, medium dense, moist |
| -5          | 0.0          |       |     | and six, medium dense, moist   |
|             | 0-0          |       |     | × ×  |
|             | 0.0          |       | 4   | H  |
| +           |              |       |     |  |
|             | 000          |       |     |  |
|             | 0.00         | 48/25 |     | Grades dense   |
| -           | 3,00         |       |     |  |
| - 10        | 0000         |       | Til | N A  |
|             | 0000         |       |     |  |
| -           | 0.00         |       |     |  |
|             | 070          |       |     |  |
|             | 070          | 48/26 |     | Grades very dense  |
| -           | 0000         |       |     |  |
|             | 0.0          |       |     | .87  |
|             | 000          |       |     |  |
| - 15        | 6000<br>6000 |       |     |  |
|             |              |       |     | a a  |

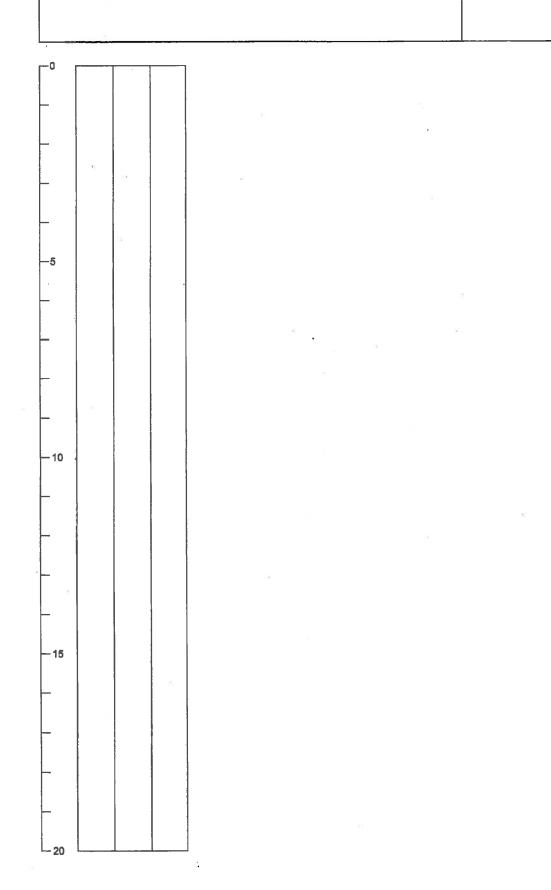
| Project Name: Ostrom's Farm                        | Well No.: B8           |                           |
|--|------------------------|---------------------------|
| Location : Ostrom's Farm                           | Total Depth : 20 Feet  |                           |
| Drilling Contractor : NW Probe                     | INSIGHT GEOLOGIC, INC. |                           |
| Drilling Equipment : Power Probe 9630              |                        | - ingletti denenatet inc. |
| Driller: Rob Warren                                |                        |                           |
| Logged By: Kevin Vandehey                          |                        |                           |
| Date : 6/20/07                                     |                        |                           |
| Depth to water: N/A                                |                        |                           |
| Depth/Feet Lithology Inches Driven //Recovery USCS | SOIL DESCRIPTION       | 22                        |



|   | ¥                    |                        |
|---|----------------------|------------------------|
| Project Name: Ostrom's Farm                                   | Well No. : B9        |                        |
| Location : Ostrom's Farm                                      | Total Depth: 20 Feet |                        |
| Drilling Contractor : NW Probe                                |                      | INSIGHT GEOLOGIC, INC. |
| Drilling Equipment : Power Probe 9630                         |                      | INDIGHT DECEMBER HAC   |
| Driller: Rob Warren   |                      |                        |
| Logged By: Kevin Vandehey                                     |                      |                        |
| Date : 6/20/07  |                      | 2                      |
| Depth to water: N/A   |                      |                        |
| Depth/Feet<br>Lithology<br>Inches Driven<br>/Recovery<br>JSCS | a                    | 6 8                    |
| Depth/Feet Lithology Inches Driv /Recovery USCS               | SOIL DESCRIPTION     |                        |

| <b>-0</b>       | 23045.31   | 40/47  | CM  |  |
|-----------------|------------|--------|-----|--|
| Į.              | 55.8       | 48/17  | GM  | GRAVEL WITH SAND: Light brown, fine to medium gravel with fine to coarse sand and silt, loose, moist   |
| 1               | 0-6        |        | 0   | and silt, loose, moist   |
| Г               | 000        |        |     |  |
| Į               | 5-8        | - 1    |     |  |
| $\vdash$        | 2-0        | - 1    |     |  |
|                 | 0.00       | - 1    |     | 8  |
| L               | 2-0        |        |     | ·  |
|                 | 00         | l      |     | 3  |
| 1               | 000        |        |     | *-   |
| -               |            | 48/18  |     |  |
|                 | 5,0        | 40, 10 |     |  |
| -5              | 0-0        | J      |     |  |
|                 | 9.5        |        |     |  |
| 1               | Ou C       |        |     |  |
| $\vdash$        | 0-0        |        |     |  |
|                 |            |        |     |  |
| L               | G O        |        |     |  |
|                 | 0-0        | 1      |     | E CONTRACTOR OF THE CONTRACTOR |
|                 | 0,0        | - 1    |     |  |
| $\vdash$        | 6 70       | 48/21  |     |  |
|                 | 0.0        | 70/2 1 |     | Grades medium dense  |
| L               | 0-0        |        |     |  |
| ]               | 200        |        |     |  |
|                 | 5.0        | .      |     |  |
| <del> </del> 10 | 0-0        | H      |     | ·  |
| 1               | $\bigcirc$ |        |     |  |
| L               | 5-6        |        |     |  |
|                 | 0-0        | - 1    |     |  |
|                 | 200        |        | -14 |  |
| <b>-</b>        | 3-3        | 48/29  |     |  |
| ļ               | 5.0        | 70/20  |     | Grades dense   |
|                 | 0-10       |        |     |  |
|                 | 300        |        |     |  |
|                 | 5,6        |        |     |  |
| $\vdash$        | 0-0        |        |     |  |
|                 | 000        | - 1    |     | (A)  |
| 15              | 5.0        |        |     | 2  |
| '3              | 0 0        | - 1    |     |  |
|                 | 000        |        |     |  |
| $\vdash$        | 2-2        | 48/31  |     |  |
|                 | 5.0        | 40/31  |     | Grades very dense  |
| Ľ.              | 0-0        |        | -   |  |
| Γ               |            |        |     |  |
| 1               | 0-0        |        |     |  |
| -               | 300        | H      |     |  |
|                 | 000        |        |     | y <sub>0</sub> .   |
|                 | 3-6        |        |     |  |
| Г               | 3.0        |        |     |  |
|                 | 070        |        |     |  |
| L_ 20           | 02.6       |        |     |  |

| Project Name: | Ostrom's Farm | Well No. : | B10 |                        |
|---------------|---------------|------------|-----|------------------------|
|               |               |            |     |                        |
|               |               |            |     | INSIGHT GEOLOGIC, INC. |
| •             | Not           | Drilled    |     |                        |



| Project Name: Ostrom's Farm                      | Well No. : B11         |                        |
|--|------------------------|------------------------|
| Location : Ostrom's Farm                         | Total Depth: 15.5 Feet | INSIGHT GEOLOGIC, INC. |
| Drilling Contractor : NW Probe                   |                        |                        |
| Drilling Equipment : Power Probe 9630            |                        |                        |
| Driller: Rob Warren                              |                        |                        |
| Logged By: Kevin Vandehey                        |                        |                        |
| Date: 6/14/07                                    |                        |                        |
| Depth to water: N/A                              |                        |                        |
| Depth/reet Lithology Inches Driven Recovery USCS |                        |                        |
| Jeptin're Lithology Lithology Carove USCS        | SOIL DESCRIPTION       |                        |

| <u>,0</u>   |                               | 48/17 | CM   |  |
|-------------|-------------------------------|-------|------|--|
|             | $\mp \pm \mp$                 | 40/1/ | SM   | SILTY SAND: Dark brown, silty, fine to medium sand, loose, moist               |
|             | 王中王                           |       |      | $H \otimes$  |
| F           | 王士王                           |       |      |  |
|             | 主要主                           |       |      | 4.1 (4.4   |
| L           | E 中王                          |       |      |  |
|             | 李王东                           |       |      |  |
|             | 王士王                           |       |      | 9  |
| $\vdash$    | 王平王                           |       |      |  |
|             | 产王主                           |       |      |  |
|             | 五十五                           |       |      |  |
|             |                               | 48/23 | ML   | SILT: Dark brown/black silt, soft, moist                                       |
|             |                               |       |      | OIL 1. Dark brown black sit, sort, molec                                       |
| -5          | $\mathbb{Z}_{\mathbb{T}^{n}}$ |       |      |  |
|             | 21.2                          |       |      | Detectores a descrit 7 front   |
|             |                               |       |      | Petroleum odor at 7 feet   |
| <b>–</b>    |                               |       |      | (te  |
|             |                               |       |      | ш  |
| L           |                               |       |      | 2  |
|             |                               |       |      |  |
|             |                               |       |      |  |
| -           | 0 - 0                         | 48/16 | GM   |  |
|             | 070                           | 70/10 | CIVI | GRAVEL WITH SAND: Gray, fine to medium gravel with fine to coarse sand and     |
| 1           | 5,0                           |       |      | silt, dense, moist to wet  |
|             | 0 - 0                         |       |      |  |
|             | 0 0                           |       |      | 0  |
| <b>—</b> 10 | 0-0                           |       |      | ×  |
|             | 0,0                           |       |      |  |
|             | 0,0                           |       |      |  |
| -           | 0-0                           |       |      | a  |
|             | 0-0                           |       |      |  |
|             | 0-0                           |       |      |  |
|             |                               | 42/   | ML   | SILT: Green gray silt with fine to medium sand and fine to medium gravel, very |
|             | 174                           |       |      | dense, wet   |
| -           |                               |       |      |  |
|             |                               |       |      |  |
|             |                               |       |      | ₩  |
|             |                               |       |      |  |
| 1           |                               |       |      |  |
|             | 1000                          | 11    | 1    |  |
| _ 15        |                               |       |      | E.   |
| <b>— 15</b> |                               |       |      | ts.  |

| Project Name: Ostrom's Farm                       | Well No.: B12        |                         |
|---|----------------------|-------------------------|
| Location : Ostrom's Farm                          | Total Depth: 16 Feet |                         |
| Drilling Contractor : NW Probe                    |                      | INSIGHT GEOLOGIC, INC.  |
| Drilling Equipment : Power Probe 9630             |                      | 11010111 02020000 1110. |
| Driller: Rob Warren                               |                      |                         |
| Logged By: Kevin Vandehey                         |                      |                         |
| Date : 6/14/07                                    |                      | _                       |
| Depth to water: 13 Feet                           |                      | <u> </u>                |
| Depth/Feet Lithology Inches Driven /Recovery USCS | SOIL DESCRIPTION     |                         |

| r° 1 |        | 48/0  |          | N  |
|------|--------|-------|----------|--|
|      |        | ٠     |          | No recovery  |
| -    |        |       |          | . 2  |
| '    |        |       |          | *  |
| -    |        |       |          |  |
|      |        |       |          | . ac   |
| L '  |        |       |          | **   |
|      |        |       |          | ×.   |
|      |        | 10/0  |          | 8  |
|      |        | 48/3  | SM       | SILTY SAND: Brown, silty fine sand with fine to medium gravel, loose, dry  |
| _5   | 至于     |       |          |  |
|      | £±±    | !     |          |  |
| L    |        |       |          |  |
| 8    | 五十五    |       |          |  |
|      | FIT    |       |          |  |
|      |        |       |          | This is a second of the second |
|      |        |       |          |  |
|      | 0,0    | 48/16 | GM       | GRAVEL WITH SAND: Brown, fine to coarse gravel with fine to coarse sand and silt, dense, moist   |
|      | ŎŢŎ    |       |          | silt, dense, moist   |
|      | 0,0    |       |          |  |
| 19   | ૢૼૢઌૢૼ |       |          |  |
| 10   | 5,0    |       |          |  |
|      | 5,0    |       |          |  |
|      | 5,0    |       | l        |  |
|      | 0,0    |       |          |  |
|      | ++++   | 48/33 | SM       | SILTY SAND: Gray, fine to coarse sand with fine to coarse gravel and silt, very  |
|      | 李丰幸    |       |          | dense, moist to wet  |
|      | 五十五    |       |          | , a  |
|      |        |       |          |  |
| -    |        |       |          | *  |
|      | 五      |       |          | ·  |
| - 15 | 工工     |       |          |  |
|      |        |       |          |  |
| L    | 1 + -  |       | <u> </u> |  |

| Project Na              | ame: Ostro                | m's Farm  | 1      | Well No. :    | B13         |  |  |  |  |  |
|-------------------------|---------------------------|-----------|--------|---------------|-------------|--|--|--|--|--|
| Location :              | Ostrom's F                | arm       |        | Total Depth : | : 19 Feet   | A CONTRACTOR OF THE PARTY OF TH |  |  |  |  |
| Drilling Co             | ontractor : NV            | V Probe   |        |               |             | INSIGHT GEOLOGIC, INC.   |  |  |  |  |
| Drilling Eq             | uipment : Po              | ower Prot | e 9630 |               |             | INSIGHT GEOLOGIC, INC.   |  |  |  |  |
| Driller: Re             | ob Warren                 |           |        |               |             |  |  |  |  |  |
| Logged By               | y : Kevin Va              | ndehey    |        |               |             | Mathematica Control  |  |  |  |  |
| Date : 6/14             |                           |           | (K)    | -             |             |  |  |  |  |  |
| Depth to w              | vater: N/A                |           |        |               |             |  |  |  |  |  |
| Depth/Feet<br>Lithology | inches Driven<br>Recovery | nscs      | 9      | SOIL          | DESCRIPTION |  |  |  |  |  |

|           | -0<br>10<br>10<br>10<br>11<br>11 | 48/16 | SM | SILTY SAND: Dark brown, silty fine sand with fine to medium gravel, loose, moist                           |
|-----------|----------------------------------|-------|----|--|
|           |                                  |       |    |  |
| <b>30</b> | _ ***                            |       |    | •  |
|           | _                                |       | ļ  |  |
|           | - FT                             | 48/3  | 14 |  |
|           | -5 TTT                           |       |    | •  |
|           |                                  |       |    |  |
|           |                                  |       |    |  |
|           | - 500                            | 48/13 | GM | GRAVEL WITH SAND: Light gray, fine to coarse gravel with fine to medium sand                               |
|           | - 000                            |       |    | GRAVEL WITH SAND: Light gray, fine to coarse gravel with fine to medium sand and silt, medium dense, moist |
|           | -10                              |       |    |  |
|           | - 0-6                            |       |    |  |
|           | - 800                            | 48/24 |    | Grades dense   |
|           | 0,0                              |       |    | ·  |
|           | 0-0                              |       |    | *  |
|           | -15 O                            |       |    |  |
|           | - 676                            | 48/27 |    | Condension desired   |
|           |                                  | 2     |    | Grades very dense  |
|           | - 00                             |       |    | - B  |
|           | 0,0                              |       |    |  |

| Project                 | Name: Ostro               | om's Farm        | Well No.: B14          |                           |  |  |
|-------------------------|---------------------------|------------------|------------------------|---------------------------|--|--|
| Locatio                 | n : Ostrom's              | Farm             | INSIGHT GEOLOGIC, INC. |                           |  |  |
| Drilling                | Contractor : N            | W Probe          |                        |                           |  |  |
| Drilling                | Equipment : F             | Power Probe 9630 |                        | - Indigiti orocopis, inc. |  |  |
| Driller:                | Rob Warren                |                  |                        |                           |  |  |
| Logged                  | By: Kevin V               | andehey          |                        | - (                       |  |  |
| Date : 6                | 3/14/07                   |                  |                        |                           |  |  |
| Depth t                 | to water: N//             | 1                |                        |                           |  |  |
| Depth/Feet<br>Lithology | nches Driven<br>/Recovery | SCS              | SOIL DESCRIPTION       |                           |  |  |

|           | - 6           |       |     |  |
|-----------|---------------|-------|-----|--|
|           | 1 T           | 48/7  | SM  | SILTY SAND: Dark brown, silty sand with fine gravel, loose, moist  |
| -         | 7 F. T.       |       |     | e te   |
|           | 7.7.<br>1.7.1 |       |     |  |
|           | 王主            |       |     |  |
|           |               |       |     | E Company of the Comp |
| F         | 巧干工           | 48/0  |     |  |
| _         |               | 10,0  |     | No sample recovered  |
| <b>-5</b> |               |       |     |  |
| <u> </u>  | =             |       |     |  |
|           |               |       |     |  |
|           |               |       |     | •  |
|           | 02.0          | 48/7  | GM  | GRAVEL WITH SAND: Light gray, fine to medium gravel with fine to medium sand and silt, medium dense, moist   |
| -         | 0 0           |       |     | and silt, medium dense, moist  |
| 10        | 3,0           |       |     | 18   |
|           | 300           |       |     |  |
| <b> </b>  | 070           |       |     |  |
| -         | 325           | 48/25 |     |  |
|           | 5,0           | 40/20 | 8   | Grades dense   |
|           | 0-0           |       |     |  |
| -         | 000           |       |     |  |
| 15        | 0.00          |       |     |  |
|           | 0,0           |       | 12. |  |
| <b> </b>  | 0.0           | 48/29 |     | Grades very dense  |
| -         | 000           |       |     | =  |
|           | 000           |       |     | % %  |
|           | 0000          |       |     | e e  |
| -         | 200           |       |     |  |
|           | 878           |       |     |  |

