

SUBSURFACE INVESTIGATION REPORT

Chelatchie General Store – 42411 NE Yale Bridge Road Amboy, Washington

Prepared for:

Mr. Joe Stella
21603 NE 249th Avenue
Battle Ground, Washington
98604

Date:

16 April 2013

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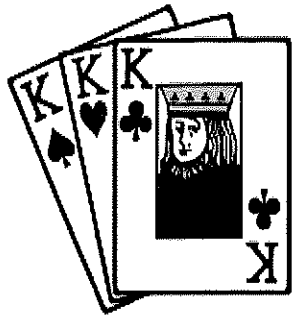
WA State Department
of Ecology (SWRO)

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3 Kings Environmental, Inc.

16 April 2013

Mr. Joe Stella
21603 NE 249th Avenue
Battle Ground, Washington
98604

Re: Subsurface Investigation Report for the Chelatchie General Store
Located at 42411 NE Yale Bridge Road in Amboy, Clark County, Washington
Washington DOE LUST File Number: 10302; 3 Kings Project Number: 214026

Mr. Stella:

3 Kings Environmental Inc. (3 Kings) has completed subsurface investigation activities associated with a petroleum release emanating from an Underground Storage Tank (UST) System at the Chelatchie General Store located at 42411 NE Yale Bridge Road in Amboy, Clark County, Washington ("subject site"). This letter report provides background information about the subject site, a description of historic and current work activities, analytical results associated with current and historic environmental assessment work and professional conclusions and recommendations. The work documented in this report meets Washington Department of Ecology (DOE) requirements for site assessment activities.

Site Description:

At the time of work activities, the subject site consisted of a general store and retail fuel facility. The subject site consisted of a single approximate 4.36-acre parcel, identified at the northeast corner of the intersection of NE Yale Bridge Road (a.k.a., State Route 503) and NE Healy Road. The subject site was identified by the Clark County Assessor's Office as account number 274365000, within the Southeast Quarter of Section 12 of Township 5 North, Range 3 East of the Willamette Baseline and Meridian. See Figure 1, "Site Vicinity Map," for a map illustrating the location of the subject site. The current owner of the subject site is Ms. Becky Graybill, who purchased the subject site from Mr. Joe Stella in 2003.

The subject site contained a single approximate 5,917-square foot building, utilized as a convenience store, offices, storage and restrooms. The structure was identified at the southwestern corner of the subject site, located approximately 50 feet east of NE Yale Bridge Road and 20 feet north of NE Healy Road. A single fuel island with two multi-product dispensers was identified beneath a canopy, and located on the west side of the property,

between the structure and NE Yale Bridge Road. Three USTs were identified just south of the canopy and fuel dispensers, and appeared to be under 10,000 gallons in size. According to the Washington DOE database of regulated UST sites, the subject site contained an approximate 8,000-gallon regular gasoline UST, an approximate 6-8,000-gallon mid-grade gasoline UST, and a split 8,000-gallon premium gasoline and diesel UST. The three USTs were presumably located within the tank nest identified south of the dispenser island and canopy. A propane Aboveground Storage Tank (AST) was identified just north of the edge of the asphalt, approximately 30 feet east of NE Yale Bridge Road. The only other environmentally sensitive features consist of four groundwater monitoring wells (i.e., monitoring wells MW-1 through MW-4), which were identified west of the structure. Specifically, monitoring wells MW-1, MW-2 and MW-3 were identified west of the dispenser island and canopy, while monitoring well MW-4 was identified north of the dispenser island and canopy.

The subject site includes an approximate 10,000-square foot asphalt area, measuring roughly 100 feet by 100 feet, located at the southwest corner of the property. The lone structure was identified within the asphalt area, while the remainder of the subject site was covered with grass and trees. The asphalt area around the structure was used for customer and employee access and parking.

The subject site was identified in an area of predominately light commercial and rural residential and/or agricultural land use. Single-family residential properties were identified adjacent to and surrounding the subject site on all sides, with the exception of a United States Department of Agriculture facility used as a Forestry Department office and shop identified southwest of the subject site, across the intersection of NE Yale Bridge Road and NE Healy Road. The subject site and properties identified at the intersection of NE Yale Bridge and Healy Roads are designated as Rural Center Commercial District (CR-2) properties by Clark County, while residential properties identified east of the subject site were zoned Rural Center Residential District with 2.5-acre minimum lot sizes (RC-2.5). All properties in the vicinity of the subject site appeared to be developed.

See Figure 2, "Site Map," for a map illustrating the layout of the subject site, location of the UST System components and other relevant site features.

Regional/Local Geology and Hydrology:

The subject site and surrounding properties are located within the Southern Cascade physiographic province, an upland area identified between the Puget Lowlands to the west and Columbia Basin to the east. The Southern Cascade physiographic province is bounded to the south by the Columbia River and the north by the Northern Cascade physiographic province. This province is considered a predominately Cenozoic-aged volcanic rocks and associated deposits, which lack the structural complexity of the northern portion of the Cascade Range. This physiographic province has experienced extensive uplift and other orogeny during the most recent 20 million years, while also privy to catastrophic earth movements in the form of glaciation, landslides and flooding.

The geology of the Southern Cascade physiographic province consists of late-Mesozoic basement rocks which were eroded to a plain on which sediment accumulation began in the Eocene, which lead to the formation of nonmarine shales, siltstones and sandstones. Basalt and andesite volcanism began during the Eocene along the Cascade arc, and were followed by significant orogeny from volcanism during the Oligocene through Quarternary time. Evidence of ash and mud flows, lahars and slides are signatures of these activities. During the middle and late Miocene, Columbia River Basalts were extruded through rifts which formed in Central Washington, and resulted in accumulation of deep deposits of basalt along the eastern flank of the province. Subsequent compression and uplift raised the eastern portion of the province. During this time, the ancestral Columbia River achieved its' current course and continued eroding the current channel. The Columbia Gorge was the site of extensive landslides, alluvial deposits and intracanyon basalt flows, which slightly altered the river course over time. In addition, glaciation effected alluvial processes at and upstream of the Columbia Gorge, which caused the damning and cataclysmic release of large volumes of water. These repeated flood events occurred between 15,500 and 13,000 years ago, and significantly eroded the Columbia Gorge and southern edge of the Southern Cascade physiographic province. Currently, the Southern Cascade physiographic province is characterized by relatively young volcanoes with active eruptive histories, namely Mt. St. Helens, Mt. Adams and Mt. Rainier.

The subject site is located at approximately 500 feet above mean sea level (amsl), within the Chelatchie Creek floodplain. Topography was fairly steep within ½ mile of the subject site, with several hills identified to the west of the subject site, as well as the valley walls approximately ½ mile south and north of the subject site. Elevations increased to over 1,300 feet amsl within one mile of the subject site. The nearest surface water body is Chelatchie Creek, identified approximately ¼ mile west of the subject site, and flowing from northeast to southwest.

The USDA "*Soil Survey of Clark County, Washington*" (1972) indicated that soils at and adjacent to the subject site are identified as the Cinnebar silt loam with slopes ranging from eight to 20 percent. This soil type is described as a deep, well-drained, gently sloping to very steep soil derived from volcanic ash. This soil is associated with lower foothills. This soil is characterized as well-drained, with moderate permeability, with medium runoff and moderate erosion hazard.

A typical profile of the Cinnebar silt loam includes an approximate six-inch thick very dark brown silt loam surface soil layer, followed by an approximate seven-inch thick dark-brown, friable silt loam, followed by an approximate 35-inch thick layer of dark yellowish-brown silt loam, and completely underlain by an approximate 25-inch thick layer of dark yellowish-brown loam. As mentioned above, the subject site was identified ¼ mile east of Chelatchie Creek. Thus, surface water is presumed to flow across the subject site toward Chelatchie Creek. Groundwater is also anticipated to flow from southwest toward Chelatchie Creek.

Based on review of well logs maintained by Washington DOE, a total of 39 well logs were identified within the same Township, Range and Section as the subject site. At least 37 of the 39 well logs were attributed to potable water wells. Two logs were identified for the subject site, and appeared to be associated with monitoring wells at the property. At least four wells were identified within ¼ mile of the subject site, including wells at 42402 NE Yale Bridge Road, 29416 NE Healy Road, 42815 NE Yale Bridge Road and 42218 Yale Bridge Road. The four closest wells ranged in depth from 100 feet to 195 feet in depth, with groundwater identified at 15 to 20

feet in most. A potable water well was not identified at the subject site, based on review of the Washington DOE database.

Groundwater was observed at a depth of approximately five to eight to ten feet bgs during groundwater monitoring activities at the subject site. A groundwater gradient ranging from two to seven percent was calculated during compliance monitoring activities, with a flow direction from southwest to south-southwest.

UST Decommissioning and Initial Cleanup Activities:

On 10 May 1993, WFA'S Construction Company (WFA) of Chehalis, Washington initiated onsite activities to decommission four historic USTs. According to information obtained from 3 Kings via public file review of documents maintained by Washington DOE, the former pump island was located in the same location as the current dispensers, and the USTs were located immediately west of current USTs. Reportedly, a 12,000-gallon regular gasoline UST, an 8,000-gallon regular gasoline UST and an 8,000-gallon super gasoline UST were decommissioned by removal. A summary report mentions a 6,000-gallon diesel UST, but appears to be associated with the property at 28713 NE Healy Road, and not the subject site. In addition to the decommissioning, a reported over-excavation of 264.29 tons of impacted soil was also completed. Groundwater was reportedly identified at 11 feet below ground surface (bgs) at the time of the work, and was found to contain Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) at levels which exceeded applicable cleanup standards.

On 30 June 1993, two groundwater monitoring wells were installed at the subject site. The two monitoring wells (i.e., wells MW-1 and MW-2) were installed by Holt Drilling, Inc. utilizing a hollow-stem auger rig, and consisted of four-inch diameter Poly Vinyl Chloride (PVC) pipe set to a depth of 12 feet bgs. The bottom five feet of the wells were comprised of 0.020-inch slotted PVC pipe, and the remainder was solid riser pipe. 10/20 Driller's Sand was used to fill the annular space from the base of the boring to five feet bgs, bentonite chips were placed to a depth of two feet bgs and concrete was brought to finish grade. Each well was completed as a flush-mount, with steel, traffic-rated monuments and locking expandable well plug.

As mentioned above, on 1 July 1993, a 6,000-gallon diesel UST was reportedly decommissioned at a property which was owned by the current owner of the subject site. Based on review of maps within the Washington DOE-maintained project file, this site is located south of the subject site, across NE Healy Road. This property is currently listed as 28713 NE Healy Road. This may have been a former cardlock facility, as the map illustrates a dispenser island, but no structure.

Sometime in 1993, the current UST System was installed at the subject site.

See Appendix A, "Historic Environmental Documentation," for copies of historic documents associated with the UST decommissioning, cleanup, well installation and diesel UST decommissioning at 28713 NE Healy Road. See Figure 2 for a map of the subject site which illustrates the location of the current and former UST cavities, dispenser island and monitoring wells.

Well Installation and Continued Cleanup Activities:

As mentioned prior, on 30 June 1993, at least two monitoring wells (i.e., monitoring wells MW-1 and MW-2) were installed at the subject site. Based on historic groundwater monitoring tables obtained by 3 Kings, it is likely that four additional wells (i.e., monitoring wells MW-3 through MW-6) were installed sometime between 1993 and 1999. Apparent groundwater monitoring initiated in October 1999 associated with six onsite wells.

Groundwater monitoring was completed 12 times between 22 October 1999 and 30 June 2008. Monitoring activities included collection of water samples from each of the six onsite monitoring wells, with laboratory analysis for apparent Total Petroleum Hydrocarbon-Gasoline extended (TPH-Gx) and BTEX constituent analysis. Depth to shallow groundwater ranged from 4.98 to 16.39 feet below Top of Casing (TOC), and flow directions routinely calculated to the northeast.

The following table summarizes the results from the historic groundwater monitoring events.

Sample ID	Sample Date	TPH-Gx (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)
MW-1	10/22/1999	1,800	100	8	130	161
	01/12/2000	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
	05/24/2000	Not Detected	Not Detected	Not Detected	Not Detected	1.7
	11/07/2000	Not Detected	Not Detected	Not Detected	Not Detected	0.09
	06/27/2001	Not Detected	Not Detected	1	1	3
	02/27/2002	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	09/13/2002	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	05/05/2003	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
	05/04/2007	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
	09/28/2007	Not Sampled	Not Sampled	Not Sampled	Not Sampled	Not Sampled
	01/10/2008	Not Detected	Not Detected	1	Not Detected	Not Detected
	06/30/2008	158	Not Detected	Not Detected	Not Detected	Not Detected
MW-2	10/22/1999	200	6.8	0.8	8.6	10.2
	01/12/2000	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
	05/24/2000	3,700	490	58	3.4	628
	11/07/2000	10,500	398	34	434	323
	06/27/2001	9,430	544	47	804	662
	02/27/2002	8,240	291	35	424	453
	09/13/2002	436	Not Detected	Not Detected	Not Detected	Not Detected
	05/05/2003	16,000	465	30	Not Detected	960
	05/04/2007	4,720	20	24	165	163
	09/28/2007	Not Sampled	Not Sampled	Not Sampled	Not Sampled	Not Sampled
	01/10/2008	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	06/30/2008	Not Sampled	Not Sampled	Not Sampled	Not Sampled	Not Sampled
MW-3	10/22/1999	Not Detected	0.9	Not Detected	0.6	Not Detected
	01/12/2000	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
	05/24/2000	3.9	1,150	61	85	465
	11/07/2000	8,420	1,322	118	124	369
	06/27/2001	50,100	2,120	134	603	649
	02/27/2002	4,610	705	27	331	177
	09/13/2002	730	Not Detected	Not Detected	Not Detected	Not Detected
	05/05/2003	5,450	338	19	Not Detected	126
	05/04/2007	4,890	539	34	563	347
	09/28/2007	377	1	2	2	70
	01/10/2008	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	06/30/2008	1,810	Not Detected	1	3	7
Washington DOE MTCA Method A Cleanup Standards		800	5	1,000	700	1,000

Bold = Concentration exceeds applicable Washington DOE cleanup standard

Sample ID	Sample Date	TPH-Gx (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)
MW-4	10/22/1999	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	01/12/2000	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
	05/24/2000	Not Detected	0.5	Not Detected	Not Detected	Not Detected
	11/07/2000	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	06/27/2001	477	Not Detected	Not Detected	56	2
	02/27/2002	159	1	Not Detected	Not Detected	Not Detected
	09/13/2002	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	05/05/2003	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
	05/04/2007	Not Detected	Not Detected	Not Detected	4	Not Detected
	09/28/2007	Not Detected	Not Detected	Not Detected	Not Detected	7
	01/10/2008	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
06/30/2008	155	Not Detected	Not Detected	Not Detected	Not Detected	
MW-5 *	10/22/1999	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
	01/12/2000	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	05/24/2000	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	11/07/2000	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
	06/27/2001	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
	02/27/2002	33	1	Not Detected	Not Detected	2
	09/13/2002	Not Detected	0.05	Not Detected	Not Detected	Not Detected
	05/05/2003	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
05/04/2007	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	
MW-6 *	10/22/1999	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
	01/12/2000	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	05/24/2000	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	11/07/2000	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	06/27/2001	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	02/27/2002	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	09/13/2002	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
	05/05/2003	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
05/04/2007	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	
Washington DOE MTCA Method A Cleanup Standards		800	5	1,000	700	1,000

Bold = Concentration exceeds applicable Washington DOE cleanup standard

* = Monitoring well decommissioned sometime after 4 May 2007.

A map illustrating the locations of the wells is available as Figure 2. See Appendix A for a cumulative groundwater sample result table.

Groundwater Remediation Activities:

In 2007, 3 Kings was utilized to introduce chemical oxidation products to groundwater beneath the subject site. Chemical oxidation was initiated in March 2007, and monitored four times over an approximate two-year period. 3 Kings placed slow-release Oxygen Release Compounds (ORC) within socks that were inserted in monitoring wells MW-1 and MW-2, and introduced an ORC slurry to monitoring wells MW-3 and MW-4 in a single event. It should be noted that former monitoring wells MW-5 and MW-6 were abandoned and presumably decommissioned sometime after 4 May 2007.

During chemical oxidation activities, groundwater monitoring was continued on an approximate semi-annual schedule. During remediation activities, groundwater ranged from 5.63 feet to 14.57 feet below TOC, with the deepest groundwater occurring during late-Summer and early-Fall. At times, monitoring wells MW-1 and MW-2 were found to be void of water, as these wells

were completed to a depth of 13 feet and 12 feet bgs, respectively. Reportedly, monitoring wells MW-3 and MW-4 were completed to a depth of 20 feet bgs.

Concentrations of dissolved petroleum hydrocarbon constituents dropped from a concentration of 16,000 micrograms per liter, or parts per billion (ppb), for TPH-Gx in sample MW-2 on 5 May 2003 to 4,720 ppb on 4 May 2007 to non-detect on 10 January 2008. Additionally, concentrations of dropped from 465 ppb to non-detect in the same well, over the same period. Monitoring well MW-3 also exhibited similar reductions in TPH-Gx and benzene, dropping from concentrations of 4,890 ppb and 539 ppb, respectively, on 4 May 2007, to concentrations of 377 ppb and one ppb, respectively, on 28 September 2007. However, concentrations of TPH-Gx did rebound to 1,810 ppb on 30 June 2008, but benzene was not detected. Concentrations of TPH-Gx did drop to 1,030 ppb on 23 September 2010, following completion of remediation, while benzene was still not detected.

Following completion of chemical oxidation activities in late 2009, 3 Kings initiated compliance monitoring.

Ongoing Groundwater Monitoring Activities:

3 Kings continued groundwater monitoring on 23 September 2010, following completion of remedial efforts involving introduction of ORC to groundwater at the subject site. Groundwater monitoring activities involved gauging depth to water, purging each well, collecting a representative groundwater sample and analyzing each sample for TPH-Gx and BTEX at each of the four remaining monitoring wells (i.e., monitoring wells MW-1 through MW-4). Groundwater monitoring was completed on 23 September 2010 (i.e., Third Quarter 2010), 31 December 2010 (i.e., Fourth Quarter 2010), 30 March 2011 (i.e., First Quarter 2011), 27 June 2011 (i.e., Second Quarter 2011) and 27 September 2011 (i.e., Third Quarter 2011).

Initially, 3 Kings opened each of the four flush-mount monuments and removed the locked expandable well plug. Using an electronic static water level indicator, 3 Kings gauged the depth to shallow groundwater from TOC to the nearest 0.01 foot. Following measurement of groundwater depth, 3 Kings utilized a submersible pump attached to dedicated, disposable polyethylene tubing to evacuate (i.e., purge) three casing volumes of water from monitoring wells MW-1 and MW-2. Due to the smaller diameter of wells MW-3 and MW-4 (i.e., 3/4-inch), 3 Kings utilized a peristaltic pump attached to polyethylene tubing for purging. During purging activities, groundwater parameters (i.e., temperature, pH and electric conductivity) were monitored and recorded to gauge the stability of the groundwater. Following removal of three casing volumes of water, and stabilization of groundwater, purging activities were terminated. All purge water was transferred to an onsite 55-gallon drum for temporary storage, pending receipt of analytical results to facilitate appropriate disposal.

Prior to sample collection, groundwater was allowed to recharge to pre-purge elevation. At this time, 3 Kings used a disposable bailer to collect a water sample from monitoring wells MW-1 and MW-2, while the dedicated disposable polyethylene tubing attached to a peristaltic pump was used to collect samples from wells MW-3 and MW-4. Samples were immediately placed in appropriate laboratory-provided sample containers equipped with Teflon lids, labeled with

sample-specific identifications, stored at approximately four degrees centigrade and transported to a Washington DOE-accredited analytical laboratory using chain-of-custody protocols. Each of the four groundwater samples was analyzed for TPH-Gx and BTEX constituents.

See Figures 3 through 7 for maps illustrating the location of the wells and corresponding depth to waters and groundwater flow direction information. See Appendix B, "Analytical Laboratory Documentation," for copies of chain-of-custodies associated with ongoing groundwater monitoring samples.

Ongoing Groundwater Monitoring Results:

Results associated with groundwater compliance monitoring are summarized in this section. The following table provides depth to shallow groundwater measurements for ongoing groundwater sampling events, and provides groundwater elevation changes between sampling events.

Sample Identification	Date Collected	Surveyed Elevation of TOC (feet amsl) *	Measured Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet amsl)	Elevation Change from Last Sampling Event (feet)
MW-1	09/23/2010	160.00	Dry	>147.00	--
	12/31/2010		9.66	150.34	+3.34
	03/30/2011		5.59	154.41	+3.11
	06/27/2011		12.61	147.39	-7.06
	09/27/2011		Dry	>147.00	-0.39
MW-2	09/23/2010	157.71	Dry	>145.71	--
	12/31/2010		7.15	150.56	+4.85
	03/30/2011		4.98	152.73	+2.13
	06/27/2011		Dry	>145.71	-6.98
	09/27/2011		Dry	>145.71	No Change
MW-3	09/23/2010	157.59	13.21	144.38	--
	12/31/2010		7.28	150.31	+5.93
	03/30/2011		4.19	153.40	+3.09
	06/27/2011		10.06	147.53	-5.87
	09/27/2011		12.68	144.91	-2.62
MW-4	09/23/2010	160.52	14.57	145.95	--
	12/31/2010		8.39	152.13	+6.18
	03/30/2011		4.27	156.25	+4.12
	06/27/2011		10.53	149.99	-6.26
	09/27/2011		13.11	147.41	-2.58

* = Surveyed TOC determined with laser level, staff and tripod comparing TOC to arbitrary benchmark

As the table indicates, groundwater ranged from approximately four feet below TOC to a maximum depth of over 14 feet below TOC. Groundwater flow direction and gradient was determined by plotting the calculated groundwater elevation from each well on a map, and connecting locations of equal elevations, then completing a rise over run (i.e., groundwater elevation change divided by distance between points) calculation to determine the gradient of the water table.

The following table summarizes groundwater gradient and flow direction information calculated for the subject site during monitoring events.

Sampling Event	Date of Sampling Event	Calculated Groundwater Gradient (feet per foot)	Calculated Groundwater Flow Direction
Third Quarter 2010	09/23/2010	0.0209	South-Southwest
Fourth Quarter 2010	12/31/2010	0.0242	Southwest
First Quarter 2011	03/30/2011	0.0542	Southwest
Second Quarter 2011	06/27/2011	0.065	Southwest
Third Quarter 2011	09/27/2011	0.0333	South-Southwest

As noted above, the groundwater flow direction was determined to be to the southwest to south-southwest, with a gradient ranging from two to seven percent.

Analytical results associated with ongoing groundwater samples are summarized below.

Sample ID	Sample Date	TPH-Gx (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)
MW-1	09/23/2010	Not Sampled	Not Sampled	Not Sampled	Not Sampled	Not Sampled
	12/31/2010	<100	<0.300	<1.00	<1.00	<2.00
	03/30/2011	<100	<0.300	<1.00	<1.00	<2.00
	06/27/2011	<100	<0.300	<1.00	<1.00	<2.00
	09/27/2011	Not Sampled	Not Sampled	Not Sampled	Not Sampled	Not Sampled
MW-2	09/23/2010	Not Sampled	Not Sampled	Not Sampled	Not Sampled	Not Sampled
	12/31/2010	<100	<0.300	<1.00	<1.00	<2.00
	03/30/2011	<100	<0.300	<1.00	<1.00	<2.00
	06/27/2011	Not Sampled	Not Sampled	Not Sampled	Not Sampled	Not Sampled
	09/27/2011	Not Sampled	Not Sampled	Not Sampled	Not Sampled	Not Sampled
MW-3	09/23/2010	1,030	1.10	2.43	18.2	38.0
	12/31/2010	308	<0.300	<1.00	<1.00	<2.00
	03/30/2011	<100	<0.300	<1.00	<1.00	<2.00
	06/27/2011	<100	<0.300	<1.00	<1.00	<2.00
	09/27/2011	<50.0	<1.0	<1.0	<1.0	<3.0
MW-4	09/23/2010	<100	<0.300	<0.500	<0.500	<1.50
	12/31/2010	<100	<0.300	<1.00	<1.00	<2.00
	03/30/2011	<100	<0.300	<1.00	<1.00	<2.00
	06/27/2011	<100	<0.300	<1.00	<1.00	<2.00
	09/27/2011	<50.0	<1.0	<1.0	<1.0	<3.0
Washington DOE MTCA Method A Cleanup Standards		800	5	1,000	700	1,000

Bold = Concentration exceeds applicable Washington DOE cleanup standard

As results indicate, with the exception of TPH-Gx detected at 1,030 ppb in monitoring well MW-3 during the Third Quarter 2010 sampling event, all petroleum constituents were identified below Washington DOE Model Toxics Control Act (MTCA) Method A cleanup levels.

See Figures 3 through 7 for maps illustrating sample results, groundwater gradient and flow direction for the Third Quarter 2010, Fourth Quarter 2010, First Quarter 2011, Second Quarter 2011 and Third Quarter 2011 sampling events, respectively. See Appendix B for copies of analytical laboratory reports.

Subsurface Investigation Activities:

On 11 March 2014, 3 Kings was at the subject site to complete subsurface investigation activities, including soil and groundwater sample collection. A total of seven borings were completed utilizing a direct-push, hydraulic, piston-sampling device (i.e., GeoProbe rig) supplied by Cascade Drilling Company, Inc. (Cascade) of Clackamas, Oregon. The five borings (i.e., drivepoint borings DP-1 through DP-7) were completed throughout the subject site, and completed to a maximum depth of 15 feet below ground surface (bgs). All seven borings were completed in the vicinity of the current and former UST System.

Initially, 3 Kings completed a public and private utility locating survey at the subject site, with the goal of identifying potential utility corridors which may impact proposed boring locations. Locates Down Under was at the subject site on 11 March 2014 to survey the work area for potential utility conflicts. Once complete, 3 Kings mobilized to the subject site with a Cascade GeoProbe rig. Each of the seven borings was completed by advancing a five-foot long stainless steel macro-core sampling device equipped with an acetate liner. A continuous stainless steel column of rods was advanced at five-foot intervals, during which sample cores were removed at five-foot intervals for inspection by a 3 Kings geologist. This process was repeated until boring completion depth was achieved.

