

# **SAMPLING AND ANALYSIS PLAN**

## **SEITZ PROPERTY SHA**

**No Address (undeveloped land at time of SHA)  
Kitsap County Tax Parcel ID # 082501-4-025-2001  
Site is accessed from Brian Lane NW  
Silverdale, WA 98383**

November 3, 2005

### **1. SITE DESCRIPTION / HISTORY**

The Seitz Property is a five (5) acre undeveloped property located in central Kitsap County northwest of Silverdale. On March 18, 2005, the Kitsap County Health District (KCHD) visited the site in order to investigate a complaint filed by a neighboring property owner of solid waste on the surface of the ground. KCHD staff observed several piles of trash and rubbish that appeared to have been uncovered/unearthed by recent land clearing activity at the site. At that time the Health District documented via photos that the complaint was valid and contacted the property owner to inquire about the status of the waste observed on the ground. The owner related that he was planning on developing the property, and on cleaning up the solid waste.

On March 25, 2005, the property owner called the Health District and informed us that he found several drums of unknown waste at the site. The Health District inspected the site on March 28, 2005. Seventeen (17) drums were identified. All of the drums were sitting on the surface of the ground. Four (4) of them had signs of leakage or spillage. Several of the drums were labeled with "Roybond Primer". The area around the drums smelled of solvents, and all of the drums were found to be full or close to full. Results of the inspection were forwarded over to the Washington State Department of Ecology (Ecology). The removal of the drums from the site was completed by Clean Harbors Environmental Services on August 17, 2005.

On March 29, 2005, Ecology received a report of hazardous waste dumping at the site (ERTS #547121). According to the complainant the dumping had occurred in 1985 or 86 when the property was owned by a Mr. Ron Deno. The complaint alleges that several drums with unknown contents were buried on the property. In 1997, as the result of a complaint from the same person, Ecology and Environment, Inc. (E&E) conducted a survey of the property on behalf of the Environmental Protection Agency. The geophysical survey and trench digging that occurred during the survey revealed no evidence of buried drums or cylinders. The complainant now maintains that the 1997 survey was done in the wrong area and that hazardous waste is still buried at the site. An initial investigation was started by the Health District as the result of the ERTS received from Ecology. The Initial Investigation was closed out on April 12, 2005, with agreement between Ecology and the Health District to conduct an SHA.

The site was listed on the Washington State Department of Ecology's (Ecology) Confirmed and Suspected Contaminated Sites (CSCS) list on April 19, 2005. The site was listed on the CSCS list based on confirmed releases of total petroleum hydrocarbons to soil, groundwater, and surface

water, and suspected releases of halogenated organic compounds, metals, and non-halogenated solvents to soil.

A ground penetrating radar and magnetic survey was conducted on August 16, and 17, 2005, at the site because of the possibility of buried drums on the site in areas not covered by the 1997 E&E study. The results were negative. No buried metallic objects and no signs of excavation were found.

## **2. FIELD PERSONNEL / DATES OF ACTIVITIES**

Field personnel for sampling activities associated with this site and their duties are as follows:

Grant Holdcroft - KCHD Field Supervisor and the Site Health and Safety Officer:

Conduct sampling and decontamination activities and make field decisions regarding sampling locations.

Steve Brown - KCHD Field Team Member:

Assist with sampling and decontamination activities and assists in making field decisions regarding sampling locations.

Sampling activities will be conducted on November 16, 2005. Samples will be delivered, with appropriate custodial care, within 24 hours to Aquatic Resources Laboratories, Inc. for analysis. Aquatic Resources is accredited by Ecology for all analyses to be conducted at this site. Results from the analyses will be received within fifteen working days.

## **3. SAMPLING OBJECTIVES**

Objectives for this sampling effort include:

1. Obtain representative soil, and water samples as needed to establish, or confirm, presence of specific hazardous constituents;
2. Gather additional data to assign Washington Ranking Method (WARM) toxicity/release scoring values;
3. Determine if the soil has been impacted by releases of contaminants from the site; and,
4. Document any contaminant concentrations below applicable Model Toxics Control Act (MTCA) cleanup levels and make a recommendation of "No Further Action" (NFA) for the site, as applicable.

## **4. SAMPLING LOCATIONS / TYPES / FREQUENCY**

### **4.1 Locations**

To determine if the soils at the site have been impacted by past practices, six (6) soil samples will be taken from cleared areas of the site (see Figure 1, attached). Two (2) of the samples will be taken from the areas of the stored drums, two (2) from the areas of the refuse piles, and one

(1) each from above and below the former house site. The samples will be taken from 0-12" below ground surface.