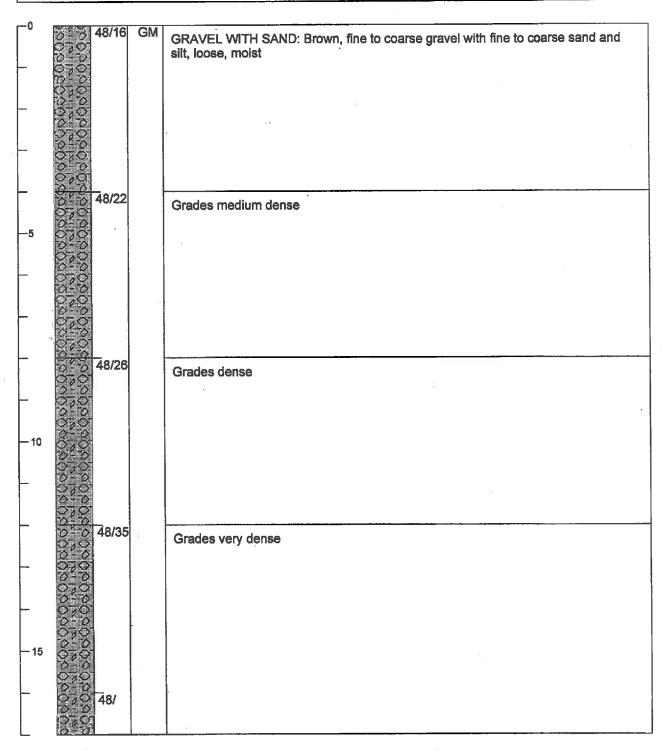
| Project                               | Name: Ostro                | om's Fan | m | Well No.:     | B15         |                        |  |  |  |
|---------------------------------------|----------------------------|----------|---|---------------|-------------|------------------------|--|--|--|
| Location                              | n: Ostrom's                | Farm     |   | Total Depth : | 20 Feet     |                        |  |  |  |
| Drilling                              | Contractor : N             | W Probe  | ) |               |             | INSIGHT GEOLOGIC, INC. |  |  |  |
| Drilling Equipment : Power Probe 9630 |                            |          |   |               |             | Indian Devictor, Inc.  |  |  |  |
| Driller:                              | Rob Warren                 |          |   |               |             |                        |  |  |  |
| Logged                                | By: Kevin V                | andehey  |   |               |             | Episode                |  |  |  |
| Date : 6                              | 6/14/07                    |          |   |               |             |                        |  |  |  |
| Depth to                              | to water: N//              | 4        |   |               |             |                        |  |  |  |
| eet<br>≥                              | Driven                     |          |   |               |             |                        |  |  |  |
| Depth/Feet<br>Lithclogy               | Inches Driven<br>/Recovery | uscs     |   | SOIL          | DESCRIPTION |                        |  |  |  |

| <b>⊢</b> °      | 13 4 48    | /15 SM | SILTY SAND: Dark brown silty fine sand, occasional fine gravel, loose, moist |
|-----------------|------------|--------|--|
|                 | ###<br>### |        | SILTY SAND. Dark brown sitty fine sand, occasional line graver, loose, moist |
|                 | <b>F</b> T |        | 0  |
| -               | 李士子        |        |  |
| L               | <u> </u>   |        |  |
|                 | 5 丰王       |        | · · · · · · · · · · · · · · · · · · ·  |
|                 | 0 - 0 48   | /13 GM | GRAVEL WITH SAND: Brown, fine to coarse gravel with fine to coarse sand and  |
| -5              | 0 0        |        | silt, loose, moist   |
| L               | 0-0        | İ      |  |
|                 | 0.0        |        |  |
| $\vdash$        | 0-0        |        | a a  |
| -               | 0,0        | 1/12   |  |
|                 | 0,0        | 112    | Grades medium dense  |
|                 | 0.0        | 2      |  |
| - 10            | 0.0        |        | #  |
|                 | 0-0        | -      |  |
|                 | 0,0        |        |  |
| <b> </b>        | 2 0 48     | 3/13   | Grades dense   |
| -               |            |        |  |
|                 | 0 0        |        |  |
|                 |            |        |  |
| - 15            | 500        |        | 9  |
|                 | 0.0        |        | · · · · · · · · · · · · · · · · · · ·  |
|                 | 0 0 48     | 3/31   | Grades very dense  |
| -               |            |        |  |
| -               | 00000      |        | ,  |
|                 | 000        |        |  |
|                 | 0 0        |        | 8  |
| L <sub>20</sub> | 0-0        |        |  |

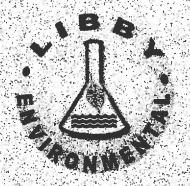
| Project Name: Ostrom's Farm                    | Well No.: B16        |                        |  |  |
|--|----------------------|------------------------|--|--|
| Location : Ostrom's Farm                       | Total Depth: 20 Feet |                        |  |  |
| Drilling Contractor : NW Probe                 |                      | INCREME GEOLOGIC INC   |  |  |
| Drilling Equipment : Power Probe 9630          |                      | INSIGHT GEOLOGIC, INC. |  |  |
| Driller : Rob Warren                           |                      |                        |  |  |
| Logged By: Kevin Vandehey                      |                      |                        |  |  |
| Date : 6/15/07                                 |                      | 1                      |  |  |
| Depth to water: N/A                            |                      |                        |  |  |
| briven   | 5                    |                        |  |  |
| Depth/Feet Lithology Inches Driv Recovery USCS | SOIL DESCRIPTION     |                        |  |  |

| <b>—</b> 0       |   |      |   |
|------------------|---|------|---|
|                  | 十二十二 48/10                              | SM   | CILTY CAND: Dork brown gift, for to medium and with fire to medium annual         |
|                  |   |      | SILTY SAND: Dark brown, silty fine to medium sand with fine to medium gravel,     |
| <u>_</u>         |   |      | loose, moist  |
| 1                | <b>+</b>                                | ]    |   |
| 1                | <b>三十二</b>                              |      |   |
| L                | ***                                     |      | :   |
|                  | 工十工:                                    |      |   |
| 1                | 主工主                                     | ł    |   |
|                  | <b>工产工</b>                              |      |   |
|                  | 计算主义                                    | ĺ    |   |
|                  | 11.4                                    |      |   |
| 1                | T + T                                   | 1    | 2   |
|                  | 48/23                                   | SP   |   |
|                  |   | 1 0. | SAND: Light gray, fine to coarse sand with fine to coarse gravel and silt, medium |
| _                | <b>的直接自然</b> 定                          |      | dense, moist  |
| <del>5</del>     | (A) |      |   |
|                  | <b>美国国际</b>                             |      | ·   |
|                  | Charles Andrews                         |      |   |
| $\vdash$         |   | ]    |   |
|                  |   |      |   |
|                  |   |      | *   |
| $\vdash$         |   |      | - 2   |
| 1                |   |      | **  |
|                  |   | ]    | W   |
| $\vdash$         | 0.00 48/24                              | CNA  |   |
|                  | 40/24                                   | GM   | GRAVEL WITH SAND: Light gray, fine to medium gravel with fine to coarse sand      |
|                  | 5-5                                     | 1    | and silt, dense, moist  |
| $\vdash$         | ×2×                                     | 1    | and sit, defise, thoist   |
|                  | 5-5                                     | 1    |   |
|                  | 0-0                                     |      |   |
| <del>-</del> 10  | 070                                     |      | _   |
|                  | 0-0                                     |      | 19  |
|                  | 070                                     |      |   |
| $\vdash$         | 0-0                                     |      |   |
| 1                | 000                                     |      |   |
|                  | 0-0                                     |      |   |
| _                | 000                                     |      |   |
| 1                | 0 0 48/25                               |      | *   |
| 1                | 000                                     |      |   |
| L_               | 0-0                                     |      |   |
| 1                | 000                                     |      | 10  |
| 1                | RE BI                                   |      |   |
| L                | × 0×                                    |      |   |
| 1                | K - K -                                 |      | ×.  |
| 1                | X × X                                   |      |   |
| 45               | 8-8-                                    | 1    |   |
| <del> - 15</del> | × 2 ×                                   |      | _   |
|                  | 5-5                                     |      |   |
| 1                | 0.0                                     |      | .   |
|                  | 0 48/20                                 |      |   |
| 1                | 070                                     |      | Grades very dense   |
| 1                | 0-0                                     |      |   |
| $\vdash$         | 0.0                                     |      |   |
|                  | 0.0                                     |      | 5   |
| 1                | 070                                     |      |   |
| <b>—</b>         | 0.0                                     |      | 9   |
| 1                | 020                                     |      | , w   |
| Į                | 0-0                                     |      |   |
| <b> -</b>        | 000                                     |      |   |
| 1                | 0-0                                     |      |   |
| 1                | 070                                     |      |   |
| L <sub>20</sub>  | 70-7                                    |      |   |
|                  |   |      |   |

| Project Name: Ostrom's Farm                      | Well No. : B17         |  |  |  |
|--|------------------------|--|--|--|
| Location : Ostrom's Farm                         | Total Depth : 17 Feet  |  |  |  |
| Drilling Contractor : NW Probe                   | INSIGHT GEOLOGIC, INC. |  |  |  |
| Drilling Equipment : Power Probe 9630            |                        | The state of the s |  |  |
| Driller: Rob Warren                              | Driller: Rob Warren    |  |  |  |
| Logged By: Kevin Vandehey                        | San W. San Service     |  |  |  |
| Date : 6/15/07                                   |                        |  |  |  |
| Depth to water: N/A                              |                        |  |  |  |
| gy<br>gy<br>Driven<br>very                       |                        |  |  |  |
| Depth/Feet Lithology Inches Driv //Recovery USCS | SOIL DESCRIPTION       |  |  |  |



# ATTACHMENT B LABORATORY REPORTS



# Libby Environmental, Inc.

4139 Libby Road N.E., Olympia, WA 98506-2518

July 13, 2007

Bill Halbert Insight Geologic, PLLC 2528 Ellis Street Olympia, WA 98501

Dear Mr. Halbert:

Please find enclosed the analytical data report for the Ostrom's Farm project located in Olympia Washington. Mobile Lab Services were conducted on June 14 & 15, 2007. Soil and water samples were analyzed for Diesel & Oil by NWTPH-Dx/Dx Extended, Gasoline by NWTPH-Gx, Hydrocarbon Identification by NWTPH-HCID, VOC's by EPA Method 8260B, Total Lead by EPA Method 7000 Series, and Pesticides by EPA Method 8081.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. An invoice for this analytical work is also enclosed. All soil samples are reported on a dry weight basis.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please give me a call. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry L. Chilcutt

Mr. DWA

President

Libby Environmental, Inc.

## ATTACHMENT B CHEMICAL ANALYTICAL PROGRAM

## **ANALYTICAL METHODS**

Chain-of-custody procedures were followed during the transfer of field samples to the analytical laboratory. The samples were held in cold storage pending extraction and/or analysis. The analytical results, analytical methods reference and laboratory quality assurance/quality control (QA/QC) records are included in this Attachment. The analytical results are also summarized in the text of this report.

### **ANALYTICAL DATA REVIEW**

The laboratory maintains an internal quality assurance program as documented in its laboratory quality assurance manual. The laboratory uses a combination of blanks, surrogate recoveries, duplicates, matrix spike recoveries, matrix spike duplicate recoveries, blank spike recoveries, and blank spike duplicate recoveries to evaluate the validity of the analytical results. The laboratory also uses data quality goals for individual chemicals or groups of chemicals based on the long-term performance of the test methods. The data quality goals were included in the laboratory reports. The laboratory compared each group of samples with the existing data quality goals and noted any exceptions in the laboratory report.

## **ANALYTICAL DATA REVIEW SUMMARY**

Based on our data quality review, it is our opinion that the analytical data are of acceptable quality for their intended use.

## LIBBY ENVIRONMENTAL CHEMISTRY LABORATORY

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

**VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL** 

| Sample Description          | LE ORGAN  | Method  | B1-14'  | B1-20'  | The second secon | B2-14' B2-20' |          |
|-----------------------------|-----------|---------|---------|---------|--|---------------|----------|
| Sample Beser priori         |           | Blank   | DITT    | D1 20   | DD 11  | 52 20         | B11-8'   |
| Date Extracted              | Reporting | N/A     | 6/14/07 | 6/14/07 | 6/14/07  | 6/14/07       | 6/14/07  |
| Date Analyzed               | Limits    | 6/14/07 | 6/14/07 | 6/14/07 | 6/14/07  | 6/14/07       | 6/14/07  |
| ,,                          | (mg/kg)   | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg)  | (mg/kg)       | (mg/kg)  |
|                             | (         | (       | ( 6 6)  | ( 6 6)  | ( 8 8/   | (-0-0)        | <u> </u> |
| Dichlorodifluoromethane     | 0.06      | nd      | nd      | nd      | nd   | nd            | nd       |
| Chloromethane               | 0.06      | nd      | nd      | nd      | nd   | nd            | nd       |
| Vinyl chloride *            | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| Bromomethane                | 0.09      | nd      | nd      | nd      | nd   | nd            | nd       |
| Chloroethane                | 0.06      | nd      | nd      | nd      | nd   | nd            | nd       |
| Trichlorofluoromethane      | 0.05      | nd      | nd      | nd      | nd   | nd            | nd       |
| 1,1-Dichloroethene          | 0.05      | nd      | nd      | nd      | nd   | nd            | nd       |
| Methylene chloride          | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| trans -1,2-Dichloroethene   | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| 1, 1-Dichloroethane         | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| 2,2-Dichloropropane         | 0.05      | nd      | nd      | nd      | nd   | nd            | nd       |
| cis-1,2-Dichloroethene      | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| Chloroform                  | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| 1,1,1-Trichloroethane (TCA) | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| Carbon tetrachloride        | 0.02      | nd      | nd      | nđ      | nd   | nd            | nd       |
| 1,1-Dichloropropene         | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| Benzene                     | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| 1,2-Dichloroethane (EDC)    | 0.03      | nd      | nd      | nd      | nd   | nd            | nd       |
| Trichloroethene (TCE)       | 0.03      | nd      | nd      | nd      | nd   | nd            | nd       |
| 1,2-Dichloropropane         | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| Dibromomethane              | 0.04      | nd      | nd      | nd      | nd   | nd            | nd       |
| Bromodichloromethane        | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| cis-1,3-Dichloropropene     | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| Toluene                     | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| Trans-1,3-Dichloropropene   | 0.03      | nd      | nd      | nd      | nd   | nd            | nd       |
| 1,1,2-Trichloroethane       | 0.03      | nd      | nd      | nd      | nd   | nd            | nd       |
| Tetrachloroethene (PCE)     | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| 1,3-Dichloropropane         | 0.05      | nd      | nd      | nd      | nd   | nd            | nd       |
| Dibromochloromethane        | 0.03      | nd      | nd      | nd      | nd   | nd            | nd       |
| 1,2-Dibromoethane (EDB) *   | 0.005     | nd      | nd      | nd      | nd   | nd            | nd       |
| Chlorobenzene               | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |
| 1,1,1,2-Tetrachloroethane   | 0.03      | nd      | nd      | nd      | nd   | nd            | nd       |
| Ethylbenzene                | 0.03      | nd      | nd      | nd      | nd   | nd            | nd       |
| Total Xylenes               | 0.03      | nd      | nd      | nd      | nd   | nd            | nd       |
| Styrenes                    | 0.02      | nd      | nd      | nd      | nd   | nd            | nd       |

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

#### **VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL**

| Sample Description          |           | Method<br>Blank | B1-14'  | B1-20'  | B2-14'  | B2-20'     | B11-8'  |
|-----------------------------|-----------|-----------------|---------|---------|---------|------------|---------|
| Date Extracted              | Reporting | N/A             | 6/14/07 | 6/14/07 | 6/14/07 | 6/14/07    | 6/14/07 |
| Date Analyzed               | Limits    | 6/14/07         | 6/14/07 | 6/14/07 | 6/14/07 | 6/14/07    | 6/14/07 |
|                             | (mg/kg)   | (mg/kg)         | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg)    | (mg/kg) |
| Bromoform                   | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| Isopropylbenzene            | 0.08      | nd              | nd      | nd      | nd      | nd         | nd      |
| 1,2,3-Trichloropropane      | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| Bromobenzene                | 0.03      | nd              | nd      | nd      | nd      | nd         | nd      |
| 1,1,2,2-Tetrachloroethane   | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| n-Propylbenzene             | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| 2-Chlorotoluene             | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| 4-Chlorotoluene             | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| 1,3,5-Trimethylbenzene      | 0.02      | nd              | nd      | nd      | nd      | n <b>d</b> | nd      |
| tert-Butylbenzene           | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| 1,2,4-Trimethylbenzene      | 0.02      | nd              | nd      | nđ      | nd      | nd         | nd      |
| sec-Butylbenzene            | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| 1,3-Dichlorobenzene         | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| Isopropyltoluene            | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| 1,4-Dichlorobenzene         | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| 1,2-Dichlorobenzene         | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| n-Butylbenzene              | 0.02      | nd              | nd      | nd      | nd      | nd         | nd      |
| 1,2-Dibromo-3-Chloropropane | 0.03      | nd              | nd      | nd      | nd      | nd         | nd      |
| 1,2,4-Trichlorolbenzene     | 0.05      | nd              | nd      | nd      | nd      | nd         | nd      |
| Hexachloro-1,3-butadiene    | 0.10      | nd              | nd      | nd      | nd      | nd         | nd      |
| Naphthalene                 | 0.03      | nd              | nd      | nd      | nd      | nd         | nd      |
| 1,2,3-Trichlorobenzene      | 1.0       | nd              | nd      | nd      | nd      | nd         | nd      |
| Surrogate Recovery          |           |                 |         |         |         |            |         |
| Dibromofluoromethane        |           | 114             | 122     | 118     | 124     | 123        | 125     |
| 1,2-Dichloroethane-d4       |           | 108             | 114     | 112     | 114     | 116        | 118     |
| Toluene-d8                  |           | 105             | 108     | 106     | 110     | 107        | 108     |
| 4-Bromofluorobenzene        |           | 105             | 109     | 112     | 110     | 110        | 112     |

<sup>&</sup>quot;nd" Indicates not detected at listed detection limit.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