During completion of each boring, a 3 Kings geologist reviewed acetate liner contents to evaluate soil conditions and record relevant observations. 3 Kings completed head-space measurements utilizing a Photo Ionization Detector (PID) to screen soil removed during boring completion activities for the presence of VOCs. Head-space measurements were collected at approximate three- to five-foot interval during boring completion, with measurements recorded on each boring log. Head-space measurements were completed by placing approximately one to two ounces of soil at discrete intervals in a four-ounce glass jar and covering the top of the jar with aluminum foil. Each jar was then capped and allowed to rest at approximate room temperature for approximately ten minutes. Following appropriate rest period, the tip of the PID was inserted through the aluminum foil at the top of the container, and maximum PID readings were recorded. An exploratory boring log was completed for each boring, which provided a location of the boring, description of soils encountered, field screening measurements, and other relevant information. Copies of exploratory boring logs are included in Appendix C, "Exploratory Boring Logs."

Each soil sample was collected from the acetate liner, immediately placed in laboratory-provided sample containers equipped with Teflon lids, labeled with sample-specific identifications, stored at approximately four degrees centigrade, and transported to a Washington DOE-accredited analytical laboratory (i.e., Specialty Analytical in Clackamas, Oregon) using chain-of-custody protocols. Select soil samples collected were analyzed for Total Petroleum Hydrocarbon-Gasoline extended (TPH-Gx), Benzene, Toluene, Ethylbenzene and Xylenes (BTEX), Volatile Organic Compounds (VOCs), and/or total lead. As the goal of the subsurface investigation activities were to evaluate subsurface conditions associated with a former UST, sample intervals were focused between eight and 12 feet bgs.

Select borings were also used for shallow groundwater sample collection. Following completion of soil sampling activities, a temporary well screen was placed in the open boring selected for groundwater sample collection. Temporary well screen consisted of one-inch diameter Schedule 40 Poly Vinyl Chloride (PVC) piping, including ten feet of slotted pipe beneath five feet of solid riser pipe. The temporary well screen was placed at the base of each boring selected for water sampling, and dedicated disposable polyethylene tubing was attached to a peristaltic pump and introduced into the well. The peristaltic pump and tubing were used to remove a minimum of three casing volumes (i.e., approximately one gallon) of water from each sample location prior to sample collection. The goal of removing water prior to sample collection is to eliminate water which was potentially impacted by drilling activities.

Following removal of three casing volumes of water, and re-establishment of pre-purge groundwater elevation, 3 Kings proceeded to collect a representative water sample from the temporary well screen. Water was collected directly from the peristaltic pump and tubing into laboratory-provided sample containers equipped with Teflon lids, labeled with sample-specific identifications, stored at approximately four degrees centigrade and transported to a Washington DOE-accredited analytical laboratory (i.e., Specialty Analytical in Clackamas, Oregon) for analyses. Water samples collected were analyzed for TPH-Gx, BTEX, VOCs and/or total lead. Following completion, each boring was backfilled with bentonite chips and hydrated, and each boring was capped with gravel.

During subsurface investigation activities, 3 Kings personnel also collected a water sample from existing monitoring well MW-3. The water sample was collected after gauging depth to water from each of the four onsite monitoring wells using an electronic static water level indicator to the nearest 0.01 foot. Next, 3 Kings used a peristaltic pump attached to dedicated disposable polyethylene tubing to remove approximately three casing volumes of water prior to sampling activity (i.e., purge). During water purge, 3 Kings monitored temperature, pH and electric conductivity at regular intervals to gauge the stability of the well water. Following removal of three casing volumes, and verification that groundwater parameters were stable, 3 Kings allowed the well to recharge to pre-purge levels. At this point, 3 Kings used the same peristaltic pump and tubing to collect a water sample from the well. The water sample was handled in similar fashion to subsurface investigation water samples, and analyzed for petroleum.

See Figure 8, "Subsurface Investigation Sample Location & Analytical Results Map," for a map illustrating the boring locations. See Appendix B for copies of chain-of-custody documentation associated with the most recent sampling event. See Appendix D, "Site Photographs," for pictures taken during subsurface investigation activities.

Subsurface Investigation Results:

Results associated with the subsurface investigation completed on 11 March 2014 confirmed the presence of petroleum-impacted soil and shallow groundwater in the vicinity of the historic UST cavity. Based on field observations completed during subsurface investigation activities, petroleum impacts were not observed in boring DP-1 through DP-4, as well as borings DP-6 and DP-7. Only boring DP-5 was found to contain obvious indications of petroleum impact.

The following table summarizes soil sample results obtained from the subsurface investigation at the subject site.

Sample Name	TPH-Gx (mg/kg)	BTEX (mg/kg)	Non-BTEX VOCs (mg/kg)	Total Lead (mg/kg)
DP-3 @ 8'	<3.77	B = <0.0151 T = <0.151 E = <0.151 X = <0.453	Not Analyzed	Not Analyzed
DP-4 @ 9'	<3.83	B = <0.0306 T = <0.153 E = <0.153 X = <0.459	Not Analyzed	Not Analyzed
DP-5 @ 12'	1,200	* B = <0.114 T = <0.114 E = 8.12 X = 24.34	1,2,4-TMB = 52 1,3,5-TMB = 13.1 IPB = 0.93 N = 6.46	<2.38
DP-6 @ 12'	<3.62	B = <0.0145 T = <0.145 E = <0.145 X = <0.434	Not Analyzed	Not Analyzed
Washington DOE MTCA Method A Cleanup Standards	30 (w/ Benzene) 100 (w/out Benzene)	Benzene = 0.03 Toluene = 7 Ethylbenzene = 6 Xylenes = 9	Naphthalene = 5	250

As the table illustrates, boring DP-5 was found to contain gasoline impacts which exceeded Washington DOE MTCA Method A cleanup levels. Several constituents were identified at concentrations which exceed cleanup standards, including generic gasoline (i.e., TPH-Gx), ethylbenzene, xylenes and naphthalene.

The following table summarizes groundwater sample results obtained from the subject site.

Sample Name	TPH-Gx (ug/L)	BTEX (ug/L)	Non-BTEX VOCs (ug/L)	Total Lead (ug/L)
DP-1-W	<100	B = <0.300 T = <0.500 E = <0.500 X = <1.50	Not Analyzed	Not Analyzed
DP-3-W	104	B = <0.300 T = <0.500 E = 4.94 X = 25.3	Not Analyzed	Not Analyzed
DP-4-W	2,400	B = 0.580 T = 1.08 E = 63.8 X = 330	Not Analyzed	Not Analyzed
DP-5-W	88,100	* B = 22.9 T = 55.6 E = 2,710 X = 13,150	1,2,4-TMB = 3,880 1,3,5-TMB = 1,070 IPB = 117 N = 1,260 NPB = 167	51.7
MW-3	162	B = <0.300 T = <0.500 E = 2.89 X = 13.9	Not Analyzed	0.213
Washington DOE MTCA Method A Cleanup Standards	800 (w/ Benzene) 1,000 (w/out Benzene)	Benzene = 5 Toluene = 1,000 Ethylbenzene = 700 Xylenes = 1,000	Naphthalene = 100	15

Bold = Concentration exceeds applicable Washington DOE cleanup standard

* = BTEX reported using EPA 8260B method

As the table summarizes, petroleum impacts in groundwater which exceed Washington DOE MTCA Method A cleanup standards were identified in borings DP-4 and DP-5.

See Figure 8 for a map illustrating boring locations with corresponding analytical results. See Appendix B for copies of analytical laboratory reports, see Appendix C for copies of exploratory boring logs and Appendix D for site photographs.

Conclusions:

Based on historic information obtained by 3 Kings, the removal of three USTs, removal of petroleum-impacted soil, installation of groundwater monitoring wells and associated monitoring, and introduction of biologic soil amendment was completed at the subject site. These activities removed a large portion of the petroleum source material. However, subsurface investigation activities completed by 3 Kings in March 2014 confirmed the presence of remaining petroleum-impacted soil and groundwater which exceeds applicable Washington DOE cleanup standards.

Based on concentrations identified, coupled with information from historic reports, 3 Kings presumes a pocket of petroleum-impacted soil in an approximate 50-foot diameter area located at the northwest corner of the former UST cavity remains. In addition, petroleum-impacted groundwater was identified along the south and west sides of the subject site, presumably in hydraulically down-gradient positions from the source material and historic UST System.

Additional delineation and remediation work will be required to determine the magnitude and extent of the petroleum impacts to soil and shallow groundwater.

Recommendations:

Based on information contained in this report, 3 Kings recommends continued delineation and remediation work at the subject site associated with the historic petroleum release. Additional activities should include additional soil sampling in the vicinity of boring DP-5. Sampling should include collection of soil samples at a depth of 12 feet bgs, approximately ten feet from boring DP-5 on all sides. Each sample should be analyzed for TPH-Gx, with the goal of evaluating the magnitude and extent of soil impacts.

*why not
all DP-5 samples*

In addition, to evaluate the presence of petroleum-impacted groundwater, 3 Kings recommends installing a minimum of three additional groundwater monitoring wells. 3 Kings anticipates installing at least one well in a hydraulically up-gradient position (i.e., northeast of UST System), one well near current boring DP-5 and one well in a down-gradient position from the identified impacts (i.e., west of drainage swale along Highway 503 right-of-way). Groundwater monitoring should be completed on a quarterly basis to evaluate dissolved petroleum hydrocarbon concentrations, as well as seasonal fluctuations in depth and flow direction.

In order to remediate the identified impacts to soil and shallow groundwater in a cost-effective manner, 3 Kings recommends the use of biologic or chemical oxidants to aid in the natural breakdown of petroleum products. This biologic or chemical oxidant can be introduced to the

subsurface using a GeoProbe, and dispersed using a high-pressure grout pump. Once the material has been introduced to the subsurface, it will be allowed to work for approximately 45 days. After 45 days, 3 Kings will recommend completion of another subsurface investigation to verify the effectiveness of the biologic or chemical oxidant. Soil and groundwater samples would presumably be collected from similar locations to previous sampling events, as well as from the existing and proposed groundwater monitoring wells. Results from the most recent sampling will be compared to historic sampling events to evaluate the need for additional remedial efforts.

Assuming results associated with final confirmation samples following remedial efforts are at or below Washington DOE MTCA Method A cleanup levels, 3 Kings will recommend project file closure and issuance of a "No Further Action" (NFA) finding by the Washington DOE for the subject site. If results indicate remaining petroleum impacts to soil or shallow groundwater still exceed applicable cleanup standards, additional remediation may be necessary.

Signature:

Report Prepared By:



Brett S. MacDonald, R.G.



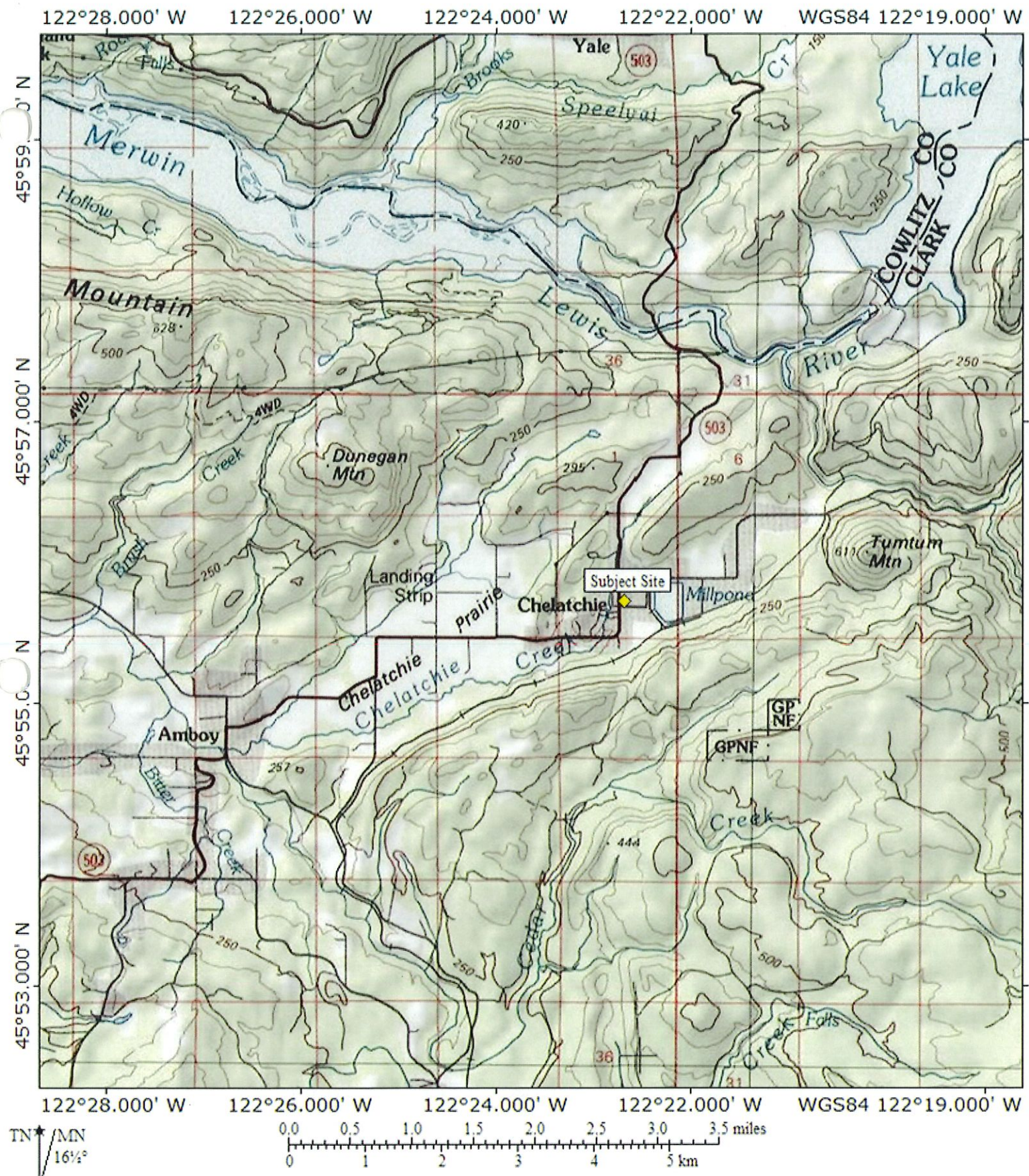
Brett S. MacDonald

Figures

- Figure 1 Site Vicinity Map
- Figure 2 Site Map
- Figure 3 Groundwater Sample Results, Flow Direction & Gradient Map:
Third Quarter 2010
- Figure 4 Groundwater Sample Results, Flow Direction & Gradient Map:
Fourth Quarter 2010
- Figure 5 Groundwater Sample Results, Flow Direction & Gradient Map:
First Quarter 2011
- Figure 6 Groundwater Sample Results, Flow Direction & Gradient Map:
Second Quarter 2011
- Figure 7 Groundwater Sample Results, Flow Direction & Gradient Map:
Third Quarter 2010
- Figure 8 Sample Location & Analytical Results Map

Appendices

- Appendix A Historic Environmental Documentation
- Appendix B Analytical Laboratory Documentation
- Appendix C Exploratory Boring Logs
- Appendix D Site Photographs



USGS Topographic Maps for Chelatchie, Washington Area

FIGURE 1: SITE VICINITY MAP

Chelatchie General Store Subsurface Investigation
 42411 NE Yale Bridge Road
 Amboy, Washington
 3 Kings Job Number: 214026



3Kings
 Environmental, Inc.

LEGEND

- - - = Approximate Property Boundary
- ⊕ = Location of Monitoring Well

0 Scale 35

*Single-Family Residence
(42815 NE Yale Bridge Road)*

NE Yale Bridge Road (State Route 503)

Chelatchie
General
Store

MW-4

Canopy
And
Dispensers

MW-1

MW-2

MW-3

Former
UST Cavity

(8K G/L)
(10K Gas)
(10K Gas)

NE Healy Road

*Commercial Property
(28713 NE Healy Road)*

*Single-Family Residence
(28605 NE Healy Road)*

FIGURE 2: SITE MAP

Chelatchie General Store Subsurface Investigation
42411 NE Yale Bridge Road
Amboy, Washington
3 Kings Job Number: 214026



3 Kings
Environmental, Inc.

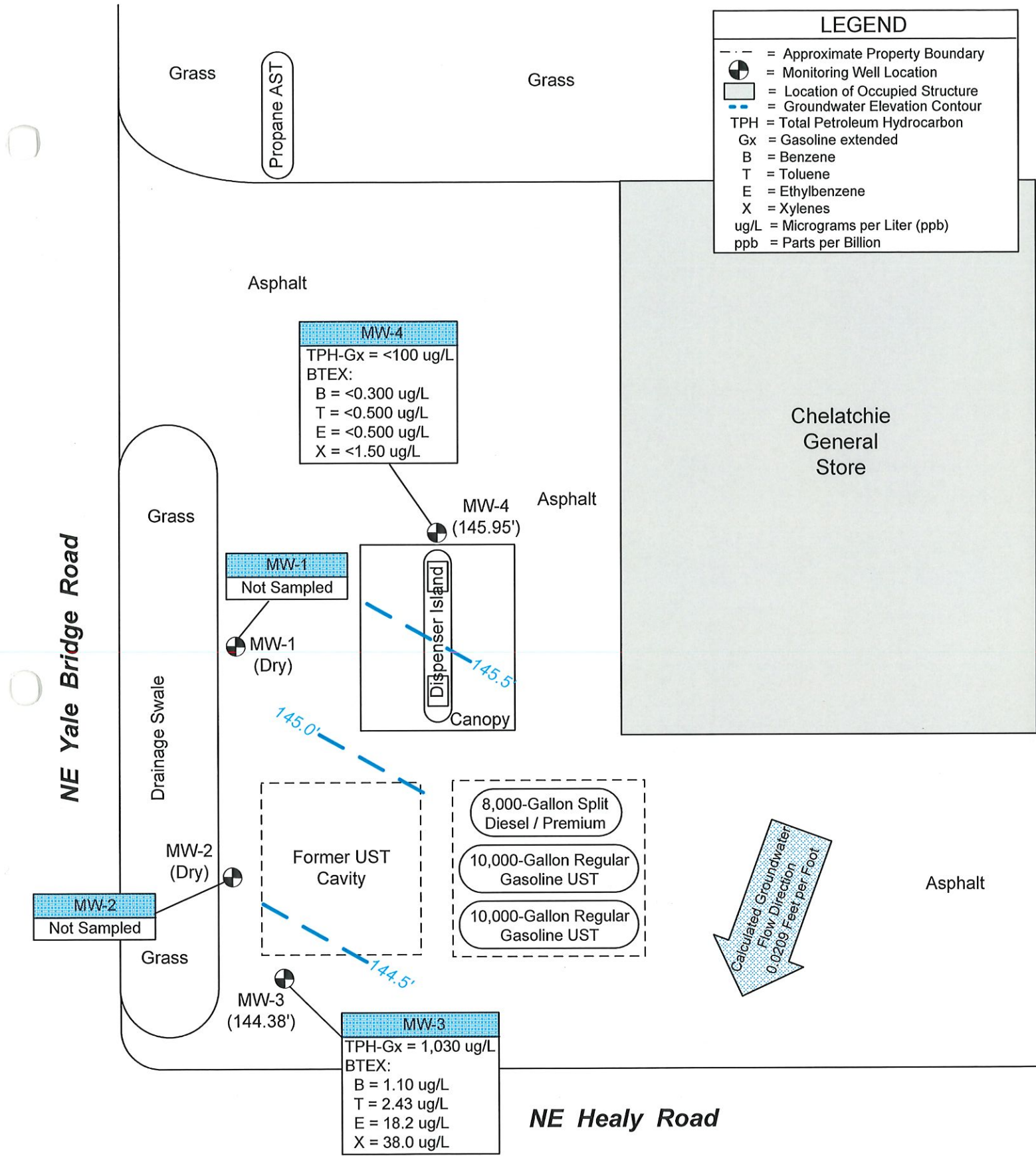
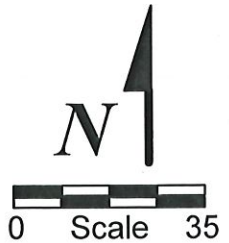


FIGURE 3: GROUNDWATER SAMPLE RESULTS, FLOW DIRECTION & GRADIENT MAP: THIRD QUARTER 2010



Chelatchie General Store Subsurface Investigation
 42411 NE Yale Bridge Road
 Amboy, Washington
 3 Kings Job Number: 214026



LEGEND

- - - = Approximate Property Boundary
- ⊙ = Monitoring Well Location
- ▭ = Location of Occupied Structure
- - - = Groundwater Elevation Contour
- TPH = Total Petroleum Hydrocarbon
- Gx = Gasoline extended
- B = Benzene
- T = Toluene
- E = Ethylbenzene
- X = Xylenes
- ug/L = Micrograms per Liter (ppb)
- ppb = Parts per Billion

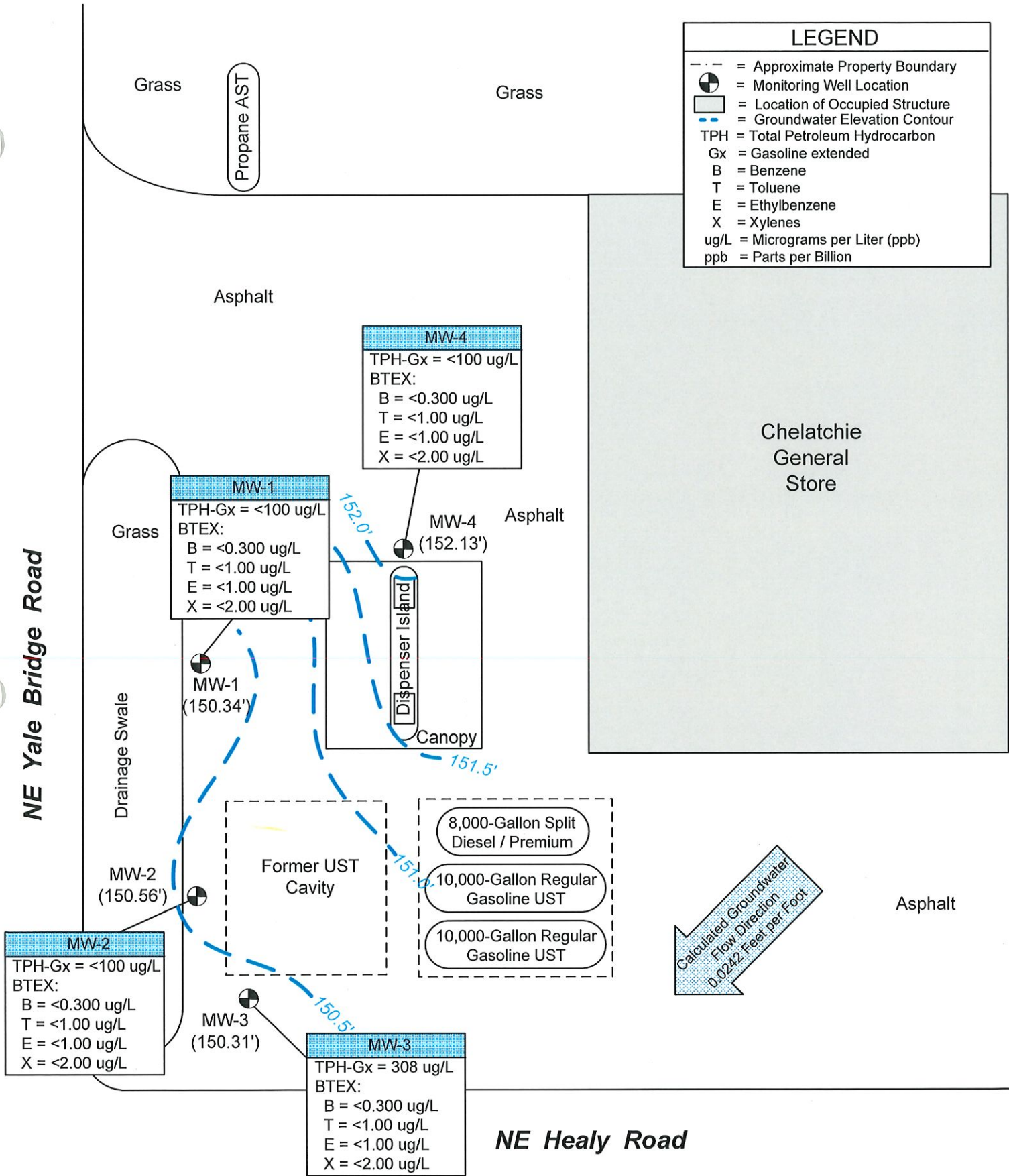
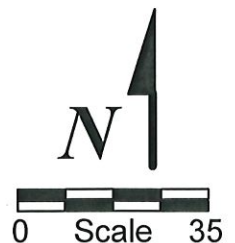


FIGURE 4: GROUNDWATER SAMPLE RESULTS, FLOW DIRECTION & GRADIENT MAP: FOURTH QUARTER 2010



Chelatchie General Store Subsurface Investigation
 42411 NE Yale Bridge Road
 Amboy, Washington
 3 Kings Job Number: 214026



