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June 14, 2012

Guy Barrett, LHG  
Southwest Regional Office,  
Toxics Cleanup Program  
P.O. Box 47775, Olympia, WA 98504-7775

RE: *Underground Storage Tank Decommissioning, Contaminated Soil Excavation, and Confirmation Soil and Groundwater Sampling*

FOR: Former L&C Deli / Vista Mart  
Ecology Facility ID's 1035 and 7176  
13908 and 13912 NE 20th Avenue; Vancouver, WA 98686

Dear Mr. Barrett:

This letter report documents activities to decommission by removal three (3) underground storage tanks (USTs) at the *subject property*, identified as the former L&C Deli / Vista Mart, located at 13908 and 13912 NE 20th Avenue, in Vancouver, Washington (See **Attachment A** for a Site Location Map and all Site Figures). Additional activities that were conducted at this time included:

- Removal of the canopy, fuel dispensers and fuel island;
- Removal of approximately 220 tons of petroleum-contaminated soil (PCS) and offsite disposal at an authorized landfill;
- Treatment of groundwater within the excavation with activated carbon and petrophyllitic bacteria;
- Confirmation sampling and laboratory analysis of soil from the limits of the excavation;
- Confirmation sampling and laboratory analysis of groundwater within the limits of the excavation; and
- Replacement and repair of stormwater piping through the excavation; and
- Backfill and compaction of the excavation.

Each of these activities are discussed in detail in appropriate Sections of this report.

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## **1.0 SITE DESCRIPTION HISTORY**

The subject property, identified as the former L&C Deli and Vista Mart, is located at the northwest corner of the intersection of NE 20th Avenue and NE 139th Street near the intersection of Interstate I-5 and Interstate I-205. The subject property formerly contained three (3) 12,000-gallon single-walled steel USTs formerly containing diesel, and premium and regular unleaded gasoline. Product from the USTs were dispensed from two (2) multiple product dispensers located beneath an adjacent canopy to the east of the UST cavity. Notice of temporary closure of the UST system was received by the Washington Department of Ecology (Ecology) in September 25, 2009.

## **2.0 SITE HISTORY**

### **2.1 Initial Release and Investigations**

The following historical information was provided in a March 2010 *Periodic Review* report by the Toxics Cleanup Program of Ecology for the subject property:

*In September 1987, gasoline product and vapors were discovered in a sanitary sewer line in a location near the L&C Deli Site. In addition, gasoline product was discovered floating on the groundwater in a number of test pits excavated in the vicinity of the subject Site. In November 1987, an extraction well and recovery system were installed by an Ecology contractor at the subject Site to recover the free product gasoline floating on the groundwater.*

*Subsequent integrity testing of the USTs and lines located on the subject property indicated that although the tanks appeared to be sound, the associated lines may have been leaking product. The recovery of gasoline product from the extraction well diminished in late 1988, and in February 1989, Ecology allowed the recovery system to be permanently shut down. A total of 524 gallons of gasoline product was recovered during the operation of the recovery system. On August 10, 1990, the clients received an Order from Ecology requiring that a remedial investigation and feasibility study (RI/FS) be performed to facilitate the remediation of the gasoline product that may have remained adsorbed in the soils and dissolved in the groundwater in the vicinity of the subject Site.*

*Hahn and Associates, Inc. (HAI) performed remedial investigative activities at the subject Site from October 1990 to March 1991 through the installation of 11 soil borings and 7 groundwater monitoring wells. The remedial investigation appeared to define the extent of the impacts to the soil and groundwater on and in the vicinity of the subject Site. A feasibility study of remedial options was also prepared by HAI.*

*In January 1992, WDOE prepared a Cleanup Action Plan (CAP) which summarized the results of the RI/FS and outlined the preferred cleanup alternative. In summary, the preferred cleanup alternative involved: 1) the partial removal of contaminated soils; 2) the surface treatment of the excavated soils by bioremediation; 3) the in-situ degradation of the remaining soil contamination*

*by natural processes; and 4) a modified pump and treat method for remediation of the shallow groundwater from the excavation pit.*

*On March 2, 1992, Ecology issued an Enforcement Order requiring implementation of the preferred cleanup alternative as outlined in the CAP. Also included in the Enforcement Order was a request for additional documents including: 1) an engineering design report; 2) construction plans and specifications; 3) an operation and maintenance plan; 4) a compliance monitoring plan; 5) a sampling and analysis plan; and 6) a health and safety plan.*

*Contaminated soil removal activities, confirmation soil sampling activities and groundwater removal activities took place in September 1992. Remedial excavation was conducted in areas identified during the RI/FS to contain soil contamination at concentrations exceeding MTCA Method A cleanup levels.*

*The final depth of the soil excavation ranged from approximately 9 to 11 feet below the ground surface. Groundwater was encountered in the excavation pit at a depth of approximately 8 to 9 feet. The excavation of soil proceeded unencumbered in all directions, except to the east and southeast, where excavation activities were halted so as not to undermine underground utilities in these areas. The confirmation sampling indicated that the contaminated soil was removed both laterally and vertically to below regulatory cleanup levels, with the exception of the east and southeast walls where soil contamination was left in-place at concentrations of 43 to 1,100 parts per million of gasoline-range petroleum hydrocarbons (TPH-G).*

Further, Ecology's *Periodic Review* report identified cleanup levels for the site as follows:

*Because a no further action determination was issued for the Site prior to 2001, MTCA Method A cleanup levels prior to 2001 will be used to determine whether or not the remedial activities at the Site have been effective in protecting human health and the environment.*

## **2.2 Washington Department of Transportation Investigation and Acquisition**

In March 2011, an investigation was conducted at the subject property to determine the magnitude and extent of residual contamination in soil and groundwater beneath the subject property, a portion of which was proposed to be purchased as part of a road-widening project that involves both adjacent right-of-ways to the east (20<sup>th</sup> Ave.) and south (139<sup>th</sup> St.). As part of the investigation, ten (10) direct push-probe borings, PP-1 through PP-10 were advanced within the area to be purchased by Washington Department of Transportation (WSDOT), and near all four (4) sides of the UST area. Two push-probe borings (PP-2 and PP-3) were located within the adjacent roadways to the east and south to evaluate possible off-site contaminant migration which may impact future road and utility construction.

### Soil Analytical Results

All soil samples were analyzed for gasoline-range Total Petroleum Hydrocarbons per Northwest Method NWTPH-Gx, diesel-range TPH per Northwest Method NWTPH-Dx, and benzene, toluene, ethylbenzene and xylene (BTEX) compounds per EPA Method 8260B. The results of the investigation did **not** detect diesel, gasoline, or BTEX contamination in soil above method-reporting limits (MRLs) from the push-probe borings PP1, PP3, PP4, PP7, PP8, PP9, PP10. The results of the investigation, however, detected elevated levels of gasoline and diesel TPH, and BTEX compounds in soil from boring PP5, located east of the former diesel UST. It is important to note that push-probe boring PP5 is located on the newly acquired WSDOT property. Soil analytical results are summarized in **Table 1**. **Figure 4** identifies the probe locations and soil analytical results from the WSDOT investigation.

<b>Table 1: WSDOT Soil Sample Analytical Results</b> Former L&C Deli / Vista Mart, 13912 NE 20 <sup>th</sup> Ave., Vancouver, WA						
Soil contaminant concentrations in milligrams per kilogram (mg/Kg) or parts per million (ppm). ND: Not detected above method-reporting limits (MRLs), shown in parentheses. J: Estimated value below the method-reporting limit (MRL), yet above the Method-Detection Limit (MDL). Highlighted concentrations exceed MTCA cleanup values.						
Soil Sample ID (with indicated depth)	Contaminants-of-Potential-Concern					
	Gasoline-Range TPH	Diesel-Range TPH	Benzene	Toluene	Ethylbenzene	Total Xylenes
PP1 - 6'	ND (<6.63)	<b>24.4 J</b>	ND (<0.017)	ND (<0.063)	ND (<0.033)	ND (<0.099)
PP2 - 7.5'	<b>13.6</b>	ND (<34.7)	<b>0.09</b>	ND (<0.017)	<b>0.991</b>	<b>0.63</b>
PP3 - 6'	ND (<6.63)	ND (<34.6)	ND (<0.02)	ND (<0.08)	ND (<0.04)	ND (<0.12)
PP4 - 6' (onsite)	ND (<6.63)	ND (<36.2)	ND (<0.02)	ND (<0.09)	ND (<0.045)	ND (<0.13)
PP5 - 7'	<b>198</b>	<b>1,630</b>	<b>1.1</b>	<b>0.251</b>	<b>0.379</b>	<b>0.883</b>
PP6 - 6'	ND (<6.28)	ND (<25)	<b>0.47</b>	ND (<0.063)	ND (<0.03)	ND (<0.09)
PP7 - 7'	ND (<6.83)	ND (<29.2)	ND (<0.017)	ND (<0.068)	ND (<0.034)	ND (<0.1)
PP8 - 6.5' (onsite)	ND (<8.65)	ND (<31.9)	ND (<0.02)	ND (<0.086)	ND (<0.043)	ND (<0.13)
PP9 - 9' (onsite)	ND (<8.74)	<b>18.1 J</b>	ND (<0.02)	ND (<0.087)	ND (<0.044)	ND (<0.13)
PP10 - 13'	ND (<8.12)	<b>18.7 J</b>	ND (<0.02)	ND (<0.08)	ND (<0.04)	ND (<0.12)
1991 MTCA Cleanup Levels	<b>100</b>	<b>200</b>	<b>0.50</b>	40	20	20
2001 MTCA Method A Soil Cleanup Levels for Unrestricted Land Use	100 no benzene 30 with benzene	2,000	<b>0.03</b>	7	6	9

For comparison in **Table 1** are 1991 MTCA Cleanup Levels and 2001 MTCA Method A cleanup levels for unrestricted landuse. Detected concentrations of gasoline-range TPH, diesel-range TPH and benzene in soil from boring PP5 exceed the 1991 MTCA Cleanup levels. Only gasoline-range

TPH and benzene in soil from boring PP5 were detected above 2001 MTCA Method A cleanup levels for unrestricted land use. No other detected contaminants exceeded MTCA Method A cleanup levels for unrestricted land use.

### Groundwater Analytical Results

All groundwater samples were analyzed for gasoline-range TPH per Northwest Method NWTPH-Gx, diesel-range TPH per Northwest Method NWTPH-Dx, and BTEX compounds per EPA Method 8260B. The groundwater analytical results are summarized in **Table 2** and on **Figure 5**.

<b>Table 2: WSDOT Groundwater Sample Analytical Results</b> Former L&C Deli / Vista Mart, 13912 NE 20 <sup>th</sup> Ave., Vancouver, WA						
Soil contaminant concentrations in micrograms per Liter (µg/L) or parts per billion (ppb). Highlighted concentrations exceed MTCA cleanup values.						
Soil Sample ID	Contaminants-of-Potential-Concern					
	Gasoline-Range TPH	Diesel-Range TPH	Benzene	Toluene	Ethylbenzene	Total Xylenes
PP1	ND (<100)	ND (<122)	ND (<0.25)	ND (<1.0)	ND (<0.5)	ND (<1.5)
PP2	2,550	522	3.58	2.53	102	205
PP3	ND (<100)	ND (<120)	ND (<0.25)	ND (<1.0)	ND (<0.5)	ND (<1.5)
PP4 (onsite)	ND (<100)	155	ND (<0.25)	ND (<1.0)	ND (<0.5)	ND (<1.5)
PP5	10,900	13,900	2,030	78.8	59.8	99.6
PP6	2,300	620	724	1.25	4.07	ND (<1.5)
PP7	108	250	4.04	ND (<1.0)	ND (<0.5)	ND (<1.5)
PP8 (onsite)	ND (<100)	ND (<134)	ND (<0.25)	ND (<1.0)	ND (<0.5)	ND (<1.5)
PP9 (onsite)	ND (<100)	ND (<130)	ND (<0.25)	ND (<1.0)	ND (<0.5)	ND (<1.5)
PP10	ND (<100)	ND (<134)	ND (<0.25)	ND (<1.0)	ND (<0.5)	ND (<1.5)
1991 MTCA Cleanup Levels	No Value (TPH 1,000)	No Value (TPH 1,000)	5	40	30	20
2001 MTCA Method A Cleanup Levels for Unrestricted Land Use	1,000 no benzene 800 with benzene	500	5	1,000	700	1,000

The results of the investigation did **not** detect diesel, gasoline, or BTEX contamination in groundwater from push-probe borings PP1, PP3, PP4, PP8, PP9, or PP10. The highest detected contaminant concentrations were detected in boring PP5, a short distance east of the UST cavity, and located on the newly acquired WSDOT property. Lesser contaminant concentrations were detected downgradient (east) in groundwater from push-probe boring PP2 a short distance southeast of PP5, and PP6, further east of PP2.

In **Table 2** are 1991 MTCA Cleanup Levels and 2001 MTCA Method A cleanup levels for unrestricted landuse. No contaminants were detected in groundwater from onsite borings. TPH (as gasoline and diesel) and BTEX compounds detected in groundwater from offsite boring PP5 exceed 1991 MTCA Cleanup values. Similarly, TPH (as gasoline), benzene, ethylbenzene and xylenes were detected in groundwater from offsite borings PP2 and PP6 were also detected above the 1991 MTCA Cleanup values.

When compared to the 2001 MTCA Method A Cleanup values, gasoline- and diesel-range TPH and benzene were detected at concentrations in groundwater from offsite borings PP5 and PP6 exceeding the 2001 cleanup values. Similarly, gasoline- and diesel-range TPH were detected in groundwater from boring PP2 at concentrations exceeding the 2001 MTCA Method A cleanup values.

### **3.0 BB&A UST DECOMMISSIONING AND CLEANUP ACTIVITIES**

Prior to performing UST decommissioning activities, all utilities were identified within the work area, and all appropriate forms, permits and authorizations were completed and obtained, including: Ecology 30-day Notice, Clark County Fire Marshall Permit, Waste Management Hillsboro Landfill Disposal Permit #110305OR (for disposal of petroleum-contaminated soil), and Ecology Underground Injection Control (UIC) authorization for backfill with activated carbon and petrophyllic bacteria to treat soil and groundwater in the excavation.

#### **3.1 UST Decommissioning and Removal of Fuel Dispensers and Product Lines**

During the week of April 23 to 27, 2012, BB&A decommissioned by removal, three (3) 12,000-gallon USTs, including the southernmost UST, which formerly contained diesel fuel, the central UST formerly containing regular unleaded fuel; and the northern UST formerly containing premium unleaded fuel. On April 23<sup>rd</sup>, the fuel dispensers were disconnected and removed, and the product lines flushed with water back into the USTs to remove any residual fuel. Any groundwater accumulation within the turbines sumps was pumped into the USTs as well. Additional activities performed on April 23<sup>rd</sup> included canopy demolition and metal recycling.

On April 24<sup>th</sup>, the concrete pad and asphalt above the USTs, product lines and fuel dispenser island were removed. Soil above the USTs and product lines was excavated, as was soil alongside the north and south side of the UST cavity. Soil was screened using an organic vapor meter with photoionization detector (OVM-PID). All concrete and clean fill was set aside for reuse as backfill. Any soil with evidence of contamination was set aside for offsite disposal at Waste Management's Hillsboro landfill. The product lines were removed, and the USTs were tilted. Each of the USTs were noted to be eight (8) feet in diameter and 32 feet long. Soil contamination was most noted in the walls of the excavation – especially immediately southeast of the UST cavity (i.e., east of the

diesel UST). Groundwater was noted in the UST cavity at approximately seven (7) to seven and one-half (7.5) feet below land surface (BLS). A sheen was noted on groundwater within the UST cavity.

On April 25<sup>th</sup>, at the time that the USTs were tilted, only a small amount of residual fuel was noted in each UST. All residual fuel product within the USTs were evacuated by Oil Re-Refining (ORRCO) using their vacuum truck. The USTs were triple rinsed, with the resulting sludge and oil/water mixture evacuated using ORRCO'S vacuum truck. Approximately 242 gallons of fuel product, sludge, and rinse water was removed from the three (3) USTs. A copy of ORRCO's receipt is provided in **Attachment B**.

The USTs were inerted by ventilation using an air compressor and eductor apparatus. Tank atmosphere was measured to determine if the tanks were safe for removal. This determination was made on the basis of field measurements relative to the lower explosive limit (LEL). The USTs were inerted by reducing the LEL within the USTs to levels below five (5) percent LEL. The USTs were not removed until this level was attained. Upon removal, the USTs were transported to Metro Metals for recycling.

Soil contamination was observed in the area immediately southeast of the UST cavity (i.e., east of the diesel UST), and to a lesser extent in the northern, western, and southeastern walls of the UST cavity. On April 26<sup>th</sup>, contaminated soil in these areas was excavated to a depth of approximately eight (8) feet below land surface (BLS), just below the soil/water interface. The excavation of contaminated soil was extended east of the UST cavity, beneath the former fuel dispenser islands. It is important to note that the excavation extended slightly offsite southeast of the former UST cavity, in the former location of PP5. However, because this portion of the site is owned by WSDOT (as right-of-way), no additional excavation was conducted in this area of residual contamination.

During excavation activities, approximately 242 tons petroleum-contaminated soil (PCS) was excavated for transport to Waste Management's Hillsboro landfill under permit number 110305OR. Also during these activities, the stormwater pipe crossing beneath the fuel dispenser island was removed. Upon completion of the excavation activities, the stormwater pipe was replaced.

### **3.2 Confirmation Soil Sample Analytical Results**

Upon completion of excavation activities, and prior to backfill, confirmation soil samples were collected for laboratory analysis of gasoline-range TPH per Northwest Method NWTPH-Gx, diesel-range TPH per Northwest Method NWTPH-Dx, and several soil samples were additionally analyzed for BTEX compounds per EPA Method 8260B. The analytical results are shown below in **Table 3**. Soil sample locations and analytical results are shown on **Figure 6 (Attachment A)**.

Laboratory analysis of the confirmation soil samples detected diesel-range TPH at 780 ppm in soil sample SE-7', which was collected at the soil/water interface a short distance east of former push-probe boring PP5, the former location of highest detected soil contamination. BTEX and gasoline-range TPH were not detected in soil sample SE-7'. The only other contaminant detected in confirmation soil samples was toluene at the low concentration of 0.022 ppm in soil sample SWDISP-7'. The complete laboratory report is provided in **Attachment C**.

<b>Table 3: BB&amp;A Excavation Confirmation Soil Sample Analytical Results</b>						
Former L&C Deli / Vista Mart, 13912 NE 20 <sup>th</sup> Ave., Vancouver, WA						
Soil contaminant concentrations in milligrams per kilogram (mg/Kg) or parts per million (ppm).						
ND: Not detected above method-reporting limits (MRLs), shown in parentheses.						
J: Estimated value below the method-reporting limit (MRL), yet above the Method-Detection Limit (MDL).						
Highlighted concentrations exceed MTCA cleanup values.						
Soil Sample ID (with indicated depth)	Contaminants-of-Potential-Concern					
	Gasoline-Range TPH	Diesel-Range TPH	Benzene	Toluene	Ethylbenzene	Total Xylenes
S1 - 7.5'	ND (<5.5)	ND (<17)				
SW2 - 7.5'	ND (<5.2)	ND (<17)				
W3 - 7.5'	ND (<5.4)	ND (<17)				
NW4 - 7.5'	ND (<5.4)	ND (<17)				
N5 - 7.5'	ND (<5.3)	ND (<17)				
SWDISP - 7'	ND (<4.8)	ND (<15)	ND (<0.024)	<b>0.022</b>	ND (<0.021)	ND (<0.07)
NEDISP - 7'	ND (<4.7)	ND (<15)	ND (<0.023)	ND (<0.018)	ND (<0.021)	ND (<0.069)
SE - 7' (offsite)	ND (<4.2)	<b>780</b>	ND (<0.021)	ND (<0.016)	ND (<0.019)	ND (<0.061)
E - 7' (offsite)	ND (<4.4)	ND (<15)	ND (<0.022)	ND (<0.016)	ND (<0.02)	ND (<0.064)
NE - 7'	ND (<4.5)	ND (<15)	ND (<0.022)	ND (<0.017)	ND (<0.022)	ND (<0.066)
NE6 - 7.5'	ND (<4.3)	ND (<14)	ND (<0.021)	ND (<0.016)	ND (<0.019)	ND (<0.063)
1991 MTCA Cleanup Levels	100	<b>200</b>	0.50	40	20	20
2001 MTCA Method A Soil Cleanup Levels for Unrestricted Land Use	100 no benzene 30 with benzene	2,000	0.03	7	6	9

For comparison in **Table 3** are the 1991 MTCA Cleanup Levels and 2001 MTCA Method A Cleanup Levels for unrestricted land use. The detected diesel concentration of 780 ppm in soil sample SE-7' exceeds the 1991 MTCA Cleanup level at 200 ppm, but not the 2001 MTCA Method A cleanup level (for unrestricted land use) at 2,000 ppm. No other contaminants were detected at concentrations exceeding either of the 1991 or 2001 MTCA cleanup levels.