<sup>\*</sup> INSTRUMENT DETECTION LIMIT

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

### QA/QC Data - EPA 8260B Analyses

|                       |                            | Sample Ide                   | ntification:             | L070613-1                  |                              |                          |      |
|-----------------------|----------------------------|------------------------------|--------------------------|----------------------------|------------------------------|--------------------------|------|
|                       |                            | Matrix Spik                  | te                       | Matrix Spike Duplicate     |                              |                          | RPD  |
|                       | Spiked<br>Conc.<br>(mg/kg) | Measured<br>Conc.<br>(mg/kg) | Spike<br>Recovery<br>(%) | Spiked<br>Conc.<br>(mg/kg) | Measured<br>Conc.<br>(mg/kg) | Spike<br>Recovery<br>(%) |      |
| 1,1-Dichloroethene    | 2.00                       | 1.70                         | 85                       | 2.00                       | 1.41                         | 71                       | 18.6 |
| Benzene               | 2.00                       | 1.97                         | 99                       | 2.00                       | 1.58                         | 79                       | 22,0 |
| Toluene               | 2.00                       | 2.04                         | 102                      | 2.00                       | 1.68                         | 84                       | 19.4 |
| Chlorobenzene         | 2.00                       | 2.39                         | 120                      | 2.00                       | 2.11                         | 106                      | 12.4 |
| Trichloroethene (TCE) | 2.00                       | 2.25                         | 113                      | 2.00                       | 1.89                         | 95                       | 17.4 |
| Surrogate Recovery    |                            |                              |                          |                            | <u>.</u>                     |                          | -    |
| Dibromofluoromethane  |                            |                              | 113                      | -                          |                              | 111                      |      |
| 1,2-Dichloroethane-d4 |                            |                              | 109                      |                            |                              | 96                       |      |
| Toluene-d8            |                            |                              | 110                      |                            |                              | 105                      |      |
| 4-Bromofluorobenzene  |                            |                              | 106                      |                            |                              | 96                       |      |

|                       | Laborator                  | y Control Sa                 | mple                     |
|-----------------------|----------------------------|------------------------------|--------------------------|
|                       | Spiked<br>Conc.<br>(mg/kg) | Measured<br>Conc.<br>(mg/kg) | Spike<br>Recovery<br>(%) |
| 1,1-Dichloroethene    | 2.00                       | 1.49                         | 75                       |
| Benzene               | 2.00                       | 1.79                         | 90                       |
| Toluene               | 2.00                       | 1.83                         | 92                       |
| Chlorobenzene         | 2.00                       | 2.40                         | 120                      |
| Trichloroethene (TCE) | 2.00                       | 2.17                         | 109                      |
| Surrogate Recovery    |                            |                              |                          |
| Dibromofluoromethane  |                            |                              | 116                      |
| 1,2-Dichloroethane-d4 |                            |                              | 112                      |
| Toluene-d8            |                            |                              | 109                      |
| 4-Bromofluorobenzene  |                            |                              | 102                      |

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%

**ACCEPTABLE RPD IS 35%** 

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

**VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL** 

| Sample Description          | LE ORGAL  | B11-15'  | B12-11' | B12-16'  | B12-16'  | Method  | TP1A     |
|-----------------------------|-----------|----------|---------|----------|----------|---------|----------|
| Sample Description          |           | D11-12   | D12-11  | D12-10 . | Dup      | Blank   | 4'       |
| Date Extracted              | Reporting | 6/14/07  | 6/14/07 | 6/14/07  | 6/14/07  | N/A     | 6/15/07  |
|                             | Limits    | 6/14/07  | 6/14/07 | 6/14/07  | 6/14/07  | 6/15/07 | 6/15/07  |
| Date Analyzed               |           |          |         |          |          |         |          |
| C                           | (mg/kg)   | (mg/kg)  | (mg/kg) | (mg/kg)  | (mg/kg)  | (mg/kg) | (mg/kg)  |
| Dichlorodifluoromethane     | 0.06      | nd       | nd      | nd       | nd       | nd      | nd       |
| Chloromethane               | 0.06      | nd<br>nd | nd      | nd       | nd       | nd      | nd       |
|                             | 0.00      |          |         |          |          |         |          |
| Vinyl chloride *            |           | nd       | nd<br>d | nd<br>nd | nd<br>nd | nd      | nd<br>nd |
| Bromomethane                | 0.09      | nd       | nd      | nd<br>   | nd       | nd      | nd<br>1  |
| Chloroethane                | 0.06      | nd       | nd      | nd       | nd       | nd      | nd       |
| Trichlorofluoromethane      | 0.05      | nd       | nd      | nd       | nd       | nd      | nd       |
| 1,1-Dichloroethene          | 0.05      | nd       | nd      | nd       | nd       | nd      | nd       |
| Methylene chloride          | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| trans -1,2-Dichloroethene   | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| 1,1-Dichloroethane          | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| 2,2-Dichloropropane         | 0.05      | nd       | nd      | nd       | nd       | nd      | nd       |
| cis -1,2-Dichloroethene     | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| Chloroform                  | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| 1,1,1-Trichloroethane (TCA) | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| Carbon tetrachloride        | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| 1,1-Dichloropropene         | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| Benzene                     | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| 1,2-Dichloroethane (EDC)    | 0.03      | nd       | nd      | nd       | nd       | nd      | nd       |
| Trichloroethene (TCE)       | 0.03      | nd       | nd      | nd       | nd       | nđ      | nd       |
| 1,2-Dichloropropane         | 0.02      | nd       | nd      | nd       | nd       | nd      | nd 🥌     |
| Dibromomethane              | 0.04      | nd       | nd      | nd       | nd       | nd      | nd       |
| Bromodichloromethane        | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| cis-1,3-Dichloropropene     | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| Toluene                     | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| Trans-1,3-Dichloropropene   | 0.03      | nd       | nd      | nd       | nd       | nd      | nd       |
| 1,1,2-Trichloroethane       | 0.03      | nd       | nd      | nd       | nd       | nd      | nd       |
| Tetrachloroethene (PCE)     | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| 1,3-Dichloropropane         | 0.05      | nd       | nd      | nd       | nd       | nd      | nd       |
| Dibromochloromethane        | 0.03      | nd       | nd      | nd       | nd       | nd      | nd       |
| 1,2-Dibromoethane (EDB) *   | 0.005     | nd       | nd      | nd       | nd       | nd      | nd       |
| Chlorobenzene               | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |
| 1,1,1,2-Tetrachloroethane   | 0.03      | nd       | nd      | nd       | nd       | nd      | nd       |
| Ethylbenzene                | 0.03      | nd       | nd      | nd       | nd       | nd      | nd       |
| Total Xylenes               | 0.03      | nd       | nd      | nd       | nd       | nd      | nd       |
| Styrenes                    | 0.02      | nd       | nd      | nd       | nd       | nd      | nd       |

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL

| Sample Description          | ID ORGAL  | B11-15' | B12-11' | B12-16' | B12-16' | Method  | TP1A    |
|-----------------------------|-----------|---------|---------|---------|---------|---------|---------|
| omp.o Boon.p.co             |           | 2       | 2.2     | 212.0   | Dup     | Blank   | 4'      |
| Date Extracted              | Reporting | 6/14/07 | 6/14/07 | 6/14/07 | 6/14/07 | N/A     | 6/15/07 |
| Date Analyzed               | Limits    | 6/14/07 | 6/14/07 | 6/14/07 | 6/14/07 | 6/15/07 | 6/15/07 |
| •                           | (mg/kg)   | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
|                             |           |         |         |         |         |         |         |
| Bromoform                   | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| Isopropylbenzene            | 0.08      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2,3-Trichloropropane      | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| Bromobenzene                | 0.03      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,1,2,2-Tetrachloroethane   | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| n-Propylbenzene             | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 2-Chlorotoluene             | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 4-Chlorotoluene             | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,3,5-Trimethylbenzene      | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| tert-Butylbenzene           | 0.02      | nd 👵    | nd      | nd      | nd      | nd      | nd      |
| 1,2,4-Trimethylbenzene      | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| sec-Butylbenzene            | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,3-Dichlorobenzene         | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| Isopropyltoluene            | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,4-Dichlorobenzene         | 0.02      | nd      | nđ      | nd      | nd      | nd      | nd      |
| 1,2-Dichlorobenzene         | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| n-Butylbenzene              | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2-Dibromo-3-Chloropropane | 0.03      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2,4-Trichlorolbenzene     | 0.05      | nd      | nd      | nd      | nd      | nd      | nd      |
| Hexachloro-1,3-butadiene    | 0.10      | nd      | nd      | nd      | nd      | nd      | nd      |
| Naphthalene                 | 0.03      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2,3-Trichlorobenzene      | 1.0       | nd      | nd      | nd      | nd      | nd      | nd      |
| Surrogate Recovery          |           |         |         |         |         |         |         |
| Dibromofluoromethane        |           | 116     | 119     | 122     | 117     | 111     | 125     |
| 1,2-Dichloroethane-d4       |           | 114     | 117     | 113     | 111     | 106     | 124     |
| Toluene-d8                  |           | 106     | 109     | 106     | 105     | 108     | 110     |
| 4-Bromofluorobenzene        |           | 111     | 111     | 111     | 105     | 106     | 104     |

<sup>&</sup>quot;nd" Indicates not detected at listed detection limit.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

<sup>\*</sup> INSTRUMENT DETECTION LIMIT

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

**VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL** 

| Sample Description          |           |         | TP2A-3.5' | TP2B-4'       | TP3A-2.5' | TP3A-2.51 | TP3B-3' |
|-----------------------------|-----------|---------|-----------|---------------|-----------|-----------|---------|
|                             |           |         |           |               |           | Dup       |         |
| Date Extracted              | Reporting | 6/15/07 | 6/15/07   | 6/15/07       | 6/15/07   | 6/15/07   | 6/15/07 |
| Date Analyzed               | Limits    | 6/15/07 | 6/15/07   | 6/15/07       | 6/15/07   | 6/15/07   | 6/15/07 |
|                             | (mg/kg)   | (mg/kg) | (mg/kg)   | (mg/kg)       | (mg/kg)   | (mg/kg)   | (mg/kg) |
|                             | (85/      | (86)    | (         | (************ | (66)      | (6)       | (       |
| Dichlorodifluoromethane     | 0.06      | nd      | nd        | nd            | nd        | nd        | nd      |
| Chloromethane               | 0.06      | nd      | nd        | nd            | nd        | nd        | nd      |
| Vinyl chloride *            | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| Bromomethane                | 0.09      | nd      | nd        | nd            | nd        | nd        | nd      |
| Chloroethane                | 0.06      | nd      | nd        | nd            | nd        | nd        | nd      |
| Trichlorofluoromethane      | 0.05      | nd      | nd        | nd            | nd        | nd        | nd      |
| 1,1-Dichloroethene          | 0.05      | nd      | nd        | nd            | nd        | nd        | nd -    |
| Methylene chloride          | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| trans -1,2-Dichloroethene   | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| 1,1-Dichloroethane          | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| 2,2-Dichloropropane         | 0.05      | nd      | nd        | nd            | nd        | nd        | nd      |
| cis-1,2-Dichloroethene      | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| Chloroform                  | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| 1,1,1-Trichloroethane (TCA) | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| Carbon tetrachloride        | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| 1,1-Dichloropropene         | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| Benzene                     | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| 1,2-Dichloroethane (EDC)    | 0.03      | nd      | nd        | nd            | nd        | nd        | nd      |
| Trichloroethene (TCE)       | 0.03      | nd      | nd        | nd            | nd        | nd        | nd      |
| 1,2-Dichloropropane         | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| Dibromomethane              | 0.04      | nd      | nd        | nd            | nd        | nd        | nd      |
| Bromodichloromethane        | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| cis-1,3-Dichloropropene     | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| Toluene                     | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| Trans-1,3-Dichloropropene   | 0.03      | nd      | nd        | nd            | nđ        | nd        | nd      |
| 1,1,2-Trichloroethane       | 0.03      | nd      | nd        | nd            | nd        | nd        | nd      |
| Tetrachloroethene (PCE)     | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| 1,3-Dichloropropane         | 0.05      | nd      | nd        | nd            | nd        | nd        | nd      |
| Dibromochloromethane        | 0.03      | nd      | nd        | nd            | nd        | nd        | nd      |
| 1,2-Dibromoethane (EDB) *   | 0.005     | nd      | nd        | nd            | nd        | nd        | nd      |
| Chlorobenzene               | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |
| 1,1,1,2-Tetrachloroethane   | 0.03      | nd      | nd        | nd            | nd        | nd        | nd      |
| Ethylbenzene                | 0.03      | nd      | nd        | nd            | nd        | nd        | nd      |
| Total Xylenes               | 0.03      | nd      | nd        | nd            | nd        | nd        | nd      |
| Styrenes                    | 0.02      | nd      | nd        | nd            | nd        | nd        | nd      |

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

#### VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL

| Sample Description          |           | TP1B-3.5' | TP2A-3.5'  | TP2B-4' | TP3A-2.5' | TP3A-2.5' | TP3B-3' |
|-----------------------------|-----------|-----------|------------|---------|-----------|-----------|---------|
|                             |           |           |            |         |           | Dup       |         |
| Date Extracted              | Reporting | 6/15/07   | 6/15/07    | 6/15/07 | 6/15/07   | 6/15/07   | 6/15/07 |
| Date Analyzed               | Limits    | 6/15/07   | 6/15/07    | 6/15/07 | 6/15/07   | 6/15/07   | 6/15/07 |
|                             | (mg/kg)   | (mg/kg)   | (mg/kg)    | (mg/kg) | (mg/kg)   | (mg/kg)   | (mg/kg) |
| Bromoform                   | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| Isopropylbenzene            | 0.08      | nd        | nd         | nd      | nd        | nd        | nd      |
| 1,2,3-Trichloropropane      | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| Bromobenzene                | 0.03      | nd        | nd         | nd      | nd        | nd        | nd      |
| 1,1,2,2-Tetrachloroethane   | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| n-Propylbenzene             | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| 2-Chlorotoluene             | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| 4-Chlorotoluene             | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| 1,3,5-Trimethylbenzene      | 0.02      | nd        | n <b>d</b> | nd      | nd        | nd        | nd      |
| tert-Butylbenzene           | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| I,2,4-Trimethylbenzene      | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| sec-Butylbenzene            | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| 1,3-Dichlorobenzene         | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| Isopropyltoluene            | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| 1,4-Dichlorobenzene         | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| 1,2-Dichlorobenzene         | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| n-Butylbenzene              | 0.02      | nd        | nd         | nd      | nd        | nd        | nd      |
| 1,2-Dibromo-3-Chloropropane | 0.03      | nd        | nd         | nd      | nd        | nd        | nd      |
| 1,2,4-Trichlorolbenzene     | 0.05      | nd        | nd         | nd      | nd        | nd        | nd      |
| Hexachloro-1,3-butadiene    | 0.10      | nd        | nd         | nd      | nd        | nd        | nd      |
| Naphthalene                 | 0.03      | nd        | nd         | nd      | nd        | nd        | nd      |
| 1,2,3-Trichlorobenzene      | 1.0       | nd        | nd         | nd      | nd        | nd        | nd      |
| Surrogate Recovery          |           |           |            |         |           |           |         |
| Dibromofluoromethane        |           | 118       | 119        | 117     | 109       | 105       | 117     |
| 1,2-Dichloroethane-d4       |           | 117       | 119        | 116     | 105       | 96.8      | 109     |
| Toluene-d8                  |           | 106       | 107        | 107     | 102       | 103       | 107     |
| 4-Bromofluorobenzene        |           | 107       | 104        | 105     | 110       | 103       | 108     |

<sup>&</sup>quot;nd" Indicates not detected at listed detection limit.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

<sup>\*</sup> INSTRUMENT DETECTION LIMIT

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

QA/QC Data - EPA 8260B Analyses

|                       |                            | Sample Ide                   | ntification:             | TP3C-2.5'                  |                              |                          |      |
|-----------------------|----------------------------|------------------------------|--------------------------|----------------------------|------------------------------|--------------------------|------|
|                       |                            | Matrix Spik                  | te                       | Matrix Spike Duplicate     |                              |                          | RPD  |
|                       | Spiked<br>Conc.<br>(mg/kg) | Measured<br>Conc.<br>(mg/kg) | Spike<br>Recovery<br>(%) | Spiked<br>Conc.<br>(mg/kg) | Measured<br>Conc.<br>(mg/kg) | Spike<br>Recovery<br>(%) |      |
| 1,1-Dichloroethene    | 2.00                       | 1.61                         | 81                       | 2.00                       | 1.61                         | 81                       | 0.0  |
| Benzene               | 2.00                       | 2.00                         | 100                      | 2.00                       | 1.96                         | 98                       | 2.0  |
| Toluene               | 2.00                       | 1.52                         | 76                       | 2.00                       | 1.99                         | 100                      | 26.8 |
| Chlorobenzene         | 2.00                       | 2.22                         | 111                      | 2.00                       | 2.19                         | 110                      | 1.4  |
| Trichloroethene (TCE) | 2.00                       | 2.36                         | 118                      | 2.00                       | 2.33                         | 117                      | 1.3  |
| Surrogate Recovery    |                            |                              |                          |                            |                              |                          |      |
| Dibromofluoromethane  |                            |                              | 113                      | -                          |                              | 109                      |      |
| 1,2-Dichloroethane-d4 |                            |                              | 101                      |                            |                              | 93                       |      |
| Toluene-d8            |                            |                              | 106                      |                            |                              | 107                      |      |
| 4-Bromofluorobenzene  |                            |                              | 99                       |                            |                              | 99                       |      |

|                       | Laborator                  | y Control Sa                 | mple                     |
|-----------------------|----------------------------|------------------------------|--------------------------|
|                       | Spiked<br>Conc.<br>(mg/kg) | Measured<br>Conc.<br>(mg/kg) | Spike<br>Recovery<br>(%) |
| 1,1-Dichloroethene    | 2.00                       | 1.95                         | 98                       |
| Benzene               | 2.00                       | 1.69                         | 85                       |
| Toluene               | 2.00                       | 1.77                         | 89                       |
| Chlorobenzene         | 2.00                       | 2.29                         | 115                      |
| Trichloroethene (TCE) | 2.00                       | 2.01                         | 101                      |
| Surrogate Recovery    |                            |                              |                          |
| Dibromofluoromethane  |                            |                              | 117                      |
| 1,2-Dichloroethane-d4 |                            |                              | 106                      |
| Toluene-d8            |                            |                              | 108                      |
| 4-Bromofluorobenzene  |                            |                              | 104                      |