No surface water samples will be taken. The closest surface water in the area is Clear Creek. Clear Creek runs northwest to southeast approximately 1000' northeast of the site.

Two ground water samples will be taken. One from the Landsworth Water system and one from the Brianwood Water system. The Brianwood Water system well is approximately 700 feet from the site to the southwest. The Landswood Water system is approximately 600 feet to the east of the site. See Figure 2, attached, for locations of these wells.

### SAMPLE LOCATION TABLE

Sample ID	Location	Media	Analysis
SP1	Northeast in drum area	Soil	NWTPH-Dx , VOCs, SVOCs, and metals
SP2	Northeast in drum area	Soil	NWTPH-Dx , VOCs, SVOCs, and metals
SP3	East of refuse pile #1	Soil	NWTPH-Dx , SVOCs, and metals
SP4	East of refuse pile #2	Soil	NWTPH-Dx , SVOCs, and metals
SP5	East of house	Soil	NWTPH-Dx , SVOCs, and metals
SP6	West of house	Soil	NWTPH-Dx , SVOCs, and metals
SP7	Landsworth Creek Water System Well	Water	NWTPH-Dx , VOCs, SVOCs, and metals
SP8	Brianswood Well Water System	Water	NWTPH-Dx , VOCs, SVOCs, and metals

#### 4.2 Types

Discrete soil samples will be collected from each respective sample location. Samples will be collected with the use of a stainless steel shovel and then placed in sample containers. Discrete water samples will be collected from a faucet in the water system closest to the well using the appropriate sample collection containers.

#### 4.3 Frequency

This will be a one-time sampling event only.

## 5. SAMPLING METHODS / CONTAINERS / PRESERVATION

### 5.1 Methods

**Chemicals of Concern:** Chemicals of concern in drinking water include petroleum products, semi-volatile organic compounds (SVOCs), metals,. The breakdown for analyzing the samples is as follows:

Analyte	Method	MTCA Soil Standard*
Total Petroleum Hydrocarbons - Diesel range	NWTPH-Dx	2000 mg/kg
Semi-volatile Organic Compounds (SVOCs)	8270	0.1 mg/kg
Metals	6010/7000 series	Various
Volatile Organic Compounds (VOCs)	8260	Various

\* - Method A Cleanup Levels for Unrestricted Land Uses

### 5.2 Containers

The contract laboratory will provide sample containers for the analyses to be performed. Sample containers requiring preservatives will be prepared by the laboratory.

### 5.3 Preservation

Immediately after sampling, the container will be stored in an iced cooler. Samples will be delivered to the Aquatic Research, Inc., laboratory in Seattle within 24 hours of the sampling event either by hand or through express delivery. All samples will be stored in a refrigerator at KCHD's offices if an overnight delay is required. KCHD shall be responsible for delivering samples to its contract laboratory.

## 6. SAMPLING EQUIPMENT DECONTAMINATION

Equipment will be decontaminated by the equipment operators between sampling events in the field with a liquinox solution and rinsed with distilled water. Subsequent to the final sampling event the Health District equipment will be rinsed in the field and decontaminated at the Health District facility according to established decontamination procedures.

## 7. INVESTIGATIVE WASTES DISPOSITION

No investigative waste will be generated during this sampling event.

## 8. QUALITY ASSURANCE / QUALITY CONTROL (QA/QC) PROCEDURES

Field sampling and Chain-of-Custody documentation are to be completed in the field.

### 8.1 Laboratory QA/QC

All analyses will be done by Aquatic Research, Inc., Seattle, a Department of Ecology accredited laboratory for the sampling analyses.

The lab will provide the following information:

Check standards (Method Blanks): Estimates the precision of the method and checks bias due to calibration.

Duplicate analyses of samples: Checks the precision of the actual samples.

Matrix spikes: Tests for bias due to chemical interference from the sample matrix.

Chain-of-custody: The chain-of-custody form will be filled out in the field and the appropriate methods of transfer will be completed at the lab.

The laboratory will provide a letter, signed by its legally authorized representative, stating that the laboratory operates and maintains records of its QA/QC program for samples from SHAs and that its results meet all applicable standards.

### 8.2 Field QA/QC Assurance

If the laboratory recommends, sampling containers will be filled with suitable blank substances, sealed, and kept with other samples throughout the entire sampling event. A field duplicate sample may be taken for assuring accuracy of the laboratory results.