### **3.3 Soil and Groundwater Treatment with Activated Carbon and Petrophyllic Bacteria**

Upon completion of excavation activities, and prior to backfill, groundwater within the UST cavity, and soil along the walls of the excavation were treated using petrophyllic bacteria and BOS-200®<sup>1</sup>, an activated carbon product with nutrients. The activated carbon chemically binds with petroleum contaminants in soil and groundwater, and the nutrients and petrophyllic microbes promote biological degradation of the contaminants. This product is relatively new, yet has been shown to be very effective at binding available petroleum contamination including dissolved and free-floating petroleum in groundwater. The BOS-200® activated carbon has an adsorption capacity of approximately 70 grams dissolved hydrocarbon per one (1) pound of carbon. The bacteria mixture injected with the carbon consumes the hydrocarbon bound to carbon, and the bacteria essentially reactivates the carbon so that it can absorb further contaminant. This cycle will continue until “source food” (i.e., all petroleum hydrocarbons) are been removed. As a result, the activated carbon creates a “biobarrier” through which groundwater can flow, removing free-phase and dissolved phase petroleum contamination, and preventing contaminated groundwater from migrating beyond the “biobarrier.” One significant advantage over other alternatives is that the carbon binds the hydrocarbons immediately upon contact allowing almost immediate contaminant reduction. Ms. Mary Shaleen Hansen of the UIC Program authorized the use of BOS-200® activated carbon and petrophyllic bacteria in the excavation without any UIC registration.

On April 27<sup>th</sup>, the BOS-200® and bacteria was mixed and applied to the excavation in batches. In each batch, 50 pounds of BOS-200® powder was mixed with 50 gallons of water in a drum, along with approximately 16 ounces of petrophyllic bacteria. A pump was used to apply the carbon, water and bacteria mixture to the walls of the excavation, and all areas of the excavation with groundwater accumulation to treat the sheen on water and any dissolved-phase contamination.

### **3.4 Excavation Backfill**

Upon completion of all excavation activities, confirmation soil sampling, and treatment using BOS-200® and bacteria, the excavation was backfilled by first placing the broken concrete pad at the bottom of the excavation, on top of which, clean overburden and imported gravel fill material was placed. The backfill material was compacted in lifts to rough grade to allow for paving by others.

### **3.5 UST Decommissioning Forms and Checklists**

Included in Attachment D are all appropriate UST decommissioning checklists and forms.

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BOS-200® is a product produced by Remediation Products Inc. Information regarding this product can be found at: <http://www.trapandtreat.com/products/bos-200/>

### **3.6 Groundwater Confirmation Sample Analytical Results**

#### **3.6.1 Methodology**

On May 8<sup>th</sup>, 10 days after soil and groundwater treatment using BOS-200® and bacteria, and backfilling of the excavation, two (2) borings were advanced within the excavation boundary. Push-probe boring P11 was advanced a short distance east of the southwest dispenser island. Push-probe boring P12 was placed in the northwest quarter of the excavation. **Figure 7** shows the push-probe boring locations.

The temporary push-probe borings were advanced using a GeoProbe® 6600 truck and tooling equipment. Both push-probe borings were advanced to an approximate depth of 10 feet BLS. The core barrels are constructed of stainless steel. Additional core barrels were added as the probe was advanced. No soil was collected from either boring. Upon completion of the soil borings, temporary well casings (made of schedule 40 PVC) were placed within the borings. The bottom five (5) feet of each temporary well casing was slotted and positioned to intercept the upper portion of the groundwater table. Prior to collecting groundwater samples, approximately three (3) gallons of groundwater was purged from the push probes using a low-flow peristaltic pump and dedicated polyethylene tubing to remove drilling-derived sediments and to draw representative groundwater into the well.

Following purging, a groundwater sample was collected using clean, dedicated polyethylene tubing connected to a peristaltic pump set at its lowest setting (0.1 to 0.3 liters per minute). The flow rate was minimized to reduce off gassing of volatile contaminants. Samples were transferred into laboratory-supplied containers with appropriate preservative, uniquely labeled, documented on a chain-of-custody record, placed in a cooler on synthetic ice, and delivered to Test America Analytical Laboratory in Beaverton, Oregon. Both groundwater samples were analyzed for gasoline-range TPH per Northwest Method NWTPH-Gx, diesel-range TPH per Northwest Method NWTPH-Dx, and BTEX compounds per EPA Method 8260B. The groundwater sample from boring P12 was additionally analyzed for polynuclear aromatic hydrocarbons (PAHs) per EPA Method 8270SIM.

Upon completion of groundwater sampling, the temporary well casings were removed, and the borings backfilled with bentonite to seal the borehole. Each temporary boring was registered with the Washington Department of Ecology.

### 3.6.2 Groundwater Analytical Results

The groundwater analytical results are summarized on **Table 4**, and **Figure 7 (Attachment A)**. In groundwater from boring P11, diesel-range TPH was detected at the method-reporting limit of 80 ppb. Gasoline-range TPH and BTEX compounds were not detected in this sample.

**Table 4: Groundwater Analytical Results, May 8, 2012**

UNITS: Groundwater Concentrations in micrograms per liter (µg/L), or parts per billion (ppb).

ND: Not Detected above laboratory method-reporting limits (MRLs).

J: Contaminant concentration estimated below the method-reporting limit (MRL), yet above the method-detection limit (MDL).

\*\*Model Toxics Control Act (MTCA) Cleanup Levels: Method A for Unrestricted Land Use; Risk-Based Method B is provided where MTCA Method A is not available.

CONTAMINANTS OF CONCERN	Push-Probe Boring Locations		MTCA Methods**	
	P11	P12	1991 MTCA	2001 MTCA
Gasoline-Range TPH	ND (<80)	87	1,000 (TPH)	800 (benzene present)
Diesel-Range TPH	80	510	1,000 (TPH)	500 <sup>A</sup>
Heavy Oil-Range TPH	ND (<470)	50 J	1,000 (TPH)	500 <sup>A</sup>
Benzene	ND (<1.0)	0.63 J	5	5 <sup>A</sup>
Toluene	ND (<1.0)	0.33 J	40	1,000 <sup>A</sup>
Ethylbenzene	ND (<1.0)	0.2 J	30	700 <sup>A</sup>
Xylenes	ND (<3.0)	1.9 J	20	1,000 <sup>A</sup>
Acenaphthene		0.053 J	0.2 (MCL)	960 <sup>B</sup>
Acenaphthylene		ND (<0.095)	0.2 (MCL)	No MTCA Value
Anthracene		ND (<0.095)	0.2 (MCL)	4,800 <sup>B</sup>
Benzo(a)anthracene		ND (<0.095)	0.2 (MCL)	0.120 <sup>B</sup>
Benzo(a)pyrene		ND (<0.095)	0.2 (MCL)	0.1 <sup>A</sup>
Benzo(b)fluoranthene		ND (<0.095)	0.2 (MCL)	0.12 <sup>B</sup>
Benzo(ghi)perylene		ND (<0.095)	0.2 (MCL)	No MTCA Value
Benzo(k)fluoranthene		ND (<0.095)	0.2 (MCL)	1.2 <sup>B</sup>
Chrysene		ND (<0.095)	0.2 (MCL)	1.2 <sup>B</sup>
Dibenzo(a,h)anthracene		ND (<0.095)	0.2 (MCL)	0.012 <sup>B</sup>
Fluoranthene		ND (<0.095)	0.2 (MCL)	640 <sup>B</sup>
Fluorene		0.18	0.2 (MCL)	640 <sup>B</sup>
Indeno(1,2,3-cd)pyrene		ND (<0.095)	0.2 (MCL)	0.12 <sup>B</sup>
1-Methylnaphthalene		ND (<0.095)	0.2 (MCL)	1.5 <sup>B</sup>
2-Methylnaphthalene		ND (<0.095)	0.2 (MCL)	32 <sup>B</sup>
Naphthalene		0.15	0.2 (MCL)	160 <sup>A</sup>
Phenanthrene		0.16	0.2 (MCL)	No MTCA Value
Pyrene		ND (<0.095)	0.2 (MCL)	480 <sup>B</sup>

In the groundwater sample from boring P12, gasoline-range TPH was detected at 87 ppb, diesel-range TPH was detected at 510 ppb, and heavy oil TPH and BTEX compounds were all estimated below the method-reporting limit (MRL), yet above the method-detection limit (MDL). Due to the detected diesel TPH in groundwater from boring P12, this sample was additionally analyzed for PAHs; although the hold time for this analysis was exceeded. Acenaphthene, fluorene, naphthalene and phenanthrene were all detected at concentration less than 0.2 ppb.

In **Table 4** are 1991 MTCA Cleanup Levels and 2001 MTCA Method A cleanup levels for unrestricted landuse. No contaminants were detected in groundwater from borings P11 and P12 at concentrations exceeding 1991 MTCA Cleanup values. Further, the only contaminant exceeding 2001 MTCA Method A Cleanup values was diesel-range TPH in boring P12 at 510 ppb, slightly above the 2001 MTCA Method A cleanup value of 500 ppb. The detected diesel-range TPH concentration in groundwater from boring P12 exceeds the 2001 MTCA Method A cleanup value by two (2) percent. Turbidity and bio-interference could potentially account for some portion of the detected diesel-range TPH.

#### **4.0 COMPLIANCE OF MONITORING WELLS MW3 AND MW5A**

Enforcement Order #DE 92TC-S112 required three (3) quarterly groundwater sampling events from monitoring well MW3 and replacement monitoring well MW5A, with laboratory analysis for gasoline-range TPH and BTEX compounds. Three (3) quarterly groundwater monitoring events have been completed at monitoring well MW3 and replacement monitoring well MW5A. Gasoline-range TPH and BTEX compounds were not detected in groundwater from either monitoring well during any of the three (3) groundwater monitoring events. As such, groundwater from monitoring wells MW3 and MW5A meets MTCA Method A cleanup levels for unrestricted land use. Upon approval from Mr. Guy Barrett, monitoring well MW3 was decommissioned during redevelopment of the intersection of 20<sup>th</sup> Avenue and 139<sup>th</sup> Street. On May 8<sup>th</sup>, 2012, monitoring well MW5A was decommissioned, and the sidewalk repaired to meet surrounding sidewalk slope, elevation, and texture.

#### **5.0 SUMMARY OF RESIDUAL SOIL AND GROUNDWATER CONTAMINATION**

The results of the WSDOT investigation did not detect any contamination in soil or groundwater from onsite borings at concentrations exceeding the 1991 MTCA Cleanup values or the 2001 MTCA Method A Cleanup values. Similarly, confirmation soil sampling conducted by BB&A after UST decommissioning and PCS excavation activities, did not detect any contamination in soil at concentrations exceeding the 1991 MTCA Cleanup values or the 2001 MTCA Method A Cleanup values. Confirmation groundwater sampling conducted by BB&A did not detect any contaminants in groundwater from borings P11 and P12 exceeding 1991 MTCA Cleanup values, and only diesel-

range TPH was detected in groundwater from boring P12 at a concentration (two [2] percent) above the 2001 MTCA Method A Cleanup values.

Lastly, three (3) quarterly groundwater monitoring events were completed at monitoring well MW3 and replacement monitoring well MW5A, the results of which did not detect any gasoline-range TPH or BTEX compounds in groundwater from either monitoring well. As such, groundwater from monitoring wells MW3 and MW5A meets MTCA Method A cleanup levels for unrestricted land use.

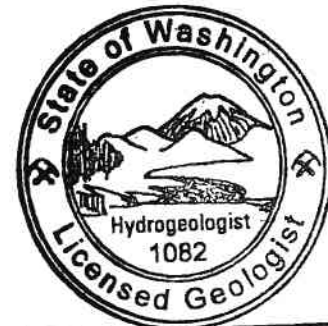
Based on these findings, BB&A requests that a no further action (NFA) determination be issued for the former L&C Deli / Vista Mart site, without any further periodic review.

Should you have any questions regarding this update letter, please do not hesitate to contact us.

Sincerely,  
BB&A Environmental



Stephen Omo, RG  
Project Manager  
*Wa Site Assessor # 0142160*



Randall Jon Boese  
*[Handwritten Signature]*

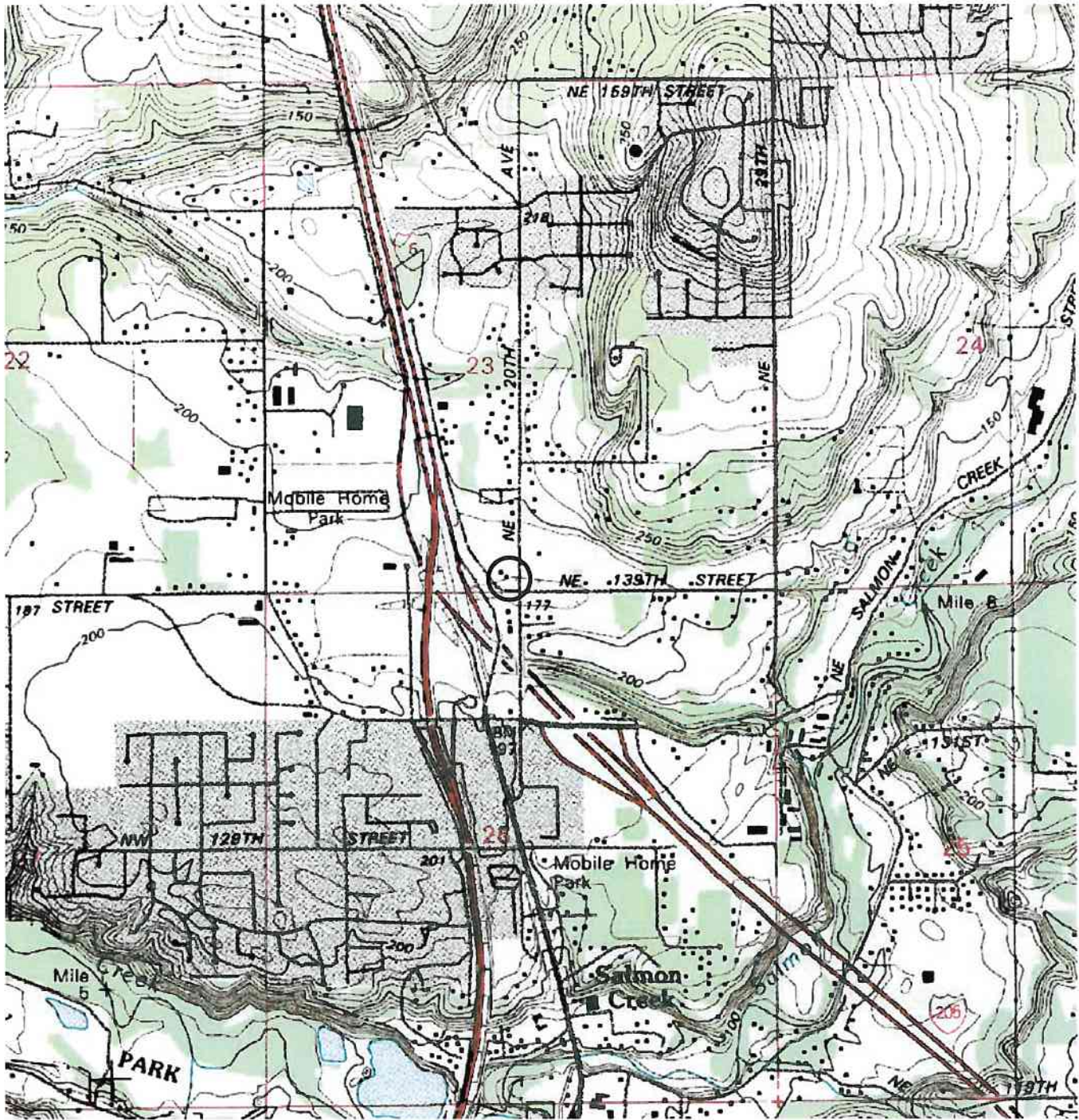
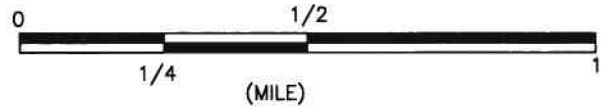
Randall J. Boese, RG  
President / Principal

- Attachment A: Figures
- Attachment B: Disposal Receipts
- Attachment C: Laboratory Reports and Chain of Custody Documents
- Attachment D: UST Decommissioning Checklists and Forms

cc: Don Holsinger, The 205 Group, 2151 NW 21st Place, Ridgefield, WA 98642

# ATTACHMENT A

*Figures*



○ SITE LOCATION

FIGURE 1



OREGON

FORMER L & C DELI/VISTA MART, 13908 NE 20th Avenue, Vancouver, WA  
SITE VICINITY MAP

SOURCE: USGS TOPOGRAPHIC QUADRANGLE SERIES: 7.5 MINUTES, SALMON CREEK, OR

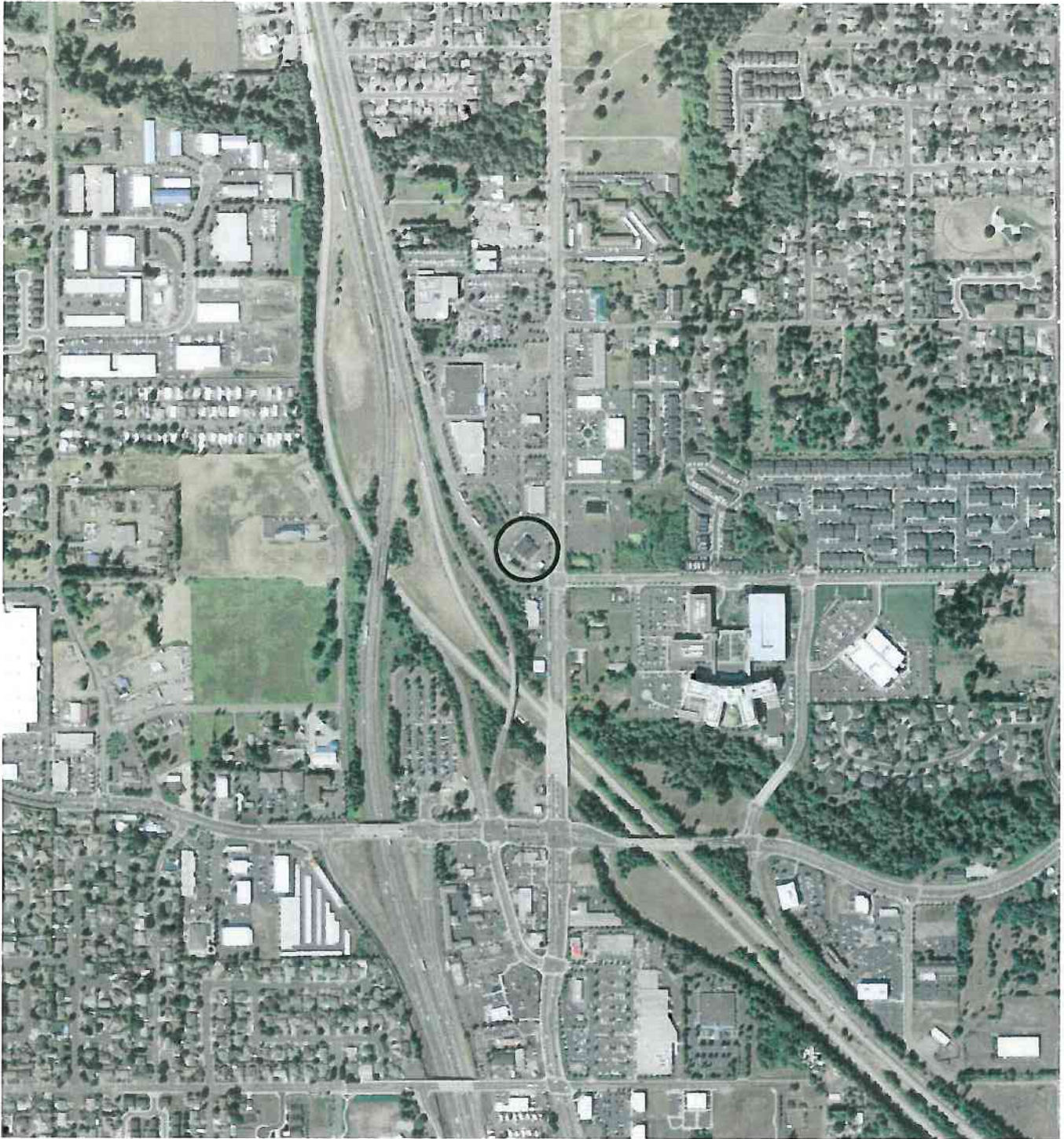


EUGENE OFFICE  
32986 Roberts Ct.  
Coburg, OR  
ph: 541.484.9484

PORTLAND OFFICE  
25195 SW Parkway Ave., #207  
Wilsonville, OR  
ph: 503.570.9484

www.BBAENV.COM

Job Code: VOC02ISC.11UC
CADD File: VOC02ISC.11UC
Scale: AS SHOWN
Drawn: KATHRYN DAVIS DESIGNS
Checked: STEVE OMO
Date: 02/10/11