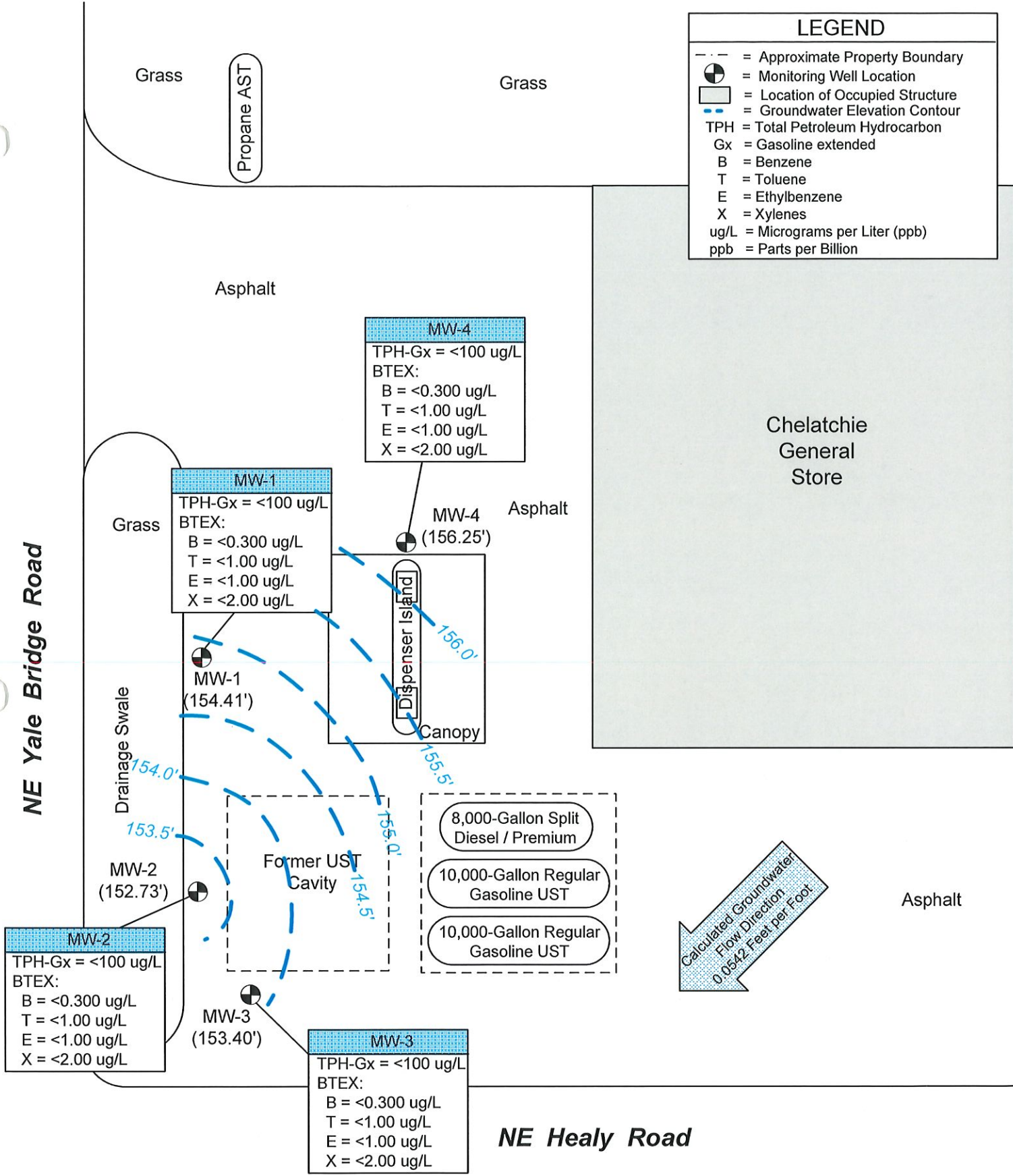
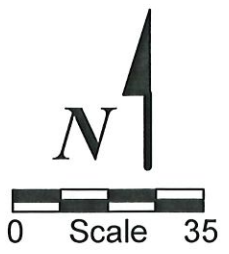


FIGURE 5: GROUNDWATER SAMPLE RESULTS, FLOW DIRECTION & GRADIENT MAP: FIRST QUARTER 2011



Chelatchie General Store Subsurface Investigation
 42411 NE Yale Bridge Road
 Amboy, Washington
 3 Kings Job Number: 214026



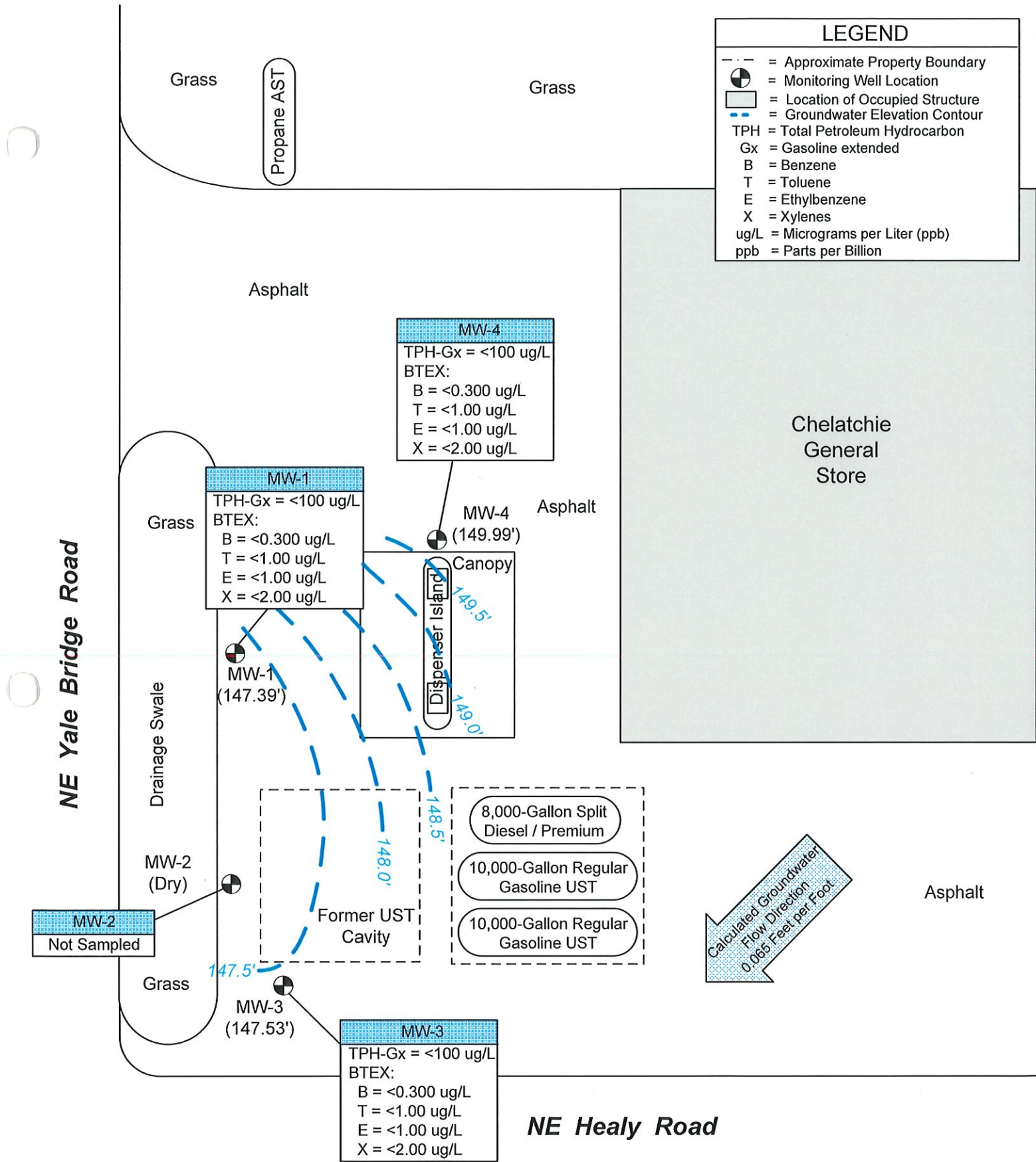
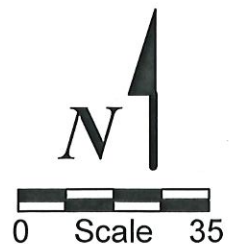


FIGURE 6: GROUNDWATER SAMPLE RESULTS, FLOW DIRECTION & GRADIENT MAP: SECOND QUARTER 2011



Chelatchie General Store Subsurface Investigation
 42411 NE Yale Bridge Road
 Amboy, Washington
 3 Kings Job Number: 214026



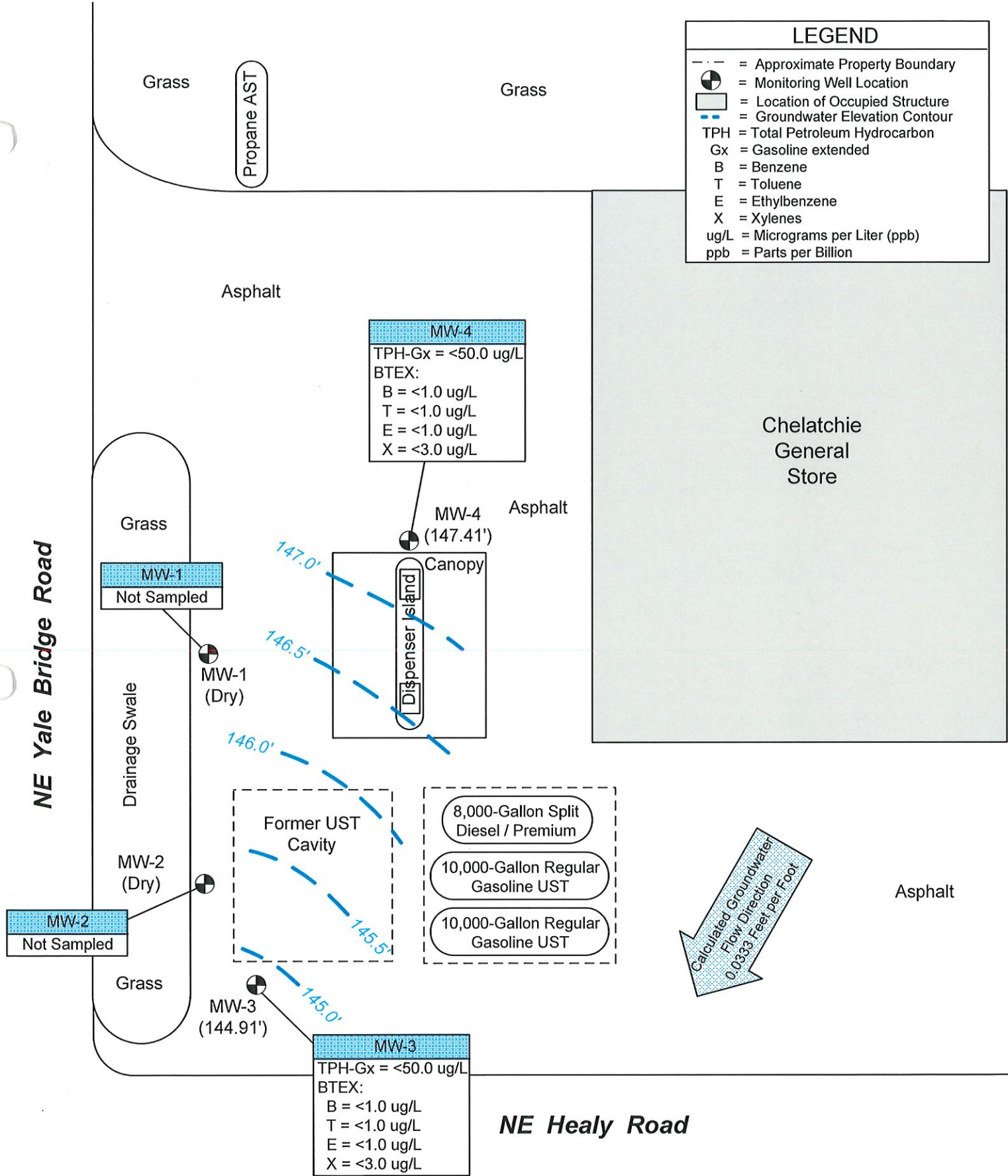
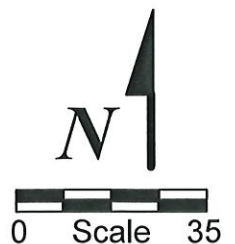


FIGURE 7: GROUNDWATER SAMPLE RESULTS, FLOW DIRECTION & GRADIENT MAP: THIRD QUARTER 2011



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 Environmental, Inc.

Chelatchie General Store Subsurface Investigation
 42411 NE Yale Bridge Road
 Amboy, Washington
 3 Kings Job Number: 214026



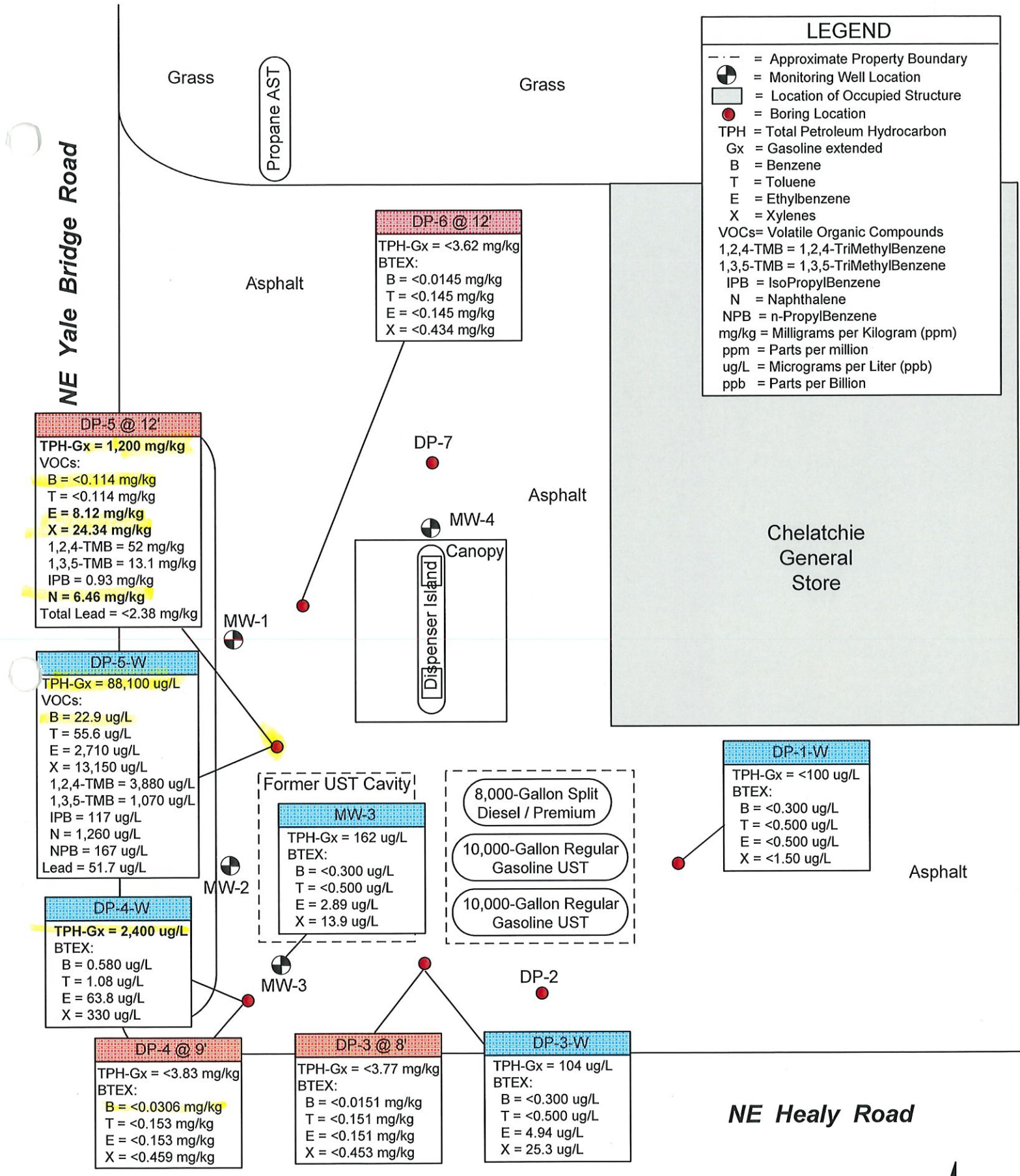
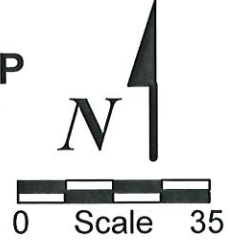


FIGURE 8: SAMPLE LOCATION & ANALYTICAL RESULTS MAP



Chelatchie General Store Subsurface Investigation
 42411 NE Yale Bridge Road
 Amboy, Washington
 3 Kings Job Number: 214026



APPENDIX A

Historic Environmental Documentation

**UNDERGROUND STORAGE TANK CLOSURE ASSESSMENT
CHELATCHIE PRAIRIE GENERAL STORE - AMBOY, WA. 98601
JOB# 9157**

INTRODUCTION

W.F. Anderson Construction Co., Inc. (WFA) has completed an Underground Storage Tank Closure Assessment at the Chelatchie Prairie General Store located at: Rt. 1 Box 415 - Amboy, Wa. 98601. The assessment was initiated by Joe Stella, owner/operator.

The objectives of this assessment were to document the excavation and removal of underground storage tanks, (UST'S) from the site, collect soil samples from beneath the removed tanks, and provide a written report. This documents WFA'S observations, field procedures, analytical methods, analytical results, conclusions, and recommendation for work completed to date.

SITE DESCRIPTION

This site is located on the corner of NE Healy Rd. and NE Yale Bridge Rd. (secondary Hwy.) To the North of the site is the Yale Bridge Rd. and Mt. St. Helens Forest Service HQTRS. To the South is open field and pasture. To the East is green pasture. To the West is a parking lot. (see attached map) At the time of WFA'S investigation, the site was used as a Grocery Store and Gas Station.

SITE HISTORY

At the time of the UST'S removal the property was used as a general store and gas station. The site is completely asphalted with major aterials to the West and to the North.

The 12000 gallon Unleaded UST is 18 years old, the 8000 gallon Super UST is 18 years old, the other 8000 gallon Regular UST is 18 years old, and the 6000 gallon Diesel UST is 6 years old.

Prior to the site being used as a general store and gas station, the information is unknown.

HYDROGEOLOGICAL & SOIL CHARACTERISTICS

The soil consisted of a sandy clay loam for about 9 feet. At 10 feet it turned into a glacier till with the water table at approximately 11 feet.

SUMMARY PRIOR TO FIELD SAMPLING

The site appeared to be very dry with no signs of standing water in adjacent fields. The area appeared to be clean with no visual signs of contamination or spills. There were no stains or eroded areas on the asphalt, and the storm ditch next to the road was completely dry.

UNDERGROUND STORAGE TANK REMOVAL OBSERVATIONS

The excavation and removal of the existing UST'S 1-12000 gallon Unleaded, 2-8000 gallon (1-Super Unleaded 1-Regular), and 1-6000 gallon Diesel, vents and vent lines pumps and product lines, was completed by WFA'S Construction Co. of Chehalis, Wa. Permits for the UST'S removal are present in this report.

Excavation began May 10, 1993 at approximately 8:00 in the morning. The top of the tanks were uncovered. Coastal Tank Services from Tacoma, Wa. arrived. All lines were purged and plugged. The tanks were then pumped, flushed and cleaned. 700 gallons of Product was removed from the tanks. Dry ice was then inserted into the tanks. Tanks were inerted and removed from hole. Mark Henderson from Department of Ecology was on site. There were no visual signs of any holes in the tank. There was some electrolysis present. Gastector Model 1314 SMPN Meter showed that the soil was contaminated. The tanks were purchased by Arnold Hatfield of Amboy, Wa. to be hauled away from the site and dismantled for scrap. (receipt in report)

On May 11, 1993 we removed approximately 250 yards of contaminated material from the tank area. The contaminated soil was put on plastic on the owners property. Mark Henderson from the Department of Ecology was on site. Soil and water samples were taken. Groundwater was encountered at approximately 11 feet.

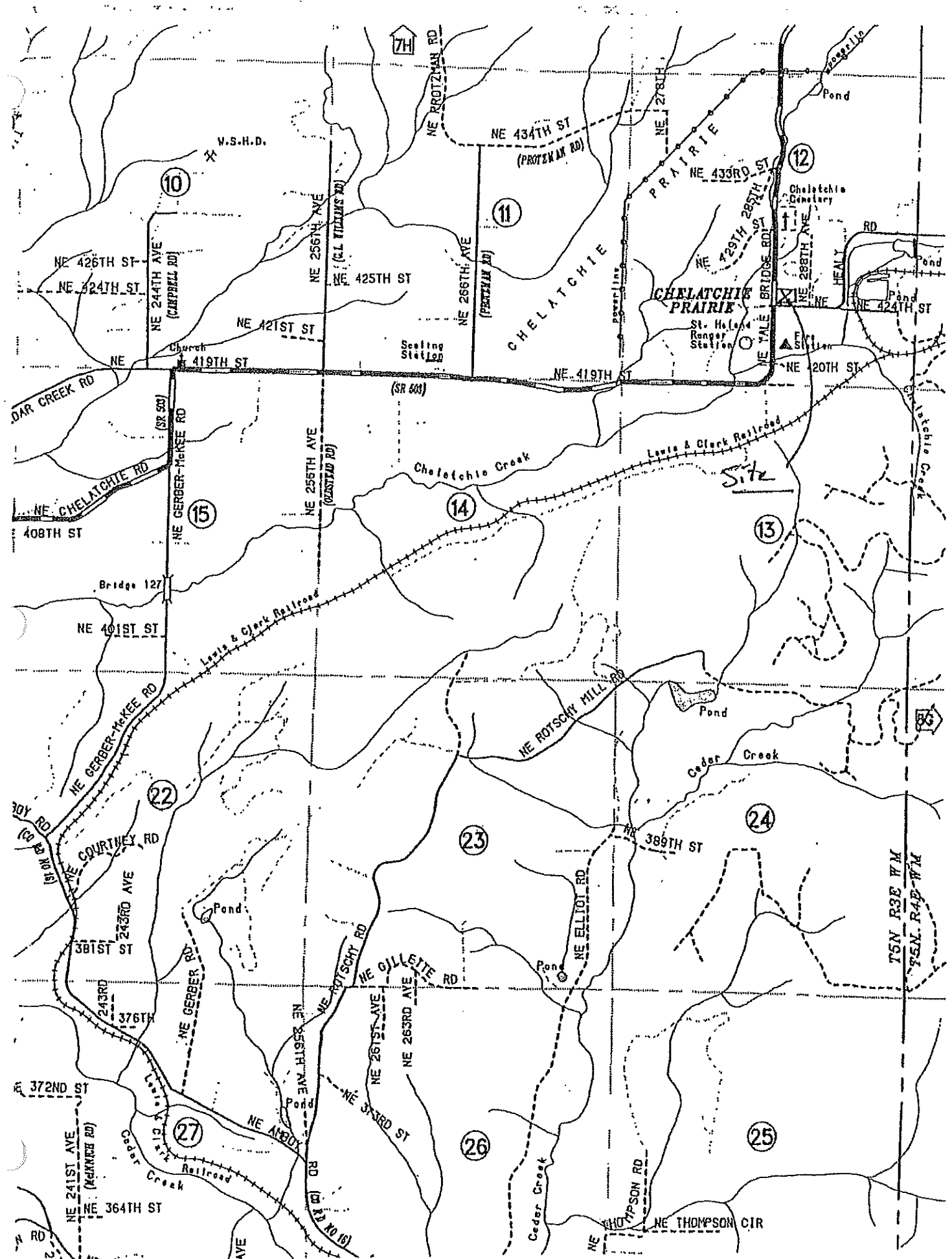
On July 1, 1993, two (2) monitoring wells were installed to monitor ground water.

On July 1, 1993 a 6000 gallon Diesel UST was removed across the street on same owner property. The top of the tank was uncovered. Coastal Tank of Tacoma, Wa. arrived. All lines were purged and plugged. The tank was then pumped, flushed and cleaned. 100 gallons of product was removed. Dry ice was inserted into the tank. Tank was inerted and removed from site. Tank was taken to WFA'S property to be cut up for scrap. No visual signs of contamination were present. Gastector Model SMPN 1314 Meter showed no signs of contamination. The tank itself was in good condition with no visual signs of electrolysis, corrosion or leakage.

All agencies were notified of the removal five (5) days prior to excavation operations.

The tanks were visually inspected for any obvious signs of leakage.

Tanks were removed from the site by Arnold Hatfield and recycled through Schnitzer Steel Scrap of Portland, Oregon. The 6000 gallon Diesel tank was removed from the site by WFA'S personnel and taken to WFA'S property to be cut up for scrap metal.



Site

T5N R3E W1M
T5N. R4E W1M

FOREST SERVICE

HOUSE

HOUSE

NE YALE BRIDGE ROAD

EMPTY LOT

6000 Gal

Diesel

island

CONTAMINATED SOIL (stockpile)

NE HEALY ROAD

8000 Gal

Super

island

12000 Gal

Unleaded

8000 Gal

Regular

STORE

new tank hole

GOOD DIRT

(stockpile)

CHELATCHIE PRAIRIE GENERAL STORE - RT. 1 BOX 415 AMBOY, WA. 98601

JOE STELLA - OWNER/OPERATOR JOB# 9157

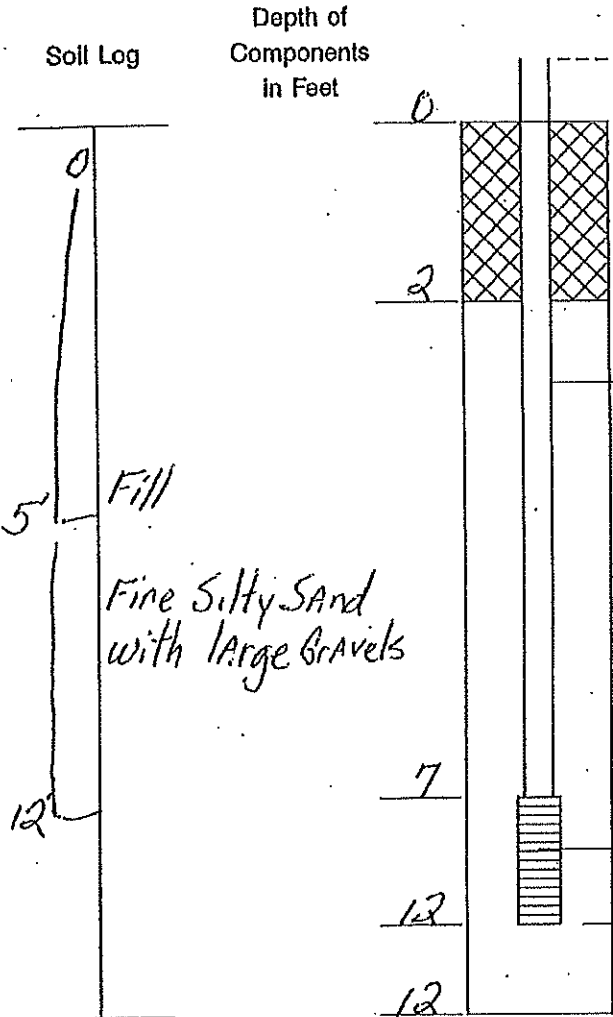
HOLT DRILLING, INC.