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%

**ACCEPTABLE RPD IS 35%** 

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

### **VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL**

| Sample Description          |           | TP3C-2.5' | TP3D-2'  | HA1-1   | HA2     | TP4A-1  | TP4B-1  |
|-----------------------------|-----------|-----------|----------|---------|---------|---------|---------|
| Date Extracted              | Reporting | 6/15/07   | 6/15/07  | 6/15/07 | 6/15/07 | 6/15/07 | 6/15/07 |
| Date Analyzed               | Limits    | 6/15/07   | 6/15/07  | 6/15/07 | 6/15/07 | 6/15/07 | 6/15/07 |
|                             | (mg/kg)   | (mg/kg)   | (mg/kg)  | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| D: 11 110                   | 0.00      | 1         |          | 1       | 1       | 4       | - 4     |
| Dichlorodifluoromethane     | 0.06      | nd        | nd       | nd      | nd      | nd      | nd      |
| Chloromethane               | 0.06      | nd        | nd       | nd      | nd      | nd      | nd      |
| Vinyl chloride *            | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| Bromomethane                | 0.09      | nd        | nd       | nd      | nd      | nd      | nd      |
| Chloroethane                | 0.06      | nd        | nd       | nd      | nd      | nd      | nd      |
| Trichlorofluoromethane      | 0.05      | nd        | nd       | nd      | nd      | nd      | nd      |
| 1,1-Dichloroethene          | 0.05      | nd        | nd       | nd      | nd      | nd      | nd      |
| Methylene chloride          | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| trans-1,2-Dichloroethene    | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| 1,1-Dichloroethane          | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| 2,2-Dichloropropane         | 0.05      | nd        | nd       | nd      | nd      | nd      | nd      |
| cis -1,2-Dichloroethene     | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| Chloroform                  | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| 1,1,1-Trichloroethane (TCA) | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| Carbon tetrachloride        | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| 1,1-Dichloropropene         | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| Benzene                     | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| 1,2-Dichloroethane (EDC)    | 0.03      | nd        | nd       | nd      | nd      | nd      | nd      |
| Trichloroethene (TCE)       | 0.03      | nd        | nd       | nd      | nd      | nd      | nd      |
| 1,2-Dichloropropane         | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| Dibromomethane              | 0.04      | nd        | nd       | nd      | nd      | nd      | nd      |
| Bromodichloromethane        | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| cis-1,3-Dichloropropene     | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| Toluene                     | 0.02      | nd        | nd       | 0.31    | nd      | nd      | nd      |
| Trans-1,3-Dichloropropene   | 0.03      | nd        | nd       | nd      | nd      | nd      | nd      |
| 1,1,2-Trichloroethane       | 0.03      | nd        | nd       | nd      | nd      | nd      | nd      |
| Tetrachloroethene (PCE)     | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| 1,3-Dichloropropane         | 0.05      | nd        | nd       | nd      | nd      | nd      | nd      |
| Dibromochloromethane        | 0.03      | nd        | nd       | nd      | nd      | nd      | nd      |
| 1,2-Dibromoethane (EDB) *   | 0.005     | nd        | nd       | nd      | nd      | nd      | nd      |
| Chlorobenzene               | 0.02      | nd        | nd       | nd      | nd      | nd      | nd      |
| 1,1,1,2-Tetrachloroethane   | 0.03      | nd        | nd       | nd      | nd      | nd      | nd      |
| Ethylbenzene                | 0.03      | nd        | nd       | nd      | nd      | nd      | nd      |
| Total Xylenes               | 0.03      | nd        | nd       | nd      | nd      | nd      | nd      |
| Styrenes                    | 0.03      | nd        | nd<br>nd | nd      | nd      | nd      | nd      |

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

#### **VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL**

| Sample Description          |           | TP3C-2.5' | TP3D-2' | HA1-1      | HA2        | TP4A-1  | TP4B-1  |
|-----------------------------|-----------|-----------|---------|------------|------------|---------|---------|
| Date Extracted              | Reporting | 6/15/07   | 6/15/07 | 6/15/07    | 6/15/07    | 6/15/07 | 6/15/07 |
| Date Analyzed               | Limits    | 6/15/07   | 6/15/07 | 6/15/07    | 6/15/07    | 6/15/07 | 6/15/07 |
| Buto Mary 200               | (mg/kg)   | (mg/kg)   | (mg/kg) | (mg/kg)    | (mg/kg)    | (mg/kg) | (mg/kg) |
|                             | , 0 0,    |           |         | , <u>J</u> |            |         |         |
| Bromoform                   | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| Isopropylbenzene            | 0.08      | nd        | nd      | nd         | nd         | nd      | nd      |
| 1,2,3-Trichloropropane      | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| Bromobenzene                | 0.03      | nd        | nd      | nd         | nd         | nd      | nd      |
| 1,1,2,2-Tetrachloroethane   | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| n-Propylbenzene             | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| 2-Chlorotoluene             | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| 4-Chlorotoluene             | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| 1,3,5-Trimethylbenzene      | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| tert-Butylbenzene           | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| I,2,4-Trimethylbenzene      | 0.02      | nd        | nd      | nd         | nd         | nd      | nđ      |
| sec-Butylbenzene            | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| 1,3-Dichlorobenzene         | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| Isopropyltoluene            | 0.02      | nd        | nd      | nđ         | nd         | nd      | nd      |
| 1,4-Dichlorobenzene         | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| 1,2-Dichlorobenzene         | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| n-Butylbenzene              | 0.02      | nd        | nd      | nd         | nd         | nd      | nd      |
| 1,2-Dibromo-3-Chloropropane | 0.03      | nd        | nd      | nd         | nd         | nd      | nd      |
| 1,2,4-Trichlorolbenzene     | 0.05      | nd        | nd      | nd         | nd         | nd      | nd      |
| Hexachloro-1,3-butadiene    | 0.10      | nd        | nd      | nd         | n <b>d</b> | nđ      | nd      |
| Naphthalene                 | 0.03      | nd        | nd      | nd         | nd         | nd      | nd      |
| 1,2,3-Trichlorobenzene      | 1.0       | nd        | nd      | nd         | nd         | nd      | nd      |
| Surrogate Recovery          |           |           |         |            |            |         |         |
| Dibromofluoromethane        |           | 112       | 114     | 111        | 108        | 110     | 113     |
| 1,2-Dichloroethane-d4       |           | 103       | 103     | 97.2       | 98.2       | 103     | 105     |
| Toluene-d8                  |           | 107       | 107     | 107        | 106        | 108     | 108     |
| 4-Bromofluorobenzene        |           | 104       | 102     | 109        | 98.4       | 99.3    | 102     |

<sup>&</sup>quot;nd" Indicates not detected at listed detection limit.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

<sup>\*</sup> INSTRUMENT DETECTION LIMIT

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL

| Sample Description          | LE ORGAN          | Method  | B3-16'  | B4-20'  | B6-4'   | B5-12'  | B7-12'  |
|-----------------------------|-------------------|---------|---------|---------|---------|---------|---------|
| Sample Description          |                   | Blank   | D3-10.  | B4-20   | D0-4    | B3-12   | D/-12   |
| Date Extracted              | The second second |         | 6/20/07 | 6/20/07 | 6/00/07 | 6/00/07 | (/20/07 |
|                             | Reporting         | N/A     | 6/20/07 | 6/20/07 | 6/20/07 | 6/20/07 | 6/20/07 |
| Date Analyzed               | Limits            | 6/23/07 | 6/21/07 | 6/23/07 | 6/23/07 | 6/23/07 | 6/23/07 |
|                             | (mg/kg)           | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| P3.11 U/I //                | 0.06              | 4       | . 1     |         | 4       | 4       | 4       |
| Dichlorodifluoromethane     | 0.06              | nd      | nd<br>1 | nd      | nd      | nd      | nd      |
| Chloromethane               | 0.06              | nd      | nd      | nd      | nd      | nd      | nd      |
| Vinyl chloride *            | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| Bromomethane                | 0.09              | nd      | nd      | nd      | nd      | nd      | nd      |
| Chloroethane                | 0.06              | nd      | nd      | nd      | nd      | nd      | nd      |
| Trichlorofluoromethane      | 0.05              | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,1-Dichloroethene          | 0.05              | nd      | nd      | nd      | nd      | nd      | nd      |
| Methylene chloride          | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| trans -1,2-Dichloroethene   | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| l,1-Dichloroethane          | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| 2,2-Dichloropropane         | 0.05              | nd      | nd      | nd      | nd      | nd      | nd      |
| cis -1,2-Dichloroethene     | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| Chloroform                  | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,1,1-Trichloroethane (TCA) | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| Carbon tetrachloride        | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,1-Dichloropropene         | 0.02              | nd      | nđ      | nd      | nd      | nd      | nd      |
| Benzene                     | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2-Dichloroethane (EDC)    | 0.03              | nd      | nd      | nd      | nd      | nd      | nd      |
| Trichloroethene (TCE)       | 0.03              | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2-Dichloropropane         | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| Dibromomethane              | 0.04              | nd      | nd      | nd      | nd      | nd      | nd      |
| Bromodichloromethane        | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| cis-1,3-Dichloropropene     | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| Toluene                     | 0.02              | nd      | nđ      | nd      | nd      | nd      | nd      |
| Trans-1,3-Dichloropropene   | 0.03              | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,1,2-Trichloroethane       | 0.03              | nd      | nd      | nd      | nd      | nd      | nd      |
| Tetrachloroethene (PCE)     | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,3-Dichloropropane         | 0.05              | nd      | nd      | nd      | nd      | nd      | nd      |
| Dibromochloromethane        | 0.03              | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2-Dibromoethane (EDB) *   | 0.005             | nd      | nd      | nd      | nd      | nd      | nd      |
| Chlorobenzene               | 0.02              | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,1,1,2-Tetrachloroethane   | 0.03              | nd      | nd      | nd      | nd      | nd      | nd      |
| Ethylbenzene                | 0.03              | nd      | nd      | nd      | nd      | nd      | nd      |
| Total Xylenes               | 0.03              | nd      | nd      | nd      | 0.056   | nd      | nd      |
| Styrenes                    | 0.03              | nd      | nd      | nd      | nd      | nd      | nd      |
| GLYTCHES                    | 0.02              | IIU     | - IIU   | IIU     | IIU     | IIU     | IRU     |

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

#### VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL

| Sample Description          | <del></del> | Method<br>Blank | B3-16'  | B4-20'  | B6-4'   | B5-12'  | B7-12'  |
|-----------------------------|-------------|-----------------|---------|---------|---------|---------|---------|
| Date Extracted              | Reporting   | N/A             | 6/20/07 | 6/20/07 | 6/20/07 | 6/20/07 | 6/20/07 |
| Date Analyzed               | Limits      | 6/21/07         | 6/21/07 | 6/23/07 | 6/21/07 | 6/21/07 | 6/21/07 |
|                             | (mg/kg)     | (mg/kg)         | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| Bromoform                   | 0.02        | nd              | nd      | nd      | nd      | nd      | nd      |
| Isopropylbenzene            | 0.08        | nd              | nd      | nd      | nd      | nd      | nd      |
| 1,2,3-Trichloropropane      | 0.02        | nd              | nd      | nd      | nd      | nd      | nd      |
| Bromobenzene                | 0.03        | nd              | nd      | nd      | nd      | nd      | nd      |
| 1,1,2,2-Tetrachloroethane   | 0.02        | nd              | nd      | nd      | nd      | nd      | nd      |
| n-Propylbenzene             | 0.02        | nd              | nd      | nd      | nd      | nd      | nd      |
| 2-Chlorotoluene             | 0.02        | nd              | nd      | nd      | nď      | nd      | nd      |
| 4-Chlorotoluene             | 0.02        | nd              | nd      | nd      | nd      | nd      | nd      |
| 1,3,5-Trimethylbenzene      | 0.02        | nd              | nd      | nd      | 0.12    | nđ      | nd      |
| tert-Butylbenzene           | 0.02        | nd              | nd      | nd      | nd      | nd      | nd      |
| 1,2,4-Trimethylbenzene      | 0.02        | nd              | nd      | nd      | nd      | nd      | nd      |
| sec-Butylbenzene            | 0.02        | nd              | nd      | nd      | nd      | nd      | nd      |
| 1,3-Dichlorobenzene         | 0.02        | nd              | nd      | nd      | nd      | nd      | nd      |
| Isopropyltoluene            | 0.02        | nd              | πd      | nd      | 0.06    | nd      | nd      |
| 1,4-Dichlorobenzene         | 0.02        | nd              | nd      | nd      | nd      | nd      | nd      |
| 1,2-Dichlorobenzene         | 0.02        | nd              | nd      | nd      | nd      | nd      | nd      |
| n-Butylbenzene              | 0.02        | nd              | nd      | nd      | 0.10    | nd      | nd      |
| 1,2-Dibromo-3-Chloropropane | 0.03        | nd              | nd      | nd      | nd      | nd      | nd      |
| 1,2,4-Trichlorolbenzene     | 0.05        | nd              | nd      | nd      | nd      | nd      | nd      |
| Hexachloro-1,3-butadiene    | 0.10        | nd              | nd      | nd      | nd      | nd      | nd      |
| Naphthalene                 | 0.03        | nd              | nd      | nd      | nd      | nd      | nd      |
| 1,2,3-Trichlorobenzene      | 1.0         | nd              | nd      | nd      | nd      | nd      | nd      |
| Surrogate Recovery          |             |                 |         |         |         |         |         |
| Dibromofluoromethane        |             | 113             | 111     | 119     | 126     | 115     | 118     |
| 1,2-Dichloroethane-d4       |             | 93.3            | 100     | 101     | 126     | 98.5    | 94.6    |
| Toluene-d8                  |             | 111             | 106     | 124     | 114     | 111     | 114     |
| 4-Bromofluorobenzene        |             | 98.3            | 97.8    | 111     | 107     | 106     | 106     |

<sup>&</sup>quot;nd" Indicates not detected at listed detection limit.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

<sup>\*</sup> INSTRUMENT DETECTION LIMIT

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

# QA/QC Data - EPA 8260B Analyses

|                       |                            | Matrix Spik                  | ie .                     | Matr                       | ix Spike Dupl                | icate                    | RPD  |
|-----------------------|----------------------------|------------------------------|--------------------------|----------------------------|------------------------------|--------------------------|------|
|                       | Spiked<br>Conc.<br>(mg/kg) | Measured<br>Conc.<br>(mg/kg) | Spike<br>Recovery<br>(%) | Spiked<br>Conc.<br>(mg/kg) | Measured<br>Conc.<br>(mg/kg) | Spike<br>Recovery<br>(%) |      |
| 1,1-Dichloroethene    | 2.00                       | 1.70                         | 85                       | 2.00                       | 1.41                         | 71                       | 18.6 |
| Benzene               | 2.00                       | 1.97                         | 99                       | 2.00                       | 1.58                         | 79                       | 22.0 |
| Toluene               | 2.00                       | 2.04                         | 102                      | 2.00                       | 1.68                         | 84                       | 19.4 |
| Chlorobenzene         | 2.00                       | 2.39                         | 120                      | 2.00                       | 2.11                         | 106                      | 12.4 |
| Trichloroethene (TCE) | 2.00                       | 2.25                         | 113                      | 2.00                       | 1.89                         | 95                       | 17.4 |
| Surrogate Recovery    |                            |                              |                          |                            |                              |                          |      |
| Dibromofluoromethane  |                            |                              |                          |                            |                              |                          |      |
| 1,2-Dichloroethane-d4 |                            |                              |                          |                            |                              |                          |      |

Toluene-d8

4-Bromofluorobenzene

|                       | Laborator                  | y Control Sa                 | mple                     |
|-----------------------|----------------------------|------------------------------|--------------------------|
|                       | Spiked<br>Conc.<br>(mg/kg) | Measured<br>Conc.<br>(mg/kg) | Spike<br>Recovery<br>(%) |
| 1,1-Dichloroethene    | 2.00                       | 2.39                         | 120                      |
| Benzene               | 2.00                       | 2.36                         | 118                      |
| Toluene               | 2.00                       | 2.10                         | 105                      |
| Chlorobenzene         | 2.00                       | 2.52                         | 126                      |
| Trichloroethene (TCE) | 2.00                       | 2.63                         | 132                      |
| Surrogate Recovery    |                            |                              |                          |
| Dibromofluoromethane  |                            |                              | 119                      |
| 1,2-Dichloroethane-d4 |                            |                              | 101                      |
| Toluene-d8            |                            |                              | 112                      |
| 4-Bromofluorobenzene  |                            |                              | 101                      |