○ SITE LOCATION



EUGENE OFFICE  
32986 Roberts Ct.  
Coburg, OR  
ph: 541.484.9484

PORTLAND OFFICE  
25195 SW Parkway Ave., #207  
Wilsonville, OR  
ph: 503.570.9484

[www.BBAENV.COM](http://www.BBAENV.COM)

COMMERCIAL PROPERTY  
AERIAL

13908 NE 20th AVENUE, VANCOUVER, WA

PROJECT CODE:  
VOC01ISC.11UC

DATE:  
02/10/11

SCALE:  
AS SHOWN

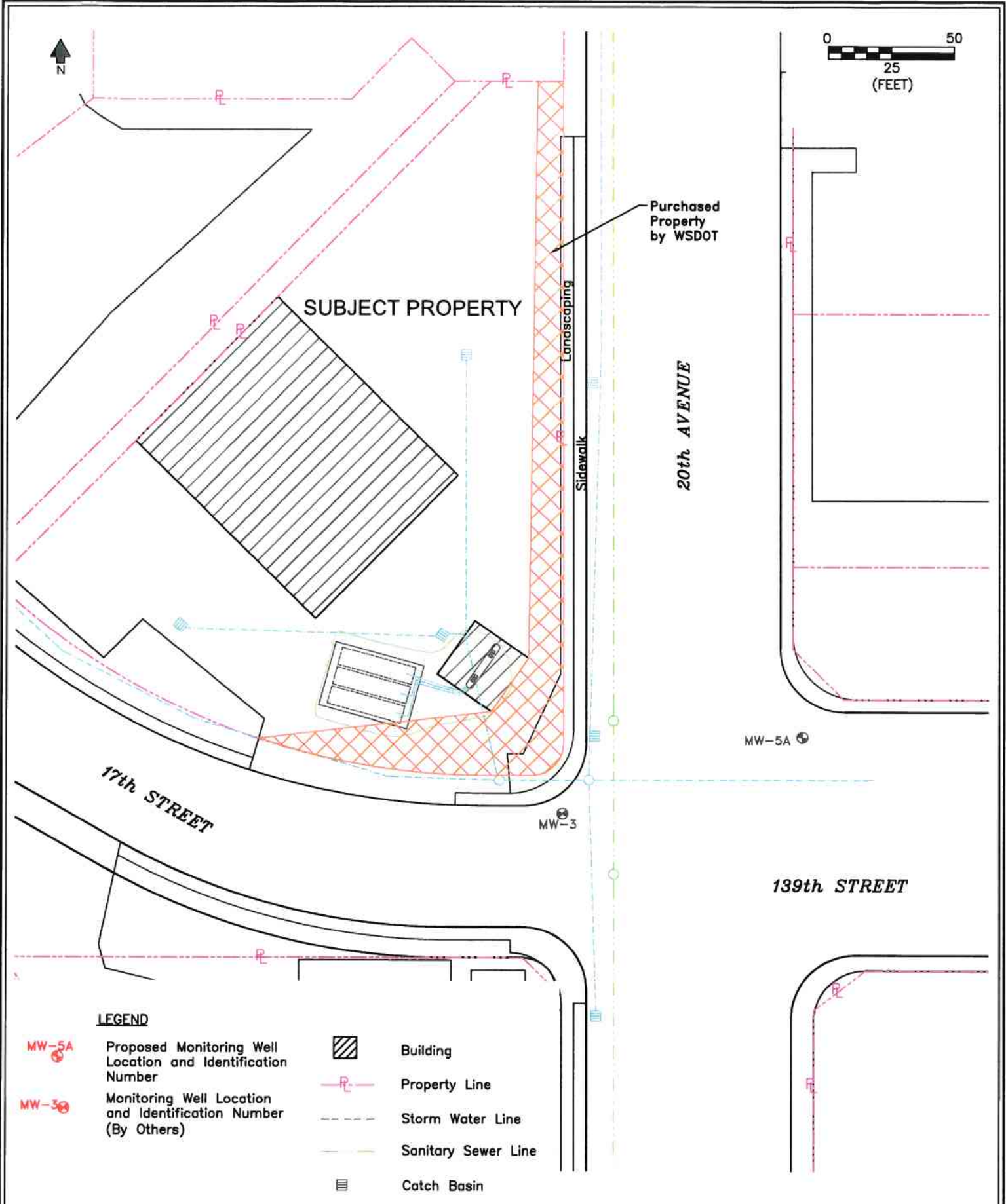
DRAWN:  
K.D.DESIGNS

CHECKED:  
STEVE OMO

FIGURE #:

2





**LEGEND**

- MW-5A Proposed Monitoring Well Location and Identification Number
- MW-3 Monitoring Well Location and Identification Number (By Others)
- Building
- Property Line
- Storm Water Line
- Sanitary Sewer Line
- Catch Basin



EUGENE OFFICE  
32986 Roberts Ct.  
Coburg, OR  
ph: 541.484.9484

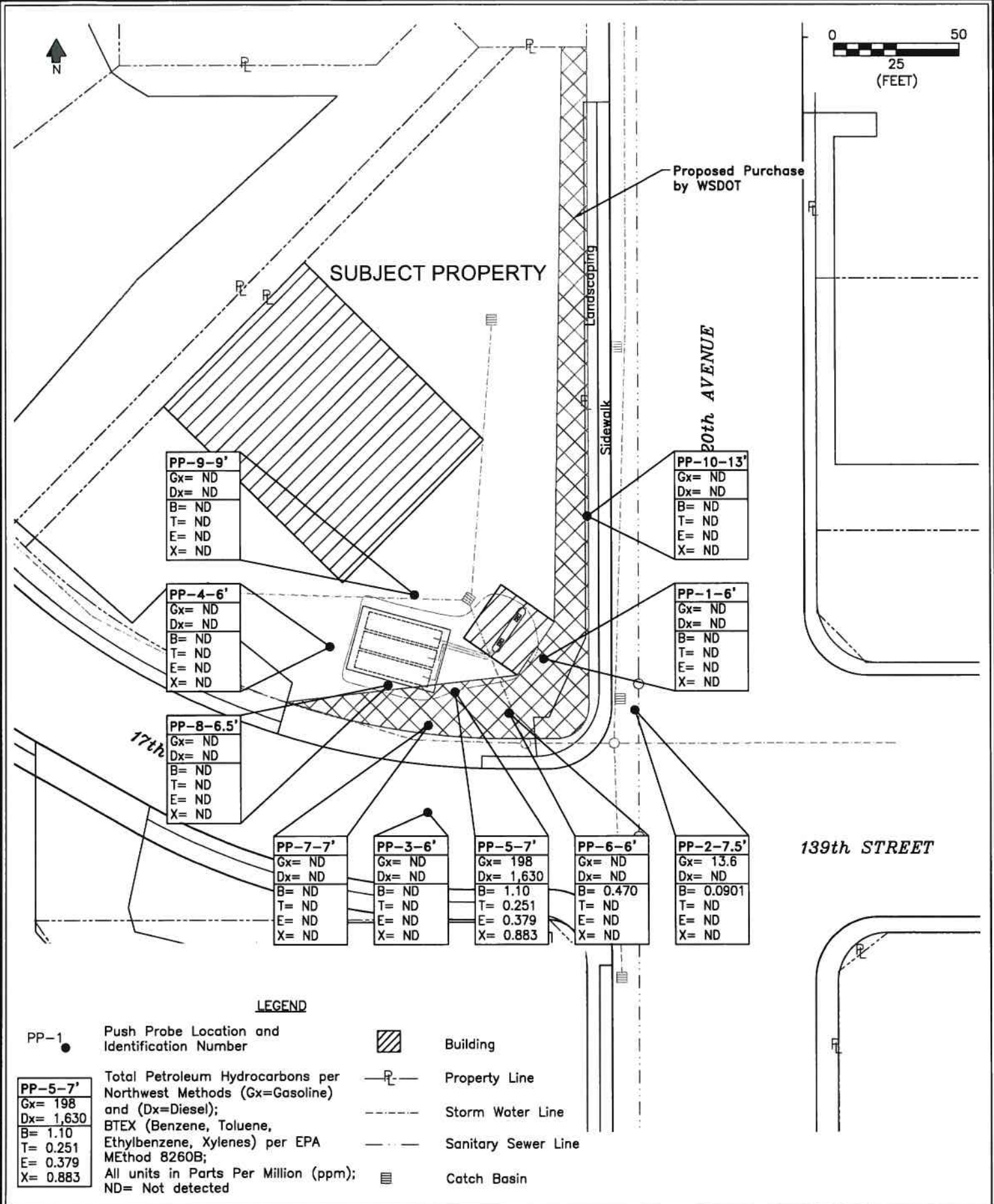
PORTLAND OFFICE  
25195 SW Parkway Ave., #207  
Wilsonville, OR  
ph: 503.570.9484

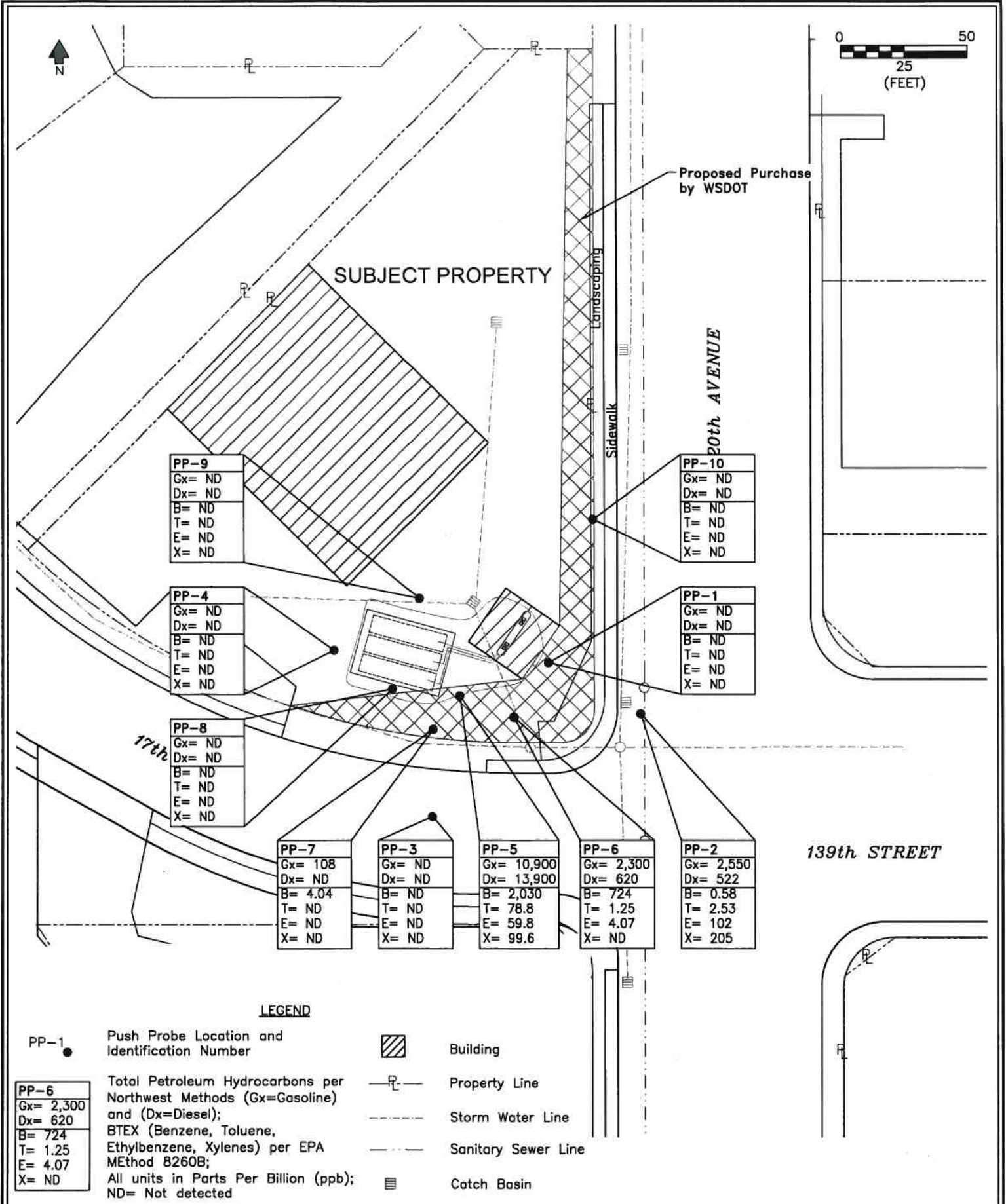
www.BBAENV.COM

FORMER L & C DELI/VISTA MART  
SITE PLAN  
13908 NE 20th AVENUE, VANCOUVER, WA

PROJECT CODE: VOC02ISC.11UC	DATE: 07/14/11	SCALE: 1"=50'	DRAWN: K.D.DESIGNS	CHECKED: STEVE OMO
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FIGURE #:  
**3**





**LEGEND**

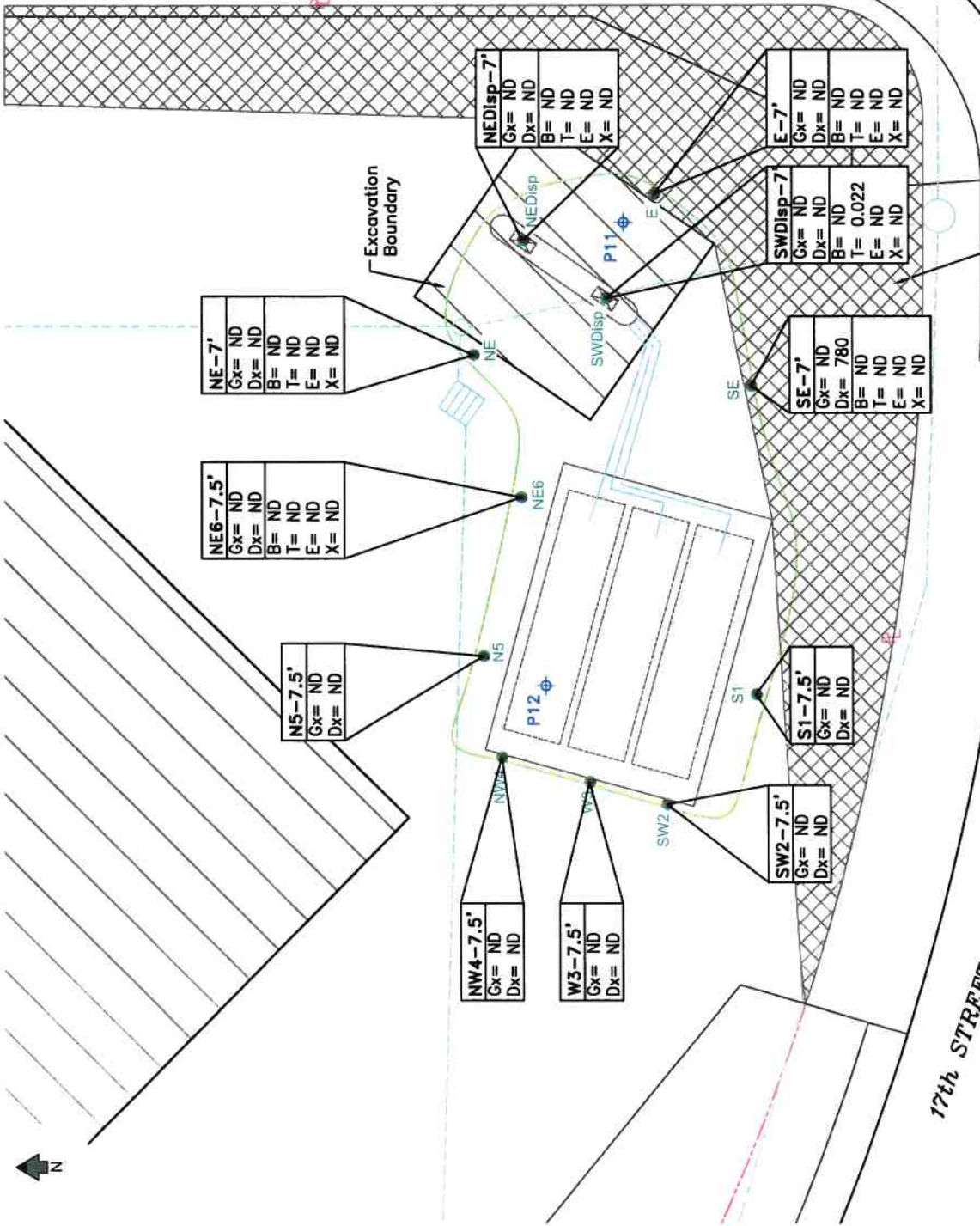
- PP-1 ● Push Probe Location and Identification Number
  - Building
  - Property Line
  - Storm Water Line
  - Sanitary Sewer Line
  - Catch Basin
- PP-6**  
Gx= 2,300  
Dx= 620  
B= 724  
T= 1.25  
E= 4.07  
X= ND
- Total Petroleum Hydrocarbons per Northwest Methods (Gx=Gasoline) and (Dx=Diesel);  
BTEX (Benzene, Toluene, Ethylbenzene, Xylenes) per EPA Method 8260B;  
All units in Parts Per Billion (ppb);  
ND= Not detected

	<b>EUGENE OFFICE</b> 32986 Roberts Ct. Coburg, OR ph: 541.484.9484	<b>PORTLAND OFFICE</b> 25195 SW Parkway Ave., #207 Wilsonville, OR ph: 503.570.9484	<b>FORMER L &amp; C DELI/VISTA MART</b> <b>WSDOT INVESTIGATION - GROUNDWATER ANALYTICAL DATA</b> <b>13908 NE 20th AVENUE, VANCOUVER, WA</b>		FIGURE #: <div style="font-size: 2em; font-weight: bold; text-align: center;">5</div>	
	<a href="http://www.BBAENV.COM">www.BBAENV.COM</a>		PROJECT CODE: VOC02ISC.11UC	DATE: 06/11/12	SCALE: 1"=50'	DRAWN: K.D.DESIGNS



20th AVENUE

Landscaping  
Sidewalk



**LEGEND**

Total Petroleum Hydrocarbons per NWTPH (Gx=Gasoline) & (Dx=Diesel); BTEX (Benzene, Toluene, Ethylbenzene, Xylenes) per EPA Method 8620B; All units in parts per million (ppm); ND= Not Detected

Soil Sample Location at Soil/Water Interface

Soil Sample Location at Catch Basin

Push Probe Location and Identification Number

Building

Property Line

Storm Water Line

Sanitary Sewer Line

SE-7 Gx= ND Dx= 780 B= ND T= ND E= ND X= ND	P12	SE-7 Gx= ND Dx= 780 B= ND T= ND E= ND X= ND
---	-----	---



**EUGENE OFFICE**  
32986 Roberts Ct.  
Coburg, OR  
ph: 541.484.9484

**PORTLAND OFFICE**  
25195 SW Parkway Ave., #207  
Wilsonville, OR  
ph: 503.570.9484

www.BBAENV.COM

**CONFIRMATION SOIL SAMPLE ANALYTICAL RESULTS**  
**FORMER L & C DELI/VISTA MART**  
**13908 NE 20th AVENUE, VANCOUVER, WA**