Resource Protection Well Report

15 JUL 93 11:38

Project Name Chelatchie Prairie
Well Identification # MW-1-2
Drilling Method HSA
Driller Clyde Moore
License # 1939

Date 6-30-93
County Clark, NW 1/4 SW 1/4
Section 12 T. 5 N R. 3 E
Start Card 210930
Consulting Firm WF Anderson



Stick up Flush on Monument Casing

Type of Surface Seal Concrete
Amount 2'

ID of Riser Pipe 4"
Type of Riser Pipe PVC
Amount 7'
Type of Connection Flush Thread

Type of Backfill around Riser Bentonite Chips
Amount 3'

Diameter of Borehole 12"

Screen Size or Type 20 Slot PVC

Type of Filter Material 10-20 Silica Sand
Amount 7'

Remarks:

Signature Clyde Moore

COUNTY OF CLARK

Code Administration Division
1408 Franklin 206/699-2375

Page 1 of 1
06/21/93 15:59

Activity No : C93DM036 Project No : AU038031
 Status : APPROVED Validated by : SD
 Inspector area:
 This type : DEMOLITION PERMIT Applied : 06/21/93
 Title : TX LT 50 SEQ 12-5-3 Approved : 06/21/93
 Parcel number : 274387 0000 Completed :
 Group-occup/use: To Expire : 12/18/93

Owner : STELLA JOSEPH
 Applicant : STELLA JOSEPH
 Applicant Addr : 42413 NE YALE BRIDGE RD CHEHALIS WA98532
 Phone number : 262-9068 EVERETT
 Job Address : HEALTY RD
 First legal : #50 SEC 12 T5N R3EWM .29A
 Plat number : 076070 SECTION 12 T5N R3EWM
 Census tract : 40100 School district: 119
 Class code : O/S
 Valuation : 2,000
 Construction : OTH
 Description : DEMO 1 6000 GAL TANK


CONTRACTOR : W F ANDERSON CONST CO INC Lic. C WFANDC*235Q1 070193
 Additional Information: DEMO 6000 TANK NO
 CK LIST REQ

Fee description	Units	Fee/Unit	Ext fee	Data
Permit Issuance Fee -->			7.00	
Tank demolition: lineal feet -->	20	.35	7.00	
Tank demolition: diameter -->	8		7.00	
*** Fees Required ***		Fees Collected & Credits		***

	Receipt No.	Date	Payment
Fees: 21.00		06/21/93	21.00
Adjustments: .00		Total Credits:	.00
Total Fees: 21.00		Total Payments:	21.00
		Balance Due:	.00

NOTICE

This permit becomes null and void if work or construction is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I hereby certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be complied with whether specified herein or not. The granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction.



 Signature of Contractor or Authorized Agent / Date

 Signature of Owner / Date

CODE: 101 Ed. U.B.C.

BECOMES PERMIT WHEN PROPERLY VALIDATED

INSPECTION RECORD CARD

**Post
this side
up**

File No. _____

Permit No. _____

PLEASE READ!

Owner/Contractor _____

Bldg. Address _____

PHONE NUMBERS
 Electrical 696-6319
 Health Dept. 695-9215
 Fire Marshall 699-2267

Call 699-2477 for INSPECTIONS

	APP. BY	DATE	INSPECTOR'S NOTES	APP. BY	DATE
ZONING & SETBACKS					
Setbacks					
Excavation & Forms					

Footing Blocking req.

OK to Pour **GROUNDWORK** Pour no concrete until the above has been signed.

	APP. BY	DATE	INSPECTOR'S NOTES	APP. BY	DATE
Footing					
Foundation/Joist					
Reinforced Steel					
Ground Work Plumbing Co.					

Perimeter Footing Drains

Roof Drains

OK to Pour **ROUGH INSPECTION** Pour no concrete until the above has been signed.

	APP. BY	DATE	INSPECTOR'S NOTES	APP. BY	DATE
Plumbing					
Tub & Shower					
Heating/Ventilation					
Gas Piping					
Chimney Steel					

Roof Sheathing

Bond Beams

Framing

OK to Insulate **INSULATION** Do not cover until the above has been signed.

	APP. BY	DATE	INSPECTOR'S NOTES	APP. BY	DATE
Foundation/Slab					
Exterior Sidewalls					

Ceiling, Attic

OK to Cover **UTILITIES** —Do not cover until the above has been signed.

	APP. BY	DATE	INSPECTOR'S NOTES	APP. BY	DATE
Sewer/Septic (by HD)					
Water Service					

OK to Cover **MISCELLANEOUS** Do not cover until the above has been signed.

	APP. BY	DATE	INSPECTOR'S NOTES	APP. BY	DATE
Sheetrock & Nailing					

Sidewalks

Woodstove Inserts

FINISH INSPECTIONS

	APP. BY	DATE	INSPECTOR'S NOTES	APP. BY	DATE
Plumbing Fixtures					
Gas Piping					
Heating/Ventilation					
Building					
Driveway					
Drainage/Storm Sewer					

Landscape

Fire Sprinkler/Hydrant

Paving/Parking (Striping)

Decks, Landing, Stairs

Skirting

• OCCUPANCY PERMIT REQUIRED TO OCCUPY BUILDING •

This card shall be maintained in a conspicuous place on the job. Please call for all inspections. Inspections will be made the following working day.

NOTICE — Approved building plans required on job site at time of each and every inspection.

NOTE: If work is not marked approved, make corrections noted under remarks or correction notice and call for another inspection before continuing work. Permit expires by limitation 180 days from date of permit if construction is not started.

S.W.W. HEALTH DEPARTMENT / DATE

FIRE MARSHALL / DATE

JOB COMPLETED / DATE



UNDERGROUND STORAGE TANK Site Check/Site Assessment Checklist

For Oiles UGA Only
 Owner / 1000 278
 Site / 1010 302

INSTRUCTIONS

When a release has not been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person registered with Ecology. The results of the site check or site assessment must be included with this checklist. This form must be submitted to Ecology at the address shown below within 90 days after completion of the site check/site assessment.

SITE INFORMATION: Include the Ecology site ID number if the tanks are registered with Ecology. This number may be found on the tank owner's invoice or tank permit.

TANK INFORMATION: Please list all tanks for which the site check or site assessment is being conducted. Use the owner's tank ID numbers if available, and indicate tank capacity and substance stored.

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT: Please check the appropriate item.

CHECKLIST: Please initial each item in the appropriate box.

Underground Storage Tank Section
 Department of Ecology
 P. O. Box 47655
 Olympia, WA 98504-7655

SITE ASSESSOR INFORMATION: This form must be signed by the registered site assessor who is responsible for conducting the site check/site assessment.

SITE INFORMATION

Site ID Number (on invoice or available from Ecology if the tanks are registered): _____

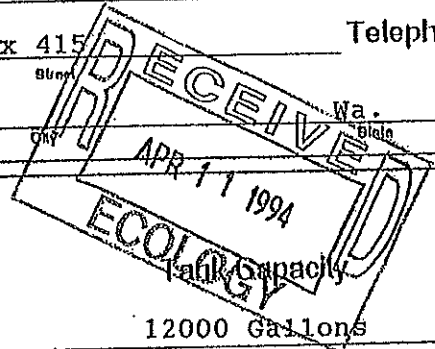
Site/Business Name: Chelatchie Prairie General Store

Site Address: Rt. 1 Box 415 Telephone: (206) 247-5529

Amboy

Wa.

98601



TANK INFORMATION

Tank ID No.	Tank Capacity	Substance Stored
<u>N/A</u>	<u>12000 Gallons</u>	<u>Unleaded Gasoline</u>
<u>N/A</u>	<u>6000 Gallons</u>	<u>Diesel</u>
<u>N/A</u>	<u>8000 Gallons</u>	<u>Regular Leaded Gasoline</u>
<u>N/A</u>	<u>8000 Gallons</u>	<u>Super Unleaded Gasoline</u>

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

- Check one:
- Investigate suspected release due to on-site environmental contamination
 - Investigate suspected release due to off-site environmental contamination.
 - Extend temporary closure of UST system for more than 12 months.
 - UST system undergoing change-in-service.
 - UST system permanently closed-in-place.
 - UST system permanently closed with tank removed.
 - Abandoned tank containing product.
 - Required by Ecology or delegated agency for UST system closed before 12/22/88.
 - Other (describe): _____

CHECKLIST

Each item of the following checklist shall be initiated by the person registered with the Department of Ecology whose signature appears below.

		YES	NO
1.	The location of the UST site is shown on a vicinity map.	WFA	
2.	A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in site assessment guidance)	WFA	
3.	A summary of UST system data is provided. (see Section 3.1)	WFA	
4.	The soils characteristics at the UST site are described. (see Section 5.2)	WFA	
5.	Is there any apparent groundwater in the tank excavation?	WFA	
6.	A brief description of the surrounding land use is provided. (see Section 3.1)	WFA	
7.	Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses.	WFA	
8.	A sketch or sketches showing the following items is provided:	WFA	
	- location and ID number for all field samples collected	WFA	
	- groundwater samples distinguished from soil samples (if applicable)	WFA	
	- samples collected from stockpiled excavated soil	WFA	
	- tank and piping locations and limits of excavation pit	WFA	
	- adjacent structures and streets	WFA	
	- approximate locations of any on-site and nearby utilities	WFA	
9.	If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4)	WFA	
10.	A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method.	WFA	
11.	Any factors that may have compromised the quality of the data or validity of the results are described.		WFA
12.	The results of this site check/site assessment indicate that a confirmed release of a regulated substance has not occurred.		WFA


SITE ASSESSOR INFORMATION

Wayne Anderson WF Anderson Const. Co., Inc.
 Person registered with Ecology Firm Affiliated with
 Business Address: 212 Middle Fork Rd. Telephone: (206) 262-9068
Street
Chehalis Wa. 98532
City State ZIP+Code

I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 179.360 WAC.

7-23/93

Date


 Signature of Person Registered with Ecology

Sent
10-13-93

ANDERSON PETROLEUM SERVICES, INC.
212 MIDDLE FORK ROAD
CHEHALIS, WA. 98532

Attention: UST Licensing Dept

Company: D.O.E.

Telephone #: _____

Fax #: 206-438 7484

Subject: Chetochie Prairie Mem. Stone

Sender: [Signature]

Sender Telephone #: 206-262-9068

Sender Fax #: 206-262-9230

You should receive ~ pages, including this cover sheet. If you do not receive all the pages, please call the number above..

COMMENTS: This is a copy of the clauses and checklist for one 1000 gallon diesel from Chetochie Prairie Stone.

UNDERGROUND STORAGE TANK Permanent Closure/Change-in-Service Checklist

20 U0003781
010302

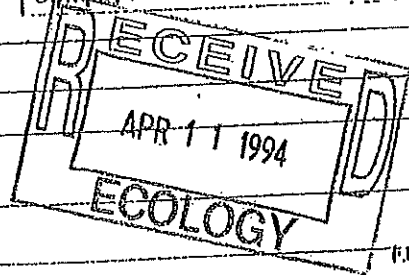
The purpose of this form is to certify the proper closure/change-in-service of underground storage tank (UST) systems. These activities must be conducted in accordance with Chapter 173.360 WAC. Washington State UST rules require the tank owner or operator to notify Ecology in writing 30 days prior to closure or change-in-service of tanks. This must be done by completing the 30 Day Notice form (ECY 110-155).

This Permanent Closure Checklist shall be completed and signed by a Licensed Remedial/Investigative Supervisor. The supervisor shall be on site when all tank permanent closure/change-in-service activities are being conducted. The firm which employs the licensed supervisor shall also be licensed by the Washington State Department of Ecology as a Service Provider. If any of the activities listed below have been supervised by a different licensed supervisor, a separate checklist must be filled out and signed by the licensed supervisor performing those activities.

For further information about completing this form, please contact the Department of Ecology UST Program.

A separate checklist must be completed for each UST system (tank and associated piping), except that UST systems at one site may be reported together by completing page 2 of this form separately for each system. The completed checklist should be mailed to the following address within 30 days of the completion of the closure or change-in-service.

Underground Storage Tank Section
Department of Ecology
Mail Stop PV-11
Olympia, WA 98504-8711



1. UST SYSTEM OWNER AND LOCATION

Site Owner/Operator: Joe & Darlene Stella
 Owner Address: Route 1 Box 415
Street
Amboy, WA 98601
City State ZIP Code
 Telephone: (206) 247-5529

Site ID Number (not needed or available from Ecology if tank is registered): 010302
 Site/Business Name: Chelatchie Prairie General Store
 Site Address: Route 1 Box 415
Street
Amboy WA 98601
City State ZIP Code
Clark
County

2. TANK PERMANENT CLOSURE/CHANGE-IN-SERVICE PERFORMED BY:

Firm: W. F. Anderson Const., Inc. License Number: S001740
 Address: 212 Middle Fork Road
Street
Chehalis, WA 98532
City State ZIP Code
 Telephone: (206) 262-9068
 Licensed Supervisor: Steven J. Hamlin Remedial/Investigative License Number: W00078

This page must be completed separately for each tank permanently closed (decommissioned) or change-in-service at the site. For additional tanks you may photocopy this form for completing.

3. TANK CLOSURE/CHANGE-IN-SERVICE INFORMATION

1. Tank ID Number (as registered with Ecology): N/A 2. Year installed: 1987
3. Tank capacity in gallons: 6,000 4. Date of last use: 7-1-93
5. Last substance stored: Diesel 6. Date of closure/change-in-service: 7-1-93
7. Type of closure: Closure with Tank Removal In-place Closure Change-in-Service
8. If in-place closure is used, the tank has been filled with the following substance: _____
9. If change-in-service, indicate new substance stored in tank: _____
10. Local permit(s) (if any) obtained from: Clark County
Always contact local authorities regarding permit requirements.
11. Has a site assessment been completed? Yes No

Unless an external release detection system is operating at the time of closure or change in service, and a report is provided as specified in WAC 173.360-390, a site assessment must be conducted. This site assessment must be conducted by a person registered with the Department of Ecology to perform site assessments. Results of the site assessment must be included with the Site Assessment Checklist (ECY 010-158).

4. CHECKLIST

Each item of the following checklist shall be fulfilled by the licensed supervisor whose signature appears below.

	Yes	No	NA*
1. Has all liquid been removed from product lines?	<input checked="" type="checkbox"/>		
2. Has all product piping been capped or removed?	<input checked="" type="checkbox"/>		
3. Have all non-product lines been capped or removed?	<input checked="" type="checkbox"/>		
4. Have all liquid and accumulated sludges been removed from the tank?	<input checked="" type="checkbox"/>		
5. Has the tank been properly purged or inerted?	<input checked="" type="checkbox"/>		
6. Have the drop tube, fill pipe, gauge pipe, pumps and other tank fixtures been removed?	<input checked="" type="checkbox"/>		
7. Have all tank openings been plugged or capped? NOTE: One plug should have 1/8 inch vent hole.	<input checked="" type="checkbox"/>		
8. Have all sludges removed from the tank been designated and disposed of in accordance with the state of Washington's dangerous waste regulations (Chapter 173.303 WAC)?	<input checked="" type="checkbox"/>		
9. If removed, was tank properly labeled and disposed of in accordance with all applicable local, state and federal regulations?	<input checked="" type="checkbox"/>		

*Item not applicable

I hereby certify that I have been the licensed supervisor present on site during the above listed permanent closure activities and to the best of my knowledge they have been conducted in compliance with all applicable state and federal laws, regulations and procedures pertaining to underground storage tanks.

Persons submitting false information are subject to penalties under Chapter 173.360 WAC.

7-2-93

Date

[Signature]
Signature of Licensed Supervisor

5. ADDITIONAL REQUIRED SIGNATURES

7-28-93

Date

[Signature]
Signature of Licensed Service Provider (if) Owner or Authorized Representative

7-29-93

Date

X [Signature]
Signature of Tank Owner or Authorized Representative

SOIL SAMPLING PROCEDURES

Field screening of soils excavated from around the UST'S was accomplished by examination and with a Gastector Model 1314 SMPN Detector. Soil samples were collected from the backhoe bucket using Decontaminated Soil Scoops. The samples were placed in 8 ounce glass jars and put on ice to be transported to Sound Analytical Services, of Tacoma, Wa. to be analyzed. Chain-of-custody documentation was maintained and accompanied the transfer of samples. (see attached)

Soil sample locations are present on attached map.

ANALYTICAL CHEMISTRY PROCEDURES

Soil samples were analyzed in accordance with the Department of Ecology guidelines. All samples were submitted to Sound Analytical Services of Tacoma, Wa., and were analyzed for Total Hydrocarbons (TPH) in accordance with D.O.E. methods, WTPH-G for Gasoline, and WTPH-D for Diesel.

ANALYTICAL CHEMISTRY RESULTS

The analytical chemistry results are summarized in the attached reports. Test results from soil samples analyzed in accordance with D.O.E. methods. (see attached)

Coastal Tank Cleaning, inc.

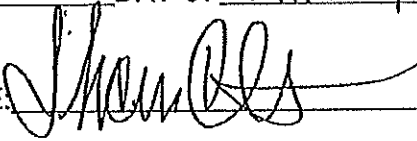
3801 7th Avenue South, Seattle, WA 98108

TO: WF ANDERSON CONST.

THIS LETTER IS TO CERTIFY THAT COASTAL TANK CLEANING, INC. HAS STRIPPED AND RINSED WITH SOAPY WATER THE BELOW LISTED TANKS IN ORDER TO ALLOW THE TANKS TO BE INERTED.

DATED THIS 10TH DAY OF MAY, 1993

AUTHORIZED SIGNATURE



- 1 EA 6 K UST
 - 1 EA 8 K UST
 - 1 EA 12 K UST
- @

42413 NE Hale Bridge Rd.
Ambury WA.

STRAIGHT BILL OF LADING

ORIGINAL - NOT NEGOTIABLE

Coastal Tank Cleaning

3801 - 7th Avenue South
Seattle, Washington 98108

Shipper No. 8407-93

Invoice No. 3833

Date 5/10/93

TO: Consignor COASTAL TANK
Street 3801 7TH AVE S
City SEATTLE State WA Zip Code 98108

FROM: Shipper W.F. ANDERSON CONST
Street 42413 NE YALE BRIDGE RD.
City AMBOY State WA Zip Code

24 HOUR EMERGENCY CONTACT TELEPHONE NUMBER: 206-624-9843

Vehicle Number 106

No. of Units & Container Type	HM	BASIC DESCRIPTION Proper Shipping Name, Hazard Class Identification Number (UN or NA) per 172.101, 172.202, 172.203	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)
1 TT	X	Gasoline with Water Flammable Liquid UN 1203	700 gal
EMERGENCY RESPONSE GUIDE ON BOARD TRUCK			

PLACARDS TENDERED: YES NO IN CASE OF EMERGENCY, SPILL OR LEAK USE EMERGENCY RESPONSE GUIDE #:

I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked and labeled and are in all respects in proper condition for transport in accordance with applicable international and national provisions concerning dangerous goods.

[Signature]
Signature

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown, marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route

to said destination. It is mutually agreed as to each order of all or any of, said property over all or any portion of said route to destination and by each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification of the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER W.F. ANDERSON CONST

CARRIER Coastal Tank Cleaning (206) 624-9843

PER *[Signature]*

PER *[Signature]* DATE 5/10/93

RECEIVED BY *[Signature]*

DATE

white - OFFICE yellow - CUSTOMER pink - BOOK

Purchased from W.F. Anderson Co.
three fuel tanks for \$1.00
to be dismantled for scrap
only. Recycled through
Schnitzer Steel Scrap Portland,
Oregon.

by Arnold Hatfield
Rt. 1 Box 326
Amboy WA 98601
R (206) 247-5362

Arnold Hatfield
May 10, 1993

SOUND ANALYTICAL SERVICES, INC.

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

TRANSMITTAL MEMORANDUM

DATE: May 13, 1993

TO: Everett Dunham, W. F. Anderson Construction

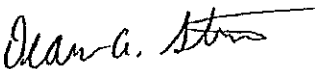
PROJECT NAME: Chelatchie

LABORATORY NUMBER: 31995

Enclosed are one original and one copy of the Tier I data deliverables package for Laboratory Work Order Number 31995. Thirteen samples were received for analysis at Sound Analytical Services, Inc., on May 12, 1993.

If there are any questions regarding this data package, please do not hesitate to call me at (206) 922-2310.

Sincerely,


Dean A. Strom
Project Manager

SOUND ANALYTICAL SERVICES, INC.

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: W. F. Anderson Construction

Date: May 13, 1993

Report On: Analysis of Soil & Water

Lab No.: 31995

Page 1 of 7

IDENTIFICATION:

Samples received on 05-12-93

Project: Chelatchie

ANALYSIS:

WTPH-G

Date Extracted: 5-12-93

Date Analyzed: 5-12-93

Lab Sample No. 31995-1

Client ID: CP3G

Matrix: Soil

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7 - C12)	ND	1.0	

SURROGATE RECOVERY, %

Trifluorotoluene 68

Lab Sample No. 31995-2

Client ID: CP4G

Matrix: Soil

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7 - C12)	ND	1.0	

SURROGATE RECOVERY, %

Trifluorotoluene 71

ND - Not Detected

PQL - Practical Quantitation Limit

Continued . . .

SOUND ANALYTICAL SERVICES, INC.

W. F. Anderson Construction
Project: Chelatchie
Page 2 of 7
Lab No. 31995
May 13, 1993

WTPH-G
Date Extracted: 5-12-93
Date Analyzed: 5-12-93

Lab Sample No. 31995-3
Matrix: Soil

Client ID: CP5G

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7-C12)	18	1.0	X1
<u>SURROGATE RECOVERY, %</u> Trifluorotoluene	65		

X1 = Aged Gasoline

Lab Sample No. 31995-4
Matrix: Soil

Client ID: CP6G

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7-C12)	ND	1.0	
<u>SURROGATE RECOVERY, %</u> Trifluorotoluene	63		

ND - Not Detected
PQL - Practical Quantitation Limit

Continued . . .

SOUND ANALYTICAL SERVICES, INC.

W. F. Anderson Construction
Project: Chelatchie
Page 3 of 7
Lab No. 31995
May 13, 1993

WTPH-G
Date Extracted: 5-12-93
Date Analyzed: 5-12-93

Lab Sample No. 31995-5
Matrix: Soil

Client ID: CP7G

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7-C12)	ND	1.0	
<u>SURROGATE RECOVERY, %</u> Trifluorotoluene	59		

Lab Sample No. 31995-6
Matrix: Soil

Client ID: CP8G

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7-C12)	ND	1.0	
<u>SURROGATE RECOVERY, %</u> Trifluorotoluene	53		

ND - Not Detected
PQL - Practical Quantitation Limit

Continued . . .

SOUND ANALYTICAL SERVICES, INC.

W. F. Anderson Construction
Project: Chelatchie
Page 4 of 7
Lab No. 31995
May 13, 1993

WTPH-G
Date Extracted: 5-12-93
Date Analyzed: 5-12-93

Lab Sample No. 31995-7
Matrix: Soil

Client ID: CP9G

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7-C12)	ND	1.0	

<u>SURROGATE RECOVERY, %</u> Trifluorotoluene	66		
--	----	--	--

Lab Sample No. 31995-8
Matrix: Soil

Client ID: CP10G

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7-C12)	ND	1.0	

<u>SURROGATE RECOVERY, %</u> Trifluorotoluene	62		
--	----	--	--

ND - Not Detected
PQL - Practical Quantitation Limit

Continued . . .

SOUND ANALYTICAL SERVICES, INC.

W. F. Anderson Construction
Project: Chelatchie
Page 5 of 7
Lab No. 31995
May 13, 1993

WTPH-G
Date Extracted: 5-12-93
Date Analyzed: 5-12-93

Lab Sample No. 31995-9
Matrix: Soil

Client ID: CP11G

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7 - C12)	ND	1.0	
<u>SURROGATE RECOVERY, %</u> Trifluorotoluene	71		

Lab Sample No. 31995-10
Matrix: Soil

Client ID: CP12G

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7 - C12)	ND	1.0	
<u>SURROGATE RECOVERY, %</u> Trifluorotoluene	60		

ND - Not Detected
PQL - Practical Quantitation Limit

Continued . . .

SOUND ANALYTICAL SERVICES, INC.

W. F. Anderson Construction
Project: Chelatchie
Page 6 of 7
Lab No. 31995
May 13, 1993

WTPH-G
Date Extracted: 5-12-93
Date Analyzed: 5-13-93

Lab Sample No. 31995-11
Matrix: Soil

Client ID: CP13G

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Gasoline (C7-C12)	ND	1.0	
<u>SURROGATE RECOVERY, %</u> Trifluorotoluene	59		

Lab Sample No. 31995-12
Matrix: Water

Client ID: CP14W

BTEX by Method 8020
Date Analyzed: 5-13-93

<u>Parameter</u>	<u>Concentration, mg/L</u>	<u>PQL</u>	<u>Flag</u>
Benzene	0.023	0.001	
Toluene	0.21	0.001	
Ethyl Benzene	0.034	0.001	
Xylenes	0.37	0.001	

SURROGATE RECOVERY, %

Trifluorotoluene 77

ND - Not Detected
PQL - Practical Quantitation Limit

Continued . . .

SOUND ANALYTICAL SERVICES, INC.

W. F. Anderson Construction
Project: Chelatchie
Page 7 of 7
Lab No. 31995
May 13, 1993

Lab Sample No. 31995-13
Matrix: Water

Client ID: CP15W

BTEX by Method 8020
Date Analyzed: 5-13-93

<u>Parameter</u>	<u>Concentration, mg/L</u>	<u>PQL</u>	<u>Flag</u>
Benzene	0.020	0.002	
Toluene	0.17	0.002	
Ethyl Benzene	0.028	0.002	
Xylenes	0.32	0.002	

SURROGATE RECOVERY, %

Trifluorotoluene 75

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

WTPH-G

Client: W. F. Anderson Construction
Lab No: 31995qc
Matrix: Soil
Units: mg/kg
Date: May 13, 1993

DUPLICATES

Dup No. 31995-2

Parameter	Sample (S)	Duplicate (D)	RPD	Flag
Gasoline (C_7-C_{12})	ND	ND	0.0	
<u>SURROGATE RECOVERY, %</u> Trifluorotoluene	71	54		

RPD = Relative Percent Difference
= $[(S - D) / ((S + D) / 2)] \times 100$

METHOD BLANK

Blank No. 93051205

Parameter	Result	PQL
Gasoline (C_7-C_{12})	ND	1.0
<u>SURROGATE RECOVERY, %</u> Trifluorotoluene	84	

SOUND ANALYTICAL SERVICES, INC.