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%

**ACCEPTABLE RPD IS 35%** 

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

#### **VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL**

| · ` · · ·                   | LE ORGAN                              | VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL |         |         |         |         |         |  |  |  |  |
|-----------------------------|---------------------------------------|--|---------|---------|---------|---------|---------|--|--|--|--|
| Sample Description          |                                       | B8-20  | B12-11' | B12-16' | B12-16' | Method  | TP1A    |  |  |  |  |
|                             | · · · · · · · · · · · · · · · · · · · |  |         |         | Dup     | Blank   | 4'      |  |  |  |  |
| Date Extracted              | Reporting                             | 6/20/07  | 6/14/07 | 6/14/07 | 6/14/07 | N/A     | 6/15/07 |  |  |  |  |
| Date Analyzed               | Limits                                | 6/23/07  | 6/14/07 | 6/14/07 | 6/14/07 | 6/15/07 | 6/15/07 |  |  |  |  |
|                             | (mg/kg)                               | (mg/kg)  | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |  |  |  |  |
|                             |                                       |  |         |         |         |         |         |  |  |  |  |
| Dichlorodifluoromethane     | 0.06                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Chloromethane               | 0.06                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Vinyl chloride *            | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Bromomethane                | 0.09                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Chloroethane                | 0.06                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Trichlorofluoromethane      | 0.05                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| 1,1-Dichloroethene          | 0.05                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Methylene chloride          | 0.03                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| trans-1,2-Dichloroethene    | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| 1,1-Dichloroethane          | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| 2,2-Dichloropropane         | 0.05                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| cis-1,2-Dichloroethene      | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Chloroform                  | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| 1,1,1-Trichloroethane (TCA) | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Carbon tetrachloride        | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| 1,1-Dichloropropene         | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Benzene                     | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| 1,2-Dichloroethane (EDC)    | 0.03                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Trichloroethene (TCE)       | 0.03                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| 1,2-Dichloropropane         | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Dibromomethane              | 0.04                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Bromodichloromethane        | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| cis-1,3-Dichloropropene     | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Toluene                     | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Trans-1,3-Dichloropropene   | 0.03                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| 1,1,2-Trichloroethane       | 0.03                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Tetrachloroethene (PCE)     | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| 1,3-Dichloropropane         | 0.05                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Dibromochloromethane        | 0.03                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| 1,2-Dibromoethane (EDB) *   | 0.005                                 | nd   | nd ·    | nd      | nd      | nd      | nd      |  |  |  |  |
| Chlorobenzene               | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| 1,1,1,2-Tetrachloroethane   | 0.03                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Ethylbenzene                | 0.03                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Total Xylenes               | 0.03                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |
| Styrenes                    | 0.02                                  | nd   | nd      | nd      | nd      | nd      | nd      |  |  |  |  |

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

**VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN SOIL** 

| Sample Description          |           | B11-15' | B12-11' | B12-16' | B12-16' | Method  | TP1A    |
|-----------------------------|-----------|---------|---------|---------|---------|---------|---------|
|                             |           |         |         |         | Dup     | Blank   | 4'      |
| Date Extracted              | Reporting | 6/14/07 | 6/14/07 | 6/14/07 | 6/14/07 | N/A     | 6/15/07 |
| Date Analyzed               | Limits    | 6/14/07 | 6/14/07 | 6/14/07 | 6/14/07 | 6/15/07 | 6/15/07 |
|                             | (mg/kg)   | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| Bromoform                   | 0.02      | nd      | nd      | nd      | nd      | nđ      | nd      |
| Isopropylbenzene            | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2,3-Trichloropropane      | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| Bromobenzene                | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,1,2,2-Tetrachloroethane   | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| n-Propylbenzene             | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 2-Chlorotoluene             | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 4-Chlorotoluene             | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,3,5-Trimethylbenzene      | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| tert-Butylbenzene           | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2,4-Trimethylbenzene      | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| sec-Butylbenzene            | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,3-Dichlorobenzene         | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| Isopropyltoluene            | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,4-Dichlorobenzene         | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2-Dichlorobenzene         | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| n-Butylbenzene              | 0.02      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2-Dibromo-3-Chloropropane | 0.03      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2,4-Trichlorolbenzene     | 0.05      | nd      | nd      | nd      | nd      | nd      | nd      |
| Hexachloro-1,3-butadiene    | 0.10      | nd      | nd      | nd      | nd      | nd      | nd      |
| Naphthalene                 | 0.03      | nd      | nd      | nd      | nd      | nd      | nd      |
| 1,2,3-Trichlorobenzene      | 1.0       | nd      | nd      | nd      | nd      | nd      | nd      |
| Surrogate Recovery          |           |         |         |         |         |         |         |
| Dibromofluoromethane        |           | 105     | 125     |         |         |         |         |
| 1,2-Dichloroethane-d4       |           | 80.2    | 114     |         |         |         |         |
| Toluene-d8                  |           | 110     | 116     |         |         |         |         |
| 4-Bromofluorobenzene        |           | 102     | 110     |         |         |         |         |

<sup>&</sup>quot;nd" Indicates not detected at listed detection limit.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

<sup>\*</sup> INSTRUMENT DETECTION LIMIT

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

**VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN WATER** 

| Sample Description                             |            | Method   | B11-W   | B11-12   |     |
|--|------------|----------|---------|----------|-----|
| D . 6  |            | Blank    |         |          |     |
| Date Sampled                                   | Reporting  | N/A      | 6/14/07 | 6/14/07  |     |
| Date Analyzed                                  | Limits     | 6/15/07  | 6/15/07 | 6/15/07  |     |
|  | (ug/l)     | (ug/l)   | (ug/l)  | (ug/l)   |     |
| Dichlorodifluoromethane                        | 2.0        | nd       | nd      | nd       |     |
| Chloromethane                                  | 2.0        | nd       | nd      | nd       |     |
| Vinyl chloride *                               | 0.2        | nd       | nd      | nd       |     |
| Bromomethane                                   | 2.0        | nd       | nd      | nd       |     |
| Chloroethane                                   | 2.0        | nd       | nd      | nd       |     |
| Trichlorofluoromethane                         | 2.0        | nd       | nd      | nd       |     |
| 1.1-Dichloroethene                             | 2.0        | nd       | nd      | nd       |     |
| Methylene chloride                             | 1.0        | nd       | nd      | nd       |     |
| trans -1,2-Dichloroethene                      | 1.0        | nd       | nd      | nd       |     |
| 1,1-Dichloroethane                             | 1.0        | nd       | nd      | nd       |     |
| 2,2-Dichloropropane                            | 2.0        | nd       | nd      | nd       |     |
| cis -1,2-Dichloroethene                        | 1.0        | nd       | nd      | nd       |     |
| Chloroform                                     | 1.0        | nd       | nd      | nd       |     |
| 1,1,1-Trichloroethane (TCA)                    | 1.0        | nd       | nd      | nd       |     |
| Carbon tetrachloride                           | 1.0        | nd       | nd      | nd       |     |
| 1,1-Dichloropropene                            | 1.0        | nd       | nd      | nd       |     |
| Benzene  | 1.0        | nd       | nd      |          |     |
|  | 1.0        | nd<br>nd | nd      | nd<br>nd |     |
| 1,2-Dichloroethane (EDC) Trichloroethene (TCE) |            | -        |         |          |     |
|  | 1.0<br>1.0 | nd       | nd      | nd       |     |
| 1,2-Dichloropropane                            | 1.0        | nd       | nd      | nd       | Xe. |
| Dibromomethane                                 |            | nd       | nd      | nd       |     |
| Bromodichloromethane                           | 1.0        | nd       | nd      | nd       |     |
| cis-1,3-Dichloropropene                        | 1.0        | nd       | nd      | nd       |     |
| Toluene  | 1.0        | nd       | nd      | nd       |     |
| Trans-1,3-Dichloropropene                      | 1.0        | nd       | nd      | nd       |     |
| 1,1,2-Trichloroethane                          | 1.0        | nd       | nd      | nd       |     |
| Tetrachloroethene (PCE)                        | 1.0        | nd       | nd      | nd       |     |
| 1,3-Dichloropropane                            | 1.0        | nd       | nd      | nd       |     |
| Dibromochloromethane                           | 1.0        | nd       | nd      | nd       |     |
| 1,2-Dibromoethane (EDB) *                      | 0.01       | nd       | nd      | nd       |     |
| Chlorobenzene                                  | 1.0        | nd       | nd      | nd       |     |
| 1,1,1,2-Tetrachloroethane                      | 1.0        | nd       | nd      | nd       |     |
| Ethylbenzene                                   | 1.0        | nd       | nd      | nd       |     |
| Total Xylenes                                  | 1.0        | nd       | nd      | nd       |     |
| Styrenes                                       | 1.0        | nd       | nd      | nd       |     |

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

#### **VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN WATER**

| Sample Description          |           | Method  | B11-W   | B11-12  |   |
|-----------------------------|-----------|---------|---------|---------|---|
|                             |           | Blank   |         |         |   |
|                             | Reporting | N/A     | 6/14/07 | 6/14/07 | * |
| Date Analyzed               | Limits    | 6/15/07 | 6/15/07 | 6/15/07 |   |
|                             | (ug/l)    | (ug/l)  | (ug/l)  | (ug/l)  |   |
| Bromoform                   | 1.0       | nd      | nd      | nd      |   |
| Isopropylbenzene            | 4.0       | nd      | nd      | nd      |   |
| 1,2,3-Trichloropropane      | 1.0       | nd      | nd      | nd      |   |
| Bromobenzene                | 1.0       | nd      | nd      | nd      |   |
| 1,1,2,2-Tetrachloroethane   | 1.0       | nd      | nd      | nd      |   |
| n-Propylbenzene             | 1.0       | nd      | nd      | nd      |   |
| 2-Chlorotoluene             | 1.0       | nd      | nd      | nd      |   |
| 4-Chlorotoluene             | 1.0       | nd      | nd      | nd      |   |
| 1,3,5-Trimethylbenzene      | 1.0       | nd      | nd      | nd      |   |
| tert-Butylbenzene           | 1.0       | nd      | nd      | nd      |   |
| 1,2,4-Trimethylbenzene      | 1.0       | nd      | nd      | nd      |   |
| sec-Butylbenzene            | 1.0       | nd      | nd      | nd      |   |
| 1,3-Dichlorobenzene         | 1.0       | nd      | nd      | nd      |   |
| Isopropyltoluene            | 1.0       | nd      | nd      | nd      |   |
| 1,4-Dichlorobenzene         | 1.0       | nd      | nd      | nd      |   |
| 1,2-Dichlorobenzene         | 1.0       | nd      | nd      | nd      |   |
| n-Butylbenzene              | 1.0       | nd      | nd      | nd      |   |
| 1,2-Dibromo-3-Chloropropane | 1.0       | nd      | nd      | nd      |   |
| 1,2,4-Trichlorolbenzene     | 2.0       | nd      | nd      | nd      |   |
| Hexachloro-1,3-butadiene    | 5.0       | nd      | nd      | nd      |   |
| Naphthalene                 | 5.0       | nd      | nd      | nd      |   |
| 1,2,3-Trichlorobenzene      | 5.0       | nd      | nd      | nd      |   |
| Surrogate Recovery          |           |         |         |         |   |
| Dibromofluoromethane        |           | 111     | 115     | 115     |   |
| 1,2-Dichloroethane-d4       |           | 106     | 108     | 106     |   |
| Toluene-d8                  |           | 108     | 106     | 108     |   |
| 4-Bromofluorobenzene        |           | 106     | 104     | 105     |   |

<sup>&</sup>quot;nd" Indicates not detected at listed detection limit.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

<sup>\*</sup> INSTRUMENT DETECTION LIMIT

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

### QA/QC Data - EPA 8260B Analyses

|                       |                           | Sample Ide                  | entification:            | B11-12                    |                             |                          |     |  |
|-----------------------|---------------------------|-----------------------------|--------------------------|---------------------------|-----------------------------|--------------------------|-----|--|
|                       | Matrix Spike              |                             |                          | Matr                      | Matrix Spike Duplicate      |                          |     |  |
|                       | Spiked<br>Conc.<br>(ug/l) | Measured<br>Conc.<br>(ug/l) | Spike<br>Recovery<br>(%) | Spiked<br>Conc.<br>(ug/l) | Measured<br>Conc.<br>(ug/l) | Spike<br>Recovery<br>(%) |     |  |
| 1,1-Dichloroethene    | 40                        | 37.1                        | 93                       | 40                        | 38.7                        | 97                       | 4.2 |  |
| Benzene               | 40                        | 33.3                        | 83                       | 40                        | 35.4                        | 89                       | 6.1 |  |
| Toluene               | 40                        | 35.3                        | 88                       | 40                        | 36.5                        | 91                       | 3.3 |  |
| Chlorobenzene         | 40                        | 45.6                        | 114                      | 40                        | 47.9                        | 120                      | 4.9 |  |
| Trichloroethene (TCE) | 40                        | 39.9                        | 100                      | 40                        | 41.4                        | 104                      | 3.7 |  |
| Surrogate Recovery    |                           |                             |                          |                           |                             |                          |     |  |
| Dibromofluoromethane  |                           |                             | 118                      |                           |                             | 114                      |     |  |
| 1,2-Dichloroethane-d4 |                           |                             | 113                      |                           |                             | 99                       |     |  |
| Toluene-d8            |                           |                             | 109                      |                           |                             | 107                      |     |  |
| 4-Bromofluorobenzene  |                           |                             | 104                      |                           |                             | 103                      |     |  |

|                       | Laborator                 | y Control Sa                | mple                     |
|-----------------------|---------------------------|-----------------------------|--------------------------|
|                       | Spiked<br>Conc.<br>(ug/l) | Measured<br>Conc.<br>(ug/l) | Spike<br>Recovery<br>(%) |
| 1,1-Dichloroethene    | 40                        | 39.0                        | 98                       |
| Benzene               | 40                        | 34.0                        | 85                       |
| Toluene               | 40                        | 35.4                        | 89                       |
| Chlorobenzene         | 40                        | 45.8                        | 115                      |
| Trichloroethene (TCE) | 40                        | 40.2                        | 101                      |
| Surrogate Recovery    |                           |                             |                          |
| Dibromofluoromethane  |                           |                             | 117                      |
| 1,2-Dichloroethane-d4 |                           |                             | 106                      |
| Toluene-d8            |                           |                             | 108                      |
| 4-Bromofluorobenzene  |                           |                             | 104                      |

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%

**ACCEPTABLE RPD IS 35%** 

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

### VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN WATER

| Sample Description          |           | Method  | B4W-20  | B4W-20  |  |
|-----------------------------|-----------|---------|---------|---------|--|
|                             |           | Blank   |         | Dup     |  |
| Date Sampled                | Reporting | N/A     | 6/20/07 | 6/20/07 |  |
| Date Analyzed               | Limits    | 6/21/07 | 6/21/07 | 6/21/07 |  |
|                             | (ug/l)    | (ug/l)  | (ug/l)  | (ug/l)  |  |
|                             |           |         |         |         |  |
| Dichlorodifluoromethane     | 2.0       | nd      | nd      | nd      |  |
| Chloromethane               | 2.0       | nd      | nd      | nd      |  |
| Vinyl chloride *            | 0.2       | nd      | nd      | nd      |  |
| Bromomethane                | 2.0       | nd      | nd      | nd      |  |
| Chloroethane                | 2.0       | nd      | nd      | nd      |  |
| Trichlorofluoromethane      | 2.0       | nd      | nd      | nd      |  |
| 1, I-Dichloroethene         | 2.0       | nd      | nd      | nd      |  |
| Methylene chloride          | 1.0       | nd      | nd      | nd      |  |
| trans-1,2-Dichloroethene    | 1.0       | nd      | nd      | nd      |  |
| 1,1-Dichloroethane          | 1.0       | nd      | nd      | nd      |  |
| 2,2-Dichloropropane         | 2.0       | nd      | nd      | nd      |  |
| cis -1,2-Dichloroethene     | 1.0       | nd      | nd      | nd      |  |
| Chloroform                  | 1.0       | nd      | nd      | nd      |  |
| 1,1,1-Trichloroethane (TCA) | 1.0       | nd      | nd      | nd      |  |
| Carbon tetrachloride        | 1.0       | nd      | nd      | nd      |  |
| 1,1-Dichloropropene         | 1.0       | nd      | nd      | nd      |  |
| Benzene                     | 1.0       | nd      | nd      | nd      |  |
| 1,2-Dichloroethane (EDC)    | 1.0       | nd      | nd      | nd      |  |
| Trichloroethene (TCE)       | 1.0       | nd      | nd      | nd      |  |
| 1,2-Dichloropropane         | 1.0       | nd      | nd      | nd      |  |
| Dibromomethane              | 1.0       | nd      | nd      | nd      |  |
| Bromodichloromethane        | 1.0       | nd      | nd      | nd      |  |
| cis-1,3-Dichloropropene     | 1.0       | nd      | nd      | nd      |  |
| Toluene                     | 1.0       | nd      | nd      | nd      |  |
| Trans-1,3-Dichloropropene   | 1.0       | nd      | nd      | nd      |  |
| 1,1,2-Trichloroethane       | 1.0       | nd      | nd      | nd      |  |
| Tetrachloroethene (PCE)     | 1.0       | nd      | nd      | nd      |  |
| 1,3-Dichloropropane         | 1.0       | nd      | nd      | nd      |  |
| Dibromochloromethane        | 1.0       | nd      | nd      | nd      |  |
| 1,2-Dibromoethane (EDB) *   | 0.01      | nd      | nd      | nd      |  |
| Chlorobenzene               | 1.0       | nd      | nd      | nd      |  |
| 1,1,1,2-Tetrachloroethane   | 1.0       | nd      | nd      | nd      |  |
| Ethylbenzene                | 1.0       | nd      | nd      | nd      |  |
| Total Xylenes               | 1.0       | nd      | nd      | nd      |  |
| Styrenes                    | 1.0       | nd      | nd      | nd      |  |