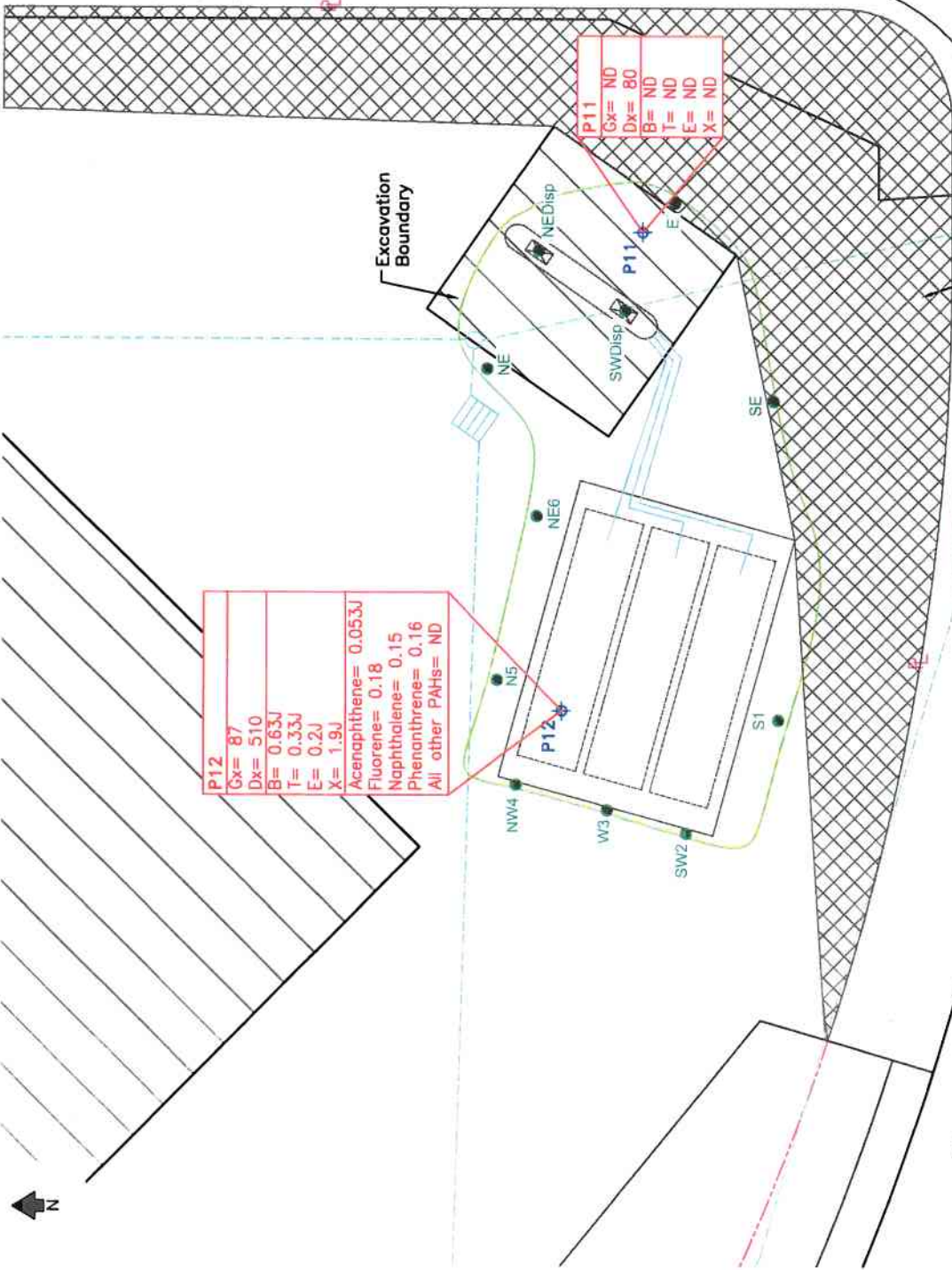
PROJECT CODE: VOC02ISC.11UC    DATE: 06/12/12    SCALE: 1"=20'    DRAWN: K.D.DESIGNS    CHECKED: STEVE OMO

FIGURE #:  
**6**



20th AVENUE

Sidewalk  
Landscaping



<b>P12</b>
Gx= 87
Dx= 510
B= 0.63J
T= 0.33J
E= 0.2J
X= 1.9J
Acenaphthene= 0.053J
Fluorene= 0.18
Naphthalene= 0.15
Phenanthrene= 0.16
All other PAHs= ND

<b>P11</b>
Gx= ND
Dx= 80
B= ND
T= ND
E= ND
X= ND

- Push Probe Location and Identification Number
- Building
  - Property Line
  - Storm Water Line
  - Sanitary Sewer Line

**LEGEND**

Total Petroleum Hydrocarbons per NWTPH (Gx=Gasoline) & (Dx=Diesel): P12

BTEX (Benzene, Toluene, Ethylbenzene, Xylenes) per EPA Method 8620B;

PAHs per EPA Method 8270;

All units in parts per billion (ppb);

ND= Not Detected

Soil Sample Location at Soil/Water Interface

Catch Basin

<b>P11</b>
Gx= ND
Dx= 80
B= ND
T= ND
E= ND
X= ND

W3



EUGENE OFFICE 32986 Roberts Ct. Coburg, OR ph: 541.484.9484

PORTLAND OFFICE 25195 SW Parkway Ave., #207 Wilsonville, OR ph: 503.570.9484

www.BBAENV.COM

CONFIRMATION GROUNDWATER SAMPLE ANALYTICAL RESULTS  
FORMER L & C DELI/VISTA MART  
13908 NE 20th AVENUE, VANCOUVER, WA

PROJECT CODE: VOC02ISC.11UC DATE: 06/14/12 SCALE: 1"=20' DRAWN: K.D.DESIGNS CHECKED: STEVE OMO

FIGURE #: 7

# ATTACHMENT B

*Disposal Receipts*

8352  
30-367-8894  
ORD980975692



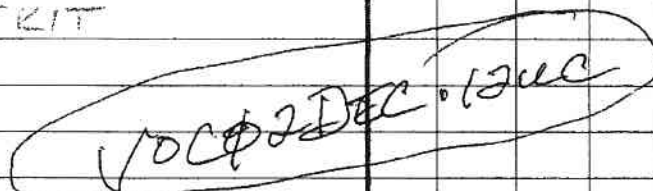
Kennewick, WA: EPA# WAH000011577  
 Medford, OR: EPA# ORD987197092  
 North Bend, OR: EPA# ORD980978266  
 Salt Lake City, UT: EPA# UTD982589459  
 Spokane, WA: EPA# WAH000011585

Date: 4-25-12  
 Customer JLT Number: 612930  
 Dispatch #: 26401

Generate: GROUP 205  
 Name: STEVE 5035720082  
 Address: 13908 NE 20<sup>th</sup> AVE VANCOUVER, WA 98686  
 City: VANCOUVER State: WA Zip: 98686

Billing Address: [Handwritten signature]  
 Check#: PO#  
 Profile Date: 4-25-12

Transportation: Consigned To: OIL REREFINING  
 Destination: 4150 N SUTLER RD PORTLAND OR 97217  
 Via Carrier: ORRCLU  
 Driver: DANNY W Truck # 4102 Miles Run: Load Ticket #

Gal./Brl.	Description	Sniffer P / F	CDT / HCDT	pH	Flash Point	Rate per Gal./Brl.	Rate per Hour	Charge
242	SPENT FUEL & WATER		0 PPM			.45		108.90
1	HYDROCHLORIC TEST KIT					30.00		30.00
2.5 Site	TRUCK & DRIVER					95.00		237.50
								

Above material being transported for Recycling EPA# NON Total: 376.40

Customer warrants that the waste petroleum products being transferred by the above collector do not contain any contaminants including, without limitation, pesticides, chlorinated solvents at concentrations greater than 1000 PPM, PCBs at concentrations greater than 2 PPM (or 50 PPM with Analytical), or any other material classified as hazardous waste by 40 CFR part 261, Subparts C and D (implementing the federal Resource Conservation and Recovery Act), or by any equivalent state hazardous substance classification program. Should Laboratory tests find this waste not in compliance with 40 CFR Part 261, customer (generator) agrees to pay for all disposal costs incurred.

SIGNED X  DATE: 4-25-12







Hillsboro Landfill, Inc  
 3205 SE Minter Bridge  
 Hillsboro, OR, 97123  
 Ph: (503)-640-9427

Original  
 Ticket# 1287542

Customer Name BERGESONBOES BB & A ENVIRONME Carrier KEN MARTIN  
 Ticket Date 04/25/2012 Vehicle# 25  
 Payment Type Credit Account Container  
 Annual Ticket# Driver roger  
 Hauling Ticket# Check#  
 Route Billing # 0000429  
 State Waste Code Gen EPA ID N/A  
 Manifest na  
 Destination Grid  
 PO VDC02DEC.12UC  
 Profile 110305OR (PCS)  
 Generator OR-205 GROUP 205 GROUP

Volume

	Time	Scale	Operator	Inbound	Gross	127320 lb*
In	04/25/2012 16:21:20	Outbound	wef		Tare	43220 lb
Out	04/25/2012 16:21:30	Outbound	wef		Net	84100 lb
			* Manual Weight		Tons	42.05

Comments

Consumer Comments? We want to know Please call.

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1		Cont Soil Pet-RGC- 100	42.05	Tons	23.24	\$977.24	CLARK
2		13% FEA-13% FEA FE 100	%		13.00	\$127.04	CLARK

*Roger Martin*

Total Tax  
 Total Ticket \$1104.28

Driver's Signature



Hillsboro Landfill, Inc  
 3205 SE Minter Bridge  
 Hillsboro, OR, 97123  
 Ph: (503)-640-9427

Original  
 Ticket# 1287632

Customer Name BERGESONBOES BB & A ENVIRONME Carrier KEN MARTIN  
 Ticket Date 04/26/2012 Vehicle# 25 Volume  
 Payment Type Credit Account Container  
 Annual Ticket# Driver roger  
 Hauling Ticket# Check#  
 Route Billing # 0000429  
 State Waste Code Gen EPA ID N/A  
 Manifest na Grid  
 Destination  
 PO 90002DEC.12UC  
 Profile 110305DR (PCS)  
 Generator OR-205 GROUP 205 GROUP

Time	Scale	Operator	Inbound	Gross	100200 lb*
In 04/26/2012 15:55:02	Inbound_1	ajm		Tare	43220 lb*
Out 04/26/2012 15:55:02		ajm		Net	56980 lb
		* Manual Weight		Tons	28.49

Comments

Consumer Comments? We want to know... Please call...

WASTE MANAGEMENT

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Pet-RGC- 100		28.49	Tons	23.24		\$662.11	CLARK
2 13% FEA-13% FEA FE 100			%	13.00		\$86.07	CLARK

Total Tax  
 Total Ticket \$748.18

river's Signature



Hillsboro Landfill, Inc  
 3205 SE Minter Bridge  
 Hillsboro, OR, 97123  
 Ph: (503)-640-9427

Original  
 Ticket# 1287584

Customer Name BERGESONAGES BB & A ENVIRONME Carrier KEN MARTIN  
 Ticket Date 04/26/2012 Vehicle# 25  
 Payment Type Credit Account Container  
 Manual Ticket# Driver roger  
 Hauling Ticket# Check#  
 Route Billing # 0000429  
 Waste Code Gen EPA ID N/A  
 Manifest na  
 Destination Grid  
 Profile 1103050R (PCS)  
 Generator OR-205 GROUP 205 GROUP

Volume

Time	Scale	Operator	Inbound	Gross	
In 04/26/2012 10:03:00	Inbound 2	ajm		114900 lb*	
Out 04/26/2012 10:03:00		ajm		43220 lb*	
		* Manual Weight		71680 lb	
				Tons	35.84

Comments

Consumer Comments? We want you know. Please call.

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
Cont Soil Pet-RGC- 100		35.84	Tons	23.24		\$832.92	CLARK
13% FEA-13% FEA FE 100			%	13.00		\$100.28	CLARK

*Handwritten signature*

Total Tax  
 Total Ticket \$941.20

Driver's Signature  
 403WM





Hillsboro Landfill, Inc  
 3205 SE Winter Bridge  
 Hillsboro, OR, 97123  
 Ph: (503)-640-9427

Original  
 Ticket# 1287612

Customer Name BERGESONBOES BB & A ENVIRONME Carrier KEN MARTIN  
 Ticket Date 04/26/2012 Vehicle# 25  
 Payment Type Credit Account Container  
 Manual Ticket# Driver roger  
 Hauling Ticket# Check#  
 Route Billing # 0000429  
 State Waste Code Gen EPA ID N/A  
 Manifest na  
 Destination Grid  
 PO V0002DEC.12UC  
 Profile 1103050R (PCS)  
 Generator OR-205 GROUP 205 GROUP

Volume

Time	Scale	Operator	Inbound	Gross	107950 lb*
In 04/26/2012 13:16:42	Inbound_1	ajm		Tare	43220 lb*
Out 04/26/2012 13:16:42		ajm		Net	64640 lb
		* Manual Weight		Tons	32.32

Comments

Consumer Comments? We want to know. Please call.

**WASTE MANAGEMENT**

Product	LD%	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Pet-R6C- 100		32.32	Tons	23.24		\$751.12	CLARK
2 13% FEA-13% FEA FE 100			%	13.00		\$97.65	CLARK

*Handwritten signature/initials*

Total Tax  
 Total Ticket \$848.77

Driver's Signature





Hillsboro Landfill, Inc  
 3205 SE Minter Bridge  
 Hillsboro, OR, 97123  
 Ph: (503)-640-9427

Original  
 Ticket# 1287635

Customer Name BERGESONBOES BB & A ENVIRONME Carrier KEN MARTIN  
 Ticket Date 04/26/2012 Vehicle# 24  
 Payment Type Credit Account Container  
 Manual Ticket# Driver jerry  
 Hauling Ticket# Check#  
 Route Billing # 0000429  
 State Waste Code Gen EPA ID N/A  
 Manifest na  
 Destination Grid  
 PG V0002DEC.12UC  
 Profile 1103050R (PCS)  
 Generator OR-205 GROUP 205 GROUP

Volume

Time	Scale	Operator	Inbound	Gross	61560 lb*
In 04/26/2012 16:08:19	Inbound_1	ajm		Tare	39060 lb*
Out 04/26/2012 16:09:19		ajm		Net	22500 lb
		* Manual Weight		Tons	11.25

Comments

Consumer Comments? We want to know. Please call

WASTE MANAGEMENT

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Pet-RBC-100		11.25	Tons	23.24		\$261.45	CLARK
2 13% FEA-13% FEA FE 100			%	13.00		\$33.99	CLARK

Total Tax  
 Total Ticket \$295.44

river's Signature



Hillsboro Landfill, Inc  
 2005 SE Minter Bridge  
 Hillsboro, OR, 97123  
 Ph: (503)-640-9427

Original  
 Ticket# 1287615

Customer Name BERGESONBOES BR & A ENVIRONME Carrier KEN MARTIN  
 Ticket Date 04/26/2012 Vehicle# 24  
 Payment Type Credit Account Container  
 Manual Ticket# Driver jerry  
 Hauling Ticket# Check#  
 Route Billing # 0000429  
 State Waste Code Gen EPA ID N/A  
 Manifest na  
 Destination Grid  
 PO V0002DEC.12UC  
 Profile 110305DR (PCS)  
 Generator OR-205 GROUP 205 GROUP

Volume

Time	Scale	Operator	Inbound	Gross	
In 04/26/2012 13:27:51	Inbound_1	jdb		95340	lb
Out 04/26/2012 13:27:51		jdb		39060	lb*
		* Manual Weight		56280	lb
					Tons
					28.14

Comments

Consumer Comments? We want to know. Please call.

WASTE MANAGEMENT

Product	LDX	Qty	UDM	Rate	Tax	Amount	Origin
1 Cont Soil Pet-RBC-100		28.14	Tons	23.24		\$653.97	CLARK
2 13% FEA-13% FEA FE 100			%	13.00		\$85.02	CLARK

Total Tax  
 Total Ticket \$738.99

Driver's Signature



Hillshoro Landfill, Inc  
 3205 SE Minter Bridge  
 Hillshoro, OR, 97123  
 Ph: (503)-540-9427

Original  
 Ticket# 1257569

Customer Name BERGESONDOES BB & A ENVIRONME Carrier KEN MARTIN  
 Ticket Date 04/26/2012 Vehicle# 24  
 Payment Type Credit Account Container  
 Annual Ticket# Driver jerry  
 Hauling Ticket# Check#  
 Route Billing # 0000429  
 State Waste Code Gen EPA ID N/A  
 Manifest na Grid  
 Destination  
 PD V0002DEC.12UC  
 Profile 1103050R (PCS)  
 Generator OR-205 GROUP 205 GROUP

Volume

Time	Scale	Operator	Inbound	Gross	99980 lb*
In 04/26/2012 10:29:08	Inbound_1	wef		Tare	39060 lb*
Out 04/26/2012 10:29:08		wef		Net	60920 lb
		Manual Weight		Tons	30.46

Comments

Consumer Comments? We want to know. Please call.

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Pet-R6C-100		30.46	Tons	23.24		\$707.89	CLARK
2 13% FEA-13% FEA FE 100		-	%	13.00		\$92.03	CLARK

*Jane Ecks*

Total Tax  
 Total Ticket \$799.92

Driver's Signature





Hillsboro Landfill, Inc  
 3205 SE Minter Bridge  
 Hillsboro, OR, 97123  
 Ph: (503)-540-9427

Original  
 Ticket# 1267543

Customer Name BERGESONBOES BB & A ENVIRONME Carrier KEN MARTIN  
 Ticket Date 04/25/2012 Vehicle# 24  
 Payment Type Credit Account Container  
 Manual Ticket# Driver jerry  
 Hauling Ticket# Check#  
 Route Billing # 0000429  
 State Waste Code Gen EPA ID N/A  
 Manifest na  
 Destination Grid  
 Profile V0002DEC.12UC  
 Profile 110305OR (PCS)  
 Generator OR-205 GROUP 205 GROUP

Volume

	Time	Scale	Operator	Inbound	Gross	107400 lb*
In	04/25/2012 16:22:07	Outbound	wef		Tare	39060 lb
Out	04/25/2012 16:27:28	Outbound	wef		Net	68340 lb
			* Manual Weight		Tons	34.17

Comments

Consumer Comments? We want to know. Please call.

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Cont Soil Pet-RGC-100		34.17	Tons	23.24		\$794.11	CLARK
2 13% FEA-13% FEA FE 100			%	13.00		\$103.23	CLARK

*[Handwritten Signature]*

Total Tax  
 Total Ticket \$897.34

Driver's Signature







# J. L. Stordahl & Sons, Inc.

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Stordahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

DATE  
4/26/2012

TIME  
06:41 AM

FROMER: 1310 *1350*  
~~Ken~~ *MIA*  
~~54 Brookside Drive~~  
~~ELSO, WA 98626~~

JOB:  
BB&A Environmental

376239  
TRUCK NO. Type  
M25 TT  
LICENSE:  
K. Martin #25

NO. ZONE: HAULED BY:

2"-4" Crushed Freight	32.35 Ton	11.00 0.00	355.05 0.00
Accum. Amount	Ton 32.35	Gross: 54.01 Tons Tare: 21.66 Tons Net: 32.35 Tons	Subtotal 355.05 Tax 27.04 Total 382.09
LOCATION WHERE WEIGHED:	LONGVIEW		
WEIGHMASTER:	Sherry		
DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>		

# J. L. Stordahl & Sons, Inc.

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Stordahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

DATE  
4/26/2012

TIME  
08:24 AM

FROMER: 1310 *1350*  
~~Ken~~ *MIA*  
~~54 Brookside Drive~~  
~~ELSO, WA 98626~~

JOB:  
BB & A Environmental

376239  
TRUCK NO. Type  
M24 TT  
LICENSE:  
K. Martin #24

NO. ZONE: HAULED BY:

2"-4" Crushed Freight	30.55 Ton	11.00 0.00	336.05 0.00
Accum. Amount	Ton 62.90	Gross: 50.23 Tons Tare: 19.68 Tons Net: 30.55 Tons	Subtotal 336.05 Tax 25.54 Total 361.59
LOCATION WHERE WEIGHED:	LONGVIEW		
WEIGHMASTER:	Sherry		
DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>		

# J. L. Stordahl & Sons, Inc.

2233 TALLEY WAY - KELSO, WASHINGTON 98626  
360 636-2420

J.L. Stordahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

DATE  
4/27/2012  
TIME  
10:40 PM

376279

CUSTOMER: 1350  
isc. Sales  
233 Talley Way  
ELSO, WA 98626

JOB:  
Credit Card on file at Office  
BB&A Environmental

TRUCK NO. M25 Type TT  
LICENSE:  
K. Martin #25

NO. ZONE: HAULED BY:

6	2"-4" Crushed Freight	31.91 Ton	11.00 0.00	351.01 0.00
accs: 1		Accum. Amount Ton 31.91	Gross: 34.15 Tons Tare: 22.24 Tons Net: 31.91 Tons	Subtotal 351.01 Tax 26.68 Total 377.69
STATION WHERE WEIGHED: LONGVIEW		WEIGHMASTER: Sherry		
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Stordahl & Sons, Inc.