QUALITY CONTROL REPORT

WTPH-G with BTEX
by EPA SW-846 Method 8020

Client: W. F. Anderson Construction
Lab No: 31995qc
Matrix: Water
Units: mg/L
Date: May 13, 1993

METHOD BLANK

Blank No. 93051203

Parameter	Result	PQL
Benzene	ND	0.001
Toluene	ND	0.001
Ethyl Benzene	ND	0.001
Xylenes	ND	0.001
<u>SURROGATE RECOVERY, %</u> Trifluorotoluene	87	

ND - Not Detected

PQL - Practical Quantitation Limit



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. BOX 47600 • Olympia, Washington 98504-7600 • (206) 459-6000

March 10, 1993

Joe and Darlene Stella
Route 1, Box 415
Amboy, WA 98601

Dear Joe and Darlene Stella:

Your Notice of Intent to Install an underground storage tank(s) at Chelatchie Prairie Store, Route 1, Box 415, Amboy, Washington, was received by Ecology on March 8, 1993. You may proceed with the installation on or after April 7, 1993, which is the day after the required 30-day waiting period. A temporary Underground Storage Tank Permit is enclosed for each tank. It will enable you to have product delivered to the tank for the purpose of testing, and to begin operation until a permanent permit is sent to you.

A copy of your Notice of Intent to Install has been forwarded to the appropriate regional office. Field people with the Underground Storage Tank Program may visit your site during or after the 30-day waiting period; however, with the many tank installations now taking place, it is not possible to visit every site.

The tank activities must be performed by a licensed tank service provider as defined in Chapter 173-360 WAC, Section 630. If you would like a list of service providers, please request one by calling the phone number given below.

An UST Notification Form and Installation Checklist must be completed, signed, and returned to this office within 30 days after installing your tank(s) in order to comply with the state underground storage tank rules (Chapter 173-360 WAC). These forms are enclosed. Upon receipt of these items, an invoice will be sent for collection of the state annual tank fee unless the new tank is replacing a tank for which the current annual fee has already been paid. An Underground Storage Tank Self-Certification of Compliance Form for each tank will also be sent to you. When the compliance form is sent back to Ecology and the fees have been paid, the permanent validated permit will be mailed.

Joe and Darlene Stella

Page 2

March 10, 1993

If you have questions, please call 438-7520. Mail should be addressed to: Department of Ecology, Underground Storage Tank Section, P. O. Box 47655, Olympia, WA 98504-7655.

Sincerely,

Jasmine McIlwaine

Data Management Unit
Underground Storage Tank Section
Toxics Cleanup Program

TANK:ss
Enclosures

cc: Mr. Everett Dunham
W.F. Anderson Const. Co.
212 Middle Fork Rd.
Chehalis, WA 98532

5-13-93
11:02 Avery Reemes w/ Rogline
heating oil - 300 gal.

Bremerton - owner yanked
his own heating oil tanks
Ace Paint Company -

1:18 = Wayne Anderson
43 yd's from pump island
area - field readings = 30 ppm

sw UCO05781
010302
4539

W.F. ANDERSON CONSTRUCTION CO., INC.

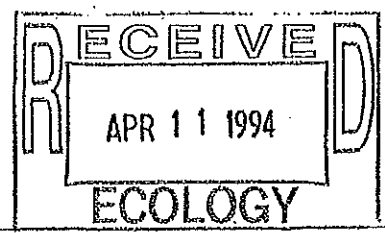
Rec'd at SWRD 4/29/94

212 MIDDLE FORK ROAD CHEHALIS, WA. 98532	GENERAL CONTRACTOR CONTRACTORS#WFRANBC235Q1	OFFICE: 206-262-9868 FAX#: 206-262-9230
---	---	--

11

June 23, 1993

Mr. Joe Stella
dba Chelatchie Prairie General Store
Route 1 Box 415
Amboy, Wa. 98601



RE: Underground Storage Tank Closure Assessment;
Chelatchie Prairie General Store - Amboy, Wa. 98601
Job# 9157

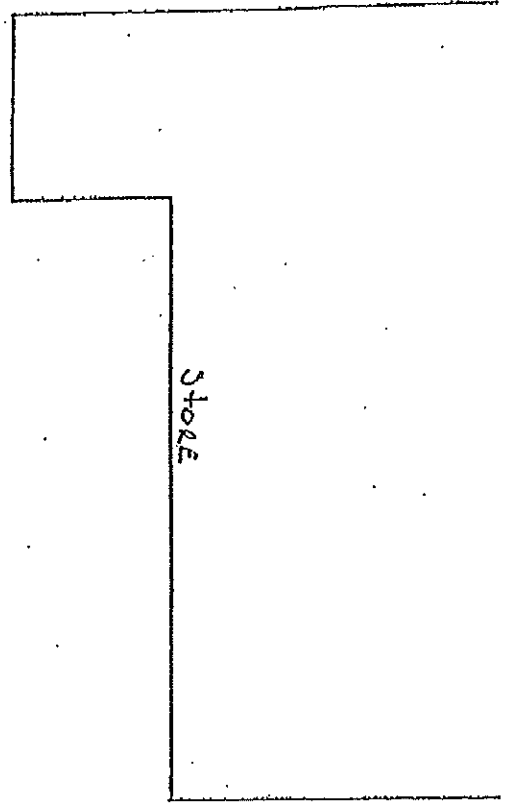
Dear Mr. Stella,

This letter transmits W.F. Anderson Construction's (WFA) report on the Underground Storage Tank Closure Assessment. This investigation was initiated by you, as owner and operator of Chelatchie Prairie General Store - Amboy, Wa. 98601.

We appreciate the opportunity to provide you continued services. If you should have any further questions or comments concerning this report, please contact us at: (206) 262-9068.

Sincerely,

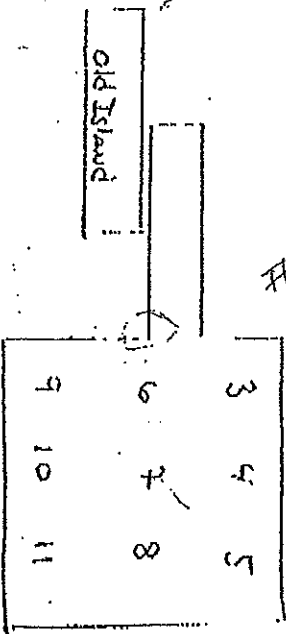
Wayne F. Anderson
Wayne Anderson
W.F. Anderson Construction Co., Inc.



STORE

50' x 100' (approx)

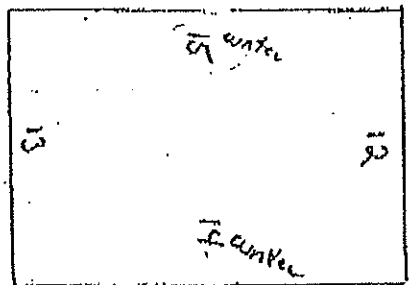
NE YALE SIDE



OLD ISLAND

#2 5' x 10' (4 1/2' x 10')

2' x 10' (approx)



entrance

entrance

15

15

NE Healy Rd

Coastal Tank Cleaning, Inc.

8801 7th Avenue South, Seattle, WA 98108

TO: ANDERSON CONSTRUCTION

THIS LETTER IS TO CERTIFY THAT COASTAL TANK CLEANING, INC. HAS STRIPPED AND RINSED WITH SOAPY WATER THE BELOW LISTED TANKS IN ORDER TO ALLOW THE TANKS TO BE INERTED.

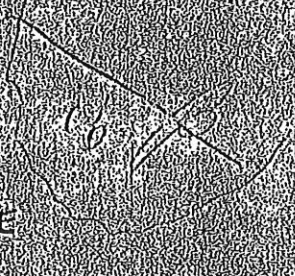
DATED THIS 01st DAY OF JULY, 1993

AUTHORIZED SIGNATURE J. J. Quisenberry etc.

1 - 6000 GAL GASOLINE UST

LOCATED AT:

CHLACHIE PRAIRIE STORE
42411 N.E. WALE BRIDGE RD.



Industrial & Marine Tank Cleaning

CUSTOMER COPY

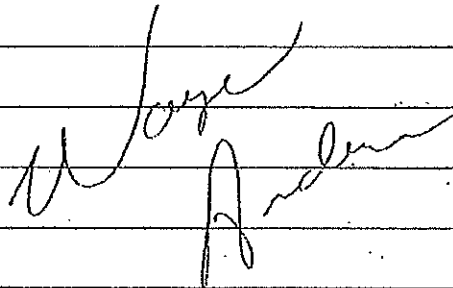
Coastal Tank Cleaning

DATE: 07-01-93

CUSTOMER: ANDERSON CONSTRUCTION
(CHELACHIE PRAIRIE)
JOB #: 8470-93 JOB SITE: 42411 YALE BOULEVARD RD. STEVE

VESSEL	PUMP	GAS FREE
BILGE	<input type="checkbox"/>	<input type="checkbox"/>
BALLAST TANK	<input type="checkbox"/>	<input type="checkbox"/>
FUEL OIL	<input type="checkbox"/>	<input type="checkbox"/>
FRESH WATER	<input type="checkbox"/>	<input type="checkbox"/>
LAZARETTE	<input type="checkbox"/>	<input type="checkbox"/>
HYDRAULIC OIL	<input type="checkbox"/>	<input type="checkbox"/>
LUBE OIL	<input type="checkbox"/>	<input type="checkbox"/>
CHAIN LOCKER	<input type="checkbox"/>	<input type="checkbox"/>
COFFERDAM	<input type="checkbox"/>	<input type="checkbox"/>

TANK NO'S:
STRIP & FLUSH 1-6000 GAL. GAS UST



GALLONS OF DISPOSAL: 100 AUTHORIZED SIGNATURE:

STRAIGHT BILL OF LADING
 ORIGINAL - NOT NEGOTIABLE
Coastal Tank Cleaning
 3801 - 7th Avenue South
 Seattle, Washington 98108

NOB
 Shipper No. 8470-93
 Invoice No 4733
 Date 07-01-93

TO: Consignee COASTAL TANK
 Street 3801 7th S.
 City SEATTLE State WN. Zip Code

FROM: Shipper ANDERSON CONST. / CHELACHIE PRAIRIE
 Street 42411 N.E. YALE BRIDGE RD.
 City State WN. Zip Code

24 HOUR EMERGENCY CONTACT TELEPHONE NUMBER: 206-624-9843

Route		Vehicle Number	
		103	
No. of Units & Container type	HM	BASIC DESCRIPTION Proper Shipping Name, Hazard Class Identification Number (UN or NA) per 172.101, 172.202, 172.203	TOTAL QUANTITY (Weight, Volume, Gallons etc.)
1 IT	X	FLAMMABLE LIQUID, N.O.S. N.A. 1993 (GASOLINE, WATER) R.Q.	100

EMERGENCY RESPONSE GUIDE ON BOARD TRUCK

PLACARDS TENDERED: YES NO IN CASE OF EMERGENCY, SPILL OR LEAK USE EMERGENCY RESPONSE GUIDE #: 07

I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.
 Signature: Jon Austin

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of this property under the contract) agrees to carry to its usual place of delivery, at said destination, if on its route, or otherwise to deliver to another carrier on the route

to said destination. It is mutually agreed as to each carrier of all or any of a property over all or any portion of enroute to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the Bill of Lading terms and conditions in the governing classification of the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and that the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assign

SHIPPER ANDERSON CONSTRUCTION
 PER W. J. Anderson

CARRIER Coastal Tank Cleaning (206) 624-9843
 PER Jon Austin DATE 07-01-93

RECEIVED BY _____ DATE _____

White - OFFICE yellow - CUSTOMER pink - BOOK

SOUND ANALYTICAL SERVICES, INC.

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS
4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

TRANSMITTAL MEMORANDUM

DATE: July 13, 1993
TO: Wayne Anderson
W. F. Anderson Construction
PROJECT NAME: Chelatchie
LABORATORY NUMBER: 33219

Enclosed is one original and one copy of the Tier I data deliverables package for Laboratory Work Order Number 33219. Three samples were received for analysis at Sound Analytical Services, Inc., on July 6, 1993.

If there are any questions regarding this data package, please do not hesitate to call me at (206) 922-2310.

Sincerely,



Dean A. Strom
Project Manager

SOUND ANALYTICAL SERVICES, INC.

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS
4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

Report To: W. F. Anderson Construction Date: July 13, 1993

Report On: Analysis of Soil

Lab No.: 33219
Page 1 of 2

IDENTIFICATION:

Samples received on 07-06-93
Project: Chelatchie

ANALYSIS:

WTPH-D

Date Extracted: 7-9-93
Date Analyzed: 7-10-93

Lab Sample No. 33219-1

Client ID: C1

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Diesel (> C12 - C24)	ND	25	
<u>SURROGATE RECOVERY, %</u> o-terphenyl	81		

Lab Sample No. 33219-2

Client ID: C2

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Diesel (> C12 - C24)	ND	25	
<u>SURROGATE RECOVERY, %</u> o-terphenyl	70		

ND - Not Detected
PQL - Practical Quantitation Limit

Continued . . .

SOUND ANALYTICAL SERVICES, INC.

W. F. Anderson Construction
Project: Chelatchie
Page 2 of 2
Lab No. 33219
July 13, 1993

WTPH-D
Date Extracted: 7-9-93
Date Analyzed: 7-10-93

Lab Sample No. 33219-3

Client ID: C3

<u>Parameter</u>	<u>Concentration, mg/kg</u>	<u>PQL</u>	<u>Flag</u>
Diesel (> C12-C24)	ND	25	
<u>SURROGATE RECOVERY, %</u> o-terphenyl	75		

ND - Not Detected
PQL - Practical Quantitation Limit

SOUND ANALYTICAL SERVICES, INC.

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS
4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

QUALITY CONTROL REPORT

WTPH-D (Diesel Range Organics)

Client: W.F. Anderson Construction
Lab No: 33219qc
Matrix: Soil
Units: mg/kg
Date: July 13, 1993

DUPLICATES

Dup No. 33219-1

Parameter	Sample (S)	Duplicate (D)	RPD	Flags
Diesel ($C_{12}-C_{24}$)	ND	ND	0.0	
<u>SURROGATE RECOVERY, %</u> o-terphenyl	81	67		

RPD = Relative Percent Difference
= $[(S - D) / ((S + D) / 2)] \times 100$

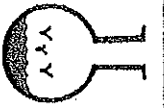
METHOD BLANK

Blank No. 002F0101.D

Parameter	Result	PQL
Diesel	ND	25
<u>SURROGATE RECOVERY, %</u> o-terphenyl	81	

ND - Not Detected

PQL - Practical Quantitation Limit



SOUND ANALYTICAL SERVICES, INC.
ANALYTICAL & ENVIRONMENTAL CHEMISTS

TWO LUMINO DRIVE, SUITE 100
Tacoma, Washington 98424
(206) 922-2310 • FAX (206) 922-5047

CHAIN OF CUSTODY / REQUEST FOR LABORATORY ANALYSIS

CLIENT: <i>W.F. Anderson Const</i>		PROJECT NAME: <i>Chelstick</i>		CONTACT: <i>Wayne Anderson</i>		PHONE NO: <i>206-262-9093</i>	
LAB #	SAMPLE I.D.	DATE	TIME	MATRIX	# of Containers	ANALYSIS REQUESTED:	
	<i>C1</i>			<i>Soil</i>		Halogenated Volatiles EPA 601/6010	TCAP Extraction 8 Metals Volatiles Semi-volatiles Pesticides & Herbicides
	<i>C2</i>					Aromatic Volatiles EPA 602/6020	
	<i>C3</i>					Chlorinated Pest., PCB's EPA 608/6080	
						PAH's	
						Volatile Organics EPA 624/6240 (GC/MS)	
						Semi-volatiles EPA 625/6270 (GC/MS)	
						TPH 418.1	
						Oil & Grease	
						Total Metals (Specify below)	
						WTPH D	
Signature		Printed Name		Firm	Time / Date	SPECIAL INSTRUCTIONS/COMMENTS:	
Relinquished By	<i>Shirley York</i>	<i>Shirley York</i>	<i>Anderson Const</i>	<i>3:30 / 7-2-93</i>			
Received By	<i>Mary Leiker</i>	<i>Mary Leiker</i>	<i>SAS</i>	<i>10:00 7/2/93</i>			
Relinquished By							
Received By							
Relinquished By							
Received By							

ANDERSON PETROLEUM SERVICES

RECEIVED

212 Middle Fork Road
Chehalis, Wa. 98532

'93 AUG 13 AM 11:22

Phone: (206)262-9068

IN FAX (206)262-9230

August 11, 1993

Department of Ecology
Southwest Regional Office
7272 Cleanwater Lane - MSLU-11
Olympia, Washington 98504-6811

Attn: Mark Henderson

RE: Contamination - Chelatchie Prairie General Store

Dear Mr. Henderson,

This letter transmits W.F. Anderson's Construction Co. Inc. action taken concerning the contaminated soils excavated during removal procedures at the Chelatchie Prairie General Store - 42413 NE Yale Bridge Road in Amboy, Washington.

Approximately 264 tons of contaminated soils were removed from the excavated area and placed on visqueen with a berm of hay bales surrounding the stock piled soils.

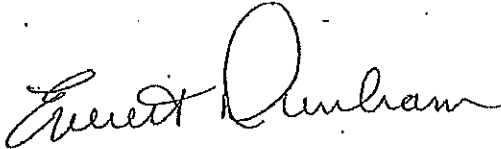
On 6/3/93 application was made to Hillsboro Landfill - Hillsboro, Oregon for the disposal of soils at their site. Upon approval by all parties involved, the contaminated soils were scheduled for transportation.

On 8/3/93 removal and transportation of contaminated soils stock piled at the Chelatchie Prairie General Store, Amboy, Washington, was started. All contaminated soils were transported from site on 8/6/93.

Hillsboro Landfill, Hillsboro, Ore. received a total of 264.29 tons of contaminated soils from this site, under special waste permit #1549.

All contaminated soils removed from the excavation of the underground storage tanks has been removed from site.

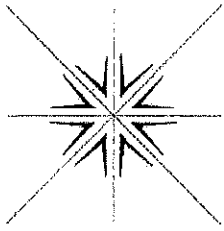
Sincerely,

A handwritten signature in cursive script that reads "Everett Dunham". The signature is written in black ink and is positioned below the word "Sincerely,".

Everett Dunham
General Manager
W.F. Anderson Construction Co., Inc

APPENDIX B

Analytical Laboratory Documentation



Specialty Analytical

11711 SE Capps Road, Ste B
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

April 09, 2014

Brett MacDonald
3 Kings Environmental, Inc.
PO Box 280
1311 SE Grace Avenue
Battle Ground, WA 98604
TEL: (360) 666-5464
FAX (360) 666-8202
RE: Graybill Phase II GSA / 214026

Dear Brett MacDonald:

Order No.: 1403096

Specialty Analytical received 19 sample(s) on 3/12/2014 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Marty French
Lab Director

Specialty Analytical

Date Reported: 09-Apr-14

CLIENT: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

Lab Order: 1403096

Lab ID: 1403096-001 **Collection Date:** 3/11/2014 11:20:00 AM
Client Sample ID: DP-1A@9' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	3/28/2014

Lab ID: 1403096-002 **Collection Date:** 3/11/2014 11:25:00 AM
Client Sample ID: DP-1A@12' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: JRC
Diesel	ND	22.7		mg/Kg-dry	1	3/20/2014 8:44:00 AM
Lube Oil	ND	75.7		mg/Kg-dry	1	3/20/2014 8:44:00 AM
Surr: o-Terphenyl	99.2	50-150		%REC	1	3/20/2014 8:44:00 AM

Lab ID: 1403096-003 **Collection Date:** 3/11/2014 11:45:00 AM
Client Sample ID: DP-2A@9' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	3/28/2014

Specialty Analytical

Date Reported: 09-Apr-14

CLIENT: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

Lab Order: 1403096

Lab ID: 1403096-004
Client Sample ID: DP-3A@8'

Collection Date: 3/11/2014 12:10:00 PM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: JRC
Diesel	ND	22.6		mg/Kg-dry	1	3/20/2014 9:06:00 AM
Lube Oil	ND	75.3		mg/Kg-dry	1	3/20/2014 9:06:00 AM
Surr: o-Terphenyl	96.3	50-150		%REC	1	3/20/2014 9:06:00 AM
BTEX - RBC		SW8021B				Analyst: RHD
Benzene	0.0264	0.0151		mg/Kg-dry	1	3/14/2014 9:32:06 PM
Toluene	ND	0.151		mg/Kg-dry	1	3/14/2014 9:32:06 PM
Ethylbenzene	ND	0.151		mg/Kg-dry	1	3/17/2014 12:16:06 PM
Xylenes, Total	ND	0.452		mg/Kg-dry	1	3/17/2014 12:16:06 PM
Surr: 4-Bromofluorobenzene	49.8	42.6-126		%REC	1	3/14/2014 9:32:06 PM

Lab ID: 1403096-005
Client Sample ID: DP-4A@8'

Collection Date: 3/11/2014 12:35:00 PM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	3/28/2014

Lab ID: 1403096-006
Client Sample ID: DP-5A@11'

Collection Date: 3/11/2014 1:00:00 PM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX		NWTPH-DX				Analyst: JRC
Diesel	ND	22.0		mg/Kg-dry	1	3/20/2014 9:28:00 AM
Lube Oil	ND	73.4		mg/Kg-dry	1	3/20/2014 9:28:00 AM
Surr: o-Terphenyl	98.7	50-150		%REC	1	3/20/2014 9:28:00 AM

Specialty Analytical

Date Reported: 09-Apr-14

CLIENT: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

Lab Order: 1403096

Lab ID: 1403096-007

Collection Date: 3/11/2014 12:15:00 PM

Client Sample ID: DP-3A-W

Matrix: WATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
NWTPH-DX - RBC		NWTPH-DX		Analyst: JRC		
Diesel	ND	0.0752		mg/L	1	3/20/2014 11:40:00 AM
Lube Oil	0.201	0.188		mg/L	1	3/20/2014 11:40:00 AM
Surr: o-Terphenyl	78.7	50-150		%REC	1	3/20/2014 11:40:00 AM
BTEX - RBC		SW8021B		Analyst: RHD		
Benzene	ND	0.300		µg/L	1	3/14/2014 1:54:15 PM
Toluene	ND	0.500		µg/L	1	3/14/2014 1:54:15 PM
Ethylbenzene	ND	0.500		µg/L	1	3/14/2014 1:54:15 PM
Xylenes, Total	ND	1.50		µg/L	1	3/14/2014 1:54:15 PM
Surr: 4-Bromofluorobenzene	96.4	74.8-126		%REC	1	3/14/2014 1:54:15 PM
PAH'S BY GC/MS - LOW LEVEL		SW8270D		Analyst: bda		
1-Methylnaphthalene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
2-Methylnaphthalene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Acenaphthene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Acenaphthylene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Anthracene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Benz(a)anthracene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Benzo(a)pyrene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Benzo(b)fluoranthene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Benzo(g,h,i)perylene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Benzo(k)fluoranthene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Chrysene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Dibenz(a,h)anthracene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Fluoranthene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Fluorene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Naphthalene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Phenanthrene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Pyrene	ND	0.0478	HT	µg/L	1	3/21/2014 1:13:00 PM
Surr: 2-Fluorobiphenyl	70.1	18.6-106	HT	%REC	1	3/21/2014 1:13:00 PM
Surr: Nitrobenzene-d5	71.0	17-130	HT	%REC	1	3/21/2014 1:13:00 PM
Surr: Terphenyl-d14	123	39.6-131	HT	%REC	1	3/21/2014 1:13:00 PM

Specialty Analytical

Date Reported: 09-Apr-14

CLIENT: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

Lab Order: 1403096

Lab ID: 1403096-008 **Collection Date:** 3/11/2014 1:20:00 PM
Client Sample ID: DP-1@9' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	3/28/2014

Lab ID: 1403096-009 **Collection Date:** 3/11/2014 1:45:00 PM
Client Sample ID: DP-2@10' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT				Analyst: clh
Hold	Hold	0			1	3/28/2014

Lab ID: 1403096-010 **Collection Date:** 3/11/2014 2:20:00 PM
Client Sample ID: DP-3@8' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
BTEX - RBC		SW8021B				Analyst: RHD
Benzene	ND	0.0151		mg/Kg-dry	1	3/14/2014 8:38:06 PM
Toluene	ND	0.151		mg/Kg-dry	1	3/14/2014 8:38:06 PM
Ethylbenzene	ND	0.151		mg/Kg-dry	1	3/14/2014 8:38:06 PM
Xylenes, Total	ND	0.453		mg/Kg-dry	1	3/14/2014 8:38:06 PM
Surr: 4-Bromofluorobenzene	46.3	42.6-126		%REC	1	3/14/2014 8:38:06 PM
NWTPH-GX		NWTPH-GX				Analyst: RHD
Gasoline	ND	3.77		mg/Kg-dry	1	3/14/2014 5:57:57 PM
Surr: 4-Bromofluorobenzene	59.0	50-150		%REC	1	3/14/2014 5:57:57 PM

Specialty Analytical

Date Reported: 09-Apr-14

CLIENT: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

Lab Order: 1403096

Lab ID: 1403096-011

Collection Date: 3/11/2014 2:50:00 PM

Client Sample ID: DP-4@9'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
BTEX - RBC		SW8021B				Analyst: RHD
Benzene	ND	0.0306		mg/Kg-dry	1	3/21/2014 2:19:05 PM
Toluene	ND	0.153		mg/Kg-dry	1	3/21/2014 2:19:05 PM
Ethylbenzene	ND	0.153		mg/Kg-dry	1	3/21/2014 2:19:05 PM
Xylenes, Total	ND	0.459		mg/Kg-dry	1	3/21/2014 2:19:05 PM
Surr: 4-Bromofluorobenzene	51.3	42.6-126		%REC	1	3/21/2014 2:19:05 PM
NWTPH-GX		NWTPH-GX				Analyst: RHD
Gasoline	ND	3.83		mg/Kg-dry	1	3/21/2014 2:19:56 PM
Surr: 4-Bromofluorobenzene	61.6	50-150		%REC	1	3/21/2014 2:19:56 PM

Specialty Analytical

Date Reported: 09-Apr-14

CLIENT: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

Lab Order: 1403096

Lab ID: 1403096-012
Client Sample ID: DP-5@12'

