

SAMPLING METHODS AND PROCEDURES

Water Level Measurements

All groundwater level measurements will be obtained using an electric measuring device, which indicates when a probe is in contact with groundwater. Measurements will be obtained by lowering the device into the well until the water surface had been encountered, and by measuring the distance from the top of the inside riser pipe to the probe. All the measurements will be recorded to the nearest 0.01 ft. To minimize cross-contamination, the water level indicator will be decontaminated with isopropyl alcohol and distilled water between each well.

Monitoring Well Sampling

All monitoring wells were sampled from the “cleanest” to the “most contaminated” according to the protocols listed below.

Field Protocol

- Step 1 Measure water level in each well.
- Step 2 Purge each monitoring well by evacuating a minimum of three well bore volumes using a disposable polyethylene bailer.
- Step 3 Collect water samples using a disposable polyethylene bailer.
- Step 4 Cool samples to approximately 4°C for transportation.
- Step 5 Store water samples and transport to a specific laboratory, following all documentation and chain-of-custody procedures.

Upon completion of groundwater sampling, a chain-of-custody log will be completed. Chain-of-custody records include the following information: project, project number, shipped by, shipped to, suspected hazard, sampling point, location, field identification number, date collected, sample type, number of containers, analysis required, and sampler's signature.

The chain-of-custody records will be shipped with the samples to the laboratory. Upon arrival at the laboratory the samples will be checked in and signed by the appropriate laboratory personnel. Laboratory identification numbers will be noted on the chain-of-custody record. Upon completion of the laboratory analysis, the completed chain-of-custody record will be returned to the project manager.

Analytical Methods

The following list identifies the various chemical constituents and analytical methods which will be used for their quantification.

<u>Chemical Parameter</u>	<u>Method</u>
Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX)	EPA Method – 8260B
1,2,4- and 1,3,5-Trimethylbenzene and Naphthalene	EPA Method – 8260B
Chloride and Sulfate Anions	EPA Method – 300.0
Total Dissolved Solids (TDS)	Standard Method 2540C
PAHs: acenaphthene, benz(a)anthracene, benzo(a)pyrene, dibenzo(a,h)anthracene, fluorene, pyrene, 1-methylnaphthalene, 2-methylnaphthalene	EPA Method - 8270D SIM