2233 TALLEY WAY - KELSO, WASHINGTON 98626  
360 636-2420

J.L. Stordahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

DATE  
4/27/2012  
TIME  
10:40 PM

376280

CUSTOMER: 1350  
isc. Sales  
233 Talley Way  
ELSO, WA 98626

JOB:  
Credit Card on File at Office  
BB&A Environmental

TRUCK NO. M24 Type TT  
LICENSE:  
K. Martin #24

NO. ZONE: HAULED BY:

6	2"-4" Crushed Freight	30.33 Ton	11.00 0.00	333.63 0.00
accs: 2		Accum. Amount Ton 62.24	Gross: 49.79 Tons Tare: 19.46 Tons Net: 30.33 Tons	Subtotal 333.63 Tax 29.36 Total 362.99
STATION WHERE WEIGHED: LONGVIEW		WEIGHMASTER: Sherry		
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

4/27/12

# J. L. Storedahl & Sons, Inc.

DATE  
27/2012

TIME  
21:41 PM

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

TICKET NO.  
510125

CUSTOMER: 1350  
Asst. Sales  
2233 Talley Way  
Kelso, WA 98626

JOB:  
Paid with Credit Card

TRUCK NO. Type  
A10700E T

LICENSE:  
Ken Martin

NO. ZONE: HAULED BY:

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
	3"-8" Crushed Freight	29.19 Ton	9.00 0.00	262.71 0.00
oads: 2	Accum. Amount Ton 61.24	Gross: 48.79 Tons Tare: 19.60 Tons Net: 29.19 Tons	Subtotal Tax Total	262.71 20.23 282.94
LOCATION WHERE WEIGHED:	LIVINGSTON QUARRY			
WEIGHMASTER	Nichole			
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Storedahl & Sons, Inc.

DATE  
1/27/2012

TIME  
1:47:30 AM

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

TICKET NO.  
510096

CUSTOMER: 1350  
Asst. Sales  
2233 Talley Way  
Kelso, WA 98626

JOB:  
Paid with Credit Card

TRUCK NO. Type  
A10700E T

LICENSE:  
Ken Martin

NO. ZONE: HAULED BY:

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
6	2"-4" Crushed Freight	30.40 Ton	9.00 0.00	273.60 0.00
oads: 2	Accum. Amount Ton 62.44	Gross: 50.00 Tons Tare: 19.60 Tons Net: 30.40 Tons	Subtotal Tax Total	273.60 21.07 294.67
LOCATION WHERE WEIGHED:	LIVINGSTON QUARRY			
WEIGHMASTER	Nichole			
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Storedahl & Sons, Inc.

DATE  
1/27/2012  
TIME  
3:37:54 PM

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

TICKET NO.  
510128

CUSTOMER: 1350  
Disc. Sales  
223 Talley Way  
KELSO, WA 98626

JOB:  
Paid with Credit Card

TRUCK NO. Type  
A10700E T

LICENSE:  
Ken Martin

PHONE NO.  
1

ZONE:

HAULED BY:

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
0	1 1/2"-3/4" Crushed Freight	30.14 Ton	9.00 0.00	271.26 0.00
loads: 3	Accum. Amount Ton 95.07	Gross: 49.74 Tons Tare: 19.60 Tons Net: 30.14 Tons	Subtotal Tax	271.26 20.89
LOCATION WHERE WEIGHED: LIVINGSTON QUARRY			Total	292.15
WEIGHMASTER Nichole				
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Storedahl & Sons, Inc.

DATE  
1/27/2012  
TIME  
4:26:10 PM

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

TICKET NO.  
510133

CUSTOMER: 1350  
Disc. Sales  
223 Talley Way  
KELSO, WA 98626

JOB:  
Paid with Credit Card

TRUCK NO. Type  
75281PR TT

LICENSE:  
CS6 Inc

PHONE NO.  
1

ZONE:

HAULED BY:

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
8	2 1/2"-1 1/2" Crushed Freight	31.36 Ton	9.00 0.00	282.24 0.00
loads: 3	Accum. Amount Ton 95.67	Gross: 51.17 Tons Tare: 19.81 Tons Net: 31.36 Tons	Subtotal Tax	282.24 21.73
LOCATION WHERE WEIGHED: LIVINGSTON QUARRY			Total	303.97
WEIGHMASTER Nichole				
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Storedahl & Sons, Inc.

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

DATE  
1/27/2012  
TIME  
1:16:57 PM

TICKET NO.  
510130

CUSTOMER: 1350  
Asst. Sales  
2233 Talley Way  
KELSO, WA 98626

JOB:  
Paid with Credit Card

TRUCK NO. Type  
75281PR TT  
LICENSE:  
CS6 Inc

ORDER NO.  
1

ZONE:

HAULED BY:

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
0	1 1/2"-3/4" Crushed Freight	32.87 Ton	9.00 0.00	295.83 0.00
Loads: 2	Accum. Amount Ton 63.01	Gross: 52.66 Tons Tare: 19.81 Tons Net: 32.87 Tons	Subtotal Tax Total	295.83 22.78 318.61
LOCATION WHERE WEIGHED:	LIVINGSTON QUARRY			
WEIGHMASTER	Nichole			
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Storedahl & Sons, Inc.

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

DATE  
1/27/2012  
TIME  
1:47:37 PM

TICKET NO.  
510120

CUSTOMER: 1350  
Asst. Sales  
2233 Talley Way  
KELSO, WA 98626

JOB:  
Paid with Credit Card

TRUCK NO. Type  
75281PR TT  
LICENSE:  
CS6 Inc

ORDER NO.

ZONE:

HAULED BY:

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
7	3"-8" Crushed Freight	32.05 Ton	9.00 0.00	288.45 0.00
Loads: 1	Accum. Amount Ton 32.05	Gross: 51.86 Tons Tare: 19.81 Tons Net: 32.05 Tons	Subtotal Tax Total	288.45 22.21 310.66
LOCATION WHERE WEIGHED:	LIVINGSTON QUARRY			
WEIGHMASTER	Nichole			
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Storedahl & Sons, Inc.

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

DATE  
2/7/2012

TIME  
3:30:32 PM

TICKET NO: 510114	
TRUCK NO. 75281PR	Type TT
LICENSE: CSG Inc	

CUSTOMER: 1350  
Inc. Sales  
33 Talley Way  
150, WA 98626

JOB:  
Paid with Credit Card

NO. \_\_\_\_\_ ZONE: \_\_\_\_\_ HAULED BY: \_\_\_\_\_

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
	2"-4" Crushed Freight	32.13 Ton	9.00 0.00	289.17 0.00
Loads: 6	Accum. Amount Ton 192.00	Gross: 51.94 Tons Tare: 19.81 Tons Net: 32.13 Tons	Subtotal Tax Total	289.17 22.27 311.44
LOCATION WHERE WEIGHED:	LIVINGSTON QUARRY			
WEIGHMASTER	Nichole			
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Storedahl & Sons, Inc.

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

DATE  
2/7/2012

TIME  
1:12:18 AM

TICKET NO: 510108	
TRUCK NO. 75281PR	Type TT
LICENSE: CSG Inc	

CUSTOMER: 1350  
Inc. Sales  
233 Talley Way  
KELSO, WA 98626

JOB:  
Paid with Credit Card

NO. 1 ZONE: \_\_\_\_\_ HAULED BY: \_\_\_\_\_

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
6	2"-4" Crushed Freight	32.40 Ton	9.00 0.00	291.60 0.00
Loads: 4	Accum. Amount Ton 127.03	Gross: 52.21 Tons Tare: 19.81 Tons Net: 32.40 Tons	Subtotal Tax Total	291.60 22.45 314.05
LOCATION WHERE WEIGHED:	LIVINGSTON QUARRY			
WEIGHMASTER	Nichole			
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Storedahl & Sons, Inc.

DATE  
1/27/2012

TIME  
1:46:27 AM

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

TICKET NO.  
510095

CUSTOMER: 1350  
Misc. Sales  
2233 Talley Way  
KELSO, WA 98626

JOB:  
Paid with Credit Card

TRUCK NO. Type  
75281PR TT

LICENSE:  
CS4 Inc

CO. NO.  
1

ZONE:

HAULED BY:

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
6	2"-4" Crushed Freight	32.04 Ton	9.00 0.00	288.36 0.00
Loads: 1		Accum. Amount Ton 32.04	Gross: 51.85 Tons Tare: 19.81 Tons Net: 32.04 Tons	Subtotal 288.36 Tax 22.20 Total 310.56
LOCATION WHERE WEIGHED:		LIVINGSTON QUARRY		
WEIGHMASTER		Nichole		
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Storedahl & Sons, Inc.

DATE  
1/27/2012

TIME  
1:24:01 PM

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

TICKET NO.  
510131

CUSTOMER: 1350  
Misc. Sales  
2233 Talley Way  
KELSO, WA 98626

JOB:  
Paid with Credit Card

TRUCK NO. Type  
B87275C TT

LICENSE:  
Ken Martin

CO. NO.  
71

ZONE:

HAULED BY:

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
33	2 1/2"-1 1/2" Crushed Freight	32.15 Ton	9.00 0.00	289.35 0.00
Loads: 2		Accum. Amount Ton 64.21	Gross: 54.50 Tons Tare: 22.35 Tons Net: 32.15 Tons	Subtotal 289.35 Tax 22.28 Total 311.63
LOCATION WHERE WEIGHED:		LIVINGSTON QUARRY		
WEIGHMASTER		Nichole		
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	



# J. L. Storedahl & Sons, Inc.

DATE  
1/27/2012

TIME  
16:42 PM

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

TICKET NO.  
510129

CUSTOMER: 1350  
Disc. Sales  
233 Talley Way  
Kelso, WA 98626

JOB:  
Paid with Credit Card

TRUCK NO: 887275C Type T  
LICENSE:  
Ken Martin

NO. 1

ZONE:

HAULED BY:

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
8	2 1/2"-1 1/2" Crushed Freight	32.06 Ton	9.00 0.00	288.54 0.00
Loads: 1	Accum. Amount Ton 32.06	Gross: 54.41 Tons Tare: 22.35 Tons Net: 32.06 Tons	Subtotal Tax	288.54 22.22 Total 310.76
LOCATION WHERE WEIGHED: LIVINGSTON QUARRY				
WEIGHMASTER Nichole				
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Storedahl & Sons, Inc.

DATE  
1/27/2012

TIME  
16:43:58 PM

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

TICKET NO.  
510119

CUSTOMER: 1350  
Disc. Sales  
233 Talley Way  
Kelso, WA 98626

JOB:  
Paid with Credit Card

TRUCK NO: 887275C Type T  
LICENSE:  
Ken Martin

NO. 1

ZONE:

HAULED BY:

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
6	2"-4" Crushed Freight	33.39 Ton	9.00 0.00	300.51 0.00
Loads: 8	Accum. Amount Ton 258.95	Gross: 55.74 Tons Tare: 22.35 Tons Net: 33.39 Tons	Subtotal Tax	300.51 23.14 Total 323.65
LOCATION WHERE WEIGHED: LIVINGSTON QUARRY				
WEIGHMASTER Nichole				
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Storedahl & Sons, Inc.

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

DATE  
1/27/2012

TIME  
2:32:02 PM

TICKET NO.  
510115

CUSTOMER: 1350  
Misc. Sales  
233 Talley Way  
KELSO, WA 98626

JOB:  
Paid with Credit Card

TRUCK NO. Type  
B87275C T

LICENSE:  
Ken Martin

PO. NO.  
1

ZONE:

HAULED BY:

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
6	2"-4" Crushed Freight	33.56 Ton	9.00 0.00	302.04 0.00
Loads: 7	Accum. Amount Ton 225.56	Gross: 55.91 Tons Tare: 22.35 Tons Net: 33.56 Tons	Subtotal Tax	302.04 23.25 Total 325.30
LOCATION WHERE WEIGHED: LIVINGSTON QUARRY				
WEIGHMASTER Nichole				
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Storedahl & Sons, Inc.

2233 TALLEY WAY • KELSO, WASHINGTON 98626  
360 636-2420

J.L. Storedahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer or representatives thereof, or general conditions unsuitable for truck traffic.

DATE  
1/21/2012

TIME  
11:13:41 AM

TICKET NO.  
510109

CUSTOMER: 1350  
Misc. Sales  
2233 Talley Way  
KELSO, WA 98626

JOB:  
Paid with Credit Card

TRUCK NO. Type  
B87275C T

LICENSE:  
Ken Martin

PO. NO.  
71

ZONE:

HAULED BY:

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
65	2"-4" Crushed Freight	32.84 Ton	9.00 0.00	295.56 0.00
Loads: 5	Accum. Amount Ton 159.87	Gross: 55.19 Tons Tare: 22.35 Tons Net: 32.84 Tons	Subtotal Tax	295.56 22.76 Total 318.32
LOCATION WHERE WEIGHED: LIVINGSTON QUARRY				
WEIGHMASTER Nichole				
RECEIVED BY: X		DRIVER ON: <input type="checkbox"/>	DRIVER OFF: <input type="checkbox"/>	

# J. L. Stordahl & Sons, Inc.

2233 TALLEY WAY • KELSEO WASHINGTON 98626  
960 636-2420

J.L. Stordahl & Sons, Inc. is not responsible for damages incurred from the delivery of products due to soft ground, misdirection by customer, or representatives thereof, or general conditions unsuitable for truck traffic.

DATE  
1/27/2012

TIME AM  
1:48:51 AM

CUSTOMER 1350  
Also Sales  
2233 Talley Way  
KELSEO, WA 98626

JOB  
Paid with Credit Card

ZONE:

HAULED BY:

LICENSE:  
Kent Martin

TRUCK NO. Type  
R87275C T

TICKET NO.  
510097

PRODUCT CODE	PRODUCT	AMOUNT	UNIT PRICE	EXTENSION
36	2 1/2" Crushed Freight	32.19 Tons	9.00 0.00	289.71 0.00
loads: 3	Accum. Amount	94.63	Subtotal	289.71
LOCATION WHERE WEIGHED:	LIVINGSTON QUARRY	Gross: 54.64 Tons Tare: 22.35 Tons Net: 32.19 Tons	Tax	22.31
WEIGHMASTER	Nichole		Total	312.02
RECEIVED BY: X			DRIVER ON:	DRIVER OFF:

# ATTACHMENT C

*Laboratory Reports and Chain-of-Custody Documents*

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Portland  
9405 SW Nimbus Ave.  
Beaverton, OR 97008  
Tel: (503)906-9200

TestAmerica Job ID: 250-2179-1

TestAmerica Sample Delivery Group: VOC02DEC.12UE  
Client Project/Site: L&C Deli

For:

BB&A Environmental  
25195 SW Parkway Ave  
Suite # 207  
Wilsonville, Oregon 97070

Attn: Steve Omo



Authorized for release by:  
5/6/2012 7:15:38 PM

Vanessa Frahs  
Project Manager I  
[vanessa.frahs@testamericainc.com](mailto:vanessa.frahs@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?

 **Ask  
The  
Expert**

Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2179-1  
SDG: VOC02DEC.12UE

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Collected</b>	<b>Received</b>
250-2179-1	VOC02-S1-7.5'	Solid	04/25/12 15:20	04/25/12 16:35
250-2179-2	VOC02-SW2-7.5'	Solid	04/25/12 15:25	04/25/12 16:35
250-2179-3	VOC02-W3-7.5'	Solid	04/25/12 15:30	04/25/12 16:35
250-2179-4	VOC02-NW4-7.5'	Solid	04/25/12 15:35	04/25/12 16:35
250-2179-5	VOC02-N5-7.5'	Solid	04/25/12 15:40	04/25/12 16:35

## Case Narrative

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2179-1  
SDG: VOC02DEC.12UE

---

**Job ID: 250-2179-1**

---

**Laboratory: TestAmerica Portland**

---

**Narrative**

---

**Receipt**

The samples were received on 4/25/2012 4:35 PM; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 14.80 C.

Except:

The following sample(s) was received at the laboratory outside the required temperature criteria: . The sample(s) is considered acceptable since it was collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

**GC VOA**

No analytical or quality issues were noted.

**GC Semi VOA**

No analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

**VOA Prep**

No analytical or quality issues were noted.



## Definitions/Glossary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2179-1  
SDG: VOC02DEC.12UE

### Glossary

---

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Detection Summary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2179-1  
SDG: VOC02DEC.12UE

**Client Sample ID: VOC02-S1-7.5'**

**Lab Sample ID: 250-2179-1**

No Detections

**Client Sample ID: VOC02-SW2-7.5'**

**Lab Sample ID: 250-2179-2**

No Detections

**Client Sample ID: VOC02-W3-7.5'**

**Lab Sample ID: 250-2179-3**

No Detections

**Client Sample ID: VOC02-NW4-7.5'**

**Lab Sample ID: 250-2179-4**

No Detections

**Client Sample ID: VOC02-N5-7.5'**

**Lab Sample ID: 250-2179-5**

No Detections

# Client Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2179-1  
SDG: VOC02DEC.12UE

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

**Client Sample ID: VOC02-S1-7.5'**

Date Collected: 04/25/12 15:20

Date Received: 04/25/12 16:35

**Lab Sample ID: 250-2179-1**

Matrix: Solid

Percent Solids: 72.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5500	1800	ug/Kg	☼	04/26/12 19:20	04/27/12 12:33	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene (fid)	95		50 - 150				04/26/12 19:20	04/27/12 12:33	1

**Client Sample ID: VOC02-SW2-7.5'**

Date Collected: 04/25/12 15:25

Date Received: 04/25/12 16:35

**Lab Sample ID: 250-2179-2**

Matrix: Solid

Percent Solids: 71.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5200	1700	ug/Kg	☼	04/26/12 19:20	04/27/12 11:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene (fid)	98		50 - 150				04/26/12 19:20	04/27/12 11:37	1

**Client Sample ID: VOC02-W3-7.5'**

Date Collected: 04/25/12 15:30

Date Received: 04/25/12 16:35

**Lab Sample ID: 250-2179-3**

Matrix: Solid

Percent Solids: 72.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5400	1800	ug/Kg	☼	04/26/12 19:20	04/27/12 11:09	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene (fid)	89		50 - 150				04/26/12 19:20	04/27/12 11:09	1

**Client Sample ID: VOC02-NW4-7.5'**

Date Collected: 04/25/12 15:35

Date Received: 04/25/12 16:35

**Lab Sample ID: 250-2179-4**

Matrix: Solid

Percent Solids: 71.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5400	1700	ug/Kg	☼	04/26/12 19:20	04/27/12 10:41	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene (fid)	99		50 - 150				04/26/12 19:20	04/27/12 10:41	1

**Client Sample ID: VOC02-N5-7.5'**

Date Collected: 04/25/12 15:40

Date Received: 04/25/12 16:35

**Lab Sample ID: 250-2179-5**

Matrix: Solid

Percent Solids: 73.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5300	1700	ug/Kg	☼	04/26/12 19:20	04/27/12 10:13	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene (fid)	102		50 - 150				04/26/12 19:20	04/27/12 10:13	1

# Client Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2179-1  
SDG: VOC02DEC.12UE

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

**Client Sample ID: VOC02-S1-7.5'**

Date Collected: 04/25/12 15:20

Date Received: 04/25/12 16:35

**Lab Sample ID: 250-2179-1**

Matrix: Solid

Percent Solids: 72.1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		17	17	mg/Kg	*	04/25/12 20:37	04/26/12 09:05	1
RRO (nC25-nC36)	ND		35	35	mg/Kg	*	04/25/12 20:37	04/26/12 09:05	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctadecane	84		50 - 150				04/25/12 20:37	04/26/12 09:05	1

**Client Sample ID: VOC02-SW2-7.5'**

Date Collected: 04/25/12 15:25

Date Received: 04/25/12 16:35

**Lab Sample ID: 250-2179-2**

Matrix: Solid

Percent Solids: 71.8

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		17	17	mg/Kg	*	04/25/12 20:37	04/26/12 09:23	1
RRO (nC25-nC36)	ND		35	35	mg/Kg	*	04/25/12 20:37	04/26/12 09:23	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctadecane	78		50 - 150				04/25/12 20:37	04/26/12 09:23	1

**Client Sample ID: VOC02-W3-7.5'**

Date Collected: 04/25/12 15:30

Date Received: 04/25/12 16:35

**Lab Sample ID: 250-2179-3**

Matrix: Solid

Percent Solids: 72.2

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		17	17	mg/Kg	*	04/25/12 20:37	04/26/12 13:27	1
RRO (nC25-nC36)	ND		34	34	mg/Kg	*	04/25/12 20:37	04/26/12 13:27	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctadecane	81		50 - 150				04/25/12 20:37	04/26/12 13:27	1

**Client Sample ID: VOC02-NW4-7.5'**

Date Collected: 04/25/12 15:35

Date Received: 04/25/12 16:35

**Lab Sample ID: 250-2179-4**

Matrix: Solid

Percent Solids: 71.8

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		17	17	mg/Kg	*	04/25/12 20:37	04/26/12 09:58	1
RRO (nC25-nC36)	ND		35	35	mg/Kg	*	04/25/12 20:37	04/26/12 09:58	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctadecane	81		50 - 150				04/25/12 20:37	04/26/12 09:58	1