Collection Date: 3/11/2014 3:20:00 PM
Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
BTEX - RBC		SW8021B		Analyst: RHD		
Benzene	1.74	0.0114		mg/Kg-dry	1	3/14/2014 9:05:06 PM
Toluene	ND	0.114		mg/Kg-dry	1	3/14/2014 9:05:06 PM
Ethylbenzene	10.6	2.29		mg/Kg-dry	20	3/17/2014 12:51:06 PM
Xylenes, Total	46.0	6.86		mg/Kg-dry	20	3/17/2014 12:51:06 PM
Surr: 4-Bromofluorobenzene	67.2	42.6-126		%REC	1	3/14/2014 9:05:06 PM
NWTPH-GX		NWTPH-GX		Analyst: RHD		
Gasoline	1200	57.1		mg/Kg-dry	20	3/17/2014 12:51:57 PM
Surr: 4-Bromofluorobenzene	113	50-150		%REC	20	3/17/2014 12:51:57 PM
ICP METALS- TOTAL RECOVERABLE		SW6010C		Analyst: ZL		
Lead	ND	2.38		mg/Kg-dry	1	3/14/2014 3:48:36 PM
RBC VOLATILES VOLATILE ORGANICS BY		SW8260B		Analyst: CK		
1,2,4-Trimethylbenzene	52000	11400		µg/Kg-dry	1000	3/24/2014 12:11:00 PM
1,2-Dibromoethane	ND	114	Q	µg/Kg-dry	10	3/24/2014 1:22:00 PM
1,2-Dichloroethane	ND	114	Q	µg/Kg-dry	10	3/24/2014 1:22:00 PM
1,3,5-Trimethylbenzene	13100	1140		µg/Kg-dry	100	3/24/2014 12:47:00 PM
Benzene	ND	114	Q	µg/Kg-dry	10	3/24/2014 1:22:00 PM
Ethylbenzene	8120	1140		µg/Kg-dry	100	3/24/2014 12:47:00 PM
Isopropylbenzene	930	114		µg/Kg-dry	10	3/24/2014 1:22:00 PM
m,p-Xylene	22600	2290		µg/Kg-dry	100	3/24/2014 12:47:00 PM
Methyl tert-butyl ether	ND	114	Q	µg/Kg-dry	10	3/24/2014 1:22:00 PM
Naphthalene	6460	1140		µg/Kg-dry	100	3/24/2014 12:47:00 PM
n-Propylbenzene	1730	114		µg/Kg-dry	10	3/24/2014 1:22:00 PM
o-Xylene	1740	114		µg/Kg-dry	10	3/24/2014 1:22:00 PM
Toluene	ND	114	Q	µg/Kg-dry	10	3/24/2014 1:22:00 PM
Surr: 1,2-Dichloroethane-d4	99.0	71.5-112		%REC	10	3/24/2014 1:22:00 PM
Surr: 4-Bromofluorobenzene	106	75.7-122		%REC	10	3/24/2014 1:22:00 PM
Surr: Dibromofluoromethane	76.9	64.3-124		%REC	10	3/24/2014 1:22:00 PM
Surr: Toluene-d8	103	74.9-120		%REC	10	3/24/2014 1:22:00 PM

Specialty Analytical

Date Reported: 09-Apr-14

CLIENT: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

Lab Order: 1403096

Lab ID: 1403096-013 **Collection Date:** 3/11/2014 3:50:00 PM
Client Sample ID: DP-6@12' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
BTEX - RBC		SW8021B		Analyst: RHD		
Benzene	ND	0.0145		mg/Kg-dry	1	3/14/2014 8:11:06 PM
Toluene	ND	0.145		mg/Kg-dry	1	3/14/2014 8:11:06 PM
Ethylbenzene	ND	0.145		mg/Kg-dry	1	3/14/2014 8:11:06 PM
Xylenes, Total	ND	0.434		mg/Kg-dry	1	3/14/2014 8:11:06 PM
Surr: 4-Bromofluorobenzene	51.7	42.6-126		%REC	1	3/14/2014 8:11:06 PM
NWTPH-GX		NWTPH-GX		Analyst: RHD		
Gasoline	ND	3.62		mg/Kg-dry	1	3/14/2014 5:30:57 PM
Surr: 4-Bromofluorobenzene	66.1	50-150		%REC	1	3/14/2014 5:30:57 PM

Lab ID: 1403096-014 **Collection Date:** 3/11/2014 4:20:00 PM
Client Sample ID: DP-7@10' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HOLD PER CLIENT REQUEST		PER CLIENT		Analyst: clh		
Hold	Hold	0			1	3/28/2014

Lab ID: 1403096-015 **Collection Date:** 3/11/2014 1:30:00 PM
Client Sample ID: DP-1-W **Matrix:** WATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
BTEX - RBC		SW8021B		Analyst: RHD		
Benzene	ND	0.300		µg/L	1	3/14/2014 1:27:15 PM
Toluene	ND	0.500		µg/L	1	3/14/2014 1:27:15 PM
Ethylbenzene	ND	0.500		µg/L	1	3/14/2014 1:27:15 PM
Xylenes, Total	ND	1.50		µg/L	1	3/14/2014 1:27:15 PM
Surr: 4-Bromofluorobenzene	96.3	74.8-126		%REC	1	3/14/2014 1:27:15 PM
NWTPH-GX		NWTPH-GX		Analyst: RHD		
Gasoline	ND	100		µg/L	1	3/14/2014 1:27:33 PM
Surr: 4-Bromofluorobenzene	106	50-150		%REC	1	3/14/2014 1:27:33 PM

Specialty Analytical

Date Reported: 09-Apr-14

CLIENT: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

Lab Order: 1403096

Lab ID: 1403096-016

Collection Date: 3/11/2014 2:30:00 PM

Client Sample ID: DP-3-W

Matrix: WATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
BTEX - RBC		SW8021B		Analyst: RHD		
Benzene	ND	0.300		µg/L	1	3/13/2014 3:00:15 PM
Toluene	ND	0.500		µg/L	1	3/13/2014 3:00:15 PM
Ethylbenzene	4.94	0.500		µg/L	1	3/13/2014 3:00:15 PM
Xylenes, Total	25.3	1.50		µg/L	1	3/13/2014 3:00:15 PM
Surr: 4-Bromofluorobenzene	97.1	74.8-126		%REC	1	3/13/2014 3:00:15 PM
NWTPH-GX		NWTPH-GX		Analyst: RHD		
Gasoline	104	100		µg/L	1	3/13/2014 3:00:33 PM
Surr: 4-Bromofluorobenzene	114	50-150		%REC	1	3/13/2014 3:00:33 PM

Lab ID: 1403096-017

Collection Date: 3/11/2014 2:45:00 PM

Client Sample ID: DP-4-W

Matrix: WATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
BTEX - RBC		SW8021B		Analyst: RHD		
Benzene	0.580	0.300		µg/L	1	3/13/2014 3:27:15 PM
Toluene	1.08	0.500		µg/L	1	3/13/2014 3:27:15 PM
Ethylbenzene	63.8	0.500		µg/L	1	3/13/2014 3:27:15 PM
Xylenes, Total	330	1.50		µg/L	1	3/13/2014 3:27:15 PM
Surr: 4-Bromofluorobenzene	97.4	74.8-126		%REC	1	3/13/2014 3:27:15 PM
NWTPH-GX		NWTPH-GX		Analyst: RHD		
Gasoline	2400	100		µg/L	1	3/13/2014 3:27:33 PM
Surr: 4-Bromofluorobenzene	104	50-150		%REC	1	3/13/2014 3:27:33 PM

Specialty Analytical

Date Reported: 09-Apr-14

CLIENT: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

Lab Order: 1403096

Lab ID: 1403096-018

Collection Date: 3/11/2014 3:15:00 PM

Client Sample ID: DP-5-W

Matrix: WATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
BTEX - RBC		SW8021B		Analyst: RHD		
Benzene	54.8	0.300		µg/L	1	3/13/2014 1:40:15 PM
Toluene	89.3	0.500		µg/L	1	3/13/2014 1:40:15 PM
Ethylbenzene	2980	25.0		µg/L	50	3/14/2014 2:21:15 PM
Xylenes, Total	14500	75.0		µg/L	50	3/14/2014 2:21:15 PM
Surr: 4-Bromofluorobenzene	87.7	74.8-126		%REC	1	3/13/2014 1:40:15 PM
NWTPH-GX		NWTPH-GX		Analyst: RHD		
Gasoline	88100	5000		µg/L	50	3/14/2014 1:54:33 PM
Surr: 4-Bromofluorobenzene	103	50-150		%REC	50	3/14/2014 1:54:33 PM
ICP/MS METALS-TOTAL RECOVERABLE		SW6020A		Analyst: ZL		
Lead	51.7	0.100		µg/L	1	3/13/2014 10:36:00 PM
RBC VOLATILE ORGANICS BY GC/MS		SW8260B		Analyst: CK		
1,2,4-Trimethylbenzene	3880	100		µg/L	100	3/24/2014 8:50:00 PM
1,2-Dibromoethane	ND	1.00		µg/L	1	3/24/2014 9:59:00 PM
1,2-Dichloroethane	ND	1.00		µg/L	1	3/24/2014 9:59:00 PM
1,3,5-Trimethylbenzene	1070	10.0		µg/L	10	3/24/2014 9:24:00 PM
Benzene	22.9	0.300		µg/L	1	3/24/2014 9:59:00 PM
Ethylbenzene	2710	100		µg/L	100	3/24/2014 8:50:00 PM
Isopropylbenzene	117	1.00		µg/L	1	3/24/2014 9:59:00 PM
m,p-Xylene	10700	200		µg/L	100	3/24/2014 8:50:00 PM
Methyl tert-butyl ether	ND	1.00		µg/L	1	3/24/2014 9:59:00 PM
Naphthalene	1260	10.0		µg/L	10	3/24/2014 9:24:00 PM
n-Propylbenzene	167	1.00		µg/L	1	3/24/2014 9:59:00 PM
o-Xylene	2450	100		µg/L	100	3/24/2014 8:50:00 PM
Toluene	55.6	1.00		µg/L	1	3/24/2014 9:59:00 PM
Surr: 1,2-Dichloroethane-d4	89.4	85.3-116		%REC	1	3/24/2014 9:59:00 PM
Surr: 4-Bromofluorobenzene	112	88.1-120		%REC	1	3/24/2014 9:59:00 PM
Surr: Dibromofluoromethane	103	94.2-122		%REC	1	3/24/2014 9:59:00 PM
Surr: Toluene-d8	101	86.2-135		%REC	1	3/24/2014 9:59:00 PM

Specialty Analytical

Date Reported: 09-Apr-14

CLIENT: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

Lab Order: 1403096

Lab ID: 1403096-019

Collection Date: 3/11/2014 3:50:00 PM

Client Sample ID: MW-3

Matrix: WATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
BTEX - RBC		SW8021B				Analyst: RHD
Benzene	ND	0.300		µg/L	1	3/13/2014 3:54:15 PM
Toluene	ND	0.500		µg/L	1	3/13/2014 3:54:15 PM
Ethylbenzene	2.89	0.500		µg/L	1	3/13/2014 3:54:15 PM
Xylenes, Total	13.9	1.50		µg/L	1	3/13/2014 3:54:15 PM
Surr: 4-Bromofluorobenzene	97.1	74.8-126		%REC	1	3/13/2014 3:54:15 PM
NWTPH-GX		NWTPH-GX				Analyst: RHD
Gasoline	162	100		µg/L	1	3/13/2014 3:54:33 PM
Surr: 4-Bromofluorobenzene	103	50-150		%REC	1	3/13/2014 3:54:33 PM
ICP/MS METALS-TOTAL RECOVERABLE		SW6020A				Analyst: ZL
Lead	0.213	0.100		µg/L	1	3/13/2014 10:43:00 PM

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: 6010_S

Sample ID: ICV	SampType: ICV	TestCode: 6010_S	Units: mg/Kg	Prep Date:	RunNo: 14133						
Client ID: ICV	Batch ID: 7025	TestNo: SW6010C	SW3050B	Analysis Date: 3/14/2014	SeqNo: 186305						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	102	2.00	100.0	0	102	90	110				

Sample ID: CCV	SampType: CCV	TestCode: 6010_S	Units: mg/Kg	Prep Date:	RunNo: 14133						
Client ID: CCV	Batch ID: 7025	TestNo: SW6010C	SW3050B	Analysis Date: 3/14/2014	SeqNo: 186306						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	105	2.00	100.0	0	105	90	110				

Sample ID: MBLK-7025	SampType: MBLK	TestCode: 6010_S	Units: mg/Kg	Prep Date:	RunNo: 14133						
Client ID: PBS	Batch ID: 7025	TestNo: SW6010C	SW3050B	Analysis Date: 3/14/2014	SeqNo: 186307						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	2.00									

Sample ID: LCS-7025	SampType: LCS	TestCode: 6010_S	Units: mg/Kg	Prep Date:	RunNo: 14133						
Client ID: LCSS	Batch ID: 7025	TestNo: SW6010C	SW3050B	Analysis Date: 3/14/2014	SeqNo: 186308						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	106	2.00	100.0	0	106	84.9	109				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
O RSD is greater than RSDLimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: 6010_S

Sample ID: 1403096-012ADUP	SampType: DUP	TestCode: 6010_S	Units: mg/Kg-dry	Prep Date: 3/14/2014	RunNo: 14133						
Client ID: DP-5@12'	Batch ID: 7025	TestNo: SW6010C	SW3050B	Analysis Date: 3/14/2014	SeqNo: 186310						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	2.70	2.20						1.440	61.0	20	RF

Sample ID: 1403096-012AMS	SampType: MS	TestCode: 6010_S	Units: mg/Kg-dry	Prep Date: 3/14/2014	RunNo: 14133						
Client ID: DP-5@12'	Batch ID: 7025	TestNo: SW6010C	SW3050B	Analysis Date: 3/14/2014	SeqNo: 186311						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	118	2.38	119.0	1.440	98.2	84.9	109				

Sample ID: 1403096-012AMSD	SampType: MSD	TestCode: 6010_S	Units: mg/Kg-dry	Prep Date: 3/14/2014	RunNo: 14133						
Client ID: DP-5@12'	Batch ID: 7025	TestNo: SW6010C	SW3050B	Analysis Date: 3/14/2014	SeqNo: 186312						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	125	2.48	124.2	1.440	99.6	84.9	109	118.3	5.67	20	

Sample ID: CCV	SampType: CCV	TestCode: 6010_S	Units: mg/Kg	Prep Date:	RunNo: 14133						
Client ID: CCV	Batch ID: 7025	TestNo: SW6010C	SW3050B	Analysis Date: 3/14/2014	SeqNo: 186317						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	107	2.00	100.0	0	107	90	110				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 2 of 37
O RSD is greater than RSD/limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: 6020_W

Sample ID: ICV	SampType: ICV	TestCode: 6020_W	Units: µg/L	Prep Date:	RunNo: 14109						
Client ID: ICV	Batch ID: 7018	TestNo: SW6020A	SW3010A	Analysis Date: 3/13/2014	SeqNo: 185962						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	46.8	0.100	50.00	0	93.6	90	110				

Sample ID: CCV	SampType: CCV	TestCode: 6020_W	Units: µg/L	Prep Date:	RunNo: 14109						
Client ID: CCV	Batch ID: 7018	TestNo: SW6020A	SW3010A	Analysis Date: 3/13/2014	SeqNo: 185964						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	50.8	0.100	50.00	0	102	90	110				

Sample ID: MBLK-7018	SampType: MBLK	TestCode: 6020_W	Units: µg/L	Prep Date:	RunNo: 14109						
Client ID: PBW	Batch ID: 7018	TestNo: SW6020A	SW3010A	Analysis Date: 3/13/2014	SeqNo: 185965						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.100									

Sample ID: LCS-7018	SampType: LCS	TestCode: 6020_W	Units: µg/L	Prep Date:	RunNo: 14109						
Client ID: LCSW	Batch ID: 7018	TestNo: SW6020A	SW3010A	Analysis Date: 3/13/2014	SeqNo: 185966						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	46.9	0.100	50.00	0	93.9	80	120				

Qualifiers: B Analyte detected in the associated Method Blank
 O RSD is greater than RSDlimit
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: 6020_W

Sample ID: A1403101-001ADUP	SampType: DUP	Units: µg/L	Prep Date: 3/13/2014	RunNo: 14109							
Client ID: ZZZZZZ	Batch ID: 7018	TestNo: SW6020A	Analysis Date: 3/13/2014	SeqNo: 185968							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.192	0.100						0.2207	13.8		20

Sample ID: A1403101-001AMS	SampType: MS	Units: µg/L	Prep Date: 3/13/2014	RunNo: 14109							
Client ID: ZZZZZZ	Batch ID: 7018	TestNo: SW6020A	Analysis Date: 3/13/2014	SeqNo: 185969							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	48.6	0.100	50.00	0.2207	96.8	70	130				

Sample ID: A1403101-001AMSD	SampType: MSD	Units: µg/L	Prep Date: 3/13/2014	RunNo: 14109							
Client ID: ZZZZZZ	Batch ID: 7018	TestNo: SW6020A	Analysis Date: 3/13/2014	SeqNo: 185970							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	48.6	0.100	50.00	0.2207	96.7	70	130	48.62	0.103		20

Sample ID: CCV	SampType: CCV	Units: µg/L	Prep Date:	RunNo: 14109							
Client ID: CCV	Batch ID: 7018	TestNo: SW6020A	Analysis Date: 3/13/2014	SeqNo: 185973							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	51.9	0.100	50.00	0	104	90	110				

Qualifiers: B Analyte detected in the associated Method Blank
 O RSD is greater than RSDlimit
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: 6020_W

Sample ID: CCV	SampType: CCV	TestCode: 6020_W	Units: µg/L	Prep Date:	RunNo: 14109						
Client ID: CCV	Batch ID: 7018	TestNo: SW6020A	SW3010A	Analysis Date: 3/13/2014	SeqNo: 185976						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	50.3	0.100	50.00	0	101	90	110				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 5 of 37
O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: 8260_S

Sample ID: CCV MSVWS-1963	SampType: CCV	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 14180						
Client ID: CCV	Batch ID: 7045	TestNo: SW8260B	5030	Analysis Date: 3/19/2014	SeqNo: 186909						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	71.8	10.0	80.00	0	89.7	80	120				
Toluene	71.5	10.0	80.00	0	89.4	80	120				

Sample ID: LCS MSVWS-1964	SampType: LCS	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 14180						
Client ID: LCSS	Batch ID: 7045	TestNo: SW8260B	5030	Analysis Date: 3/19/2014	SeqNo: 186910						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	76.2	10.0	80.00	0	95.3	87.5	130				
Toluene	70.7	10.0	80.00	0	88.4	83.7	127				

Sample ID: 1403121-001AMIS	SampType: MS	TestCode: 8260_S	Units: µg/Kg-dry	Prep Date: 3/18/2014	RunNo: 14180						
Client ID: ZZZZZZ	Batch ID: 7045	TestNo: SW8260B	5030	Analysis Date: 3/19/2014	SeqNo: 186911						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	73300	11200	67140	10900	92.9	65.2	121				
Toluene	199000	11200	67140	155900	64.3	52.1	127				

Sample ID: 1403121-001AMISD	SampType: MSD	TestCode: 8260_S	Units: µg/Kg-dry	Prep Date: 3/18/2014	RunNo: 14180						
Client ID: ZZZZZZ	Batch ID: 7045	TestNo: SW8260B	5030	Analysis Date: 3/19/2014	SeqNo: 186912						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	73200	11200	67140	10900	92.7	65.2	121	73290	0.183	20	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: 8260_S

Sample ID:	1403121-001AMSD	SampType:	MSD	TestCode:	8260_S	Units:	µg/Kg-dry	Prep Date:	3/18/2014	RunNo:	14180
Client ID:	ZZZZZZ	Batch ID:	7045	TestNo:	SW8260B	5030		Analysis Date:	3/19/2014	SeqNo:	186912
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Toluene	198000	11200	67140	155900	63.2	52.1	127	199100	0.377	20	

Sample ID:	MB	SampType:	MBLK	TestCode:	8260_S	Units:	µg/Kg	Prep Date:		RunNo:	14180
Client ID:	PBS	Batch ID:	7045	TestNo:	SW8260B	5030		Analysis Date:	3/19/2014	SeqNo:	186927
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	10.0									
1,2-Dibromoethane	ND	10.0									
1,2-Dichloroethane	ND	10.0									
1,3,5-Trimethylbenzene	ND	10.0									
Benzene	ND	10.0									
Ethylbenzene	ND	10.0									
Isopropylbenzene	ND	10.0									
m,p-Xylene	ND	20.0									
Methyl tert-butyl ether	ND	10.0									
Naphthalene	ND	10.0									
n-Propylbenzene	ND	10.0									
o-Xylene	ND	10.0									
Toluene	ND	10.0									
Surr: 1,2-Dichloroethane-d4	92.0		100.0		92.0	71.5	112				
Surr: 4-Bromofluorobenzene	92.0		100.0		92.0	75.7	122				
Surr: Dibromofluoromethane	94.8		100.0		94.8	64.3	124				
Surr: Toluene-d8	96.6		100.0		96.6	74.9	120				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: 8260_S

Sample ID:	CCV MSWWS-1963	SampType:	CCV	TestCode:	8260_S	Units:	µg/Kg	Prep Date:	RunNo:	14180	
Client ID:	CCV	Batch ID:	7045	TestNo:	SW8260B	5030	5030	Analysis Date:	SeqNo:	187553	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	57.4	10.0	60.00	0	95.6	80	120				
Toluene	58.3	10.0	60.00	0	97.1	80	120				

Sample ID:	CCB	SampType:	CCB	TestCode:	8260_S	Units:	µg/Kg	Prep Date:	RunNo:	14180	
Client ID:	CCB	Batch ID:	7045	TestNo:	SW8260B	5030	5030	Analysis Date:	SeqNo:	187559	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	10.0									
1,2-Dibromoethane	ND	10.0									
1,2-Dichloroethane	ND	10.0									
1,3,5-Trimethylbenzene	ND	10.0									
Benzene	ND	10.0									
Ethylbenzene	ND	10.0									
Isopropylbenzene	ND	10.0									
m,p-Xylene	ND	20.0									
Methyl tert-butyl ether	ND	10.0									
Naphthalene	ND	10.0									
n-Propylbenzene	ND	10.0									
o-Xylene	ND	10.0									
Toluene	ND	10.0									
Surr: 1,2-Dichloroethane-d4	109		100.0		109	71.5	112				
Surr: 4-Bromofluorobenzene	91.2		100.0		91.2	75.7	122				
Surr: Dibromofluoromethane	110		100.0		110	64.3	124				
Surr: Toluene-d8	106		100.0		106	74.9	120				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside a accepted recov

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: 8260_S

Sample ID: CCB	SampType: CCB	TestCode: 8260_S	Units: µg/Kg	Prep Date:	RunNo: 14180
Client ID: CCB	Batch ID: 7045	TestNo: SW8260B	5030	Analysis Date: 3/24/2014	SeqNo: 187559
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
				LowLimit	HighLimit
				RPD Ref Val	%RPD
					RPDLimit
					Qual

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026
TestCode: 8260_W

Sample ID:	CCV MSVWS-1963	SampType:	CCV	TestCode:	8260_W	Units:	µg/L	Prep Date:	RunNo:	14246	
Client ID:	CCV	Batch ID:	R14246	TestNo:	SW8260B			Analysis Date:	SeqNo:	187782	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	60.0	1.00	60.00	0	100	80	120				
Toluene	56.6	1.00	60.00	0	94.4	80	120				

Sample ID:	LCS MSVWS-1964	SampType:	LCS	TestCode:	8260_W	Units:	µg/L	Prep Date:	RunNo:	14246	
Client ID:	LCSW	Batch ID:	R14246	TestNo:	SW8260B			Analysis Date:	SeqNo:	187783	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	60.6	0.300	60.00	0	101	76.8	125				
Toluene	55.2	1.00	60.00	0	92.0	82	122				

Sample ID:	MB	SampType:	MBLK	TestCode:	8260_W	Units:	µg/L	Prep Date:	RunNo:	14246	
Client ID:	PBW	Batch ID:	R14246	TestNo:	SW8260B			Analysis Date:	SeqNo:	187784	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.00									
1,2-Dibromoethane	ND	1.00									
1,2-Dichloroethane	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
Benzene	ND	0.300									
Ethylbenzene	ND	1.00									
Isopropylbenzene	ND	1.00									
m,p-Xylene	ND	2.00									
Methyl tert-butyl ether	ND	1.00									

Qualifiers: B Analyte detected in the associated Method Blank
 O RSD is greater than RSDlimit
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: 8260_W

Sample ID:	MB	SampType:	MBLK	TestCode:	8260_W	Units:	µg/L	Prep Date:	RunNo:	14246	
Client ID:	PBW	Batch ID:	R14246	TestNo:	SW8260B	Analysis Date:	3/24/2014	Analysis Date:	SeqNo:	187784	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	1.00									
n-Propylbenzene	ND	1.00									
o-Xylene	ND	1.00									
Toluene	ND	1.00									
Surr: 1,2-Dichloroethane-d4	91.8		100.0		91.8	85.3	116				
Surr: 4-Bromofluorobenzene	92.3		100.0		92.3	88.1	120				
Surr: Dibromofluoromethane	95.9		100.0		95.9	94.2	122				
Surr: Toluene-d8	96.7		100.0		96.7	86.2	135				

Sample ID:	CCV MSVWS-1963	SampType:	CCV	TestCode:	8260_W	Units:	µg/L	Prep Date:	RunNo:	14246	
Client ID:	CCV	Batch ID:	R14246	TestNo:	SW8260B	Analysis Date:	3/25/2014	Analysis Date:	SeqNo:	187789	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	45.2	1.00	40.00	0	113	80	120				
Toluene	40.6	1.00	40.00	0	102	80	120				

Sample ID:	CCB	SampType:	CCB	TestCode:	8260_W	Units:	µg/L	Prep Date:	RunNo:	14246	
Client ID:	CCB	Batch ID:	R14246	TestNo:	SW8260B	Analysis Date:	3/25/2014	Analysis Date:	SeqNo:	187790	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.00									
1,2-Dibromoethane	ND	1.00									
1,2-Dichloroethane	ND	1.00									

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 11 of 37
O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: 8260_W