### 8.3 Documentation of Field Activities

Notes and observations of activities conducted in the field during the sampling event will be taken by Health District staff following standard recording procedures. This documentation will include but not be limited to information on: date, time, weather, temperature, personnel on site, deviations from procedure, sample locations (latitude and longitude using GPS), and unusual conditions. In addition, photographs will be taken of the site, each sample location and any unusual conditions at the site. Each photograph will be accompanied by notes on the following:

- Date;
- Time;
- Number of Photo;
- Type of film and camera;
- Photographers name;
- Name and address of site, and;
- Location & general description of the area of the photograph.

#### **8.4 Chain of Custody**

All samples will be immediately placed into appropriate containers; labeled, sealed, and cooled. Samples will be labeled with the following:

- Client name
- Project/site name
- Unique identifying lab number
- Date and time of collection
- Preservation method used (if any)
- Analyses requested

Chain of Custody documentation will be completed for all samples collected. Chain of custody will be maintained from the time the samples are collected to the time the samples are submitted to the lab and will include:

- The sampler's names;
- Date and time of collection;
- Sample location;
- Analyses to be performed;
- Date and signatures of those releasing and receiving the samples;
- Date and time the samples were received in the lab, and;
- The total number of samples received by the lab.

Samples shipped to the lab or delivered after business hours shall be sealed to protect custody. Sample custody seals must be signed by the sampler and affixed to the sample cooler or individual samples in such a way as to require breaking of the seal to open the cooler or sample. Sample custody seals are not required when samples are delivered directly to the lab by the sampler. Sample custody seals shall be used for all samples shipped to the laboratory by a third party or when delivered to the laboratory after business hours.