**Client Sample ID: VOC02-N5-7.5'**

Date Collected: 04/25/12 15:40

Date Received: 04/25/12 16:35

**Lab Sample ID: 250-2179-5**

Matrix: Solid

Percent Solids: 73.3

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		17	17	mg/Kg	*	04/25/12 20:37	04/26/12 10:37	1
RRO (nC25-nC36)	ND		34	34	mg/Kg	*	04/25/12 20:37	04/26/12 10:37	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctadecane	76		50 - 150				04/25/12 20:37	04/26/12 10:37	1

# Client Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2179-1  
SDG: VOC02DEC.12UE

## General Chemistry

Client Sample ID: VOC02-S1-7.5'  
Date Collected: 04/25/12 15:20  
Date Received: 04/25/12 16:35

Lab Sample ID: 250-2179-1  
Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28		0.010	0.010	%			04/25/12 19:48	1
Percent Solids	72		0.010	0.010	%			04/25/12 19:48	1

Client Sample ID: VOC02-SW2-7.5'  
Date Collected: 04/25/12 15:25  
Date Received: 04/25/12 16:35

Lab Sample ID: 250-2179-2  
Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28		0.010	0.010	%			04/25/12 19:48	1
Percent Solids	72		0.010	0.010	%			04/25/12 19:48	1

Client Sample ID: VOC02-W3-7.5'  
Date Collected: 04/25/12 15:30  
Date Received: 04/25/12 16:35

Lab Sample ID: 250-2179-3  
Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28		0.010	0.010	%			04/25/12 19:48	1
Percent Solids	72		0.010	0.010	%			04/25/12 19:48	1

Client Sample ID: VOC02-NW4-7.5'  
Date Collected: 04/25/12 15:35  
Date Received: 04/25/12 16:35

Lab Sample ID: 250-2179-4  
Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28		0.010	0.010	%			04/25/12 19:48	1
Percent Solids	72		0.010	0.010	%			04/25/12 19:48	1

Client Sample ID: VOC02-N5-7.5'  
Date Collected: 04/25/12 15:40  
Date Received: 04/25/12 16:35

Lab Sample ID: 250-2179-5  
Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27		0.010	0.010	%			04/25/12 19:48	1
Percent Solids	73		0.010	0.010	%			04/25/12 19:48	1

# QC Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2179-1  
SDG: VOC02DEC.12UE

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 250-4261/1-A  
Matrix: Solid  
Analysis Batch: 4307

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 4261

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Hydrocarbons	ND		3800	1200	ug/Kg		04/26/12 19:20	04/27/12 09:31	1
Surrogate	MB MB		Limits				Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
a,a,a-Trifluorotoluene (fid)	103		50 - 150				04/26/12 19:20	04/27/12 09:31	1

Lab Sample ID: LCS 250-4261/2-A  
Matrix: Solid  
Analysis Batch: 4307

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 4261

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
a,a,a-Trifluorotoluene (fid)	109		50 - 150

Lab Sample ID: 250-2179-2 MS  
Matrix: Solid  
Analysis Batch: 4307

Client Sample ID: VOC02-SW2-7.5'  
Prep Type: Total/NA  
Prep Batch: 4261

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
a,a,a-Trifluorotoluene (fid)	94		50 - 150

Lab Sample ID: 250-2179-1 DU  
Matrix: Solid  
Analysis Batch: 4307

Client Sample ID: VOC02-S1-7.5'  
Prep Type: Total/NA  
Prep Batch: 4261

Analyte	Sample Sample		DU DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Gasoline Range Hydrocarbons	ND		ND		ug/Kg	*	NC	40
Surrogate	DU DU		Limits				RPD	
%Recovery	Qualifier							
a,a,a-Trifluorotoluene (fid)	91		50 - 150					

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 250-4206/1-A  
Matrix: Solid  
Analysis Batch: 4236

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 4206

Analyte	MB MB		RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
DRO (C10-C25)	ND		12	12	mg/Kg		04/25/12 20:37	04/26/12 09:40	1
RRO (nC25-nC36)	ND		25	25	mg/Kg		04/25/12 20:37	04/26/12 09:40	1
Surrogate	MB MB		Limits				Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
1-Chlorooctadecane	94		50 - 150				04/25/12 20:37	04/26/12 09:40	1

Lab Sample ID: LCS 250-4206/2-A  
Matrix: Solid  
Analysis Batch: 4236

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 4206

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
DRO (C10-C25)	124	98.4		mg/Kg		79	50 - 150

# QC Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2179-1  
SDG: VOC02DEC.12UE

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 250-4206/2-A  
Matrix: Solid  
Analysis Batch: 4236

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 4206

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
RRO (nC25-nC36)	74.6	72.4		mg/Kg		97	50 - 150
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
1-Chlorooctadecane	86		50 - 150				

Lab Sample ID: 250-2179-1 DU  
Matrix: Solid  
Analysis Batch: 4236

Client Sample ID: VOC02-S1-7.5'  
Prep Type: Total/NA  
Prep Batch: 4206

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
DRO (C10-C25)	ND		ND		mg/Kg	⊛	NC	40
RRO (nC25-nC36)	ND		ND		mg/Kg	⊛	NC	40
<b>Surrogate</b>	<b>%Recovery</b>	<b>DU Qualifier</b>	<b>Limits</b>					
1-Chlorooctadecane	85		50 - 150					

## Method: D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Lab Sample ID: 250-2179-4 DU  
Matrix: Solid  
Analysis Batch: 4203

Client Sample ID: VOC02-NW4-7.5'  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Percent Moisture	28		29		%		4	20
Percent Solids	72		71		%		2	20

# Certification Summary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2179-1  
SDG: VOC02DEC.12UE

<u>Laboratory</u>	<u>Authority</u>	<u>Program</u>	<u>EPA Region</u>	<u>Certification ID</u>
TestAmerica Portland	Alaska	State Program	10	OR00040
TestAmerica Portland	Alaska (UST)	State Program	10	UST-012
TestAmerica Portland	California	State Program	9	2597
TestAmerica Portland	Oregon	NELAC	10	OR100021
TestAmerica Portland	USDA	Federal		P330-11-00092
TestAmerica Portland	Washington	State Program	10	C586

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.





## Login Sample Receipt Checklist

Client: BB&A Environmental

Job Number: 250-2179-1  
SDG Number: VOC02DEC.12UE

Login Number: 2179

List Number: 1

Creator: Svabik-Seror, Phillip

List Source: TestAmerica Portland

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	above temp
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Portland  
9405 SW Nimbus Ave.  
Beaverton, OR 97008  
Tel: (503)906-9200

TestAmerica Job ID: 250-2279-1

TestAmerica Sample Delivery Group: VOC02DEC.12.UC  
Client Project/Site: L&C Deli

For:

BB&A Environmental  
25195 SW Parkway Ave  
Suite # 207  
Wilsonville, Oregon 97070

Attn: Steve Omo



Authorized for release by:  
5/8/2012 4:18:08 PM

Vanessa Frahs  
Project Manager I  
[vanessa.frahs@testamericainc.com](mailto:vanessa.frahs@testamericainc.com)

### LINKS

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results through  
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Have a Question?



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[www.testamericainc.com](http://www.testamericainc.com)

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
250-2279-1	VOC02-SWDISP-7'	Solid	04/25/12 15:00	04/27/12 13:45
250-2279-2	VOC02-NEDISP-7'	Solid	04/25/12 15:00	04/27/12 13:45
250-2279-3	VOC02-SE-7'	Solid	04/25/12 15:00	04/27/12 13:45
250-2279-4	VOC02-E-7'	Solid	04/25/12 15:05	04/27/12 13:45
250-2279-5	VOC02-NE-7'	Solid	04/25/12 15:10	04/27/12 13:45
250-2279-6	VOC02-NE6-7.5'	Solid	04/25/12 15:15	04/27/12 13:45

## Case Narrative

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

---

**Job ID: 250-2279-1**

---

**Laboratory: TestAmerica Portland**

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**Narrative**

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**Receipt**

The samples were received on 4/27/2012 1:45 PM; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.80 C.

**GC/MS VOA**

No analytical or quality issues were noted.

**GC VOA**

Method(s) NWTPH-Gx: VOC02-SE-7' (250-2279-3) Hydrocarbon result is due to diesel in quantitation range.

No other analytical or quality issues were noted.

**GC Semi VOA**

Method(s) NWTPH-Dx: Detected hydrocarbons appear to be due to weathered diesel.VOC02-SE-7' (250-2279-3)

No other analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

**VOA Prep**

No analytical or quality issues were noted.

# Definitions/Glossary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

## Qualifiers

### GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)



# Detection Summary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

Client Sample ID: VOC02-SWDISP-7'

Lab Sample ID: 250-2279-1

Analyte	Result	Qualifier	MDL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	22		18	18	ug/Kg	1	☼	8260B	Total/NA

Client Sample ID: VOC02-NEDISP-7'

Lab Sample ID: 250-2279-2

No Detections

Client Sample ID: VOC02-SE-7'

Lab Sample ID: 250-2279-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Hydrocarbons	86000		4200	1400	ug/Kg	1	☼	NWTPH-Gx	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
DRO (C10-C25)	780		14	14	mg/Kg	1	☼	NWTPH-Dx	Total/NA

Client Sample ID: VOC02-E-7'

Lab Sample ID: 250-2279-4

No Detections

Client Sample ID: VOC02-NE-7'

Lab Sample ID: 250-2279-5

No Detections

Client Sample ID: VOC02-NE6-7.5'

Lab Sample ID: 250-2279-6

No Detections

# Client Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Client Sample ID: VOC02-SWDISP-7'**

**Date Collected: 04/25/12 15:00**

**Date Received: 04/27/12 13:45**

**Lab Sample ID: 250-2279-1**

**Matrix: Solid**

**Percent Solids: 80.6**

Analyte	Result	Qualifier	MDL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		70	70	ug/Kg	☒	05/01/12 12:59	05/07/12 15:37	1
Benzene	ND		24	24	ug/Kg	☒	05/01/12 12:59	05/07/12 15:37	1
Ethylbenzene	ND		21	21	ug/Kg	☒	05/01/12 12:59	05/07/12 15:37	1
Toluene	22		18	18	ug/Kg	☒	05/01/12 12:59	05/07/12 15:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		75 - 125				05/01/12 12:59	05/07/12 15:37	1
4-Bromofluorobenzene (Surr)	93		75 - 125				05/01/12 12:59	05/07/12 15:37	1
Dibromofluoromethane (Surr)	98		75 - 125				05/01/12 12:59	05/07/12 15:37	1
Toluene-d8 (Surr)	103		75 - 125				05/01/12 12:59	05/07/12 15:37	1

**Client Sample ID: VOC02-NEDISP-7'**

**Date Collected: 04/25/12 15:00**

**Date Received: 04/27/12 13:45**

**Lab Sample ID: 250-2279-2**

**Matrix: Solid**

**Percent Solids: 84.2**

Analyte	Result	Qualifier	MDL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		69	69	ug/Kg	☒	05/01/12 12:59	05/07/12 15:59	1
Benzene	ND		23	23	ug/Kg	☒	05/01/12 12:59	05/07/12 15:59	1
Ethylbenzene	ND		21	21	ug/Kg	☒	05/01/12 12:59	05/07/12 15:59	1
Toluene	ND		18	18	ug/Kg	☒	05/01/12 12:59	05/07/12 15:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 125				05/01/12 12:59	05/07/12 15:59	1
4-Bromofluorobenzene (Surr)	96		75 - 125				05/01/12 12:59	05/07/12 15:59	1
Dibromofluoromethane (Surr)	102		75 - 125				05/01/12 12:59	05/07/12 15:59	1
Toluene-d8 (Surr)	106		75 - 125				05/01/12 12:59	05/07/12 15:59	1

**Client Sample ID: VOC02-SE-7'**

**Date Collected: 04/25/12 15:00**

**Date Received: 04/27/12 13:45**

**Lab Sample ID: 250-2279-3**

**Matrix: Solid**

**Percent Solids: 89.3**

Analyte	Result	Qualifier	MDL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		61	61	ug/Kg	☒	05/01/12 12:59	05/07/12 17:28	1
Benzene	ND		21	21	ug/Kg	☒	05/01/12 12:59	05/07/12 17:28	1
Ethylbenzene	ND		19	19	ug/Kg	☒	05/01/12 12:59	05/07/12 17:28	1
Toluene	ND		16	16	ug/Kg	☒	05/01/12 12:59	05/07/12 17:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		75 - 125				05/01/12 12:59	05/07/12 17:28	1
4-Bromofluorobenzene (Surr)	103		75 - 125				05/01/12 12:59	05/07/12 17:28	1
Dibromofluoromethane (Surr)	106		75 - 125				05/01/12 12:59	05/07/12 17:28	1
Toluene-d8 (Surr)	112		75 - 125				05/01/12 12:59	05/07/12 17:28	1

**Client Sample ID: VOC02-E-7'**

**Date Collected: 04/25/12 15:05**

**Date Received: 04/27/12 13:45**

**Lab Sample ID: 250-2279-4**

**Matrix: Solid**

**Percent Solids: 85.4**

Analyte	Result	Qualifier	MDL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		64	64	ug/Kg	☒	05/01/12 12:59	05/07/12 16:21	1
Benzene	ND		22	22	ug/Kg	☒	05/01/12 12:59	05/07/12 16:21	1
Ethylbenzene	ND		20	20	ug/Kg	☒	05/01/12 12:59	05/07/12 16:21	1
Toluene	ND		16	16	ug/Kg	☒	05/01/12 12:59	05/07/12 16:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 125				05/01/12 12:59	05/07/12 16:21	1

# Client Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: VOC02-E-7'  
Date Collected: 04/25/12 15:05  
Date Received: 04/27/12 13:45

Lab Sample ID: 250-2279-4  
Matrix: Solid  
Percent Solids: 85.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125	05/01/12 12:59	05/07/12 16:21	1
Dibromofluoromethane (Surr)	99		75 - 125	05/01/12 12:59	05/07/12 16:21	1
Toluene-d8 (Surr)	106		75 - 125	05/01/12 12:59	05/07/12 16:21	1

Client Sample ID: VOC02-NE-7'  
Date Collected: 04/25/12 15:10  
Date Received: 04/27/12 13:45

Lab Sample ID: 250-2279-5  
Matrix: Solid  
Percent Solids: 84.8

Analyte	Result	Qualifier	MDL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		66	66	ug/Kg	☼	05/01/12 12:59	05/07/12 16:43	1
Benzene	ND		22	22	ug/Kg	☼	05/01/12 12:59	05/07/12 16:43	1
Ethylbenzene	ND		20	20	ug/Kg	☼	05/01/12 12:59	05/07/12 16:43	1
Toluene	ND		17	17	ug/Kg	☼	05/01/12 12:59	05/07/12 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 125	05/01/12 12:59	05/07/12 16:43	1
4-Bromofluorobenzene (Surr)	97		75 - 125	05/01/12 12:59	05/07/12 16:43	1
Dibromofluoromethane (Surr)	101		75 - 125	05/01/12 12:59	05/07/12 16:43	1
Toluene-d8 (Surr)	107		75 - 125	05/01/12 12:59	05/07/12 16:43	1

Client Sample ID: VOC02-NE6-7.5'  
Date Collected: 04/25/12 15:15  
Date Received: 04/27/12 13:45

Lab Sample ID: 250-2279-6  
Matrix: Solid  
Percent Solids: 86.0

Analyte	Result	Qualifier	MDL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		63	63	ug/Kg	☼	05/01/12 12:59	05/07/12 17:05	1
Benzene	ND		21	21	ug/Kg	☼	05/01/12 12:59	05/07/12 17:05	1
Ethylbenzene	ND		19	19	ug/Kg	☼	05/01/12 12:59	05/07/12 17:05	1
Toluene	ND		16	16	ug/Kg	☼	05/01/12 12:59	05/07/12 17:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 125	05/01/12 12:59	05/07/12 17:05	1
4-Bromofluorobenzene (Surr)	95		75 - 125	05/01/12 12:59	05/07/12 17:05	1
Dibromofluoromethane (Surr)	96		75 - 125	05/01/12 12:59	05/07/12 17:05	1
Toluene-d8 (Surr)	105		75 - 125	05/01/12 12:59	05/07/12 17:05	1

# Client Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Client Sample ID: VOC02-SWDISP-7'							Lab Sample ID: 250-2279-1			
Date Collected: 04/25/12 15:00							Matrix: Solid			
Date Received: 04/27/12 13:45							Percent Solids: 80.6			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Hydrocarbons	ND		4800	1500	ug/Kg	☼	05/01/12 11:16	05/02/12 13:01	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene (fid)	91		50 - 150				05/01/12 11:16	05/02/12 13:01	1	
Client Sample ID: VOC02-NEDISP-7'							Lab Sample ID: 250-2279-2			
Date Collected: 04/25/12 15:00							Matrix: Solid			
Date Received: 04/27/12 13:45							Percent Solids: 84.2			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Hydrocarbons	ND		4700	1500	ug/Kg	☼	05/01/12 11:16	05/02/12 13:29	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene (fid)	99		50 - 150				05/01/12 11:16	05/02/12 13:29	1	
Client Sample ID: VOC02-SE-7'							Lab Sample ID: 250-2279-3			
Date Collected: 04/25/12 15:00							Matrix: Solid			
Date Received: 04/27/12 13:45							Percent Solids: 89.3			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Hydrocarbons	86000		4200	1400	ug/Kg	☼	05/01/12 11:16	05/02/12 12:05	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene (fid)	102		50 - 150				05/01/12 11:16	05/02/12 12:05	1	
Client Sample ID: VOC02-E-7'							Lab Sample ID: 250-2279-4			
Date Collected: 04/25/12 15:05							Matrix: Solid			
Date Received: 04/27/12 13:45							Percent Solids: 85.4			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Hydrocarbons	ND		4400	1400	ug/Kg	☼	05/01/12 11:16	05/02/12 15:57	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene (fid)	95		50 - 150				05/01/12 11:16	05/02/12 15:57	1	
Client Sample ID: VOC02-NE-7'							Lab Sample ID: 250-2279-5			
Date Collected: 04/25/12 15:10							Matrix: Solid			
Date Received: 04/27/12 13:45							Percent Solids: 84.8			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Hydrocarbons	ND		4500	1500	ug/Kg	☼	05/01/12 11:16	05/02/12 11:09	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene (fid)	98		50 - 150				05/01/12 11:16	05/02/12 11:09	1	
Client Sample ID: VOC02-NE6-7.5'							Lab Sample ID: 250-2279-6			
Date Collected: 04/25/12 15:15							Matrix: Solid			
Date Received: 04/27/12 13:45							Percent Solids: 86.0			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Hydrocarbons	ND		4300	1400	ug/Kg	☼	05/01/12 11:16	05/02/12 10:41	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
a,a,a-Trifluorotoluene (fid)	101		50 - 150				05/01/12 11:16	05/02/12 10:41	1	

# Client Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

<b>Client Sample ID: VOC02-SWDISP-7'</b>							<b>Lab Sample ID: 250-2279-1</b>			
Date Collected: 04/25/12 15:00							Matrix: Solid			
Date Received: 04/27/12 13:45							Percent Solids: 80.6			
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
DRO (C10-C25)	ND		15	15	mg/Kg	*	05/01/12 16:15	05/02/12 08:53	1	
RRO (nC25-nC36)	ND		31	31	mg/Kg	*	05/01/12 16:15	05/02/12 08:53	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctadecane	80		50 - 150				05/01/12 16:15	05/02/12 08:53	1	

<b>Client Sample ID: VOC02-NEDISP-7'</b>							<b>Lab Sample ID: 250-2279-2</b>			
Date Collected: 04/25/12 15:00							Matrix: Solid			
Date Received: 04/27/12 13:45							Percent Solids: 84.2			
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
DRO (C10-C25)	ND		15	15	mg/Kg	*	05/01/12 16:15	05/02/12 10:38	1	
RRO (nC25-nC36)	ND		30	30	mg/Kg	*	05/01/12 16:15	05/02/12 10:38	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctadecane	79		50 - 150				05/01/12 16:15	05/02/12 10:38	1	

<b>Client Sample ID: VOC02-SE-7'</b>							<b>Lab Sample ID: 250-2279-3</b>			
Date Collected: 04/25/12 15:00							Matrix: Solid			
Date Received: 04/27/12 13:45							Percent Solids: 89.3			
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
DRO (C10-C25)	780		14	14	mg/Kg	*	05/01/12 16:15	05/02/12 10:56	1	
RRO (nC25-nC36)	ND		28	28	mg/Kg	*	05/01/12 16:15	05/02/12 10:56	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctadecane	86		50 - 150				05/01/12 16:15	05/02/12 10:56	1	

<b>Client Sample ID: VOC02-E-7'</b>							<b>Lab Sample ID: 250-2279-4</b>			
Date Collected: 04/25/12 15:05							Matrix: Solid			
Date Received: 04/27/12 13:45							Percent Solids: 85.4			
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
DRO (C10-C25)	ND		15	15	mg/Kg	*	05/01/12 16:15	05/02/12 11:14	1	
RRO (nC25-nC36)	ND		29	29	mg/Kg	*	05/01/12 16:15	05/02/12 11:14	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctadecane	91		50 - 150				05/01/12 16:15	05/02/12 11:14	1	