Sample ID: CCB	SampType: CCB	TestCode: 8260_W	Units: µg/L	Prep Date:	RunNo: 14246						
Client ID: CCB	Batch ID: R14246	TestNo: SW8260B		Analysis Date: 3/25/2014	SeqNo: 187790						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	1.00									
Benzene	ND	0.300									
Ethylbenzene	ND	1.00									
Isopropylbenzene	ND	1.00									
m,p-Xylene	ND	2.00									
Methyl tert-butyl ether	ND	1.00									
Naphthalene	ND	1.00									
n-Propylbenzene	ND	1.00									
o-Xylene	ND	1.00									
Toluene	ND	1.00									
Surr: 1,2-Dichloroethane-d4	111		100.0		111	85.3				116	
Surr: 4-Bromofluorobenzene	96.9		100.0		96.9	88.1				120	
Surr: Dibromofluoromethane	106		100.0		106	94.2				122	
Surr: Toluene-d8	107		100.0		107	86.2				135	

Sample ID: 1403096-018CIMS	SampType: MS	TestCode: 8260_W	Units: µg/L	Prep Date:	RunNo: 14246						
Client ID: DP-5-W	Batch ID: R14246	TestNo: SW8260B		Analysis Date: 3/25/2014	SeqNo: 187800						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	6050	30.0	6000	29.00	100	74.1				136	
Toluene	5220	100	6000	72.00	85.7	68.4				135	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 12 of 37
O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: 8260_W

Sample ID: 1403096-018CMSD	SampType: MSD	TestCode: 8260_W	Units: µg/L	Prep Date:	RunNo: 14246						
Client ID: DP-5-W	Batch ID: R14246	TestNo: SW8260B		Analysis Date: 3/25/2014	SeqNo: 187801						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	6190	30.0	6000	29.00	103	74.1	136	6052	2.29	20	
Toluene	4860	100	6000	72.00	79.8	68.4	135	5216	7.07	20	

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: BTEXRBC_S

Sample ID: R14138CCV	SampType: CCV	TestCode: BTEXRBC_S	Units: mg/Kg	Prep Date:	RunNo: 14138						
Client ID: CCV	Batch ID: 7011	TestNo: SW8021B	5030	Analysis Date: 3/14/2014	SeqNo: 186389						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.25	0.0250	2.500	0	90.6	85	115				
Toluene	2.52	0.100	2.500	0	101	85	115				
Ethylbenzene	2.64	0.100	2.500	0	106	85	115				
Xylenes, Total	7.54	0.300	7.500	0	101	85	115				

Sample ID: MB-7011	SampType: MBLK	TestCode: BTEXRBC_S	Units: mg/Kg	Prep Date:	RunNo: 14138						
Client ID: PBS	Batch ID: 7011	TestNo: SW8021B	5030	Analysis Date: 3/14/2014	SeqNo: 186390						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0250									
Toluene	ND	0.100									
Ethylbenzene	ND	0.100									
Xylenes, Total	ND	0.300									
Surr: 4-Bromofluorobenzene	3.36		5.000		67.2	42.6	126				

Sample ID: LCS-7011	SampType: LCS	TestCode: BTEXRBC_S	Units: mg/Kg	Prep Date:	RunNo: 14138						
Client ID: LCSS	Batch ID: 7011	TestNo: SW8021B	5030	Analysis Date: 3/14/2014	SeqNo: 186402						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.10	0.0250	1.250	0	87.9	68.7	117				
Toluene	1.23	0.100	1.250	0	98.8	71.4	115				
Ethylbenzene	1.08	0.100	1.250	0	86.3	76.3	115				
Xylenes, Total	3.38	0.300	3.750	0	90.1	70.1	116				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
 O RSD is greater than RSD limit R RPD outside accepted recovery limits S RPD Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: BTEXRBC_S

Sample ID:	LCS-7011	SampType:	LCS	TestCode:	BTEXRBC_S	Units:	mg/Kg	Prep Date:	3/13/2014	RunNo:	14138
Client ID:	LCSS	Batch ID:	7011	TestNo:	SW8021B	5030		Analysis Date:	3/14/2014	SeqNo:	186402
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID:	1403096-013AMS	SampType:	MS	TestCode:	BTEXRBC_S	Units:	mg/Kg-dry	Prep Date:	3/13/2014	RunNo:	14138
Client ID:	DP-6@12'	Batch ID:	7011	TestNo:	SW8021B	5030		Analysis Date:	3/14/2014	SeqNo:	186403
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.46	0.0290	1.810	0.008686	80.3	32.2	108				
Toluene	1.42	0.145	1.810	0.02316	77.2	56.7	110				
Ethylbenzene	1.24	0.145	1.810	0.02895	67.1	53.3	107				
Xylenes, Total	3.78	0.434	5.429	0.08396	68.0	47.5	119				

Sample ID:	1403096-013AMSD	SampType:	MSD	TestCode:	BTEXRBC_S	Units:	mg/Kg-dry	Prep Date:	3/13/2014	RunNo:	14138
Client ID:	DP-6@12'	Batch ID:	7011	TestNo:	SW8021B	5030		Analysis Date:	3/14/2014	SeqNo:	186404
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.55	0.0145	1.810	0.008686	85.2	32.2	108	1.462	5.82	20	
Toluene	1.33	0.145	1.810	0.02316	72.3	56.7	110	1.419	6.37	20	
Ethylbenzene	1.20	0.145	1.810	0.02895	64.5	53.3	107	1.244	3.86	20	
Xylenes, Total	3.61	0.434	5.429	0.08396	64.9	47.5	119	3.776	4.59	20	

Qualifiers: B Analyte detected in the associated Method Blank
O RSD is greater than RSDlimit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: BTEXRBC_S

Sample ID: R14138CCV	SampType: CCV	TestCode: BTEXRBC_S	Units: mg/Kg	Prep Date:	RunNo: 14138						
Client ID: CCV	Batch ID: 7011	TestNo: SW8021B	5030	Analysis Date: 3/17/2014	SeqNo: 186502						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.24	0.0250	2.500	0	89.6	85	115				
Toluene	2.46	0.100	2.500	0	98.2	85	115				
Ethylbenzene	2.56	0.100	2.500	0	102	85	115				
Xylenes, Total	7.23	0.300	7.500	0	96.4	85	115				

Sample ID: R14138CCB	SampType: CCB	TestCode: BTEXRBC_S	Units: mg/Kg	Prep Date:	RunNo: 14138						
Client ID: CCB	Batch ID: 7011	TestNo: SW8021B	5030	Analysis Date: 3/17/2014	SeqNo: 186503						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0250									
Toluene	ND	0.100									
Ethylbenzene	ND	0.100									
Xylenes, Total	ND	0.300									
Surr: 4-Bromofluorobenzene	3.43		5.000		68.5	42.6	126				

Sample ID: R14227CCV	SampType: CCV	TestCode: BTEXRBC_S	Units: mg/Kg	Prep Date:	RunNo: 14227						
Client ID: CCV	Batch ID: 7055	TestNo: SW8021B	5030	Analysis Date: 3/21/2014	SeqNo: 187386						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	2.17	0.0250	2.500	0	86.7	85	115				
Toluene	2.43	0.100	2.500	0	97.1	85	115				
Ethylbenzene	2.53	0.100	2.500	0	101	85	115				
Xylenes, Total	7.25	0.300	7.500	0	96.7	85	115				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recover

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: BTEXRBC_S

Sample ID:	R14227CCV	SampType:	CCV	TestCode:	BTEXRBC_S	Units:	mg/Kg	Prep Date:	RunNo:	14227	
Client ID:	CCV	Batch ID:	7055	TestNo:	SW8021B	5030	Analysis Date:	3/21/2014	SeqNo:	187386	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID:	MB-7055	SampType:	MBLK	TestCode:	BTEXRBC_S	Units:	mg/Kg	Prep Date:	RunNo:	14227	
Client ID:	PBS	Batch ID:	7055	TestNo:	SW8021B	5030	Analysis Date:	3/21/2014	SeqNo:	187387	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.0250									
Toluene	ND	0.100									
Ethylbenzene	ND	0.100									
Xylenes, Total	ND	0.300									
Surr: 4-Bromofluorobenzene	3.52		5.000		70.4	42.6	126				

Sample ID:	LCS-7055	SampType:	LCS	TestCode:	BTEXRBC_S	Units:	mg/Kg	Prep Date:	RunNo:	14227	
Client ID:	LCSS	Batch ID:	7055	TestNo:	SW8021B	5030	Analysis Date:	3/21/2014	SeqNo:	187388	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.27	0.0250	1.250	0	101	68.7	117				
Toluene	1.22	0.100	1.250	0	98.0	71.4	115				
Ethylbenzene	1.04	0.100	1.250	0	83.1	76.3	115				
Xylenes, Total	3.22	0.300	3.750	0	85.8	70.1	116				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 17 of 37
O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: BTEXRBC_S

Sample ID: 1403096-011AMS SampType: MS TestCode: BTEXRBC_S Units: mg/Kg-dry Prep Date: 3/21/2014 RunNo: 14227
Client ID: DP-4@9' Batch ID: 7055 TestNo: SW8021B 5030 Analysis Date: 3/21/2014 SeqNo: 187389

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.52	0.0383	1.913	0.009181	79.1	32.2	108				
Toluene	1.54	0.153	1.913	0.01913	79.5	56.7	110				
Ethylbenzene	1.41	0.153	1.913	0.01989	72.6	53.3	107				
Xylenes, Total	3.98	0.459	5.738	0.06274	68.3	47.5	119				

Sample ID: 1403096-011AMS SampType: MSD TestCode: BTEXRBC_S Units: mg/Kg-dry Prep Date: 3/21/2014 RunNo: 14227
Client ID: DP-4@9' Batch ID: 7055 TestNo: SW8021B 5030 Analysis Date: 3/21/2014 SeqNo: 187390

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.66	0.0383	1.913	0.009181	86.1	32.2	108	1.523	8.42	20	
Toluene	1.46	0.153	1.913	0.01913	75.4	56.7	110	1.539	5.20	20	
Ethylbenzene	1.25	0.153	1.913	0.01989	64.6	53.3	107	1.409	11.6	20	
Xylenes, Total	4.06	0.459	5.738	0.06274	69.7	47.5	119	3.983	1.98	20	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 18 of 37
O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: BTEXRBC_W

Sample ID: R14127CCV	SampType: CCV	TestCode: BTEXRBC_W	Units: µg/L	RunNo: 14127							
Client ID: CCV	Batch ID: R14127	TestNo: SW8021B		SeqNo: 186219							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	47.5	0.300	50.00	0	95.1	85	115				
Toluene	52.0	0.500	50.00	0	104	85	115				
Ethylbenzene	54.5	0.500	50.00	0	109	85	115				
Xylenes, Total	155	1.50	150.0	0	103	85	115				

Sample ID: LCS-R14127	SampType: LCS	TestCode: BTEXRBC_W	Units: µg/L	RunNo: 14127							
Client ID: LCSW	Batch ID: R14127	TestNo: SW8021B		SeqNo: 186220							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	47.5	0.300	50.00	0	95.1	75.8	113				
Toluene	52.0	0.500	50.00	0	104	77	116				
Ethylbenzene	54.5	0.500	50.00	0	109	76.6	118				
Xylenes, Total	155	1.50	150.0	0	103	76.7	118				

Sample ID: MB-R14127	SampType: MBLK	TestCode: BTEXRBC_W	Units: µg/L	RunNo: 14127							
Client ID: PBW	Batch ID: R14127	TestNo: SW8021B		SeqNo: 186226							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.300									
Toluene	ND	0.500									
Ethylbenzene	ND	0.500									
Xylenes, Total	ND	1.50									
Surr: 4-Bromofluorobenzene	97.3		100.0		97.3	74.8	126				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: BTEXRBC_W

Sample ID: MB-R14127	SampType: MBLK	TestCode: BTEXRBC_W	Units: µg/L	Prep Date:	RunNo: 14127						
Client ID: PBW	Batch ID: R14127	TestNo: SW8021B		Analysis Date: 3/13/2014	SeqNo: 186226						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: R14127CCV	SampType: CCV	TestCode: BTEXRBC_W	Units: µg/L	Prep Date:	RunNo: 14127						
Client ID: CCV	Batch ID: R14127	TestNo: SW8021B		Analysis Date: 3/14/2014	SeqNo: 186490						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	45.3	0.300	50.00	0	90.6	85	115				
Toluene	50.4	0.500	50.00	0	101	85	115				
Ethylbenzene	52.8	0.500	50.00	0	106	85	115				
Xylenes, Total	151	1.50	150.0	0	101	85	115				

Sample ID: CCB-R14127	SampType: CCB	TestCode: BTEXRBC_W	Units: µg/L	Prep Date:	RunNo: 14127						
Client ID: CCB	Batch ID: R14127	TestNo: SW8021B		Analysis Date: 3/14/2014	SeqNo: 186491						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.300									
Toluene	ND	0.500									
Ethylbenzene	ND	0.500									
Xylenes, Total	ND	1.50									
Surr: 4-Bromofluorobenzene	97.8		100.0		97.8	74.8	126				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 20 of 37
 O RSD is greater than RSD limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: BTEXRBC_W

Sample ID: R14127CCV	SampType: CCV	TestCode: BTEXRBC_W	Units: µg/L	RunNo: 14127							
Client ID: CCV	Batch ID: R14127	TestNo: SW8021B		SeqNo: 186497							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	44.8	0.300	50.00	0	89.6	85	115				
Toluene	49.1	0.500	50.00	0	98.2	85	115				
Ethylbenzene	51.1	0.500	50.00	0	102	85	115				
Xylenes, Total	145	1.50	150.0	0	96.4	85	115				

Sample ID: R14127CCB	SampType: CCB	TestCode: BTEXRBC_W	Units: µg/L	RunNo: 14127							
Client ID: CCB	Batch ID: R14127	TestNo: SW8021B		SeqNo: 186498							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.300									
Toluene	ND	0.500									
Ethylbenzene	ND	0.500									
Xylenes, Total	ND	1.50									
Surr: 4-Bromofluorobenzene	96.7		100.0		96.7	74.8	126				

Sample ID: 1403096-007CMS	SampType: MS	TestCode: BTEXRBC_W	Units: µg/L	RunNo: 14127							
Client ID: DP-3A-W	Batch ID: R14127	TestNo: SW8021B		SeqNo: 186508							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22.7	0.300	25.00	0	90.9	67.8	118				
Toluene	25.2	0.500	25.00	0.1700	100	74.7	117				
Ethylbenzene	27.1	0.500	25.00	0.2300	107	74.5	115				
Xylenes, Total	78.1	1.50	75.00	1.020	103	76.8	120				

Qualifiers: B Analyte detected in the associated Method Blank
 O RSD is greater than RSDlimit
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: BTEXRBC_W

Sample ID: 1403096-007CMS	SampType: MS	TestCode: BTEXRBC_W	Units: µg/L	Prep Date:	RunNo: 14127						
Client ID: DP-3A-W	Batch ID: R14127	TestNo: SW8021B		Analysis Date: 3/17/2014	SeqNo: 186508						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 1403096-007CMS	SampType: MSD	TestCode: BTEXRBC_W	Units: µg/L	Prep Date:	RunNo: 14127						
Client ID: DP-3A-W	Batch ID: R14127	TestNo: SW8021B		Analysis Date: 3/17/2014	SeqNo: 186509						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	23.3	0.300	25.00	0	93.2	67.8	118	22.73	2.48	20	
Toluene	26.1	0.500	25.00	0.1700	104	74.7	117	25.24	3.43	20	
Ethylbenzene	27.6	0.500	25.00	0.2300	110	74.5	115	27.09	2.05	20	
Xylenes, Total	78.7	1.50	75.00	1.020	104	76.8	120	78.06	0.778	20	

Qualifiers: B Analyte detected in the associated Method Blank
 O RSD is greater than RSDlimit
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: NWTPHDX_S

Sample ID: CCV	Samp Type: CCV	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date:	RunNo: 14193						
Client ID: CCV	Batch ID: 7006	TestNo: NWTPH-Dx	SW3545A	Analysis Date: 3/20/2014	SeqNo: 187006						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	920	15.0	999.0	0	92.1	85	115				
Lube Oil	548	50.0	499.5	0	110	85	115				

Sample ID: MB-7006	Samp Type: MBLK	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date: 3/12/2014	RunNo: 14193						
Client ID: PBS	Batch ID: 7006	TestNo: NWTPH-Dx	SW3545A	Analysis Date: 3/20/2014	SeqNo: 187007						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	15.0									
Lube Oil	ND	50.0									
Surr: o-Terphenyl	27.3		33.30		81.9	50	150				

Sample ID: LCS-7006	Samp Type: LCS	TestCode: NWTPHDX_S	Units: mg/Kg	Prep Date: 3/12/2014	RunNo: 14193						
Client ID: LCSS	Batch ID: 7006	TestNo: NWTPH-Dx	SW3545A	Analysis Date: 3/20/2014	SeqNo: 187008						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	172	15.0	166.5	0	103	76.3	125				
Lube Oil	204	50.0	166.5	0	122	69.9	127				

Sample ID: 1403096-006ADUP	Samp Type: DUP	TestCode: NWTPHDX_S	Units: mg/Kg-dry	Prep Date: 3/12/2014	RunNo: 14193						
Client ID: DP-5A@11'	Batch ID: 7006	TestNo: NWTPH-Dx	SW3545A	Analysis Date: 3/20/2014	SeqNo: 187012						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	172	15.0	166.5	0	103	76.3	125				
Lube Oil	204	50.0	166.5	0	122	69.9	127				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 23 of 37
 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: NWTPHDX_S

Sample ID: 1403096-006ADUP SampType: DUP TestCode: NWTPHDX_S Units: mg/Kg-dry Prep Date: 3/12/2014 RunNo: 14193
Client ID: DP-5A@11' Batch ID: 7006 TestNo: NWTPH-Dx SW3545A Analysis Date: 3/20/2014 SeqNo: 187012

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	22.0						0	0	20	
Lube Oil	ND	73.4						0	0	20	

Sample ID: CCV SampType: CCV TestCode: NWTPHDX_S Units: mg/Kg Prep Date: RunNo: 14193
Client ID: CCV Batch ID: 7006 TestNo: NWTPH-Dx SW3545A Analysis Date: 3/20/2014 SeqNo: 187013

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	1150	15.0	1332	0	86.4	85	115				
Lube Oil	613	50.0	666.0	0	92.0	85	115				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 24 of 37
O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: NWTPHDXLL_W

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	RunNo: 14194							
Client ID: CCV	Batch ID: 7021	TestNo: NWTPH-Dx	SW3510B	SeqNo: 187014							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	5.53	0.0800	6.000	0	92.1	85	115				
Lube Oil	3.29	0.200	3.000	0	110	85	115				

Sample ID: MB-7021	SampType: MBLK	TestCode: NWTPHDXLL	Units: mg/L	RunNo: 14194							
Client ID: PBW	Batch ID: 7021	TestNo: NWTPH-Dx	SW3510B	SeqNo: 187015							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	ND	0.0800									
Lube Oil	ND	0.200									
Surr: o-Terphenyl	0.121		0.2000		60.5	50	150				

Sample ID: LCS-7021	SampType: LCS	TestCode: NWTPHDXLL	Units: mg/L	RunNo: 14194							
Client ID: LCSW	Batch ID: 7021	TestNo: NWTPH-Dx	SW3510B	SeqNo: 187016							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.667	0.0800	1.000	0	66.7	60.7	121				
Lube Oil	0.746	0.200	1.000	0	74.6	64	126				

Sample ID: LCSD-7021	SampType: LCSD	TestCode: NWTPHDXLL	Units: mg/L	RunNo: 14194							
Client ID: LCSS02	Batch ID: 7021	TestNo: NWTPH-Dx	SW3510B	SeqNo: 187017							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.667	0.0800	1.000	0	66.7	60.7	121				
Lube Oil	0.746	0.200	1.000	0	74.6	64	126				

Sample ID: LCSD-7021	SampType: LCSD	TestCode: NWTPHDXLL	Units: mg/L	RunNo: 14194							
Client ID: LCSS02	Batch ID: 7021	TestNo: NWTPH-Dx	SW3510B	SeqNo: 187017							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.667	0.0800	1.000	0	66.7	60.7	121				
Lube Oil	0.746	0.200	1.000	0	74.6	64	126				

Sample ID: LCSD-7021	SampType: LCSD	TestCode: NWTPHDXLL	Units: mg/L	RunNo: 14194							
Client ID: LCSS02	Batch ID: 7021	TestNo: NWTPH-Dx	SW3510B	SeqNo: 187017							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.667	0.0800	1.000	0	66.7	60.7	121				
Lube Oil	0.746	0.200	1.000	0	74.6	64	126				

Qualifiers: B Analyte detected in the associated Method Blank
 O RSD is greater than RSDlimit
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: NWTPHDXLL_W

Sample ID: LCSD-7021	SampType: LCSD	TestCode: NWTPHDXLL	Units: mg/L	Prep Date: 3/13/2014	RunNo: 14194						
Client ID: LCSS02	Batch ID: 7021	TestNo: NWTPH-Dx	SW3510B	Analysis Date: 3/20/2014	SeqNo: 187017						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	0.730	0.0800	1.000	0	73.0	60.7	121	0.6667	9.10	20	
Lube Oil	0.889	0.200	1.000	0	88.9	64	126	0.7462	17.5	20	

Sample ID: CCV	SampType: CCV	TestCode: NWTPHDXLL	Units: mg/L	Prep Date:	RunNo: 14194						
Client ID: CCV	Batch ID: 7021	TestNo: NWTPH-Dx	SW3510B	Analysis Date: 3/20/2014	SeqNo: 187019						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel	6.91	0.0800	8.000	0	86.4	85	115				
Lube Oil	3.68	0.200	4.000	0	92.0	85	115				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 26 of 37
 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Craybill Phase II GSA / 214026

TestCode: NWTPHGX_S

Sample ID:	LCS-7012	Samp Type:	LCS	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:	3/13/2014	RunNo:	14137
Client ID:	LCSS	Batch ID:	7012	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	3/14/2014	SeqNo:	186381
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	63.4	2.50	62.50	0	101	53.5	121				

Sample ID:	MB-7012	Samp Type:	MBLK	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:	3/13/2014	RunNo:	14137
Client ID:	PBS	Batch ID:	7012	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	3/14/2014	SeqNo:	186382
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	2.50									
Surr: 4-Bromofluorobenzene	3.99		5.000		79.8	50	150				

Sample ID:	7012-CCV	Samp Type:	CCV	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:		RunNo:	14137
Client ID:	CCV	Batch ID:	7012	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	3/14/2014	SeqNo:	186383
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	105	2.50	100.0	0	105	80	120				

Sample ID:	1403096-010ADUP	Samp Type:	DUP	TestCode:	NWTPHGX_S	Units:	mg/Kg-dry	Prep Date:	3/13/2014	RunNo:	14137
Client ID:	DP-3@8'	Batch ID:	7012	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	3/14/2014	SeqNo:	186386
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	3.77									

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 27 of 37
O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: NWTPHGX_S

Sample ID:	R14137CCV	SampType:	CCV	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:	RunNo:	14137	
Client ID:	CCV	Batch ID:	7012	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	3/17/2014	SeqNo:	186499
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	105	2.50	125.0	0	83.7	80	120				

Sample ID:	R14137CCB	SampType:	CCB	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:	RunNo:	14137	
Client ID:	CCB	Batch ID:	7012	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	3/17/2014	SeqNo:	186500
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	2.50									
Surr. 4-Bromofluorobenzene	4.37		5.000		87.5	50	150				

Sample ID:	R14137CCV	SampType:	CCV	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:	RunNo:	14137	
Client ID:	CCV	Batch ID:	7012	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	3/17/2014	SeqNo:	186536
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	162	2.50	150.0	0	108	80	120				

Sample ID:	LCS-7049	SampType:	LCS	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:	RunNo:	14202	
Client ID:	LCSS	Batch ID:	7049	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	3/20/2014	SeqNo:	187130
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	62.1	2.50	62.50	0	99.4	53.5	121				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: NWTPHGX_S

Sample ID:	MB-7049	SampType:	MBLK	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:	3/20/2014	RunNo:	14202
Client ID:	PBS	Batch ID:	7049	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	3/20/2014	SeqNo:	187131
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	2.50									
Surr: 4-Bromofluorobenzene	3.98		5.000		79.6	50	150				

Sample ID:	1403158-001ADUP	SampType:	DUP	TestCode:	NWTPHGX_S	Units:	mg/Kg-dry	Prep Date:	3/20/2014	RunNo:	14202
Client ID:	ZZZZZZ	Batch ID:	7049	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	3/20/2014	SeqNo:	187133
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	2.88									

Sample ID:	7049-CCV	SampType:	CCV	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:		RunNo:	14202
Client ID:	CCV	Batch ID:	7049	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	3/20/2014	SeqNo:	187134
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	88.1	2.50	100.0	0	88.1	80	120				

Sample ID:	7049-CCV	SampType:	CCV	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:		RunNo:	14202
Client ID:	CCV	Batch ID:	7049	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	3/20/2014	SeqNo:	187135
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	142	2.50	150.0	0	94.6	80	120				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: NWTPHGX_S

Sample ID:	R14202CCV	SampType:	CCV	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:	RunNo:	14202	
Client ID:	CCV	Batch ID:	7049	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	SeqNo:	187366	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	102	2.50	100.0	0	102	80	120				

Sample ID:	R14202CCB	SampType:	CCB	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:	RunNo:	14202	
Client ID:	CCB	Batch ID:	7049	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	SeqNo:	187367	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	2.50									
Surr: 4-Bromofluorobenzene	4.09		5.000		81.8	50	150				

Sample ID:	R14202CCV	SampType:	CCV	TestCode:	NWTPHGX_S	Units:	mg/Kg	Prep Date:	RunNo:	14202	
Client ID:	CCV	Batch ID:	7049	TestNo:	NWTPH-Gx	5030_G_S		Analysis Date:	SeqNo:	187369	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	151	2.50	150.0	0	101	80	120				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 30 of 37
 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recov

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: NWTPHGX_W

Sample ID:	LCS-R14120	SampType:	LCS	TestCode:	NWTPHGX_W	Units:	µg/L	Prep Date:	RunNo:	14120	
Client ID:	LCSW	Batch ID:	R14120	TestNo:	NWTPH-Gx			Analysis Date:	3/13/2014	SeqNo:	186104
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	2130	100	2000	0	107	74.4	128				