FIGURE 1 - SAMPLE LOCATION MAP

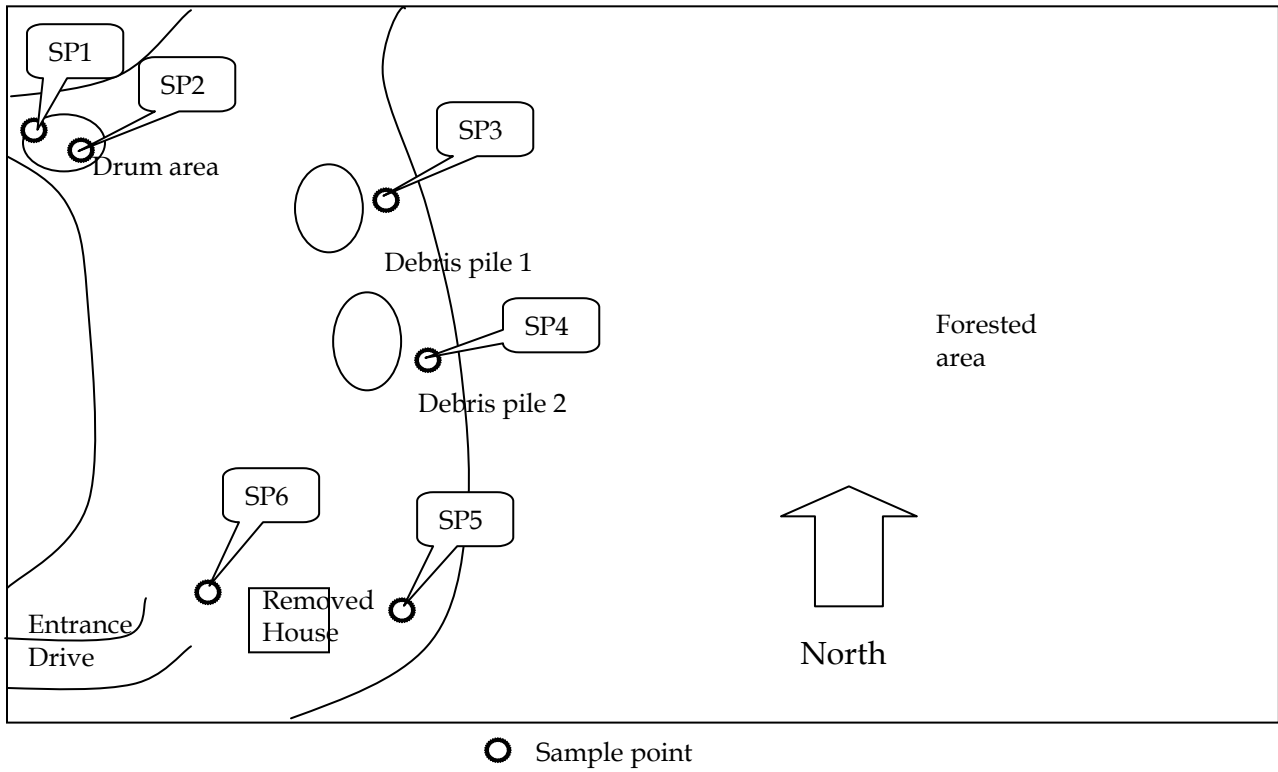
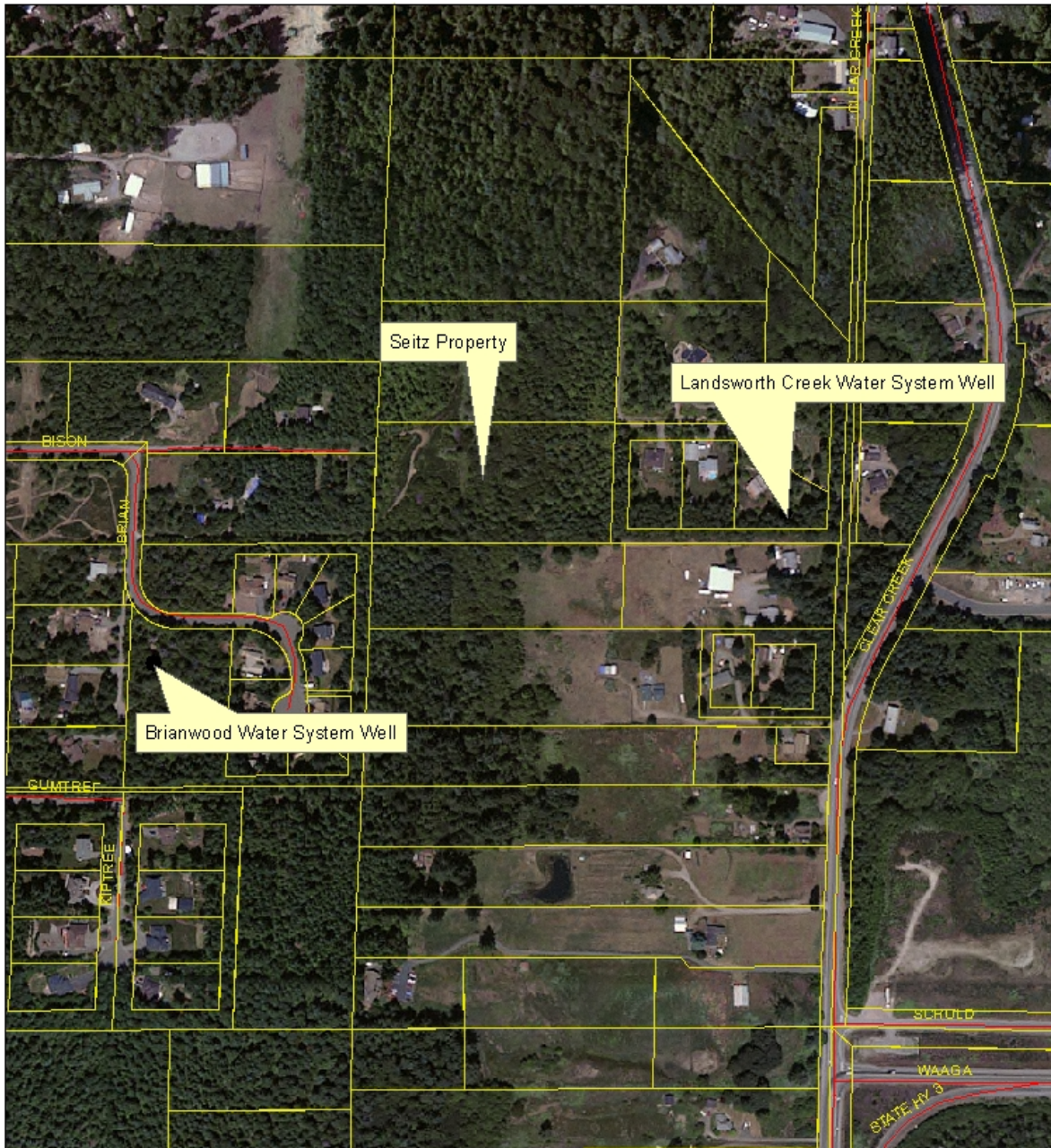


FIGURE 2 - WELL LOCATIONS



Seitz Property  
11/3/2005