<b>Client Sample ID: VOC02-NE-7'</b>							<b>Lab Sample ID: 250-2279-5</b>			
Date Collected: 04/25/12 15:10							Matrix: Solid			
Date Received: 04/27/12 13:45							Percent Solids: 84.8			
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
DRO (C10-C25)	ND		15	15	mg/Kg	*	05/01/12 16:15	05/02/12 11:32	1	
RRO (nC25-nC36)	ND		29	29	mg/Kg	*	05/01/12 16:15	05/02/12 11:32	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctadecane	84		50 - 150				05/01/12 16:15	05/02/12 11:32	1	

<b>Client Sample ID: VOC02-NE6-7.5'</b>							<b>Lab Sample ID: 250-2279-6</b>			
Date Collected: 04/25/12 15:15							Matrix: Solid			
Date Received: 04/27/12 13:45							Percent Solids: 86.0			
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac	
DRO (C10-C25)	ND		14	14	mg/Kg	*	05/01/12 16:15	05/02/12 11:50	1	
RRO (nC25-nC36)	ND		29	29	mg/Kg	*	05/01/12 16:15	05/02/12 11:50	1	

# Client Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC) (Continued)

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1-Chlorooctadecane	80		50 - 150	05/01/12 16:15	05/02/12 11:50	1

# Client Sample Results

Client: BB&A Environmental  
 Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
 SDG: VOC02DEC.12.UC

## General Chemistry

Client Sample ID: VOC02-SWDISP-7'  
 Date Collected: 04/25/12 15:00  
 Date Received: 04/27/12 13:45

Lab Sample ID: 250-2279-1  
 Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		0.010	0.010	%			05/01/12 12:39	1
Percent Solids	81		0.010	0.010	%			05/01/12 12:39	1

Client Sample ID: VOC02-NEDISP-7'  
 Date Collected: 04/25/12 15:00  
 Date Received: 04/27/12 13:45

Lab Sample ID: 250-2279-2  
 Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16		0.010	0.010	%			05/01/12 12:39	1
Percent Solids	84		0.010	0.010	%			05/01/12 12:39	1

Client Sample ID: VOC02-SE-7'  
 Date Collected: 04/25/12 15:00  
 Date Received: 04/27/12 13:45

Lab Sample ID: 250-2279-3  
 Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11		0.010	0.010	%			05/01/12 12:39	1
Percent Solids	89		0.010	0.010	%			05/01/12 12:39	1

Client Sample ID: VOC02-E-7'  
 Date Collected: 04/25/12 15:05  
 Date Received: 04/27/12 13:45

Lab Sample ID: 250-2279-4  
 Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		0.010	0.010	%			05/01/12 12:39	1
Percent Solids	85		0.010	0.010	%			05/01/12 12:39	1

Client Sample ID: VOC02-NE-7'  
 Date Collected: 04/25/12 15:10  
 Date Received: 04/27/12 13:45

Lab Sample ID: 250-2279-5  
 Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		0.010	0.010	%			05/01/12 12:39	1
Percent Solids	85		0.010	0.010	%			05/01/12 12:39	1

Client Sample ID: VOC02-NE6-7.5'  
 Date Collected: 04/25/12 15:15  
 Date Received: 04/27/12 13:45

Lab Sample ID: 250-2279-6  
 Matrix: Solid

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14		0.010	0.010	%			05/01/12 12:39	1
Percent Solids	86		0.010	0.010	%			05/01/12 12:39	1

# QC Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 250-4430/1-A  
Matrix: Solid  
Analysis Batch: 4459

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 4430

Analyte	MB MB		MDL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Xylenes, Total	ND		58	58	ug/Kg		05/01/12 18:04	05/02/12 11:54	1
Benzene	ND		20	20	ug/Kg		05/01/12 18:04	05/02/12 11:54	1
Ethylbenzene	ND		18	18	ug/Kg		05/01/12 18:04	05/02/12 11:54	1
Toluene	ND		15	15	ug/Kg		05/01/12 18:04	05/02/12 11:54	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	104		75 - 125	05/01/12 18:04	05/02/12 11:54	1
4-Bromofluorobenzene (Surr)	100		75 - 125	05/01/12 18:04	05/02/12 11:54	1
Dibromofluoromethane (Surr)	102		75 - 125	05/01/12 18:04	05/02/12 11:54	1
Toluene-d8 (Surr)	102		75 - 125	05/01/12 18:04	05/02/12 11:54	1

Lab Sample ID: LCS 250-4430/2-A  
Matrix: Solid  
Analysis Batch: 4459

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 4430

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Xylenes, Total	5930	6580		ug/Kg		111	70 - 130
Benzene	1980	2350		ug/Kg		119	80 - 120
Ethylbenzene	1980	2170		ug/Kg		110	80 - 125
Toluene	1980	2320		ug/Kg		118	80 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	101		75 - 125
4-Bromofluorobenzene (Surr)	93		75 - 125
Dibromofluoromethane (Surr)	102		75 - 125
Toluene-d8 (Surr)	104		75 - 125

Lab Sample ID: 250-2319-B-1-A MS  
Matrix: Solid  
Analysis Batch: 4459

Client Sample ID: Matrix Spike  
Prep Type: Total/NA  
Prep Batch: 4430

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Xylenes, Total	270		6700	7420		ug/Kg	☼	107	70 - 130
Benzene	ND		2230	2680		ug/Kg	☼	120	80 - 125
Ethylbenzene	60		2230	2510		ug/Kg	☼	109	80 - 125
Toluene	100		2230	2750		ug/Kg	☼	119	70 - 130

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	104		75 - 125
4-Bromofluorobenzene (Surr)	94		75 - 125
Dibromofluoromethane (Surr)	103		75 - 125
Toluene-d8 (Surr)	103		75 - 125

Lab Sample ID: 250-2319-B-1-B MSD  
Matrix: Solid  
Analysis Batch: 4459

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 4430

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec. Limits	RPD	
				Result	Qualifier					RPD	Limit
Xylenes, Total	270		6760	7780		ug/Kg	☼	111	70 - 130	5	25



# QC Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 250-2319-B-1-B MSD

Matrix: Solid

Analysis Batch: 4459

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 4430

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Benzene	ND		2250	2750		ug/Kg	☉	122	80 - 125	2	25
Ethylbenzene	60		2250	2620		ug/Kg	☉	114	80 - 125	4	25
Toluene	100		2250	2870		ug/Kg	☉	123	70 - 130	4	25
<b>MSD MSD</b>											
Surrogate	%Recovery		Qualifier	Limits							
1,2-Dichloroethane-d4 (Surr)	106			75 - 125							
4-Bromofluorobenzene (Surr)	96			75 - 125							
Dibromofluoromethane (Surr)	103			75 - 125							
Toluene-d8 (Surr)	106			75 - 125							

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 250-4393/1-A

Matrix: Solid

Analysis Batch: 4509

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4393

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Hydrocarbons	ND		3700	1200	ug/Kg		05/01/12 11:16	05/02/12 10:02	1
<b>MB MB</b>									
Surrogate	%Recovery		Qualifier	Limits		Prepared		Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103			50 - 150		05/01/12 11:16		05/02/12 10:02	1

Lab Sample ID: LCS 250-4393/2-A

Matrix: Solid

Analysis Batch: 4509

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4393

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
Gasoline Range Hydrocarbons	23200	26000		ug/Kg		112	70 - 130
<b>LCS LCS</b>							
Surrogate	%Recovery		Qualifier	Limits			
a,a,a-Trifluorotoluene (fid)	107			50 - 150			

Lab Sample ID: 250-2279-2 MS

Matrix: Solid

Analysis Batch: 4509

Client Sample ID: VOC02-NEDISP-7'

Prep Type: Total/NA

Prep Batch: 4393

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Gasoline Range Hydrocarbons	ND		29200	30300		ug/Kg	☉	104	65 - 130
<b>MS MS</b>									
Surrogate	%Recovery		Qualifier	Limits					
a,a,a-Trifluorotoluene (fid)	100			50 - 150					

Lab Sample ID: 250-2279-1 DU

Matrix: Solid

Analysis Batch: 4509

Client Sample ID: VOC02-SWDISP-7'

Prep Type: Total/NA

Prep Batch: 4393

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Gasoline Range Hydrocarbons	ND		2090	J	ug/Kg	☉	NC	40

# QC Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 250-2279-1 DU  
Matrix: Solid  
Analysis Batch: 4509

Client Sample ID: VOC02-SWDISP-7'  
Prep Type: Total/NA  
Prep Batch: 4393

Surrogate	DU DU		Limits
	%Recovery	Qualifier	
a,a,a-Trifluorotoluene (fid)	93		50 - 150

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 250-4423/1-A  
Matrix: Solid  
Analysis Batch: 4440

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 4423

Analyte	MB MB		RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
DRO (C10-C25)	ND		12	12	mg/Kg		05/01/12 16:15	05/02/12 07:59	1
RRO (nC25-nC36)	ND		25	25	mg/Kg		05/01/12 16:15	05/02/12 07:59	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctadecane	91		50 - 150	05/01/12 16:15	05/02/12 07:59	1

Lab Sample ID: LCS 250-4423/2-A  
Matrix: Solid  
Analysis Batch: 4440

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 4423

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
DRO (C10-C25)	124	119		mg/Kg		96	50 - 150
RRO (nC25-nC36)	74.4	69.0		mg/Kg		93	50 - 150

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctadecane	87		50 - 150

Lab Sample ID: 250-2279-1 DU  
Matrix: Solid  
Analysis Batch: 4440

Client Sample ID: VOC02-SWDISP-7'  
Prep Type: Total/NA  
Prep Batch: 4423

Analyte	Sample Sample		DU DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
DRO (C10-C25)	ND		ND		mg/Kg	⊛	NC	40
RRO (nC25-nC36)	ND		ND		mg/Kg	⊛	NC	40

Surrogate	DU DU		Limits
	%Recovery	Qualifier	
1-Chlorooctadecane	73		50 - 150

## Method: D2216-80 - Percent Dry Weight (Solids) per ASTM D2216-80

Lab Sample ID: 250-2279-6 DU  
Matrix: Solid  
Analysis Batch: 4407

Client Sample ID: VOC02-NE6-7.5'  
Prep Type: Total/NA

Analyte	Sample Sample		DU DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Percent Moisture	14		16		%		14	20
Percent Solids	86		84		%		3	20

# Certification Summary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2279-1  
SDG: VOC02DEC.12.UC

<u>Laboratory</u>	<u>Authority</u>	<u>Program</u>	<u>EPA Region</u>	<u>Certification ID</u>
TestAmerica Portland	Alaska	State Program	10	OR00040
TestAmerica Portland	Alaska (UST)	State Program	10	UST-012
TestAmerica Portland	California	State Program	9	2597
TestAmerica Portland	Oregon	NELAC	10	OR100021
TestAmerica Portland	USDA	Federal		P330-11-00092
TestAmerica Portland	Washington	State Program	10	C586

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244  
 11922 E. First Ave, Spokane, WA 99206-5302  
 9405 SW Nimbus Ave, Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

LOC: 250  
 2279

1-9210  
 -9290  
 -9210  
 -9210

## CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: **BBEA ENVIRONMENTAL**  
 REPORT TO: **25195 Sw Parkway Ave #207**  
 ADDRESS: **Wilsonville OR 97070**  
 PHONE: **503-870-9484** FAX:  
 PROJECT NAME: **L&C DELI**  
 PROJECT NUMBER: **VOC02 DEL 12-02**  
 SAMPLED BY: **STEVE OMO**

INVOICE TO:  
 P.O. NUMBER:  
 PRESERVATIVE  
 REQUESTED ANALYSES

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	#	#	OTHER	Specify:	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1. VOC02-SWDSP-7'	4/25/12 15:00	✓	✓			S	1		
2. VOC02-NE DISP-7'	15:00	✓	✓			S	1		
3. VOC02-SE-7'	15:00	✓	✓			S	1		
4. VOC02-E-7'	15:05	✓	✓			S	1		
5. VOC02-NE-7'	15:10	✓	✓			S	1		
6. VOC02-NEG-7.5'	15:15	✓	✓			S	1		
7.									
8.									
9.									
10.									

TURNAROUND REQUEST in Business Days \*  
 Organic & Inorganic Analyses: 10 7 5 4 3 2 1 <1  
 Petroleum Hydrocarbon Analyses: 5 4 3 2 1 <1  
 STD. STD.  
 \* Turnaround Requests less than standard may incur Rush Charges.

RECEIVED BY: **Wesley B. Williams** DATE: **4/27/12** TIME: **13:00** FIRM: **BBEA**  
 PRINT NAME: **Wesley B. Williams**  
 RECEIVED BY: **Phil Swabik** DATE: **4/27** TIME: **15:48** FIRM: **BBEA**  
 PRINT NAME: **Phil Swabik**  
 ADDITIONAL REMARKS: **Call/Email Draft Results for Additional Analyses**

RELEASED BY: **Steve Omo** DATE: **4/27** TIME: **13:00** FIRM: **BBEA**  
 PRINT NAME: **Steve Omo**  
 RECEIVED BY: **Wesley B. Williams** DATE: **4/27** TIME: **15:48** FIRM: **BBEA**  
 PRINT NAME: **Wesley B. Williams**  
 ADDITIONAL REMARKS: **Call/Email Draft Results for Additional Analyses**

TEMP: **4.8** PAGE **4.8** OF

## Login Sample Receipt Checklist

Client: BB&A Environmental

Job Number: 250-2279-1  
SDG Number: VOC02DEC.12.UC

**Login Number: 2279**

**List Number: 1**

**Creator: Svabik-Seror, Philip**

**List Source: TestAmerica Portland**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Portland  
9405 SW Nimbus Ave.  
Beaverton, OR 97008  
Tel: (503)906-9200

TestAmerica Job ID: 250-2617-1

TestAmerica Sample Delivery Group: VOC02DEC.12UC  
Client Project/Site: L&C Deli

For:

BB&A Environmental  
25195 SW Parkway Ave  
Suite # 207  
Wilsonville, Oregon 97070

Attn: Steve Omo



Authorized for release by:  
5/24/2012 2:06:18 PM

Vanessa Frahs  
Project Manager I  
[vanessa.frahs@testamericainc.com](mailto:vanessa.frahs@testamericainc.com)

### LINKS

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

---

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Collected</b>	<b>Received</b>
250-2617-1	VOC02-P11-GW	Water	05/08/12 10:00	05/08/12 15:55
250-2617-2	VOC02-P12-GW	Water	05/08/12 10:30	05/08/12 15:55

## Case Narrative

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

**Job ID: 250-2617-1**

**Laboratory: TestAmerica Portland**

### Narrative

---

#### Receipt

The samples were received on 5/8/2012 3:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.5° C.

#### GC/MS VOA

No analytical or quality issues were noted.

#### GC VOA

Method(s) NWTPH-Gx: Only one Duplicate sample was analyzed for these 11 samples due to insufficient volume.

No other analytical or quality issues were noted.

#### GC Semi VOA

Method(s) NWTPH-Dx: Detected hydrocarbons appear to be due to weathered diesel.VOC02-P11-GW (250-2617-1), VOC02-P12-GW (250-2617-2)

No other analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

#### VOA Prep

No analytical or quality issues were noted.

# Definitions/Glossary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC/MS Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Client Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: VOC02-P11-GW

Date Collected: 05/08/12 10:00

Date Received: 05/08/12 15:55

Lab Sample ID: 250-2617-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		3.0	0.31	ug/L			05/12/12 18:13	1
Benzene	ND		1.0	0.060	ug/L			05/12/12 18:13	1
Ethylbenzene	ND		1.0	0.080	ug/L			05/12/12 18:13	1
Toluene	ND		1.0	0.090	ug/L			05/12/12 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		05/12/12 18:13	1
4-Bromofluorobenzene (Surr)	101		80 - 120		05/12/12 18:13	1
Dibromofluoromethane (Surr)	100		80 - 120		05/12/12 18:13	1
Toluene-d8 (Surr)	99		80 - 120		05/12/12 18:13	1

Client Sample ID: VOC02-P12-GW

Date Collected: 05/08/12 10:30

Date Received: 05/08/12 15:55

Lab Sample ID: 250-2617-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	1.9	J	3.0	0.31	ug/L			05/12/12 18:35	1
Benzene	0.63	J	1.0	0.060	ug/L			05/12/12 18:35	1
Ethylbenzene	0.20	J	1.0	0.080	ug/L			05/12/12 18:35	1
Toluene	0.33	J	1.0	0.090	ug/L			05/12/12 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		05/12/12 18:35	1
4-Bromofluorobenzene (Surr)	108		80 - 120		05/12/12 18:35	1
Dibromofluoromethane (Surr)	109		80 - 120		05/12/12 18:35	1
Toluene-d8 (Surr)	102		80 - 120		05/12/12 18:35	1

# Client Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Client Sample ID: VOC02-P12-GW

Lab Sample ID: 250-2617-2

Date Collected: 05/08/12 10:30

Matrix: Water

Date Received: 05/08/12 15:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.053	J H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Acenaphthylene	ND	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Anthracene	ND	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Benzo[a]anthracene	ND	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Benzo[a]pyrene	ND	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Benzo[b]fluoranthene	ND	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Benzo[g,h,i]perylene	ND	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Benzo[k]fluoranthene	ND	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Chrysene	ND	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Dibenz(a,h)anthracene	ND	H	0.19	0.095	ug/L		05/18/12 12:54	05/22/12 16:55	1
Fluoranthene	ND	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Fluorene	0.18	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Indeno[1,2,3-cd]pyrene	ND	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Naphthalene	0.15	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Phenanthrene	0.16	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
Pyrene	ND	H	0.095	0.048	ug/L		05/18/12 12:54	05/22/12 16:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Fluorene-d10 (Surr)	86		25 - 125				05/18/12 12:54	05/22/12 16:55	1
Pyrene-d10 (Surr)	80		25 - 150				05/18/12 12:54	05/22/12 16:55	1
Benzo(a)pyrene-d12 (Surr)	87		10 - 125				05/18/12 12:54	05/22/12 16:55	1

# Client Sample Results

Client: BB&A Environmental  
 Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
 SDG: VOC02DEC.12UC

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Client Sample ID: VOC02-P11-GW

Lab Sample ID: 250-2617-1

Date Collected: 05/08/12 10:00

Matrix: Water

Date Received: 05/08/12 15:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		80	33	ug/L			05/12/12 18:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		50 - 150		05/12/12 18:19	1

Client Sample ID: VOC02-P12-GW

Lab Sample ID: 250-2617-2

Date Collected: 05/08/12 10:30

Matrix: Water

Date Received: 05/08/12 15:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	87		80	33	ug/L			05/12/12 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		50 - 150		05/12/12 18:49	1

# Client Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

## Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Client Sample ID: VOC02-P11-GW

Date Collected: 05/08/12 10:00

Date Received: 05/08/12 15:55

Lab Sample ID: 250-2617-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	0.080	J	0.094	0.028	mg/L		05/10/12 09:25	05/10/12 16:31	1
RRO (nC25-nC36)	ND		0.47	0.038	mg/L		05/10/12 09:25	05/10/12 16:31	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctadecane	60		50 - 150				05/10/12 09:25	05/10/12 16:31	1

Client Sample ID: VOC02-P12-GW

Date Collected: 05/08/12 10:30

Date Received: 05/08/12 15:55

Lab Sample ID: 250-2617-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	0.51		0.094	0.028	mg/L		05/10/12 09:25	05/10/12 16:49	1
RRO (nC25-nC36)	0.050	J	0.47	0.038	mg/L		05/10/12 09:25	05/10/12 16:49	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctadecane	57		50 - 150				05/10/12 09:25	05/10/12 16:49	1

# QC Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 250-4923/7  
Matrix: Water  
Analysis Batch: 4923

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Xylenes, Total	ND		3.0	0.31	ug/L			05/12/12 14:27	1
Benzene	ND		1.0	0.060	ug/L			05/12/12 14:27	1
Ethylbenzene	ND		1.0	0.080	ug/L			05/12/12 14:27	1
Toluene	ND		1.0	0.090	ug/L			05/12/12 14:27	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		05/12/12 14:27	1
4-Bromofluorobenzene (Surr)	105		80 - 120		05/12/12 14:27	1
Dibromofluoromethane (Surr)	104		80 - 120		05/12/12 14:27	1
Toluene-d8 (Surr)	103		80 - 120		05/12/12 14:27	1

Lab Sample ID: LCS 250-4923/4  
Matrix: Water  
Analysis Batch: 4923

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Xylenes, Total	60.0	56.3		ug/L		94	80 - 135
Benzene	20.0	17.3		ug/L		86	80 - 120
Ethylbenzene	20.0	18.4		ug/L		92	80 - 120
Toluene	20.0	18.0		ug/L		90	80 - 125