Sample ID:	MB-R14120	SampType:	MBLK	TestCode:	NWTPHGX_W	Units:	µg/L	Prep Date:	RunNo:	14120	
Client ID:	PBW	Batch ID:	R14120	TestNo:	NWTPH-Gx			Analysis Date:	3/13/2014	SeqNo:	186105
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	100									
Surr: 4-Bromofluorobenzene	104		100.0		104	50	150				

Sample ID:	R14120CCV	SampType:	CCV	TestCode:	NWTPHGX_W	Units:	µg/L	Prep Date:	RunNo:	14120	
Client ID:	CCV	Batch ID:	R14120	TestNo:	NWTPH-Gx			Analysis Date:	3/13/2014	SeqNo:	186111
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	2130	100	2000	0	107	80	120				

Sample ID:	R14120CCV	SampType:	CCV	TestCode:	NWTPHGX_W	Units:	µg/L	Prep Date:	RunNo:	14120	
Client ID:	CCV	Batch ID:	R14120	TestNo:	NWTPH-Gx			Analysis Date:	3/14/2014	SeqNo:	186376
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	2090	100	2000	0	105	80	120				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
 O RSD is greater than RSD limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: NWTPHGX_W

Sample ID: R14120CCB	SampType: CCB	TestCode: NWTPHGX_W	Units: µg/L	Prep Date:	RunNo: 14120						
Client ID: CCB	Batch ID: R14120	TestNo: NWTPH-Gx		Analysis Date: 3/14/2014	SeqNo: 186377						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	100									
Surr: 4-Bromofluorobenzene	105		100.0		105	50	150				

Sample ID: R14120CCV	SampType: CCV	TestCode: NWTPHGX_W	Units: µg/L	Prep Date:	RunNo: 14120						
Client ID: CCV	Batch ID: R14120	TestNo: NWTPH-Gx		Analysis Date: 3/17/2014	SeqNo: 186495						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	2230	100	2000	0	111	80	120				

Sample ID: R14120CCB	SampType: CCB	TestCode: NWTPHGX_W	Units: µg/L	Prep Date:	RunNo: 14120						
Client ID: CCB	Batch ID: R14120	TestNo: NWTPH-Gx		Analysis Date: 3/17/2014	SeqNo: 186496						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	100									
Surr: 4-Bromofluorobenzene	109		100.0		109	50	150				

Sample ID: 1403096-015CDUP	SampType: DUP	TestCode: NWTPHGX_W	Units: µg/L	Prep Date:	RunNo: 14120						
Client ID: DP-1-W	Batch ID: R14120	TestNo: NWTPH-Gx		Analysis Date: 3/17/2014	SeqNo: 186506						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	100									
Surr: 4-Bromofluorobenzene	109		100.0		109	50	150				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: NWTPHGX_W

Sample ID: R14120CCV	SampType: CCV	TestCode: NWTPHGX_W	Units: µg/L	Prep Date:	RunNo: 14120						
Client ID: CCV	Batch ID: R14120	TestNo: NWTPH-Gx		Analysis Date: 3/17/2014	SeqNo: 186507						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	3230	100	3000	0	108	80	120				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 33 of 37
O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: PAHLL_W

Sample ID:	CCV-7057	SampType:	CCV	TestCode:	PAHLL_W	Units:	µg/L	Prep Date:	RunNo:	14223	
Client ID:	CCV	Batch ID:	7057	TestNo:	SW8270D	SW	3510C	Analysis Date:	SeqNo:	187352	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	1.14	0.0500	1.000	0	114	80	120				
2-Methylnaphthalene	0.989	0.0500	1.000	0	98.9	80	120				
Acenaphthene	1.06	0.0500	1.000	0	106	80	120				
Acenaphthylene	0.989	0.0500	1.000	0	98.9	80	120				
Anthracene	0.826	0.0500	1.000	0	82.6	80	120				
Benz(a)anthracene	0.923	0.0500	1.000	0	92.3	80	120				
Benzo(a)pyrene	0.939	0.0500	1.000	0	93.9	80	120				
Benzo(b)fluoranthene	1.01	0.0500	1.000	0	101	80	120				
Benzo(g,h,i)perylene	1.05	0.0500	1.000	0	105	80	120				
Benzo(k)fluoranthene	1.15	0.0500	1.000	0	115	80	120				
Chrysene	1.03	0.0500	1.000	0	103	80	120				
Dibenz(a,h)anthracene	1.03	0.0500	1.000	0	103	80	120				
Fluoranthene	1.03	0.0500	1.000	0	103	80	120				
Fluorene	1.03	0.0500	1.000	0	103	80	120				
Indeno(1,2,3-cd)pyrene	1.02	0.0500	1.000	0	102	80	120				
Naphthalene	1.08	0.0500	1.000	0	108	80	120				
Phenanthrene	1.03	0.0500	1.000	0	103	80	120				
Pyrene	1.02	0.0500	1.000	0	102	80	120				

Sample ID:	LCS-7057	SampType:	LCS	TestCode:	PAHLL_W	Units:	µg/L	Prep Date:	RunNo:	14223	
Client ID:	LCSW	Batch ID:	7057	TestNo:	SW8270D	SW	3510C	Analysis Date:	SeqNo:	187353	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	3.75	0.0500	5.000	0	75.1	35.1	100				

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit
 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

WO#: 1403096
09-Apr-14

Specialty Analytical

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: PAHLL_W

Sample ID:	LCS-7057	SampType:	LCS	TestCode:	PAHLL_W	Units:	µg/L	Prep Date:	3/21/2014	RunNo:	14223
Client ID:	LCSW	Batch ID:	7057	TestNo:	SW8270D	SW	3510C	Analysis Date:	3/21/2014	SeqNo:	187353
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Acenaphthylene	3.88	0.0500	5.000	0	77.7	29	89.1				
Anthracene	4.25	0.0500	5.000	0	85.1	42	97.4				
Benz(a)anthracene	3.92	0.0500	5.000	0	78.5	34.2	95.8				
Benzo(a)pyrene	3.87	0.0500	5.000	0	77.5	23.4	103				
Benzo(b)fluoranthene	4.09	0.0500	5.000	0	81.7	36.6	99.5				
Benzo(g,h,i)perylene	3.74	0.0500	5.000	0	74.8	20.8	120				
Benzo(k)fluoranthene	4.06	0.0500	5.000	0	81.2	39.7	93.4				
Chrysene	3.97	0.0500	5.000	0	79.3	39.1	119				
Dibenz(a,h)anthracene	3.77	0.0500	5.000	0	75.4	5.05	89				
Fluoranthene	4.38	0.0500	5.000	0	87.6	42.4	95.9				
Fluorene	3.88	0.0500	5.000	0	77.6	37.4	88.4				
Indeno(1,2,3-cd)pyrene	3.75	0.0500	5.000	0	75.1	10.5	98.4				
Naphthalene	3.08	0.0500	5.000	0	61.5	25.6	106				
Phenanthrene	4.24	0.0500	5.000	0	84.8	38.1	106				
Pyrene	4.20	0.0500	5.000	0	83.9	41.3	118				

Sample ID:	LCSD-7057	SampType:	LCSD	TestCode:	PAHLL_W	Units:	µg/L	Prep Date:	3/21/2014	RunNo:	14223
Client ID:	LCSS02	Batch ID:	7057	TestNo:	SW8270D	SW	3510C	Analysis Date:	3/21/2014	SeqNo:	187354
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Acenaphthene	3.58	0.0500	5.000	0	71.5	35.1	100	3.754	4.83	20	
Acenaphthylene	3.68	0.0500	5.000	0	73.5	29	89.1	3.883	5.44	20	
Anthracene	4.01	0.0500	5.000	0	80.1	42	97.4	4.255	6.03	20	
Benz(a)anthracene	3.92	0.0500	5.000	0	78.3	34.2	95.8	3.923	0.165	20	

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 35 of 37
O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: PAHLL_W

Sample ID:	LCSD-7057	SampType:	LCSD	TestCode:	PAHLL_W	Units:	µg/L	Prep Date:	3/21/2014	RunNo:	14223
Client ID:	LCSS02	Batch ID:	7057	TestNo:	SW8270D	SW	3510C	Analysis Date:	3/21/2014	SeqNo:	187354
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)pyrene	3.97	0.0500	5.000	0	79.3	23.4	103	3.875	2.36	20	
Benzo(b)fluoranthene	3.95	0.0500	5.000	0	79.0	36.6	99.5	4.086	3.32	20	
Benzo(g,h,i)perylene	3.81	0.0500	5.000	0	76.3	20.8	120	3.738	1.99	20	
Benzo(k)fluoranthene	4.24	0.0500	5.000	0	84.8	39.7	93.4	4.059	4.30	20	
Chrysene	3.96	0.0500	5.000	0	79.1	39.1	119	3.967	0.272	20	
Dibenz(a,h)anthracene	3.69	0.0500	5.000	0	73.9	5.05	89	3.768	1.96	20	
Fluoranthene	4.22	0.0500	5.000	0	84.4	42.4	95.9	4.382	3.83	20	
Fluorene	3.75	0.0500	5.000	0	75.0	37.4	88.4	3.879	3.40	20	
Indeno(1,2,3-cd)pyrene	3.66	0.0500	5.000	0	73.2	10.5	98.4	3.753	2.43	20	
Naphthalene	2.86	0.0500	5.000	0	57.3	25.6	106	3.076	7.16	20	
Phenanthrene	3.96	0.0500	5.000	0	79.2	38.1	106	4.240	6.76	20	
Pyrene	4.08	0.0500	5.000	0	81.6	41.3	118	4.195	2.81	20	

Sample ID:	MB-7057	SampType:	MBLK	TestCode:	PAHLL_W	Units:	µg/L	Prep Date:	3/21/2014	RunNo:	14223
Client ID:	PBW	Batch ID:	7057	TestNo:	SW8270D	SW	3510C	Analysis Date:	3/21/2014	SeqNo:	187355
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	0.0500									
2-Methylnaphthalene	ND	0.0500									
Acenaphthene	ND	0.0500									
Acenaphthylene	ND	0.0500									
Anthracene	ND	0.0500									
Benz(a)anthracene	ND	0.0500									
Benzo(a)pyrene	ND	0.0500									

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 36 of 37
 O RSD is greater than RSDlimit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

QC SUMMARY REPORT

Specialty Analytical

WO#: 1403096
09-Apr-14

Client: 3 Kings Environmental, Inc.
Project: Graybill Phase II GSA / 214026

TestCode: PAHLL_W

Sample ID:	MB-7057	SampType:	MBLK	TestCode:	PAHLL_W	Units:	µg/L	Prep Date:	3/21/2014	RunNo:	14223
Client ID:	PBW	Batch ID:	7057	TestNo:	SW8270D	SW	3510C	Analysis Date:	3/21/2014	SeqNo:	187355
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(b)fluoranthene	ND	0.0500									
Benzo(g,h,i)perylene	ND	0.0500									
Benzo(k)fluoranthene	ND	0.0500									
Chrysene	ND	0.0500									
Dibenz(a,h)anthracene	ND	0.0500									
Fluoranthene	ND	0.0500									
Fluorene	ND	0.0500									
Indeno(1,2,3-cd)pyrene	ND	0.0500									
Naphthalene	ND	0.0500									
Phenanthrene	ND	0.0500									
Pyrene	ND	0.0500									
Surr: 2-Fluorobiphenyl	0.0574		0.1000		57.4	18.6		106			
Surr: Nitrobenzene-d5	0.0590		0.1000		59.1	17		130			
Surr: Terphenyl-d14	0.0922		0.1000		92.2	39.6		131			

Qualifiers: B Analyte detected in the associated Method Blank H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit Page 37 of 37
O RSD is greater than RSD limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery

KEY TO FLAGS

Rev. May 12, 2010

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- A4 The product appears to be aged or degraded diesel.
- B The blank exhibited a positive result great than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- G Result may be biased high due to biogenic interferences. Clean up is recommended.
- H Sample was analyzed outside recommended holding time.
- HT At clients request, samples was analyzed outside of recommended holding time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits; post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD



3 Kings Environmental, Inc.
 1311 SE Grace Ave
 Battle Ground, WA 98604

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 f. 360.666.8202
 www.3kings.com

Project Manager: Brett MacDonald
 Project Name: Graybill Phase II ESA
 Project Number: 214026 (CWA)
 Samples Collected by: Brett MacDonald

PO: C-1021

- Normal Turn-Around
- Rush Turn-Around

Specify Completion Date _____

Date	Time	Sample ID	Matrix	Number of Containers	NWTPH - DX	NWTPH-GX	BTEX	VOCs (RSDM)	PAHs	Total 8 Metals	PCBs	Total Lead	Lab Job No.	Temperature	Lab I.D.
3/11/2014	1120	DP-1A e 9'	S	1									14030916		
	1125	DP-1A e 12'			X										HOLD
	1145	DP-2A e 9'													HOLD
	1210	DP-3A e 8'			X		X								
	1235	DP-4A e 8'			X										HOLD
	1300	DP-5A e 11'	V	1											
	1215	DP-3A-L3	W	6	X		X		(X)						
	1320	DP-1 e 9'	S	1											HOLD
	1345	DP-2 e 10'													
	1420	DP-3 e 8'				X	X								HOLD
	1450	DP-4 e 9'			(X)	(X)	(X)	(X)							HOLD
	1520	DP-5 e 12'			X	X	X					X			
	1550	DP-6 e 12'			X	X	X								
	1620	DP-7 e 10'	V	1											HOLD
Relinquished By: <u>Brett MacDonald</u> Date: <u>3/12/14</u> Time: <u>0720</u> Company: <u>3 Kings Env</u>													Relinquished By: Company:	Date Time	
Received By: <u>[Signature]</u> Date: <u>3/12/14</u> Time: <u>0720</u> Laboratory: <u>[Signature]</u>													Received By: Laboratory:	Date Time	

Please send reports electronically to bmacdonald@3kingsinc.com by the specified turn-around.
 Invoices can be sent to afaik@3kingsinc.com

APPENDIX C


Exploratory Boring Logs

Boring #: DP-1		BORING LOG		Date: 3/11/2014			
MW #: N/A				Start: 1310 Finish: 1325			
Project: Graybill Phase II ESA 42411 NE Yale Bridge Rd Ambay, WA			Boring Location: 27' North and 45' East of SW corner of property. 8' East of current UST cavity.				
Project #: 214026		Client: Becky Graybill		Logged By: Brett MacDonald <i>BSM</i>			
Driller: Cascade Drilling			Sect: 12	T: 5N	R: 3E		
Drilling Method: GeoProbe			Boring Dia: 2 1/4"	Depth: 15'			
Sampling Method: Grab			Surface Elev: 160' AMSL				
			TOC Elev: N/A				
			Start Card #: N/A				
			SWL: ~9' bgs Date: 3/11/2014				
Sample	PID	Depth	Sample Interval	GW Level	Strata	Lithology	
		0			GW	~3" Asphalt GRAVEL - Sub-base (FILL)	
		1			ML	SILT: medium brown, medium stiff, moist, no odor or staining.	
	0.0	2			↓		
		3					
		4					
	0.0	5					
		6					
		7					
DP-1e9	0.0	8	9' - 9 1/2'	~9' bgs			- wet, no odor or staining
		9					
	0.0	10				GP	Silty GRAVEL: some sand, medium brown, stiff, saturated, no odor or staining.
		11					
		12					
	0.0	13					
		14					
		15				Boring terminated @ 15' bgs.	
		16					
		17					
		18					
		19					
		20					

NOTES: Collect water sample DP-1-W (2L, 3VOA + 1-250 ml)

Boring #: DP-2		BORING LOG		Date: 3/11/2014		
MW #: N/A				Start: 1330 Finish: 1350		
Project: Graybill Phase II ESA			Boring Location: 10' North and 80' East of SW corner of property, 8' South of current USE cavity.			
42411 NE Yale Bridge Rd Ambay, WA			Logged By: Brett MacDonald <i>BSM</i>			
Project #: 214026		Client: Becky Graybill				
Driller: Cascade Drilling			Sect: 12	T: 5N	R: 3E	
Drilling Method: GeoProbe			Boring Dia: 2 1/4"	Depth: 15'		
Sampling Method: Grab			Surface Elev: 160' AMSL			
			TOC Elev: N/A			
			Start Card #: N/A			
			SWL: ~9' bgs Date: 3/11/2014			
Sample	PID	Depth	Sample Interval	GW Level	Strata	Lithology
		0			GW	~3" Asphalt
		1			↓	GRAVEL - Solo-base (FILL)
		2			ML	SILT: med. brown, med. stiff, moist, no odor or staining.
	0.0	3			↓	
		4			↓	
	0.0	5			↓	
		6			↓	
		7			↓	
		8			↓	
		9			↓	-wet, no odor or staining-
DP-2 @ 10'	0.0	10	9 1/2' - 10'	↑ 1/2' bgs	↓	
	0.0	11			↓	
		12			GP	Silty GRAVEL: same sand, med. brown, stiff, saturated, no odor or staining.
		13			↓	
	0.0	14			↓	
		15				Boring terminated @ 15' bgs
		16				
		17				
		18				
		19				
		20				

NOTES:

Boring #: DP-3		BORING LOG		Date: 3/11/2014		
MW #: N/A				Start: 1400		Finish: 1425
Project: Graybill Phase II ESA 42411 NE Yale Bridge Rd Ambay, WA			Boring Location: 15' North and 48' East of SW corner of property S' SW of USF cavity.			
Project #: 214026		Client: Becky Graybill		Logged By: Brett MacDonald <i>BSM</i>		
Driller: Cascade Drilling			Sect: 12	T: 5N	R: 3E	
Drilling Method: GeoProbe			Boring Dia: 2 1/4"	Depth: 20'		
Sampling Method: Grab			Surface Elev: 160' AMSL			
			TOC Elev: N/A			
			Start Card #: N/A			
			SWL: _____ Date: 3/11/2014			
Sample	PID	Depth	Sample Interval	GW Level	Strata	Lithology
		0			GW	1.3" Asphalt
		1			ML	GRAVEL-Subbase (FILL)
	0.0	2				SILT: medium brown, medium stiff, moist, no odor or staining.
		3				
	0.0	4				
		5				
	0.0	6				
DP-3 CS	0.0	7	8'-8 1/2'	 18' bgs		-wet, no odor or staining.
		8				
		9				
	0.0	10				
		11				
	0.0	12			GP	Silty GRAVEL: some sand, med. brown, stiff, saturated, no odor or staining.
		13				
	0.0	14				
		15				Boring terminated @ 15' bgs
		16				
		17				
		18				
		19				
		20				


NOTES:

Collect Water Sample DP-3-W (2L, 3VOA + 1-250 mL)

Boring #: DP-4		BORING LOG		Date: 3/11/2014		
MW #: N/A				Start: 1430 Finish: 1450		
Project: Graybill Phase II ESA 42411 NE Yale Bridge Rd Ambay, WA			Boring Location: 12' North and 18' East of SW Corner of Property. SW corner of site. 7' SW of MW-3.			
Project #: 214026		Client: Becky Graybill		Logged By: Brett MacDonald <i>BSM</i>		
Driller: Cascade Drilling			Sect: 12	T: 5N	R: 3E	
Drilling Method: GeoProbe			Boring Dia: 2 1/4"	Depth: 15'		
Sampling Method: Grab			Surface Elev: 160' AMSL			
			TOC Elev: N/A			
			Start Card #: N/A			
			SWL: 7.68	Date: 3/11/2014		
Sample	PID	Depth	Sample Interval	GW Level	Strata	Lithology
		0			GW	~3" Asphalt
		1			↓	GRAVEL - sub-base (FILL)
	0.0	2			ML	SILT: medium brown, med. stiff, moist, no odor or staining.
		3			↓	
	0.0	4			↓	
		5			↓	
		6			↓	
		7			↓	
DP-4e9	0.0	8	8'-9'	7.68	↓	-wet, no odor or staining
		9			↓	
	0.0	10			↓	
		11			↓	
	0.0	12			GP	Silty GRAVEL: some sand, med. brown, stiff, saturated, no odor or staining.
		13			↓	
	0.0	14			↓	
		15				Boring terminated @ 15' logs.
		16				
		17				
		18				
		19				
		20				

NOTES:

Collect Water Sample DP-4-W (2L, 360A + 1-250 mL)

Boring #: DP-5		BORING LOG		Date: 3/11/2014		
MW #: N/A				Start: 1500 Finish: 1520		
Project: Graybill Phase II ESA		Boring Location: 36' North and 32' East of SW corner of property.				
42411 NE Yale Bridge Rd Amboy, WA		Former UST Cavity.				
Project #: 214026		Client: Becky Graybill		Logged By: Brett MacDonald <i>BSM</i>		
Driller: Cascade Drilling		Sect: 12	T: 5N	R: 3E	Q: SE 1/4	
Drilling Method: GeoProbe		Boring Dia: 2 1/4"		Depth: 15'		
Sampling Method: Grab		Surface Elev: 160' AMSL				
		TOC Elev: N/A				
		Start Card #: N/A				
		SWL: ~8' bgs		Date: 3/11/2014		
Sample	PID	Depth	Sample Interval	GW Level	Strata	Lithology
		0			GW	~3' Asphalt
		1			↓	
		2			ML	Silt: medium brown, medium stiff, moist, no odor or staining.
	0.0	3				
		4				
	0.0	5				
		6				
		7				
		8				
	0.0	9		~8' bgs		- wet, no odor or staining
		10				
DP-5 e12	26.8	11	12'-12 1/2'		↓	
		12			SW	Fine to medium SAND: gray, med. stiff, wet, petroleum odor.
		13			↓	
	0.8	14			GP	Silty GRAVEL: some sand, med. stiff, saturated, no odor or staining.
		15			↓	Boring terminated @ 15' bgs.
		16				
		17				
		18				
		19				
		20				

NOTES: Collect Water Sample DP-5-W (2L, 3VOA, 1-250 mL)

Boring #: DP-6		BORING LOG		Date: 3/11/2014	
MW #: N/A				Start: 1530 Finish: 1550	
Project: Graybill Phase II ESA 42411 NE Yale Bridge Rd Ambay, WA			Boring Location: 60' North and 35' East of SW corner of property 20' West of current dispensers.		
Project #: 214026		Client: Becky Graybill		Logged By: Brett MacDonald <i>BSM</i>	
Driller: Cascade Drilling			Sec: 12	T: 5N	R: 3E
Drilling Method: GeoProbe			Boring Dia: 2 1/4"	Depth: 15'	
Sampling Method: Grab			Surface Elev: 160' AMSL		
			TOC Elev: N/A		
			Start Card #: N/A		
			SWL: ~8' logs Date: 3/11/2014		

Sample	PID	Depth	Sample Interval	GW Level	Strata	Lithology
		0			GW	~3" Asphalt
		1			↓	GRAVEL - Sub-base (F16)
		2			ML	SILT: medium brown, med. stiff, moist, no odor or staining
	0.0	3			↓	
		4			GP	Sandy GRAVEL: gray, loose, dry, no odor or staining.
	0.0	5			↓	
		6			ML	SILT: med. brown, med. stiff, moist, no odor or staining
		7			↓	
	0.0	8			↓	
		9			↓	
		10			↓	-wet, no odor or staining
DP-6 @ 12'	0.0	11	11 1/2' - 12'		↓	
		12			GW	Sandy GRAVEL: multi-colored, river-washed, med. stiff, saturated, no odor or staining.
	0.0	13			↓	
		14			↓	
		15			↓	Boring terminated @ 15' logs.
		16				
		17				
		18				
		19				
		20				

NOTES:

Boring #: DP-7		BORING LOG		Date: 3/11/2014		
MW #: N/A				Start: 1600 Finish: 1620		
Project: Graybill Phase II ESA 42411 NE Yak Bridge Rd Ambay, WA			Boring Location: 95' North and 60' East of SW corner of property. 17' North of dispenser island.			
Project #: 214026		Client: Becky Graybill		Logged By: Brett MacDonald <i>B.M.</i>		
Driller: Cascade Drilling			Sect: 12	T: 5N	R: 3E	
Drilling Method: GeoProbe			Boring Dia: 2 1/4"	Depth: 15'		
Sampling Method: Grab			Surface Elev: 160' AMSL			
			TOC Elev: N/A			
			Start Card #: N/A			
			SWL: ~8' bgs	Date: 3/11/2014		
Sample	PID	Depth	Sample Interval	GW Level	Strata	Lithology
		0			GW	3" Asphalt
		1				GRAVEL: sub-base (fill)
	0.0	2			ML	SILT: medium brown, medium stiff, moist, no odor or staining.
		3				
	0.0	4				
		5				
		6				
		7				
		8				
DP-7e10'	0.0	9	9 1/2' - 10'	~8' bgs		- wet, no odor or staining
	0.0	10				
		11				
	0.0	12			GP	Silty GRAVEL: some sand, med. brown; stiff, saturated, no odor or staining
		13				
	0.0	14				
		15				
		16				Boring terminated @ 15' bgs
		17				
		18				
		19				
		20				

NOTES:

APPENDIX D

Site Photographs

APPENDIX D

SITE PHOTOGRAPHS (Page 1 of 2)

Chelatchie General Store Subsurface Investigation
42411 NE Yale Bridge Road Amboy, Washington
3 Kings Project Number 214026



The photo on the left shows the Chelatchie Prairie General Store from the corner of NE Healy Road and NE Yale Bridge Road, looking northeast. The photo on the right shows the GeoProbe rig used to collect soil and shallow groundwater samples at the subject site.



The photo on the left shows the Chelatchie Prairie General Store property from the south, looking north. The GeoProbe is in front of the store, completing boring DP-1. The photo on the right shows the location of monitoring well MW-4 (in foreground), adjacent to and north of the onsite UST dispensers. This well has not contained petroleum impact, based on historic groundwater sampling data.

APPENDIX D

SITE PHOTOGRAPHS (Page 2 of 2)

Chelatchie General Store Subsurface Investigation
42411 NE Yale Bridge Road Amboy, Washington
3 Kings Project Number 214026



The photo on the left shows the canopy at the Chelatchie Prairie General Store, looking northwest. Boring DP-2 is the white circle on the left side of the photo. The historic UST cavity was identified in the background, adjacent to and behind the current UST cavity, which is the concrete square (beneath truck). The photo on the right shows the southwestern corner of the subject site, looking east down NE Healy Road. The white circle in the asphalt is monitoring well MW-3.



Photo on the left shows the store from the west looking east. Monitoring well MW-1 was identified just behind the grass strip pictured on the right side of the photo. The photo on the right shows the canopy from the northwest, looking southeast. Monitoring well MW-1 is under the red truck in the foreground, while well MW-2 was identified beneath the second red truck in the background.