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

**VOLATILE ORGANIC COMPOUNDS BY EPA METHOD 8260B IN WATER** 

| Sample Description          |           | Method  | B4W-20  | B4W-20  |  |
|-----------------------------|-----------|---------|---------|---------|--|
|                             |           | Blank   |         | Dup     |  |
| Date Extracted              | Reporting | N/A     | 6/20/07 | 6/20/07 |  |
| Date Analyzed               | Limits    | 6/21/07 | 6/21/07 | 6/21/07 |  |
|                             | (ug/l)    | (ug/l)  | (ug/l)  | (ug/l)  |  |
| Bromoform                   | 1.0       | nd      | nd      | nd      |  |
| Isopropylbenzene            | 4.0       | nd      | nd      | nd      |  |
| 1,2,3-Trichloropropane      | 1.0       | nd      | nd      | nd      |  |
| Bromobenzene                | 1.0       | nd      | nd      | nd      |  |
| 1,1,2,2-Tetrachloroethane   | 1.0       | nd      | nd      | nd      |  |
| n-Propylbenzene             | 1.0       | nd      | nd      | nd      |  |
| 2-Chlorotoluene             | 1.0       | nd      | nd      | nd      |  |
| 4-Chlorotoluene             | 1.0       | nd      | nd      | nd      |  |
| 1,3,5-Trimethylbenzene      | 1.0       | nd      | nd      | nd      |  |
| tert-Butylbenzene           | 1.0       | nd      | nd      | nd      |  |
| 1,2,4-Trimethylbenzene      | 1.0       | nd      | nd      | nd      |  |
| sec-Butylbenzene            | 1.0       | nd      | nd      | nd      |  |
| 1,3-Dichlorobenzene         | 1.0       | nd      | nd      | nd      |  |
| Isopropyltoluene            | 1.0       | nd      | nd      | nd      |  |
| 1,4-Dichlorobenzene         | 1.0       | nd      | nd      | nd      |  |
| 1,2-Dichlorobenzene         | 1.0       | nd      | nd      | nd      |  |
| n-Butylbenzene              | 1.0       | nd      | nd      | nd      |  |
| 1,2-Dibromo-3-Chloropropane |           | nd      | nd      | nd      |  |
| 1,2,4-Trichlorolbenzene     | 2.0       | nd      | nd      | nd      |  |
| Hexachloro-1,3-butadiene    | 5.0       | nd      | nd      | nd      |  |
| Naphthalene                 | 5.0       | nd      | nd      | nd      |  |
| 1,2,3-Trichlorobenzene      | 5.0       | nd      | nd      | nd      |  |
| Surrogate Recovery          |           |         |         |         |  |
| Dibromofluoromethane        |           | 117     | 121     | 121     |  |
| 1,2-Dichloroethane-d4       |           | 106     | 105     | 121     |  |
| Toluene-d8                  |           | 107     | 107     | 110     |  |
| 4-Bromofluorobenzene        |           | 98.3    | 106     | 118     |  |

<sup>&</sup>quot;nd" Indicates not detected at listed detection limit.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

<sup>\*</sup> INSTRUMENT DETECTION LIMIT

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

### QA/QC Data - EPA 8260B Analyses

|                       |              |                | ntification:      |                 |                |                   |     |
|-----------------------|--------------|----------------|-------------------|-----------------|----------------|-------------------|-----|
|                       |              | Matrix Spik    | <u>ce</u>         | Matr            | ix Spike Dupl  | icate             | RPD |
|                       | Spiked Conc. | Measured Conc. | Spike<br>Recovery | Spiked<br>Conc. | Measured Conc. | Spike<br>Recovery |     |
|                       | (ug/l)       | (ug/l)         | (%)               | (ug/l)          | (ug/l)         | (%)               |     |
| 1,1-Dichloroethene    | 40           | 37.1           | 93                | 40              | 38.7           | 97                | 4.2 |
| Benzene               | 40           | 33.3           | 83                | 40              | 35.4           | 89                | 6.1 |
| Toluene               | 40           | 35.3           | 88                | 40              | 36.5           | 91                | 3.3 |
| Chlorobenzene         | 40           | 45.6           | 114               | 40              | 47.9           | 120               | 4.9 |
| Trichloroethene (TCE) | 40           | 39.9           | 100               | 40              | 41.4           | 104               | 3.7 |
| Surrogate Recovery    |              |                |                   |                 |                |                   |     |
| Dibromofluoromethane  |              |                | _                 |                 |                |                   |     |
| 1,2-Dichloroethane-d4 |              |                |                   |                 |                |                   |     |
| Toluene-d8            |              |                |                   |                 |                |                   |     |
| 4-Bromofluorobenzene  |              |                |                   |                 |                |                   |     |

|                       | Laborator | y Control Sa | mple        |
|-----------------------|-----------|--------------|-------------|
|                       | Spiked    | Measured     | Spike       |
|                       | Conc.     | Conc.        | Recovery    |
|                       | (ug/l)    | (ug/l)       | (%)         |
| 1,1-Dichloroethene    | 40        | 43.9         | 110         |
| Benzene               | 40        | 45.6         | 114         |
| Toluene               | 40        | 41.2         | 103         |
| Chlorobenzene         | 40        | 51.3         | 128         |
| Trichloroethene (TCE) | 40        | 49.4         | 124         |
| Surrogate Recovery    |           |              | <del></del> |
| Dibromofluoromethane  |           |              | 120         |
| 1,2-Dichloroethane-d4 |           |              | 109         |
| Toluene-d8            |           |              | 108         |
| 4-Bromofluorobenzene  |           |              | 102         |

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135%

**ACCEPTABLE RPD IS 35%** 

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

# Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

| Sample                     | Date      | Surrogate    | Diesel  | Mineral Oil | Oil     |
|----------------------------|-----------|--------------|---------|-------------|---------|
| Number                     | Analyzed  | Recovery (%) | (mg/kg) | (mg/kg)     | (mg/kg) |
| Method Blank               | 6/14/2007 | 116          | nd      | nd          | nd      |
| B1-14'                     | 6/14/2007 | 110          | nd      | nd          | nd      |
| B1-20'                     | 6/14/2007 | 101          | nd      | nd          | nd      |
| B2-14'                     | 6/14/2007 | 99           | nd      | nd          | nd      |
| B2-20'                     | 6/14/2007 | 91           | nd      | nd          | nd      |
| B11-8'                     | 6/14/2007 | 108          | nd      | nd          | 4100    |
| B11-15'                    | 6/14/2007 | 121          | nd      | nd          | nd      |
| B12-11'                    | 6/14/2007 | 117          | nd      | nd          | nd      |
| B12-11' Dup                | 6/14/2007 | 86           | nd      | nd          | nd      |
| B12-16'                    | 6/14/2007 | 108          | nd      | nd          | nd      |
|                            |           |              |         |             |         |
| Practical Quantitation Lin | nit       |              | 25      | 40          | 40      |

<sup>&</sup>quot;nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

# Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

| Sample                     | Date      | Surrogate    | Diesel  | Mineral Oil | Oil           |  |
|----------------------------|-----------|--------------|---------|-------------|---------------|--|
| Number                     | Analyzed  | Recovery (%) | (mg/kg) | (mg/kg)     | (mg/kg)       |  |
| Method Blank               | 6/15/2007 | 101          | nd      | nd          | nd            |  |
| TP1A-4'                    | 6/15/2007 | 81           | nd      | nd          | $\mathbf{nd}$ |  |
| TP1B-3.5'                  | 6/15/2007 | 87           | nd      | nd          | nd            |  |
| TP2A-3.5'                  | 6/15/2007 | 95           | nd      | nd          | nd            |  |
| TP2B-4'                    | 6/15/2007 | 92           | nd      | nd          | nd            |  |
| TP3A-2.5"                  | 6/15/2007 | 77           | nd      | nd          | nd            |  |
| TP3B-3'                    | 6/15/2007 | 75           | nd      | nd          | nd            |  |
| TP3C-2.5'                  | 6/15/2007 | 83           | nd      | nd          | nd            |  |
| TP3D-2                     | 6/15/2007 | 80           | nd      | nd          | nd            |  |
| HA1-1                      | 6/15/2007 | 119          | nd      | nd          | nd            |  |
| TP4A-1                     | 6/15/2007 | 76           | nd      | nd          | nd            |  |
| TP4B-1                     | 6/15/2007 | 97           | nd      | nd          | nd            |  |
| HA2                        | 6/15/2007 | 96           | nd      | nd          | nd            |  |
| HA2 Dup                    | 6/15/2007 | 110          | nd      | nd          | nd            |  |
|                            |           |              |         |             |               |  |
| Practical Quantitation Lin | nit       |              | 25      | 40          | 40            |  |

<sup>&</sup>quot;nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

# Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Soil

| Sample                   | Date      | Surrogate    | Diesel  | Mineral Oil | Oil           |
|--------------------------|-----------|--------------|---------|-------------|---------------|
| Number                   | Analyzed  | Recovery (%) | (mg/kg) | (mg/kg)     | (mg/kg)       |
| Method Blank             | 6/20/2007 | 108          | nd      | nd          | nd            |
| B3-16                    | 6/20/2007 | 86           | nd      | nd          | nd            |
| B4-20                    | 6/20/2007 | 72           | nd      | nd          | nd            |
| B6-4                     | 6/20/2007 | int          | 7900    | nd          | nd            |
| B5-12                    | 6/20/2007 | 76           | 64      | nd          | nd            |
| B7-12                    | 6/20/2007 | 94           | nd      | nd          | nd            |
| B8-20                    | 6/20/2007 | 103          | nd      | nd          | $\mathbf{nd}$ |
| B8-20 Dup                | 6/20/2007 | 96           | nd      | nd          | nd            |
| Practical Quantitation L | imit      | -            | 25      | 40          | 40            |

<sup>&</sup>quot;nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

# Hydrocarbon Identification by NWTPH-HCID for Soil

| Sample            | Date         | Surrogate    | Gasoline | Diesel  | Mineral Oil | Heavy Oil |
|-------------------|--------------|--------------|----------|---------|-------------|-----------|
| Number            | Analyzed     | Recovery (%) | (mg/kg)  | (mg/kg) | (mg/kg)     | (mg/kg)   |
| Method Blank      | 6/14/2007    | 116          | nd       | nd      | nd          | nd        |
| B13-14            | 6/14/2007    | 87           | nd       | nd      | nd          | nd        |
| B13-19            | 6/14/2007    | 116          | nd       | nd      | nd          | nd        |
|                   |              |              |          |         |             |           |
|                   |              |              |          |         |             |           |
| Practical Quantit | ation Limit_ |              | 20       | 50      | 100         | 100       |

<sup>&</sup>quot;nd" Indicates not detected at listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

<sup>&</sup>quot;D" Indicates detected above the listed detection limit.

<sup>&</sup>quot;int" Indicates that interference prevents determination.

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

# Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Water

| Sample                 | Date     | Surrogate    | Diesel | Mineral Oil | Oil    |
|------------------------|----------|--------------|--------|-------------|--------|
| Number                 | Analyzed | Recovery (%) | (ug/l) | (ug/1)      | (ug/l) |
| Method Blank           | 6/14/07  | 87           | nd     | nd          | nd     |
| B11-W                  | 6/14/07  | 130          | nd     | nd          | nd     |
| B12-W                  | 6/14/07  | 124          | nd     | nd          | nd     |
| Practical Quantitation | n Limit  |              | 200    | 400         | 400    |

<sup>&</sup>quot;nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

### Analyses of Diesel & Oil (NWTPH-Dx/Dx Extended) in Water

| Sample                 | Date     | Surrogate    | Diesel | Mineral Oil | Oil    |
|------------------------|----------|--------------|--------|-------------|--------|
| Number                 | Analyzed | Recovery (%) | (ug/l) | (ug/l)      | (ug/l) |
| Method Blank           | 6/21/07  | 91           | nd     | nd          | nd     |
| B4W-20                 | 6/21/07  | 108          | nd     | nd          | nd     |
| Practical Quantitation | on Limit |              | 200    | 400         | 400    |

<sup>&</sup>quot;nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (2-F Biphenyl): 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

# Analyses of Gasoline (NWTPH-Gx) in Water

| Sample                 | Date     | Surrogate    | Gasoline |
|------------------------|----------|--------------|----------|
| Number                 | Analyzed | Recovery (%) | (ug/l)   |
| Method Blank           | 6/14/07  | 87           | nd       |
| B11-W                  | 6/14/07  | 86           | nd       |
| B11-W Dup              | 6/14/07  | 92           | nd       |
| B12-W                  | 6/14/07  | 82           | nd       |
|                        |          |              |          |
| Practical Quantitation | on Limit |              | 100      |

<sup>&</sup>quot;nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Trifluorotoluene): 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

# Analyses of Gasoline (NWTPH-Gx) in Soil

| Sample                 | Date     | Surrogate    | Gasoline |  |  |  |
|------------------------|----------|--------------|----------|--|--|--|
| Number                 | Analyzed | Recovery (%) | (mg/kg)  |  |  |  |
| Method Blank           | 6/14/07  | 87           | nd       |  |  |  |
| B1-14'                 | 6/14/07  | 95           | nd       |  |  |  |
| B1-20'                 | 6/14/07  | 99           | nd       |  |  |  |
| B2-14'                 | 6/14/07  | 88           | nd       |  |  |  |
| B2-20'                 | 6/14/07  | 88           | nd       |  |  |  |
| B11-8'                 | 6/14/07  | 113          | nd       |  |  |  |
| B11-15'                | 6/14/07  | 79           | nd       |  |  |  |
| B12-11'                | 6/14/07  | 92           | nd       |  |  |  |
| B12-11' Dup            | 6/14/07  | 92           | nd       |  |  |  |
| B12-16'                | 6/14/07  | 92           | nd       |  |  |  |
| <b>.</b>               |          |              |          |  |  |  |
| Practical Quantitation | Limit    |              | 10       |  |  |  |

<sup>&</sup>quot;nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Trifluorotoluene): 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

# Analyses of Gasoline (NWTPH-Gx) in Soil

| Sample                    | Date     | Surrogate    | Gasoline |
|---------------------------|----------|--------------|----------|
| Number                    | Analyzed | Recovery (%) | (mg/kg)  |
| Method Blank              | 6/15/07  | 79           | nd       |
| TP1A-4'                   | 6/15/07  | 80           | nd       |
| TP1B-3.5'                 | 6/15/07  | 76           | nd       |
| TP2A-3.5'                 | 6/15/07  | 80           | nd       |
| TP2B-4'                   | 6/15/07  | 68           | nd       |
| TP2B-4' Dup               | 6/15/07  | 78           | nd       |
| TP3A-2.5"                 | 6/15/07  | 66           | nd       |
| TP3B-3'                   | 6/15/07  | 78           | nd       |
| TP3C-2.5'                 | 6/15/07  | 82           | nd       |
| TP3D-2                    | 6/15/07  | 68           | nd       |
| HA1-1                     | 6/15/07  | 70           | nd       |
| T4A-1                     | 6/15/07  | 75           | nd       |
| T4B-1                     | 6/15/07  | 68           | nd       |
| HA2                       | 6/15/07  | 68           | nd       |
|                           |          |              |          |
|                           |          |              |          |
| Practical Quantitation Li | mit      |              | 10       |

<sup>&</sup>quot;nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Trifluorotoluene): 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

# Analyses of Gasoline (NWTPH-Gx) in Soil

| Sample                | Date     | Surrogate    | Gasoline   |
|-----------------------|----------|--------------|------------|
| Number                | Analyzed | Recovery (%) | (mg/kg)    |
| Method Blank          | 6/20/07  | 104          | nd         |
| B6-4                  | 6/20/07  | 81           | n <b>d</b> |
| B5-12                 | 6/20/07  | 113          | nd         |
| B7-12                 | 6/20/07  | 112          | nd         |
| D 11 10 11 11         |          |              |            |
| Practical Quantitatio | n Limit  |              | 10         |

<sup>&</sup>quot;nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Trifluorotoluene): 65% TO 135%

<sup>&</sup>quot;int" Indicates that interference prevents determination.

OSTROMS PROJECT
Lacey, Washington
Insight Geologic, Inc.
Libby Env.Project No.L070614-10

# Analyses of Total Lead in Water by EPA Method 7421

| Sample                       | Date     | Lead   |
|------------------------------|----------|--------|
| Number                       | Analyzed | (ug/l) |
| Method Blank                 | 6/18/07  | nd     |
| B11-W                        | 6/18/07  | nd     |
| B11-W Dup                    | 6/18/07  | nd     |
| B12-W                        | 6/18/07  | nd     |
| Practical Quantitation Limit |          | 2.5    |

"nd" Indicates not detected at the listed detection limits.

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

# QA/QC for Lead in Water by EPA Method 7421

| Sample                       | Date     | Lead   |
|------------------------------|----------|--------|
| Number                       | Analyzed | (ug/l) |
| LCS                          | 6/18/07  | 108    |
| MS                           | 6/18/07  | 78%    |
| MSD                          | 6/18/07  | 77%    |
| RPD                          | 6/18/07  | 1.3    |
| Practical Quantitation Limit |          | 2.5    |

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135% ACCEPTABLE RPD IS 35%

OSTROMS PROJECT
Lacey, Washington
Insight Geologic, Inc.
Libby Env.Project No.L070614-10

# Analyses of Lead in Soil by EPA Method 7421

| Sample                       | Date     | Lead    |
|------------------------------|----------|---------|
| Number                       | Analyzed | (mg/kg) |
| Method Blank                 | 6/18/07  | nd      |
| B1-14'                       | 6/18/07  | nd      |
| B1-20'                       | 6/18/07  | nd      |
| B2-14'                       | 6/18/07  | nd      |
| B2-20'                       | 6/18/07  | nd      |
| B11-8'                       | 6/18/07  | nd      |
| B11-15'                      | 6/18/07  | nd      |
| B12-11'                      | 6/18/07  | nd      |
| B12-11' Dup                  | 6/18/07  | nd      |
| B12-16'                      | 6/18/07  | nd      |
| TP1A-4'                      | 6/18/07  | nd      |
| TP1B-3.5'                    | 6/18/07  | nd      |
| TP2A-3.5'                    | 6/18/07  | nd      |
| TP2B-4'                      | 6/18/07  | nd      |
| TP2B-4' Dup                  | 6/18/07  | nd      |
| TP3A-2.5"                    | 6/18/07  | nd      |
| TP3B-3'                      | 6/18/07  | 5.6     |
| TP3C-2.5'                    | 6/18/07  | nd      |
| TP3D-2                       | 6/18/07  | 6.0     |
| HA1-1                        | 6/18/07  | nd      |
| T4A-1                        | 6/18/07  | nd      |
| T4B-1                        | 6/18/07  | nd      |
| HA2                          | 6/18/07  | nd      |
| Practical Quantitation Limit |          | 5.0     |

<sup>&</sup>quot;nd" Indicates not detected at the listed detection limits.