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	107		80 - 120
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: LCSD 250-4923/5  
Matrix: Water  
Analysis Batch: 4923

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
		Result	Qualifier						
Xylenes, Total	60.0	57.7		ug/L		96	80 - 135	2	25
Benzene	20.0	17.3		ug/L		87	80 - 120	0	25
Ethylbenzene	20.0	18.8		ug/L		94	80 - 120	2	25
Toluene	20.0	17.8		ug/L		89	80 - 125	1	25

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	106		80 - 120
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: 250-2676-F-1 MS  
Matrix: Water  
Analysis Batch: 4923

Client Sample ID: Matrix Spike  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Xylenes, Total	ND		60.0	62.9		ug/L		105	70 - 130



## QC Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 250-2676-F-1 MS

Matrix: Water

Analysis Batch: 4923

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Benzene	ND		20.0	20.0		ug/L		100	80 - 125
Ethylbenzene	ND		20.0	21.1		ug/L		105	80 - 125
Toluene	ND		20.0	20.7		ug/L		104	75 - 135

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	105		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: 250-2676-G-1 MSD

Matrix: Water

Analysis Batch: 4923

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Xylenes, Total	ND		60.0	62.1		ug/L		104	70 - 130	1	25
Benzene	ND		20.0	19.9		ug/L		99	80 - 125	1	25
Ethylbenzene	ND		20.0	20.5		ug/L		102	80 - 125	3	25
Toluene	ND		20.0	20.6		ug/L		103	75 - 135	0	25

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	101		80 - 120

### Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 250-5150/1-A

Matrix: Water

Analysis Batch: 5334

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5150

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Acenaphthylene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Anthracene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Benzo[a]anthracene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Benzo[a]pyrene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Benzo[b]fluoranthene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Benzo[g,h,i]perylene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Benzo[k]fluoranthene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Chrysene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Dibenz(a,h)anthracene	ND		0.20	0.10	ug/L		05/18/12 09:00	05/22/12 11:11	1
Fluoranthene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Fluorene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Indeno[1,2,3-cd]pyrene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Naphthalene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Phenanthrene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1
Pyrene	ND		0.10	0.050	ug/L		05/18/12 09:00	05/22/12 11:11	1

# QC Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 250-5150/1-A

Matrix: Water

Analysis Batch: 5334

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 5150

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Fluorene-d10 (Surr)	93		25 - 125	05/18/12 09:00	05/22/12 11:11	1
Pyrene-d10 (Surr)	85		25 - 150	05/18/12 09:00	05/22/12 11:11	1
Benzo(a)pyrene-d12 (Surr)	93		10 - 125	05/18/12 09:00	05/22/12 11:11	1

Lab Sample ID: LCS 250-5150/2-A

Matrix: Water

Analysis Batch: 5334

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 5150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
Acenaphthene	2.50	2.30		ug/L		92	25 - 135
Acenaphthylene	2.50	2.30		ug/L		92	30 - 120
Anthracene	2.50	2.38		ug/L		95	30 - 120
Benzo[a]anthracene	2.50	2.31		ug/L		92	35 - 130
Benzo[a]pyrene	2.50	2.32		ug/L		93	40 - 135
Benzo[b]fluoranthene	2.50	2.36		ug/L		94	35 - 130
Benzo[g,h,i]perylene	2.50	2.35		ug/L		94	30 - 125
Benzo[k]fluoranthene	2.50	2.50		ug/L		100	30 - 145
Chrysene	2.50	2.31		ug/L		92	30 - 135
Dibenz(a,h)anthracene	2.50	2.38		ug/L		95	30 - 140
Fluoranthene	2.50	2.34		ug/L		94	30 - 125
Fluorene	2.50	2.36		ug/L		94	30 - 125
Indeno[1,2,3-cd]pyrene	2.50	2.36		ug/L		94	30 - 135
Naphthalene	2.50	2.32		ug/L		93	30 - 115
Phenanthrene	2.50	2.39		ug/L		96	35 - 125
Pyrene	2.50	2.39		ug/L		96	35 - 135

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Fluorene-d10 (Surr)	92		25 - 125
Pyrene-d10 (Surr)	80		25 - 150
Benzo(a)pyrene-d12 (Surr)	90		10 - 125

Lab Sample ID: LCSD 250-5150/3-A

Matrix: Water

Analysis Batch: 5334

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5150

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	
							Limits	RPD	Limit
Acenaphthene	2.50	2.14		ug/L		86	25 - 135	7	35
Acenaphthylene	2.50	2.12		ug/L		85	30 - 120	8	35
Anthracene	2.50	2.20		ug/L		88	30 - 120	8	35
Benzo[a]anthracene	2.50	2.13		ug/L		85	35 - 130	8	35
Benzo[a]pyrene	2.50	2.13		ug/L		85	40 - 135	8	35
Benzo[b]fluoranthene	2.50	2.18		ug/L		87	35 - 130	8	35
Benzo[g,h,i]perylene	2.50	2.14		ug/L		86	30 - 125	9	35
Benzo[k]fluoranthene	2.50	2.36		ug/L		94	30 - 145	6	35
Chrysene	2.50	2.16		ug/L		86	30 - 135	7	35
Dibenz(a,h)anthracene	2.50	2.16		ug/L		87	30 - 140	10	35
Fluoranthene	2.50	2.17		ug/L		87	30 - 125	8	35
Fluorene	2.50	2.18		ug/L		87	30 - 125	8	35
Indeno[1,2,3-cd]pyrene	2.50	2.18		ug/L		87	30 - 135	8	35

# QC Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 250-5150/3-A

Matrix: Water

Analysis Batch: 5334

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 5150

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	2.50	2.13		ug/L		85	30 - 115	8	35
Phenanthrene	2.50	2.22		ug/L		89	35 - 125	7	35
Pyrene	2.50	2.24		ug/L		89	35 - 135	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Fluorene-d10 (Surr)	85		25 - 125
Pyrene-d10 (Surr)	75		25 - 150
Benzo(a)pyrene-d12 (Surr)	83		10 - 125

## Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 250-4910/5

Matrix: Water

Analysis Batch: 4910

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		80	33	ug/L			05/12/12 15:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		50 - 150		05/12/12 15:14	1

Lab Sample ID: LCS 250-4910/3

Matrix: Water

Analysis Batch: 4910

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Hydrocarbons	500	629		ug/L		126	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		50 - 150

Lab Sample ID: LCSD 250-4910/4

Matrix: Water

Analysis Batch: 4910

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Hydrocarbons	500	620		ug/L		124	70 - 130	1	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		50 - 150

Lab Sample ID: 250-2617-2 MS

Matrix: Water

Analysis Batch: 4910

Client Sample ID: VOC02-P12-GW

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Hydrocarbons	87		500	648		ug/L		112	70 - 130

## QC Sample Results

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

### Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 250-2617-2 MS  
Matrix: Water  
Analysis Batch: 4910

Client Sample ID: VOC02-P12-GW  
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		50 - 150

Lab Sample ID: 250-2617-1 DU  
Matrix: Water  
Analysis Batch: 4910

Client Sample ID: VOC02-P11-GW  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Gasoline Range Hydrocarbons	ND		33.6	J	ug/L		NC	40

Surrogate	DU %Recovery	DU Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		50 - 150

### Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 250-4789/1-A  
Matrix: Water  
Analysis Batch: 4816

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 4789

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		0.10	0.030	mg/L		05/10/12 09:25	05/10/12 11:58	1
RRO (nC25-nC36)	ND		0.50	0.040	mg/L		05/10/12 09:25	05/10/12 11:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	74		50 - 150	05/10/12 09:25	05/10/12 11:58	1

Lab Sample ID: LCS 250-4789/2-A  
Matrix: Water  
Analysis Batch: 4816

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 4789

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (C10-C25)	2.50	1.90		mg/L		76	50 - 150
RRO (nC25-nC36)	1.50	1.08		mg/L		72	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	80		50 - 150

Lab Sample ID: LCSD 250-4789/3-A  
Matrix: Water  
Analysis Batch: 4816

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 4789

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
DRO (C10-C25)	2.50	2.03		mg/L		81	50 - 150	6	20
RRO (nC25-nC36)	1.50	1.15		mg/L		77	50 - 150	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctadecane	78		50 - 150

# QC Association Summary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

## GC/MS VOA

### Analysis Batch: 4923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-2617-1	VOC02-P11-GW	Total/NA	Water	8260B	
250-2617-2	VOC02-P12-GW	Total/NA	Water	8260B	
250-2676-F-1 MS	Matrix Spike	Total/NA	Water	8260B	
250-2676-G-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 250-4923/4	Lab Control Sample	Total/NA	Water	8260B	
LCS D 250-4923/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 250-4923/7	Method Blank	Total/NA	Water	8260B	

## GC/MS Semi VOA

### Prep Batch: 5150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-2617-2	VOC02-P12-GW	Total/NA	Water	3520C	
LCS 250-5150/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS D 250-5150/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 250-5150/1-A	Method Blank	Total/NA	Water	3520C	

### Analysis Batch: 5334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-2617-2	VOC02-P12-GW	Total/NA	Water	8270C SIM	5150
LCS 250-5150/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	5150
LCS D 250-5150/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	5150
MB 250-5150/1-A	Method Blank	Total/NA	Water	8270C SIM	5150

## GC VOA

### Analysis Batch: 4910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-2617-1	VOC02-P11-GW	Total/NA	Water	NWTPH-Gx	
250-2617-1 DU	VOC02-P11-GW	Total/NA	Water	NWTPH-Gx	
250-2617-2	VOC02-P12-GW	Total/NA	Water	NWTPH-Gx	
250-2617-2 MS	VOC02-P12-GW	Total/NA	Water	NWTPH-Gx	
LCS 250-4910/3	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCS D 250-4910/4	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	
MB 250-4910/5	Method Blank	Total/NA	Water	NWTPH-Gx	

## GC Semi VOA

### Prep Batch: 4789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-2617-1	VOC02-P11-GW	Total/NA	Water	3510C	
250-2617-2	VOC02-P12-GW	Total/NA	Water	3510C	
LCS 250-4789/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS D 250-4789/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 250-4789/1-A	Method Blank	Total/NA	Water	3510C	

### Analysis Batch: 4816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
250-2617-1	VOC02-P11-GW	Total/NA	Water	NWTPH-Dx	4789
250-2617-2	VOC02-P12-GW	Total/NA	Water	NWTPH-Dx	4789
LCS 250-4789/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	4789

# QC Association Summary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

## GC Semi VOA (Continued)

### Analysis Batch: 4816 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 250-4789/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	4789
MB 250-4789/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	4789

# Certification Summary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Portland	Alaska	State Program	10	OR00040
TestAmerica Portland	Alaska (UST)	State Program	10	UST-012
TestAmerica Portland	California	State Program	9	2597
TestAmerica Portland	Oregon	NELAC	10	OR100021
TestAmerica Portland	USDA	Federal		P330-11-00092
TestAmerica Portland	Washington	State Program	10	C586

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

# Method Summary

Client: BB&A Environmental  
Project/Site: L&C Deli

TestAmerica Job ID: 250-2617-1  
SDG: VOC02DEC.12UC

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PRT
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PRT
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	TAL PRT
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	TAL PRT

**Protocol References:**

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244  
 11922 E. First Ave, Spokane, WA 99206-5302  
 9405 SW Nimbus Ave, Beaverton, OR 97008-7145  
 2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

42 Loc: 250  
 50 2617  
 50  
 90

210  
 290  
 310  
 310

## CHAIN OF CUSTODY REPORT

Work Order #:

CLIENT: <b>BREA ENVIRONMENTAL</b>		INVOICE TO: <b>Raki Bergeson</b>		TURNAROUND REQUEST in Business Days *	
REPORT TO: <b>25195 SW Parkway Ave #207</b>		PRESERVATIVE		<input type="checkbox"/> 7 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 Organic & Inorganic Analyses	
ADDRESS: <b>Wilsonville OR 97070</b>		P.O. NUMBER:		<input type="checkbox"/> 10 <input type="checkbox"/> 9 <input type="checkbox"/> 8 <input type="checkbox"/> 7 <input type="checkbox"/> 6 <input type="checkbox"/> 5 <input type="checkbox"/> 4 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> <1 Petroleum Hydrocarbon Analyses	
PHONE: <b>503 570 9484</b> FAX:		REQUESTED ANALYSES		OTHER Specify: * Turnaround Request less than standard may incur Rush Charges.	
PROJECT NAME: <b>L&amp;C DELI</b>		MATRIX (W, S, O)		LOCATION/ COMMENTS	
PROJECT NUMBER: <b>VOC02 DEC. 12 UC</b>		DATE		TA WO ID	
SAMPLED BY: <b>STEVE OMO</b>		TIME			
CLIENT SAMPLE IDENTIFICATION		SAMPLING DATE/TIME			
1. <b>VOC02-P11-GW</b>		<b>5/8/12 10:00</b>		<b>8</b>	
2. <b>VOC02-P12-GW</b>		<b>11 10:30</b>		<b>8</b>	
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
RELEASED BY: <b>SR.M.O.</b>		DATE: <b>5/8/12</b>		DATE: <b>5/8/12</b>	
PRINT NAME: <b>STEPHEN OMO</b>		TIME: <b>BREA</b>		TIME: <b>3:33</b>	
RELEASED BY: <b>Stephen John</b>		DATE: <b>5/8/12</b>		DATE: <b>5/8/12</b>	
PRINT NAME: <b>Stephen John</b>		TIME: <b>5:54</b>		TIME: <b>5:54</b>	
ADDITIONAL REMARKS:		FIRM: <b>SCM</b>		FIRM: <b>SCM</b>	
SAMPLE #2 MAY NEED PAH / VPH / EPA ANALYSIS - CONSERVE SAMPLE VOLUME (IF Possible)		FIRM: <b>SCM</b>		FIRM: <b>SCM</b>	

Circle for TA 5/8/12  
 1555  
 JF/G/00

TAL-1000(0408)

## Login Sample Receipt Checklist

Client: BB&A Environmental

Job Number: 250-2617-1  
SDG Number: VOC02DEC.12UC

**Login Number: 2617**

**List Number: 1**

**Creator: Svabik-Seror, Philip**

**List Source: TestAmerica Portland**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

# ATTACHMENT D

UST Decommissioning Checklists and Forms







# UNDERGROUND STORAGE TANK Closure and Site Assessment Notice

VOC # 2 DEC. 12UC  
FOR OFFICE USE ONLY  
Site ID #: \_\_\_\_\_  
Facility Site ID #: \_\_\_\_\_

See back of form for instructions

Please  the appropriate box(es)

- Temporary Tank Closure    Change-In-Service    Permanent Tank Closure    Site Check/Site Assessment

### Site Information

### Owner Information

Site ID Number 7176  
(Available from Ecology if the tanks are registered)

UST Owner/Operator The 205 Group

Site/Business Name VISTA MAET / LLC Deli  
Street

Mailing Address 2151 NW 21<sup>ST</sup> PLACE  
Street

Site Address 13912 NE 20<sup>TH</sup> AVE

City/State VANCOUVER WA

City/State Ridgefield WA  
P.O. Box

Zip Code 98666 Telephone (360) 573-0838

Zip Code 98642 Telephone (360) 281-0897

Owners Signature \_\_\_\_\_

### Tank Closure/Change-In-Service Company

Service Company BBEA ENVIRONMENTAL

Certified Supervisor Bob Boese Decommissioning Certification No. ICC # 1089479

Supervisor's Signature [Signature] Date 6-9-12

Address \_\_\_\_\_ P.O. Box 40187

Street \_\_\_\_\_ P.O. Box \_\_\_\_\_  
EUGENE OR 97404 Telephone (541) 484-9484  
City State Zip Code

### Site Check/Site Assessor

Certified Site Assessor STEPHEN OMO (814.2160 EMP. 1/12/14) BBEA ENVIRONMENTAL

Address \_\_\_\_\_ P.O. Box 40187

Street \_\_\_\_\_ P.O. Box \_\_\_\_\_  
EUGENE OR 97404 Telephone (541) 484-9484  
City State Zip Code

### Tank Information

### Contamination Present at the Time of Closure

Tank ID	Closure Date	Closure Method	Tank Capacity	Substance Stored
#1	4/25/12	REMOVED	12,000 Gal.	Premix VHL GAS
#2	4/25/12	REMOVED	12,000 Gal.	Unleaded Gasoline
#3	4/26/12	REMOVED	12,000 Gal.	Diesel

Yes    No    Unknown  
Check unknown if no obvious contamination was observed and sample results have not yet been received from analytical lab.  
 Yes    No  
If contamination is present, has the release been reported to the appropriate regional office?

To receive this document in an alternative format, contact the Toxics Cleanup Program at 360-407-7170 (voice) or 1-800-833-6388 OR 711 (TTY)



# UNDERGROUND STORAGE TANK Closure and Site Assessment Notice

FOR OFFICE USE ONLY

Site ID #: \_\_\_\_\_

Facility Site ID #: \_\_\_\_\_

See back of form for instructions

Please  the appropriate box(es)  
 Temporary Tank Closure     Change-In-Service     Permanent Tank Closure     Site Check/Site Assessment

### Site Information

Site ID Number 7176  
(Available from Ecology if the tanks are registered)  
 Site/Business Name VISTA MART / L&C Deli  
Street  
 Site Address 13912 NE 20<sup>th</sup> Ave  
 City/State VANCOUVER WA  
 Zip Code 98686 Telephone (360) 573-0338

### Owner Information

UST Owner/Operator The 205 Group  
 Mailing Address 2151 NW 21<sup>st</sup> PLACE  
Street  
P.O. Box  
 City/State Ridgefield WA  
 Zip Code 98642 Telephone (360) 281-0897

Owners Signature \_\_\_\_\_

### Tank Closure/Change-In-Service Company

Service Company BB&A ENVIRONMENTAL  
 Certified Supervisor Rob Boese Decommissioning Certification No. ICC # 1089479  
 Supervisor's Signature \_\_\_\_\_ Date \_\_\_\_\_

Address \_\_\_\_\_  
Street P.O. Box 40187  
EUGENE OR 97404 Telephone (541) 484-9484  
City State Zip Code

### Site Check/Site Assessor

Certified Site Assessor STEPHEN OMO (8142160 exp. 1/12/14) BB&A ENVIRONMENTAL  
 Address \_\_\_\_\_  
Street P.O. Box 40187  
EUGENE OR 97404 Telephone (541) 484-9484  
City State Zip Code

### Tank Information

Tank ID	Closure Date	Closure Method	Tank Capacity	Substance Stored
#1	4/25/12	REMOVED	12,000 Gal.	Premium UNL. GAS
#2	4/25/12	REMOVED	12,000 Gal.	UNLEADED Gasoline
#3	4/25/12	REMOVED	12,000 Gal.	Diesel

### Contamination Present at the Time of Closure

Yes     No     Unknown  
 Check unknown if no obvious contamination was observed and sample results have not yet been received from analytical lab.  
  
 Yes     No  
 If contamination is present, has the release been reported to the appropriate regional office?

To receive this document in an alternative format, contact the Toxics Cleanup Program at 360-407-7170 (voice) or 1-800-833-6388 OR 711 (TTY)







## CHECKLIST

Each item of the following checklist shall be initialed 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.	✓	
2. A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in site assessment guidance)	✓	
3. A summary of UST system data is provided. (see Section 3.1.)	✓	
4. The soils characteristics at the UST site are described. (see Section 5.2)	✓	
5. Is there any apparent groundwater in the tank excavation?	✓	
6. A brief description of the surrounding land use is provided. (see Section 3.1)		
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.	✓	
8. A sketch or sketches showing the following items is provided:		
- location and ID number for all field samples collected	✓	
- groundwater samples distinguished from soil samples (if applicable)	✓	
- samples collected from stockpiled excavated soil		✓
- tank and piping locations and limits of excavation pit	✓	
- adjacent structures and streets	✓	
- approximate locations of any on-site and nearby utilities	✓	
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)	✓	
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.	✓	
11. Any factors that may have compromised the quality of the data or validity of the results are described.	✓	
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred.	✓	

## SITE ASSESSOR INFORMATION

STEPHEN OMO

Person registered with Ecology

BB&A ENVIRONMENTAL

Firm Affiliated with

Business Address: 25195 SW PARKWAY AVE # 207 Telephone: (503) 570 9484

Street

Wilsonville

City

OR

State

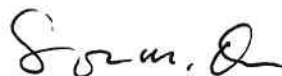
97070

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 173.360 WAC.

6/7/12

Date



Signature of Person Registered with Ecology

If you need this publication in an alternate format, please contact Toxics Cleanup Program at (360) 407-7170. For persons with a speech or hearing impairment call 711 for relay service or 800-833-6388 for TTY.