OSTROMS PROJECT Lacey, Washington Insight Geologic, Inc. Libby Env.Project No.L070614-10

# QA/QC for Lead in Soil by EPA Method 7421

| Sample                       | Date     | Lead    |
|------------------------------|----------|---------|
| Number                       | Analyzed | (mg/kg) |
| LCS                          | 6/18/07  | 108     |
| TP3C-2.5' MS                 | 6/18/07  | 93%     |
| TP3C-2.5' MSD                | 6/18/07  | 105%    |
| RPD                          | 6/18/07  | 12      |
| Practical Quantitation Limit |          | 5.0     |

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135% ACCEPTABLE RPD IS 35%

OSTROMS PROJECT
Lacey, Washington
Insight Geologic, Inc.
Libby Env.Project No.L070614-10

# Analyses of Lead in Soil by EPA Method 7421

| Sample                       | Date     | Lead    |
|------------------------------|----------|---------|
| Number                       | Analyzed | (mg/kg) |
| Method Blank                 | 7/1/07   | nd      |
| B6-4'                        | 7/1/07   | nd      |
| B5-12'                       | 7/1/07   | nd      |
| B7-12'                       | 7/1/07   | 23      |
| Practical Quantitation Limit |          | 5.0     |

<sup>&</sup>quot;nd" Indicates not detected at the listed detection limits.

OSTROMS PROJECT
Lacey, Washington
Insight Geologic, Inc.
Libby Env.Project No.L070614-10

# QA/QC for Lead in Soil by EPA Method 7421

| Sample                       | Date     | Lead    |
|------------------------------|----------|---------|
| Number                       | Analyzed | (mg/kg) |
| LCS                          | 7/1/07   | 100%    |
| MS                           | 7/1/07   | 104%    |
| MSD                          | 7/1/07   | 113%    |
| RPD                          | 7/1/07   | 8.3     |
| Practical Quantitation Limit |          | 5.0     |

ACCEPTABLE RECOVERY LIMITS FOR MATRIX SPIKES: 65%-135% ACCEPTABLE RPD IS 35%

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

| 07/10/2007 | Project:   |
|------------|------------|
|            | Client ID: |

07/10/2007

Sample Matrix: Soil Libby Environmental, LLC Date Sampled: 06/14/2007 4139 Libby Rd NE Date Received: 06/19/2007 Olympia, WA 98506 Spectra Project: 2007060301 Attn: Sherry Chilcutt

Spectra Number: 1

Ostrom's B11-8'

| Analyte             | Result  | <u>Units</u> | Method     |
|---------------------|---------|--------------|------------|
| 4,4-DDD             | 1.68    | mg/Kg        | SW846 8081 |
| 4,4-DDE             | 0.419   | mg/Kg        | SW846 8081 |
| 4,4-DDT             | 0.040   | mg/Kg        | SW846 8081 |
| Aldrin              | < 0.002 | mg/Kg        | SW846 8081 |
| Dieldrin            | < 0.002 | mg/Kg        | SW846 8081 |
| Endosulfan I        | < 0.002 | mg/Kg        | SW846 8081 |
| Endosulfan II       | < 0.002 | mg/Kg        | SW846 8081 |
| Endosulfan Sulfate  | < 0.002 | mg/Kg        | SW846 8081 |
| Endrin              | < 0.002 | mg/Kg        | SW846 8081 |
| Endrin Aldehyde     | < 0.002 | mg/Kg        | SW846 8081 |
| Endrin Ketone       | < 0.002 | mg/Kg        | SW846 8081 |
| Heptachlor          | < 0.002 | mg/Kg        | SW846 8081 |
| Heptachlor Epoxide  | < 0.002 | mg/Kg        | SW846 8081 |
| Methoxychlor        | < 0.002 | mg/Kg        | SW846 8081 |
| alpha-BHC           | < 0.002 | mg/Kg        | SW846 8081 |
| alpha-Chlordane     | < 0.002 | mg/Kg        | SW846 8081 |
| beta-BHC            | < 0.002 | mg/Kg        | SW846 8081 |
| delta-BHC           | < 0.002 | mg/Kg        | SW846 8081 |
| gamma-BHC (Lindane) | < 0.002 | mg/Kg        | SW846 8081 |
| gamma-Chlordane     | < 0.002 | mg/Kg        | SW846 8081 |

| Surrogate          | % Recovery | Method     |  |
|--------------------|------------|------------|--|
| Decachiorobiphenyl | 94         | SW846 8081 |  |

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager

a5/jjb

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

07/10/2007

Libby Environmental, LLC

4139 Libby Rd NE Olympia, WA 98506 Attn: Sherry Chilcutt Project:

Ostrom's B11-15'

Client ID: Sample Matrix:

Soil

Date Sampled:

06/14/2007

Date Received:

06/19/2007

Spectra Project: 2007060301

Spectra Number: 2

| Analyte             | <u>Result</u> | <u>Units</u> | Method     |
|---------------------|---------------|--------------|------------|
| 4,4-DDD             | 0.007         | mg/Kg        | SW846 8081 |
| 4,4-DDE             | 0.009         | mg/Kg        | SW846 8081 |
| 4,4-DDT             | 0.007         | mg/Kg        | SW846 8081 |
| Aldrin              | < 0.002       | mg/Kg        | SW846 8081 |
| Dieldrin            | < 0.002       | mg/Kg        | SW846 8081 |
| Endosulfan I        | < 0.002       | mg/Kg        | SW846 8081 |
| Endosulfan II       | < 0.002       | mg/Kg.       | SW846 8081 |
| Endosulfan Sulfate  | < 0.002       | mg/Kg        | SW846 8081 |
| Endrin              | < 0.002       | mg/Kg        | SW846 8081 |
| Endrin Aldehyde     | < 0.002       | mg/Kg        | SW846 8081 |
| Endrin Ketone       | < 0.002       | mg/Kg        | SW846 8081 |
| Heptachlor          | < 0.002       | mg/Kg        | SW846 8081 |
| Heptachlor Epoxide  | < 0.002       | mg/Kg        | SW846 8081 |
| Methoxychlor        | < 0.002       | mg/Kg        | SW846 8081 |
| alpha-BHC           | < 0.002       | mg/Kg        | SW846 8081 |
| alpha-Chlordane     | < 0.002       | mg/Kg        | SW846 8081 |
| beta-BHC            | < 0.002       | mg/Kg        | SW846 8081 |
| delta-BHC           | < 0.002       | mg/Kg        | SW846 8081 |
| gamma-BHC (Lindane) | < 0.002       | mg/Kg        | SW846 8081 |
| gamma-Chlordane     | < 0.002       | mg/Kg        | SW846 8081 |
|                     |               |              |            |

| Surrogate          | % Recovery | Method     |  |
|--------------------|------------|------------|--|
| Decachlorobinhenyl | 110        | SW846 8081 |  |

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager a5/jjb

Page 2 of 6

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

07/10/2007 Project: Ostrom's Client ID: B11-W Sample Matrix: Water Libby Environmental, LLC

Date Sampled: 06/14/2007 4139 Libby Rd NE Date Received: Olympia, WA 98506 06/19/2007 Spectra Project: Attn: Sherry Chilcutt 2007060301

Spectra Number: 3

| Analyte             | Result | <u>Units</u> | Method     |
|---------------------|--------|--------------|------------|
| 4,4'-DDD            | 0.049  | μg/L         | SW846 8081 |
| 4,4'-DDE            | 0.045  | μg/L         | SW846 8081 |
| 4,4'-DDT            | 0.023  | μg/L         | SW846 8081 |
| Aldrin              | < 0.01 | μg/L         | SW846 8081 |
| Dieldrin            | < 0.01 | μg/L         | SW846 8081 |
| Endosulfan I        | < 0.01 | μg/L         | SW846 8081 |
| Endosulfan II       | < 0.01 | μg/L         | SW846 8081 |
| Endosulfan Sulfate  | < 0.01 | μg/L         | SW846 8081 |
| Endrin              | < 0.01 | μg/L         | SW846 8081 |
| Endrin Aldehyde     | < 0.01 | μg/L         | SW846 8081 |
| Endrin Ketone       | < 0.01 | μg/L         | SW846 8081 |
| Heptachlor          | < 0.01 | μg/L         | SW846 8081 |
| Heptachlor Epoxide  | < 0.01 | μg/L         | SW846 8081 |
| Methoxychlor        | < 0.01 | μg/L         | SW846 8081 |
| alpha-BHC           | < 0.01 | μg/L         | SW846 8081 |
| alpha-Chlordane     | < 0.01 | μg/L         | SW846 8081 |
| beta-BHC            | < 0.01 | μg/L         | SW846 8081 |
| delta-BHC           | < 0.01 | μg/L         | SW846 8081 |
| gamma-BHC (Lindane) | < 0.01 | μg/L         | SW846 8081 |
| gamma-Chlordane     | <0.01  | μg/L         | SW846 8081 |

| Surrogate          | % Recovery | Method     |  |
|--------------------|------------|------------|--|
| Decachlorobiohenvl | 119        | SW846 8082 |  |

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager

a5/jjb

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

Project:

Client ID:

Sample Matrix:

Libby Environmental, LLC 4139 Libby Rd NE

Olympia, WA 98506 Attn: Sherry Chilcutt

07/10/2007

Date Sampled: 06/14/2007 Date Received: 06/19/2007 Spectra Project: 2007060301

Ostrom's

B12-11

Soil

Spectra Number: 4

| Analyte             | Result  | <u>Units</u> | Method     |
|---------------------|---------|--------------|------------|
| 4,4-DDD             | 0.005   | mg/Kg        | SW846 8081 |
| 4,4-DDE             | 0.005   | mg/Kg        | SW846 8081 |
| 4,4-DDT             | 0.009   | mg/Kg        | SW846 8081 |
| Aldrin              | < 0.002 | mg/Kg        | SW846 8081 |
| Dieldrin            | < 0.002 | mg/Kg        | SW846 8081 |
| Endosulfan I        | < 0.002 | mg/Kg        | SW846 8081 |
| Endosulfan II       | < 0.002 | mg/Kg        | SW846 8081 |
| Endosulfan Sulfate  | < 0.002 | mg/Kg        | SW846 8081 |
| Endrin              | < 0.002 | mg/Kg        | SW846 8081 |
| Endrin Aldehyde     | < 0.002 | mg/Kg        | SW846 8081 |
| Endrin Ketone       | < 0.002 | mg/Kg        | SW846 8081 |
| Heptachlor          | < 0.002 | mg/Kg        | SW846 8081 |
| Heptachlor Epoxide  | < 0.002 | mg/Kg        | SW846 8081 |
| Methoxychlor        | < 0.002 | mg/Kg        | SW846 8081 |
| alpha-BHC           | < 0.002 | mg/Kg        | SW846 8081 |
| alpha-Chlordane     | < 0.002 | mg/Kg        | SW846 8081 |
| beta-BHC            | < 0.002 | mg/Kg        | SW846 8081 |
| delta-BHC           | < 0.002 | mg/Kg        | SW846 8081 |
| gamma-BHC (Lindane) | < 0.002 | mg/Kg        | SW846 8081 |
| gamma-Chlordane     | < 0.002 | mg/Kg        | SW846 8081 |
|                     |         |              |            |

| Surrogate          | % Recovery | Method     |  |
|--------------------|------------|------------|--|
| Decachlorobiphenyl | 110        | SW846 8081 |  |

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager

a5/jjb

< 0.002 < 0.002

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

07/10/2007

Libby Environmental, LLC

4139 Libby Rd NE Olympia, WA 98506 Attn: Sherry Chilcutt Project:

Ostrom's

Client ID:

B12-16

Sample Matrix:

Soil

Date Sampled:

06/14/2007

Date Received:

06/19/2007

Spectra Project: 2007060301

Spectra Number: 5

| Analyte            | Result  |
|--------------------|---------|
| 4,4-DDD            | 0.004   |
| 4,4-DDE            | 0.005   |
| 4,4-DDT            | 0.007   |
| Aldrin             | < 0.002 |
| Dieldrin           | < 0.002 |
| Endosulfan I       | < 0.002 |
| Endosulfan II      | < 0.002 |
| Endosulfan Sulfate | < 0.002 |
| Endrin             | < 0.002 |
| Endrin Aldehyde    | < 0.002 |
| Endrin Ketone      | < 0.002 |
| Heptachlor         | < 0.002 |
| Heptachlor Epoxide | < 0.002 |
| Methoxychlor       | < 0.002 |
| alpha-BHC          | < 0.002 |
| alpha-Chlordane    | < 0.002 |
| beta-BHC           | < 0.002 |
| delta-BHC          | < 0.002 |

| <u>Units</u> | Method     |
|--------------|------------|
| mg/Kg        | SW846 8081 |
| mg/K.g       | SW846 8081 |
| mg/Kg        | SW846 8081 |
| mg/Kg        | SW846 8081 |
| mg/Kg        | SW846 8081 |
|              |            |

| Surrogate          | % Recovery | Method     |  |
|--------------------|------------|------------|--|
| Decachlorobiphenyl | 102        | SW846 8081 |  |

SPECTRA LABORATORIES

gamma-BHC (Lindane)

gamma-Chlordane

Steve Hibbs, Laboratory Manager

a5/jjb

Page 5 of 6

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

07/10/2007

Libby Environmental, LLC

4139 Libby Rd NE Olympia, WA 98506 Attn: Sherry Chilcutt Project: Ostrom's Client ID: B12-W

Sample Matrix: Water

Date Sampled: 06/14/2007
Date Received: 06/19/2007
Spectra Project: 2007060301

Spectra Number: 6

| Analyte             | Result | Units | Method     |
|---------------------|--------|-------|------------|
| 4,4'-DDD            | 0.036  | μg/L  | SW846 8081 |
| 4,4'-DDE            | 0.047  | μg/L  | SW846 8081 |
| 4,4'-DDT            | 0.062  | μg/L  | SW846 8081 |
| Aldrin              | < 0.01 | μg/L  | SW846 8081 |
| Dieldrin            | < 0.01 | μg/L  | SW846 8081 |
| Endosulfan I        | < 0.01 | μg/L  | SW846 8081 |
| Endosulfan II       | < 0.01 | μg/L  | SW846 8081 |
| Endosulfan Sulfate  | < 0.01 | μg/L  | SW846 8081 |
| Endrin              | < 0.01 | μg/L  | SW846 8081 |
| Endrin Aldehyde     | < 0.01 | μg/L  | SW846 8081 |
| Endrin Ketone       | < 0.01 | μg/L  | SW846 8081 |
| Heptachlor          | < 0.01 | μg/L  | SW846 8081 |
| Heptachlor Epoxide  | < 0.01 | μg/L  | SW846 8081 |
| Methoxychlor        | < 0.01 | μg/L  | SW846 8081 |
| alpha-BHC           | < 0.01 | μg/L  | SW846 8081 |
| alpha-Chlordane     | < 0.01 | μg/L  | SW846 8081 |
| beta-BHC            | < 0.01 | μg/L  | SW846 8081 |
| delta-BHC           | < 0.01 | μg/L  | SW846 8081 |
| gamma-BHC (Lindane) | < 0.01 | μg/L  | SW846 8081 |
| gamma-Chlordane     | <0.01  | μg/L  | SW846 8081 |

| Surrogate          | % Recovery | Method     |  |
|--------------------|------------|------------|--|
| Decachlorobiphenyl | 110        | SW846 8081 |  |

SPECTRA LABORATORIES

Steve Hibbs, Laboratory Manager

a5/jjb

Page 6 of 6

| 4139 Libby Road NE Phr. 360-352-2110 Olympla, WA 98506 Fax: 380-352-4154 Client Client Client Project #  2 RI - 14  4 R3 - 20  5 RII - 5  6 RII - 15  10 RI2 - 16  11 RI3 - 17  12 RI3 - 17  13 R3 - 17  14 R3 - 17  15 RI - 16  16 RII - 17  17 RII - 17  18 R3 - 17  11 RI3 - 17  11   | Container Type 10.00   | Project Manager. Bill #4 Project Name: Ostron.s Location: Collector: #2,   |   | 4 2 2 3 4 4 4 7 7                         | a o         | Sollection: 6 14.07 Field Note/# Containers |
|--|--|--|---|---|-------------|---|
| roject #  roject #  - 14  mple Number Depth Time - 14  - 20  - 30  | Container Type 10.00 11.                                       | Project Manager: Project Name: C. Location: Collector: Kell. X X X X X X X X X X X X X X X X X X X   |   |   | Date of C   | ollection: 6 14-07 Field Note/# Containers  |
| ject #  ple Number Depth Time  14  20  20  20  20  40  20  10  17  10  15  11  10  15  11  10  15  11  10  15  11  10  10  | Container Type 100 11 11 11 11 11 11 11 11 11 11 11 11         | Project Name: Consider Name: Collector: Xev.   |   | 1 2 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | Date of Co  | ollection: 6 14-07                          |
| ject #  ject #  ple Number Depth Time  /**  20  20  20  4  14  10:15  20  10:30  5  11:35  11   | Container Type Type "  | Sector: All Sector   |   | 1 2 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | Date of Co  | ollection: 6 14-07 Field Note/# Containers  |
| Jumber Depth Time  20 20 20 20 20 20 20 20 20 20 20 20 20  | Container Type 10.00 1.1                                       | Bector: All Control of the Control o   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | 1 2 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | O pate of C | ollection: 6 4-07                           |
| Sample Number Depth Time  \$1-14   | Container Type 100 11 11 11 11 11 11 11 11 11 11 11 11         | TO COLUMN TO THE PARTY OF THE P   | 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | 1 2 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |             |   |
| Sample Number Depth Time  81 – 14  81 – 20  82 – 14  82 – 20  83 – 20  81 – 5  81 – 5  81 – 1   | Container Type  1004714  | The Control of the Co   | COLUMN TO THE PARTY OF THE PART  | 1 2 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |             | / 3/ /                                      |
| Sample Number Depth Time  81 – 14  R1 – 20  R9 – 20  R9 – 20  R9 – 20  R9 – 20  R1 – 15  R1 –   | Container Type  10A+Tk-  "  "  "  "  "  "  "  "  "  "  "  "  " |  | \$\frac{\frac{1}{2}\fra | 1 2 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |             | ( 3 /                                       |
| Sample Number Depth Time   | Container Type  10A 4 Th.  11                                  | Columbia Color Col   | THE   |   |             |   |
| Sample Number Depth Time  81 – 14  81 – 14  81 – 20  82 – 20  83 – 20  81 – 15  811 – 15  811 – 15  812 – 16  813 – 15  813 – 16  813 – 17  814 – 17  815 –  | Container Type  /// /// // // // // // // // // // //          |  | TAN X - L X X 3   |   | 7           | $\setminus$                                 |
| 81-14 H<br>81-20' 20' 20<br>82-H' H<br>82-20' 20 10:30<br>811-5' 5' 11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35<br>11:35 | 10047a-  |  | X + 1 + × / 3   | × \ \ \ \ \ \ \                           | 7           |   |
| 81-20' 20 30 83-20' 83-20' 30 10:15 813-20' 20 10:30 811-15' 15' 11:35 811-15' 15' 11:35 812-16 15' 13' 13:20 813-4/ 13 13:20 813-4/ 13 13:20 813-4/ 17' 17:20   | " " " " " " " " " " " " " " " " " " "                          | * * * * *  | * * * * * * *   | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \     | 7           |   |
| 89-H' H' 10:15<br>81-5' 5' 10:30<br>811-5' 5' 11:15<br>811-15' 15' 11:35<br>811-15' 15' 11:35<br>812-16 16 12:55<br>813-4 13 13:30<br>813-14 14:20   | " " " " " " " " " " " " " " " " " " "                          | ×××  | >   | * * * * *                                 | 7           |   |
| 83-20' 20 10:30<br>811-5' 5' 11:15<br>811-15' 15' 11:35<br>812-11 11 12:15<br>812-16 16 12:55<br>813-16 13 13:20<br>813-19 14 14:20  | " " " " " " " " " " " " " " " " " " "                          | x  | + × ×;  | **  | 7           |   |
| 811-5" 5" 11:15<br>811-15" 15" 11:35<br>812-16 16 12:55<br>813-4 13 13:20<br>813-19 14 14:20   | 11   |  | × × ;   | ×   | 7           |   |
| 811-15' 15' 11:36<br>812-11 11 18:45<br>812-16 16 12:55<br>813-4/ 13 13:30<br>813-14 14 14:20  | 11   |  | ×   | _   | -           |   |
| R12-11 135<br>R12-16 16 12:55<br>R13-16 16 12:55<br>R13-4 13 13:20<br>R13-19 19 14:20  | 11   |  |   | 1 1                                       | *           |   |
| 812-11 11 12:45<br>812-16 16 12:55<br>813-4 13 13:30<br>813-19 19 14:20  |  | X       X  | ×   | X   | ×           |   |
| R13-16 16 12:55<br>R13-41 13 13:30<br>R13-19 14 14:30  | //   | X X  | Х   | X   | Х           |   |
| R13-4/ 13 13:20<br>R13-14 14 14:20   |  | X  | ×   | ×   | ×           | R   |
| 813-14 M M:100   |  |  | , X   | , X                                       | ×           |   |
| 1313-19 19 14:20   | 70   | - X  |   |   | ×           | Hold  |
|  |  | ×  |   |   | ×           | Hald  |
| 13 RM-15 15 15.15 11   | "  | ×  |   |   | ×           | Hold  |
| 14 84-96 15:30 11  | //   | ×  |   |   | ×           | Meld  |
| 15 B15-12 12 15:50 So.1  |  | У.   |   |   | <u> </u>    | 16014                                       |
| 16 PS15 20 120 1200 50:1   |  | <u> </u>   |   |   | 시           | 1.1016                                      |
| 17   |  |  |   |   |             |   |
| 18   |  |  |   |   |             |   |
| Relinquished by: // black/Time.  | Received by  | 1114-19-1  | Date / Time Sa  | Sample Receipt:                           |             | Remarks;                                    |
| Reinquished by: Date / Time  | Received #y  | Date   | Date / Time Goo   | Good Condition?                           |             |   |
| 7/2  | 3 S  | 345  | Cold?   | d2  |             |   |
| Relinquished by: Date / Time   | Received by  | Date   | Date / Time Sea   | Seals Intact?                             |             |   |
|  | 10<br>00   | 71<br>(4 + 1<br>2<br>(4 + 2<br>(4 + 1)<br>(4 | Tota  | Total Number of Containers                |             | TAT 24HR 48HR 5-Day                         |

| Libby Environmental. Inc.               | tal. Inc.                             | ×            | S           | <b>Chain of Custody Record</b> | C         | usto                                     | dy R        | eco        | 5               |  |          | 9)        | 28<br>(40           | = 34<br>= 31 |                                       |         | 2          |
|---|---------------------------------------|--------------|-------------|--------------------------------|-----------|--|-------------|------------|-----------------|--|----------|-----------|---------------------|--------------|---------------------------------------|---------|------------|
|   |                                       |              | ar<br>s     | 3                              |           |  |             | х          |                 |  |          | 9         |                     |              | -                                     | <br>H . |            |
| 4139 Libby Road NE                      | Ph: 360-352-2110<br>Fax: 360-352-4154 | :110<br>:154 |             |                                | Date      | 3  | 1/2/67      | Č          | 1               |  |          | _         | Page:               | 1            | - jo                                  | :       | 24         |
| 14 (50)                                 | V Johnson                             | 15 P         |             |                                | Proje     | Project Manager:                         | ager:       | 11/8       |                 | Halbert  | ن ا      | Ų.        | 32.                 |              |                                       |         |            |
|   | 9                                     | -            |             |                                | Proje     | Project Name: Osty com s                 | 0           | tio        | m S             | 2  |          |           | įš.                 |              |                                       | 1.0     |            |
| Phone:                                  | Fax:                                  | 0K           |             |                                | Location  | ion:                                     |             | (b)        | . t             | · sa   |          |           |                     |              |                                       |         |            |
| Client Project #                        |                                       |              |             |                                | Collector | ctor.                                    |             | 25         |                 |  | 9        | Date o    | Date of Collection: | ion:         | 10-51                                 |         |            |
|   |                                       |              |             |                                |           |  |             |            |                 |  |          |           |                     |              |                                       | 7       | ÷.         |
| 2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | =                                     |              | • .         | · .                            |           | 6  |             |            |                 |  |          | ν,        |                     |              |                                       | •••     |            |
|   |                                       | •            |             | /                              | N. S.     | 100                                      |             |            | \0;<br>\ti      |  | 13       | ( -)      |                     |              |                                       | .00     | 1,4        |
| Sample Number Depth                     | oth Time                              | Sample       | Container   | \$ 40.5<br>\$ 40.5             |           | SA SA SASSASSASSASSASSASSASSASSASSASSASS | 14          | 14         | SO THE STATE OF | SOUND THE PROPERTY OF THE PROP |          |           |                     | Field Note/  | Field Note/# Containers               |         |            |
|   | 1 "                                   | Soil         | 402 1.      |                                |           | ×  |             |            |                 | 2<br>2 4<br>2 6  | ><       |           |                     | Hold         |                                       |         |            |
| JAR14-20                                | 6.5                                   | So.          | 702 Ta.     |                                |           | ×  |             | ; ,        |                 |  | ×        | , "       |                     | 40 1         |                                       |         |            |
|   | 3                                     | 50,7         | //          |                                |           | ×  |             |            |                 |  | ×        |           |                     | 451          |                                       |         | - %        |
| 1-01                                    |                                       | 1105         | " "         |                                |           | ×  |             | -          |                 |  | 7        |           |                     | 1010         |                                       | T       | 1          |
| 14-41                                   | "                                     | 5011         | VOR+3.      |                                | ×         |  | ×           | Y          |                 |  |          | ×         |                     |              |                                       |         | of<br>of   |
| 13-3.5 3.                               | -5                                    | 50.1         |             |                                | ×         |  | ×           | <u> </u>   |                 | +  |          | ×         |                     |              |                                       | T       | (e         |
| 7 TP2 A-3,5 5.5                         | 5 17.6                                | 50           | 7           |                                | 7         |  | ×           | 4          |                 |  |          | ×         |                     |              |                                       |         | e<br>V     |
| 8 TP2 13 41 4                           | 11.10                                 | 501          | ,           |                                | ×         |  | X           | 7          |                 |  | $\dashv$ | X         | 2.                  |              |                                       |         |            |
| 9 TP3 B -3' 3                           | 13.30                                 | · ·          | 11          |                                | >         |  | ×           | ×          |                 |  |          | ×         |                     |              |                                       |         |            |
| 10 7836-2.5 2.5                         | 5 14.00                               | Soi!         | 11          |                                | ×         |  | ×           | ×          |                 |  |          | ×         |                     |              |                                       |         | S N        |
| 11 7034-25                              | 12:46                                 | 50.1         | N           |                                | ×         |  | 싀           | <u>~ `</u> |                 |  | 1        | K         | _                   |              |                                       | T       | Sia<br>Gia |
| 12 730-2 30-2                           | 9-2 14:25                             | 501          | *           |                                | ×         |  | ×           | ×          |                 |  |          | ×         |                     |              | :                                     |         |            |
| 13 HAI-1 W                              |                                       | 501          | 1           |                                | ×         |  | ×           | ×          |                 |  | 4        | X         |                     |              |                                       | •       | N          |
| 147411-1                                | 1 15:00                               | //05         | 11          |                                | 7         | $\dashv$                                 | ×           | >          |                 |  | -        | X         | 1                   |              |                                       | Ī       |            |
| 15748-1                                 | 15:16                                 | 1/05         | 77          |                                | X         | +  | X           | ×          |                 |  |          | *         | 1                   |              |                                       |         |            |
| 16 H A 2                                | 15:30                                 | Soil         | 11          |                                | ×         |  | ×           | ×          |                 | +  | _        | ×         |                     |              |                                       |         |            |
| 17                                      |                                       |              |             |                                |           |  |             |            |                 |  | -        |           |                     |              |                                       | Т       |            |
| 18.                                     |                                       |              |             |                                |           |  |             |            |                 |  |          |           |                     |              |                                       | T       |            |
| Relinquished by:                        | Date / Time                           |              | Received by |                                | -         |  | Date / Time | Lime       | Sam             | Sample Receipt:  | sceipt   |           | Rem                 | Remarks:     | · · · · · · · · · · · · · · · · · · · | •       |            |
| Ken Cornella                            | 6/15/10                               | J. 5.30      |             | 3                              | ال        | 3  | 0           | <b>U</b>   |                 |  |          | -         | T                   |              |                                       | :5%     |            |
| Relinquished by:                        | Date / Time                           |              | Received by | -                              | D 34.     | •  | Date        | 9          | 900 S           | Good Condition?  | 5        | +         | 1                   | ,*           |                                       | ¥6      |            |
| Relinenished by                         | Date / Time                           |              | Received by |                                |           |  | Date / Time | Time       | Spall S         | Spale Intact?  |          |           | 1                   |              |                                       | ٠,      |            |
|   |                                       |              |             |                                |           |  |             | · .        | 2 1             | i h  | 100      |           | <b>F</b>            | SALID        | ARHID A.                              | 750 7   |            |
| 0.0                                     |                                       |              |             |                                |           |  |             |            | I GIGH          | I otal Number of Containers  | 5        | alliers i | 2                   | Z#1 II.7     |                                       | 7       |            |

「日本日本 の見 は、大田子子を見せいると思いました。 大くま、大田子の田子の本のなどのないとなると、

ition: White - Lab, Yellow - File, Pink - Originator.

| 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | Page:                               |                      |           | Date of Collection: 6-20-67 |  | Field Note/# Containers               |   |         |         |              |           |        | ×           |           | ×         |       |         |            |          |            |    | fa . | Remarks:                    |                     |                     |
|---------------------------------------|-------------------------------------|----------------------|-----------|-----------------------------|--|---------------------------------------|---|---------|---------|--------------|-----------|--------|-------------|-----------|-----------|-------|---------|------------|----------|------------|----|------|-----------------------------|---------------------|---------------------|
| <b>5</b> ×                            |                                     | om } Far m           |           | Carolehing                  | 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1  | 30 40 41                              |   |         | ×       | ×            | ×         |        | ×           |           | ×         |       |         |            |          |            | 41 |      | Sample Receipt:             | Good Condition?     | Seals Intact?       |
|                                       | Date: L. L.D. D. J. Project Manager | Project Name: Ostrom | Location: | Kevin                       | 10 10 10 10 10 10 10 10 10 10 10 10 10 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | × |         | XI      | `<br>        | X X       |        | ×           |           |           |       |         | ×          |          |            |    |      | enin (0/20/07 16:25)        | L                   | Date / Time         |
|                                       | €1 =0X                              |                      |           |                             | Container                                | Type 10 10                            |   | O       |         | Von web.     | 1/a/ (mm) | 11     |             | 11        | "         | 11    | 1.      | - 1        |          | · 13       |    |      | Residence by                | Received by         | Received by         |
| Ph: 360-352-2110                      | Fax: 360-352-4154                   | - C 7                | Fax:      |                             |  | oth Time Type                         |   | 9.15 11 | 11 Or.6 | 10:45 Water  |           |        | 11.05       | 11:40 m   | 12,00     | 12.25 | 13:10 " | 13:36 "    | 13:25 11 | M.K. W     |    |      | Date / Time   6/20/07 16:25 | Date / Time         | Date / Time         |
|                                       | Client: Toc. Lt.                    |                      |           | Client Project #            | e e                                      | Sample Number Depth                   | * |         | .66     | 844-20 X 26' |           | ,9/ 1/ | BS-12 + 12' | K5-20 20' | -12 4 19' |       |         | 35-20 * 20 | 89-15 1C | RO-30 * 90 |    |      | Relinquished by: Da         | Relinquished by: Da | Relinquished by: Da |

というとう たっない かんないかい いっかんこうしゅう

# ATTACHMENT C LIMITATIONS AND GUIDELINES FOR USE

#### **ATTACHMENT C**

#### REPORT LIMITATIONS AND GUIDELINES FOR USE1

This Attachment provides information to help you manage your risks with respect to the use of this report.

## ENVIRONMENTAL SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES, PERSONS AND PROJECTS

This report has been prepared for the exclusive use of Ostrom's Farms and their authorized agents. This report may be made available to regulatory agencies for review. This report is not intended for use by others, and the information contained herein is not applicable to other sites.

Insight Geologic, Inc. structures our services to meet the specific needs of our clients. For example, an environmental site assessment study conducted for a property owner may not fulfill the needs of a prospective purchaser of the same property. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and project site. No one except Ostrom's Farms should rely on this environmental report without first conferring with Insight Geologic, Inc.. This report should not be applied for any purpose or project except the one originally contemplated.

#### THIS ENVIRONMENTAL REPORT IS BASED ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS

This report has been prepared for the Ostrom's Mushroom Facility located at 8322 Steilacoom Road SE in Lacey, Washington. Insight Geologic, Inc. considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless Insight Geologic, Inc. specifically indicates otherwise, do not rely on this report if it was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

If important changes are made after the date of this report, Insight Geologic, Inc. should be given the opportunity to review our interpretations and recommendations and provide written modifications or confirmation, as appropriate.

#### **RELIANCE CONDITIONS FOR THIRD PARTIES**

Our report was prepared for the exclusive use of our Client. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement

Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences; www.asfe.org.

with the Client and generally accepted environmental practices in this area at the time this report was prepared.

### ENVIRONMENTAL REGULATIONS ARE ALWAYS EVOLVING

Some substances may be present in the site vicinity in quantities or under conditions that may have led, or may lead, to contamination of the subject site, but are not included in current local, state or federal regulatory definitions of hazardous substances or do not otherwise present current potential liability. Insight Geologic, Inc. cannot be responsible if the standards for appropriate inquiry, or regulatory definitions of hazardous substance, change or if more stringent environmental standards are developed in the future.

## UNCERTAINTY MAY REMAIN EVEN AFTER THIS PHASE II ESA IS COMPLETED

No ESA can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. Our interpretation of subsurface conditions in this study is based on field observations and chemical analytical data from widely-spaced sampling locations. It is always possible that contamination exists in areas that were not explored, sampled or analyzed.

#### SUBSURFACE CONDITIONS CAN CHANGE

This environmental report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the site, by new releases of hazardous substances, or by natural events such as floods, earthquakes, slope instability or ground water fluctuations. Always contact Insight Geologic, Inc. before applying this report to determine if it is still applicable.

#### SOIL AND GROUND WATER END USE

The cleanup levels referenced in this report are site- and situation-specific. The cleanup levels may not be applicable for other sites or for other on-site uses of the affected media (soil and/or ground water). Note that hazardous substances may be present in some of the site soil and/or ground water at detectable concentrations that are less than the referenced cleanup levels. Insight Geologic, Inc. should be contacted prior to the export of soil or ground water from the subject site or reuse of the affected media on site to evaluate the potential for associated environmental liabilities. We cannot be responsible for potential environmental liability arising out of the transfer of soil and/or ground water from the subject site to another location or its reuse on site in instances that we were not aware of or could not control.

### MOST ENVIRONMENTAL FINDINGS ARE PROFESSIONAL OPINIONS

Our interpretations of subsurface conditions are based on field observations and chemical analytical data from widely spaced sampling locations at the site. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are

taken. Insight Geologic, Inc. reviewed field and laboratory data and then applied our professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ – sometimes significantly – from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

#### DO NOT REDRAW THE EXPLORATION LOGS

Environmental scientists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in an environmental report should never be redrawn for inclusion in other design drawings. Only photographic or electronic reproduction is acceptable, but recognize that separating logs from the report can elevate risk.

#### **READ THESE PROVISIONS CLOSELY**

Some clients, design professionals and contractors may not recognize that the geoscience practices (geotechnical engineering, geology and environmental science) are far less exact than other engineering and natural science disciplines. This lack of understanding can create unrealistic expectations that could lead to disappointments, claims and disputes. Insight Geologic, Inc. includes these explanatory "limitations" provisions in our reports to help reduce such risks. Please confer with Insight Geologic, Inc. if you are unclear how these "Report Limitations and Guidelines for Use" apply to your project or site.

## GEOTECHNICAL, GEOLOGIC AND GEOENVIRONMENTAL REPORTS SHOULD NOT BE INTERCHANGED

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding a specific project.

#### **BIOLOGICAL POLLUTANTS**

Insight Geologic, Inc's Scope of Work specifically excludes the investigation, detection, or assessment of the presence of Biological Compounds which are Pollutants in or around any structure. Accordingly, this report includes no interpretations, recommendations, findings, or conclusions for the purpose of detecting, assessing, or abating Biological Pollutants. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts.