

AS-BUILT CONSTRUCTION COMPLETE REPORT

FORMER TRUCK CITY SITE
3216 OLD HIGHWAY 99 SOUTH
MOUNT VERNON, WASHINGTON



MAUL
FOSTER
ALONGI

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ACRONYMS AND ABBREVIATIONS

AGI	Applied Geotechnology, Inc.
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CEMEX	CEMEX USA
COI	chemical of interest
County	Skagit County, Washington
CSM	conceptual site model
CUL	cleanup level
DRO	diesel-range organic
EAS	Environmental Abatement Services, Inc.
Ecology	Washington State Department of Ecology
FBI	Friedman and Bruya, Inc.
GAC	granular reactivated carbon
GRO	gasoline-range organic
HCID	Hydrocarbon Identification Method
IHS	indicator hazardous substance
ISBR	in situ bioremediation
MFA	Maul Foster & Alongi, Inc.
mg/kg	milligrams per kilogram
MTC	Materials Testing & Consulting, Inc.
MTCA	Model Toxics Control Act
NWTPH	Northwest Total Petroleum Hydrocarbons
OWTS	on-site water treatment system
PCS	petroleum-contaminated soil
PID	photoionization detector
ppm	parts per million
POC	point of compliance
PPCD	Prospective Purchaser Consent Decree
Property	proposed Skagit County Jail property (five parcels)
RAP/EDR	Remedial Action Plan and Engineering Design Report
RE	remedial excavation
RI/FS	remedial investigation and feasibility study
Site	former Truck City Truck Stop facility at 3216 Old Highway 99 S., Mount Vernon, Washington, Ecology Facility Site No. 2673, Cleanup Site No. 5176, Agreed Order 15 2 00056 2
TPH	total petroleum hydrocarbons
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound
WAC	Washington Administrative Code
Wyser	Wyser Construction, Inc.

1 INTRODUCTION

On behalf of Skagit County, Washington (County), Maul Foster & Alongi, Inc. (MFA) has prepared this report describing remedial action activities completed at the former Truck City Truck Stop facility, located at 3216 Old Highway 99 South, Mount Vernon, Skagit County, Washington, Washington State Department of Ecology (Ecology) Facility Site No. 2673, Cleanup Site ID: 5176, Agreed Order 15 2 00056 2 (Site) (Figure 1-1). The Site, in combination with adjacent parcels, is proposed for construction of the Skagit County Jail facility. The proposed jail property (Property) comprises the following five parcels, all of which are owned by the County: Skagit County parcels P29546 (Truck City parcel) and four adjoining undeveloped parcels to the south, P119262, P119263, P119265, and P119267 (Figure 1-2). The Truck City parcel comprises the entire Site, based on data available at this time. The Truck City parcel was developed by 1953 and operated as a truck stop and restaurant until the truck stop burned in 1976. The parcel was redeveloped to its current configuration in 1978, and operations have not changed since then. Prior to purchase of the five parcels, the County entered into a Prospective Purchaser Consent Decree in January 2015 with Ecology. The County became the formal owner of the Truck City parcel in February 2015.

From August to October 2015, with oversight from MFA and Ecology, Wyser Construction, Inc. (Wyser) performed structure demolition, asbestos-containing-material and regulated-universal-waste abatement, underground storage tank (UST) decommissioning and site assessment, excavation and disposal of petroleum-contaminated soil (PCS), dewatering of excavation pits, application of in situ bioremediation (ISBR) products with clean backfill soil, and compaction of the Site to grade, as well as other tasks supporting environmental remediation of the Site. The remedial action was completed in accordance with the PPCD.

2 BACKGROUND, PHYSICAL SETTING, AND EXTENT OF CONTAMINATION

2.1 Site Location and Property Conditions

The Site is located in section 32, township 34 north, range 4 east, of the Willamette Meridian (see Figure 1-1). The Site, an 8.01-acre tax parcel (parcel number P29546), is accessed from Old Highway 99 South, adjacent to the west Property boundary (see Figure 1-2). Its surface topography is generally flat.

Before initiating remedial action activities, the Site contained six buildings associated with the former commercial operations that included the Truck City gas station, truck stop and truck wash, restaurant, and retail store. Five of the buildings—the contractor’s staging shop, office space, truck wash building, retail store, and restaurant/café—were constructed in 1978.

The gas station pump islands, fueling facilities, and truck scale (weigh station) were located in the western area of the Site. The diesel pump islands and the Site's recently operational USTs were located in the central area of the parcel, adjacent south of the truck wash building. Long-term truck parking was designated in the east area of the Site. The ground surface in the western area of the Site, where fueling operations took place, was asphalt-paved, with little vegetation present. Figure 2-1 presents recent, pre-remedial-action-activity site features and recent investigation locations.

2.2 Overview of Historical Operations and Impacts

The Site was developed by 1953 and operated as a truck stop and restaurant until the truck stop burned in 1976. The parcel was redeveloped to its pre-remedial action configuration in 1978, and operations did not significantly change until they ceased in or about January 2015. Several subsurface investigations were conducted at the Site between 1989 and 2014 to assess potential petroleum-hydrocarbon impacts related to the operation of the retail gasoline station. Ecology completed an interim soil remedial cleanup action in 1993.

Applied Geotechnology, Inc. (AGI) conducted a hydrocarbon assessment of the Site in 1989. AGI advanced eight borings, to approximately 15 to 20 feet below ground surface (bgs), adjacent to the northern, southern, and eastern UST nests; gasoline and diesel pump islands; and truck wash area (see Figure 2-1). Six of the borings were completed as 2-inch-diameter monitoring wells. AGI concluded that gasoline and diesel petroleum hydrocarbon contamination was present in soil and groundwater around the northern and southern UST nests, and the potential exists for off-site migration of these chemicals of interest (COIs). Detected concentrations of gasoline- and diesel-range total petroleum hydrocarbons (TPH) and associated petroleum fuel volatile organic compounds (VOCs), specifically benzene, toluene, and total xylenes, were above Ecology's current Model Toxics Control Act (MTCA) Method A cleanup levels (CULs). Groundwater flow direction at the Site was assessed to be west to southwesterly (AGI, 1989).

Ecology conducted an interim action cleanup in 1993. Seven USTs, 5,000 gallons in capacity each and located in the northern and southern UST nests, were decommissioned and removed along with associated product lines (see Figure 2-1). Two 500-gallon-capacity USTs, as well as a septic tank full of waste oil, encountered during the contaminated-soil-excavation activities were also removed. Ecology reported that, because the septic system had been used for waste-oil disposal and was connected to the parcel's storm drain system, the septic tank may be one of the contaminant sources at this parcel (Ecology, 1993). The interim action removed 6,244 cubic yards of contaminated soil and 89,991 gallons of contaminated water. Final confirmation samples from the stockpiled soil showed detections of gasoline-range TPH below CULs, with residual diesel-range TPH concentrations above CULs.

In 2005, an unknown volume of diesel was spilled at the Site when a truck driver filling a rig allowed an unattended fueling nozzle to fall out of the tank during fueling activities. The spill spread to a ditch (known as Maddox Creek), which is located adjacent to and west of the Site and flows south parallel to Old Highway 99 South to Hickox Road (approximately 0.68 mile south of the Site). This spill went unreported until an Ecology Spills Team traced the source back to the Truck City parcel (Ecology, Environmental Report Tracking System No. 546209, 2005). Sheen was observed in Maddox Creek. Ecology retained NRC Environmental Services to clean up the spill. Absorbent booms and pads were

placed in Maddox Creek. Subsequently, Materials Testing & Consulting, Inc. (MTC) conducted sediment sampling in Maddox Creek, in the vicinity of the Site, to assess whether residual contamination remained in Maddox Creek. Based on current data, sediments in Maddox Creek no longer appear to be impacted by releases at the Site.

MTC conducted an initial Phase II environmental site assessment in February 2014 and a supplemental environmental site assessment in March 2014. Eleven borings were advanced, via a direct-push-probe drilling rig, to a maximum depth of 15 feet bgs. The borings were located in and outside the former excavation remediation area (see Figure 2-1). MTC concluded that impacted soil at concentrations above MTCA CULs for gasoline- and diesel-range TPH existed adjacent to the truck scale (MTC, 2014).

MFA conducted a remedial investigation and feasibility study (RI/FS) in July 2014 that focused on further characterization of the residual impacted areas at the Site, potential off-site migration of contaminants, and addressing data gaps (see Figure 2-2). The site investigation results and risk screening indicate that only TPH and selected VOCs are indicator hazardous substances (IHSs) in soil and groundwater. Exceedances of applicable CULs for these IHSs are localized in soil (depth and areal extent) as well as in groundwater (localized dissolved phase). Human exposure pathways were deemed complete for the identified IHSs in groundwater, while ecological exposure pathways were deemed incomplete.

Findings from collective previous and the recent subsurface investigations and Ecology's interim soil remedial action indicate that historical operations related to the former USTs and gasoline pump islands were the sources of TPH and selected VOC soil and groundwater contamination beneath the Site. MFA also concluded that the lateral and vertical extent of the dissolved-phase TPH plume had been characterized as the result of the RI/FS (MFA, 2014b). Monitoring wells installed adjacent west of the truck scale and downgradient of former USTs/former gasoline pump islands (along the western Site boundary of the Truck City parcel) and near the south and southwestern area of this parcel may serve as sentinel wells to the IHSs exhibited in the dissolved phase in groundwater.

2.3 Geology and Hydrogeology

The Site and vicinity have been mapped as recent alluvium and artificial fill. Alluvium deposits encountered at the Site, at locations of investigation, consist of floodplain sequences ranging from fluvial silty sand and well-sorted sand, to silt with intervening clay. Fill, comprising sandy gravel to gravelly silty sand, is generally present to approximately 3 to 5 feet bgs at the Site, except in the former UST nests, where remedial actions associated with soil cleanup action conducted by Ecology in 1993 resulted in the overexcavation of this area to approximately 9.5 feet bgs.

The matrix of the unconfined shallow aquifer appears to be silty sand. Depth to groundwater, encountered during subsurface exploration activities, was variable throughout the Site, ranging approximately from 3.5 to 9.5 feet bgs. The static water level at monitoring wells installed by MFA in July 2014, TC-1 through TC-6, ranged approximately from 5.80 to 6.45 feet bgs during the groundwater-monitoring event conducted on July 18, 2014. The direction of groundwater migration at the Site during the July 2014 groundwater event, based on professionally surveyed elevations at monitoring wells TC-1 through TC-6, is generally to the south-southeast, with tangent to the west.

AGI reported a west-to-southwesterly groundwater flow direction at the Site during their investigation in October 1989, based on water levels measured from installed monitoring wells. Seasonal groundwater flow direction fluctuations are expected at the Site and vicinity because of the shallow depth to groundwater in the floodplain area. The local and regional discharge points in the area appear to be to the west-southwest, toward Britt Slough and the Skagit River. At their closest points, Britt Slough and the Skagit River are located approximately 0.5 mile and 1.5 miles, respectively, west of the Site. Maddox Creek, located west of the Site, flows south parallel to Old Highway 99 South, intersects at Hickox Road, and flows west from this intersection.

2.4 Nature and Extent of Contamination

Historical subsurface investigations and RIs conducted between 1989 and 2014 identified the following COIs in soil and groundwater at the Site: gasoline-, diesel-, and lube-oil-range TPH; petroleum hydrocarbon associated VOCs (benzene, toluene, ethylbenzene, and total xylenes [BTEX]); arsenic; and lead. Some of these COIs are also confirmed as IHSs, which are defined as chemicals exceeding a CUL at one or more locations.

Soil and groundwater IHSs confirmed at the Site include:

- Gasoline-range TPH
- Diesel-range TPH
- Benzene
- Toluene
- Ethylbenzene
- Total xylenes

One exceedance of the MTCA Method A CUL for arsenic was detected in groundwater during the RI conducted in July 2014. However, the exceedance was attributed to the elevated turbidity of the groundwater sample due to a heavy presence of sediments, and was, therefore, not considered representative of dissolved-phase concentrations in the groundwater at the Site.

Based on findings from Ecology's interim remedial action, previous subsurface investigations, and MFA's 2014 RI, residual PCS was initially believed to be present at four localized areas. These four areas were included in the proposed soil remedial action plan for excavation and ISBR application into clean backfill material.

2.5 Conceptual Site Model

The conceptual site model (CSM) describes potential chemical sources, release mechanisms, environmental transport processes, exposure routes, and receptors. The primary purpose of the CSM is to describe pathways by which human and ecological receptors could be exposed to site-related chemicals. A complete exposure pathway consists of four necessary elements: (1) a source and mechanism of chemical release to the environment, (2) an environmental transport medium for a released chemical, (3) a point of potential contact with the impacted medium (referred to as the exposure point), and (4) an exposure route (e.g., soil ingestion) at the exposure point. The CSM describes potential exposure scenarios based on information collected during the site assessment. All

of these components and the relationship between them are fundamental in determining potential adverse effects that could be posed by constituents at the site. A complete CSM for the Site is presented in the RI/FS (MFA, 2014b).

2.6 Point of Compliance

The MTCA cleanup regulation defines the point of compliance (POC) as the point or points where CULs shall be attained. Once CULs are met at the POC, the Site is no longer considered a threat to human health or the environment.

Washington Administrative Code (WAC) 173-340-740(6) defines the POC requirements for soil. WAC 173-340-740(6) states that “for soil CULs based on the protection of groundwater, the POC shall be established in the soils throughout the site,” and for soil CULs based on direct contact, “the point of compliance shall be established in the soils throughout the Site from the ground surface to fifteen feet below the ground surface.”

Initially, all contaminated soil was to be excavated to a depth of 15 feet bgs, removed, and disposed of off-site at a regulated landfill. During remedial activities at the Site, groundwater was encountered between 7 and 8 feet bgs. The excavation was dewatered and soil samples were collected at approximately 10 feet bgs. Contamination in excess of associated CULs was not detected in soil below approximately 10 feet bgs; therefore, the standard POC is applied to soil at the Site.

For groundwater, the POC is the point or points where the groundwater CULs must be attained for a site to be in compliance with the cleanup standards. Groundwater CULs shall be attained in all groundwater from the POC to the outer boundary of the hazardous-substance plume. A conditional POC may be established if it is not practicable to meet the CULs throughout the site within a reasonable restoration timeframe (WAC 173-340-720(8)(c)). A conditional POC for groundwater is not proposed for the Site at this time.

For surface water, the POC is where Maddox Creek daylight at the southwest corner of the Site property boundary.

2.7 Remedial Action Objectives

Remedial action objectives describe the actions necessary to protect human health and the environment through eliminating, reducing, or otherwise controlling risks posed through each exposure pathway and migration route. These objectives are developed by evaluating the characteristics of the contaminated media, the characteristics of the hazardous substances present, migration and exposure pathways, and potential receptor points.

As a result of past activities on the Truck City parcel, soil on the Site has been contaminated with TPH and ethylbenzene, and groundwater has been contaminated by benzene and gasoline- and diesel-range TPH. The potentially complete exposure pathway for COIs in soil is direct contact with contaminated soils by on-site workers. Persons may also be exposed in the future to volatile contaminants migrating from the subsurface. Soil gas has the potential to migrate, and persons in nearby buildings may be exposed to IHSs that migrate into proposed buildings at the Site. Ecology is unaware of any drinking

water use at or near the site. However, the impacted groundwater is shallow. Future construction workers may be exposed to the impacted shallow groundwater through ingestion, dermal contact, and inhalation of chemicals volatilizing from groundwater.

The remedial objectives were intended to address potential exposure pathways as follows:

- Prevent or minimize direct contact or ingestion of contaminated soil by humans and ecological receptors.
- Prevent or minimize ingestion of contaminated groundwater by humans and ecological receptors.
- Prevent or minimize the potential for migration of contaminants from soil to groundwater.
- Prevent or minimize the potential for migration of contaminants to nearby surface water.
- Prevent or minimize direct contact, inhalation, or ingestion of harmful vapors by human and ecological receptors.

3 ABATEMENT OF ASBESTOS-CONTAINING MATERIALS AND REGULATED WASTE

3.1 Abatement of Asbestos-Containing Materials

An asbestos survey was conducted by Argus Pacific on March 2, 2015. Asbestos-containing material was identified in four of the six buildings. Environmental Abatement Services, Inc. (EAS) performed asbestos abatement by removing asbestos-containing materials from the truck wash building, retail store, restaurant/café, and contractor's staging shop. The asbestos abatement report is included as Appendix A.

3.2 Abatement of Regulated Universal Wastes

Argus Pacific conducted a regulated-building-material assessment of the six buildings on the Site. Regulated universal wastes, including mercury-containing fluorescent light tubes and thermostats, polychlorinated-biphenyl-containing light ballasts, and HID (high-intensity discharge) lights, were identified in all of the buildings. Prior to demolition activities, these materials were removed from the interiors of buildings and disposed of consistent with state and federal regulations. The regulated-building-material assessment report is included in Appendix A.

4 DEMOLITION

4.1 Decommissioning of Groundwater-Monitoring Wells

Groundwater monitoring wells TC-3, TC-4, and TC-5, located within the extent of the remedial action excavation, were decommissioned with hydrated bentonite in accordance with Washington State regulations prior to soil remedial action activities. Well decommissioning logs are included as Appendix B.

4.2 Canopy and Pump Island Demolition

The canopies and pump islands were demolished on August 5 and 6, 2015. Metal salvaged from the canopies was recycled at Skagit River Recycling in Burlington, Washington.

Asphalt pavement and concrete within the excavation extents was also removed prior to excavation activities. Asphalt and concrete were recycled at Skagit Aggregates in Mount Vernon, Washington. Remaining general construction debris was disposed of at Roosevelt Regional Landfill operated by Republic Services in Roosevelt, Washington.

4.3 Truck Scale Demolition

The former truck scale was also demolished as part of the remedial action. Metal salvaged from the former truck scale was recycled at Skagit River Recycling. Associated concrete was recycled at Skagit Aggregates.

4.4 Demolition of Former Convenience Store

As PCS excavation expanded beyond the design extents (refer to Section 7), it became necessary to demolish the former convenience store building to remove underlying impacted soils. As a result, the building was demolished between September 22 and 26, 2015, as part of the remedial action. Metal salvaged from the building was recycled at Skagit River Recycling.

5 CLOSURE OF UNDERGROUND STORAGE TANKS; SITE ASSESSMENT

MFA conducted a site assessment in support of the permanent closure of four USTs at the Site. The site assessment was performed by a certified site assessor in accordance with the UST regulations defined in WAC 173-360 and Ecology Guidance for Site Checks and Site Assessments for Underground Storage Tanks (Ecology, 1991). Selected photographs showing the UST closure and

excavation are presented in Appendix C. Field notes are presented in Appendix D. Figure 5-1 presents an overview of the remedial action completed at the Site, including the location of the USTs that were decommissioned.

5.1 Closure of Fuel-Containing Underground Storage Tank

The following four USTs were decommissioned and removed on August 6, 2015:

- One 15,000-gallon diesel UST
- Three 5,000-gallon unleaded gasoline USTs

According to Ecology's UST database, all four USTs were installed in 1978. No failures or leaks had been reported for any of the USTs. MFA geologist (Carolyn Wise, Site Assessor No. ICC8277112) was present during tank-removal activities and performed the site assessment. Wyser removed and decommissioned the USTs.

The four USTs were all cathodic-protected, single-wall, coated steel tanks. The three 5,000-gallon gasoline USTs were 8 feet in diameter and 15 feet in length. The 15,000-gallon diesel UST was 10 feet in diameter and 26 feet in length. Tanks and piping were outfitted with automatic tank gauging and line-leak detection. A UST Closure and Site Assessment form, a Site Assessment Checklist, and other related UST-decommissioning documentation are included in Appendix E.

The following features associated with the USTs were present at the Site and were also removed as part of the tank-closure activities:

- UST fill ports
- Turbines
- Underground piping from the USTs to the dispensers
- Dispensers and satellites

The USTs were emptied of any residual fuels, and then triple-rinsed, by Ultra Tank Services of Bellingham, Washington. Approximately 550 gallons of emulsified fuel and water was removed from the tanks and transported to the Ultra Tank Services facility for recycling. The emptied and cleaned tanks were recycled as scrap metal at Skagit River Recycling in Burlington, Washington. Appendix F provides documentation for Ultra Tank Services and the recycling of the emptied and cleaned tanks at Skagit River Recycling in Burlington, Washington.

5.1.1 UST Permits and Closure Activities

Wyser applied for the UST closure permit and submitted notice to Ecology 30 days before removing the USTs (see documentation included in Appendix E). The four USTs were excavated and removed on August 6, 2015. Carolyn Wise of MFA (Site Assessor No. ICC8277112) was present during tank-removal activities and performed the site assessment. Wyser performed the decommissioning and removal of the USTs, product lines, and dispensers.

The soil observed in the excavation consisted of brown, laminated, well-graded, medium- to fine-grain sand with some medium-grain gravel from the ground surface to approximately 5 feet bgs. Soil observed from 5 feet bgs to approximately 13.0 feet bgs consisted of blue-gray, subangular to subrounded, poorly-graded, medium-grained sand. It appeared that native soil had been used to backfill around the USTs during installation, as the interface between the two soil types appeared to be the result of fluvial floodplain deposits and not imported fill. Therefore, soil samples were collected in the capillary fringe at approximately 8 feet bgs along the sides of the excavation, and approximately 1 foot below the USTs at the base of the excavation. Large, subrounded to rounded cobbles were observed beneath the former diesel UST. Pea gravel was observed directly beneath the piping leading from the USTs to the dispensers along the southern edge of the excavation at approximately 3 feet bgs. Groundwater was encountered at approximately 8.5 feet bgs during initial excavation activities, but eventually rose to approximately 7 feet bgs before reaching equilibrium with the surrounding water table.

PCS in the UST excavation was identified through field-screening techniques for petroleum hydrocarbons and fuel-associated VOCs; screening included the following:

- Visual
- Olfactory
- Photoionization detector (PID)
- Sheen observation

PID measurements were recorded for each soil sample to evaluate the presence of elevated VOCs. PID measurements were at low levels (less than 20 parts per million [ppm]) in the UST excavation and there was no visual or olfactory evidence of a release. Reddish-brown soil was observed with slightly discolored water seeping out of the northern wall of the UST excavation near the former truck wash. Sample S-N2-10.0 is considered representative of this discolored area. All other sidewall samples were collected at the groundwater interface in the capillary fringe at approximately 8 feet bgs (see Figure 5-2).

5.1.2 Overburden Soil Segregation

During UST-closure activities, the overburden soil from the UST excavation was separated into five stockpiles for characterization. The volume of each soil stockpile was estimated to be between 200 and 300 cubic yards. Five soil samples (ST-1 to ST-5) composited from five discrete locations in each stockpile were collected for analysis, in accordance with Ecology site assessment guidance (Ecology, 1991).

An excavator was used to obtain soil samples and to stockpile soil removed from the excavation. Stockpile soil samples were collected from the middle of the excavator bucket, away from the surface and metal sides. Soil samples were collected using USEPA Method 5035.

Soil samples were submitted for analysis of COIs by Friedman and Bruya, Inc. (FBI) in Seattle, Washington under standard chain of custody protocol. Laboratory reports are included in Appendix G. Stockpile soil samples were analyzed by the following methods:

- Gasoline-range organics (GROs) by the Northwest Total Petroleum Hydrocarbons (NWTPH)-Gx method
- Diesel-range organics (DROs) by the NWTPH-Dx method
- Total lead by U.S. Environmental Protection Agency (USEPA) Method 200.8
- BTEX by USEPA Method 8021B

A rapid turnaround was required for stockpile sample results in order to evaluate the stockpiled soil for reuse or off-site disposal.

Analytical data and the laboratory's internal quality assurance and quality control data were reviewed to assess whether they met data quality objectives, consistent with USEPA procedures for evaluating laboratory analytical data (USEPA, 2004, 2008). A memorandum summarizing data validation procedures, data usability, and deviations from specific field and/or laboratory methods for the UST decommissioning is included in Appendix H.

Analytical results for the stockpile soil samples are summarized in Table 5-1. Stockpile sample results were compared both to MTCA Method A criteria for unrestricted land use and to guideline concentration ranges for reuse of PCS (Ecology, 2011).

Soil samples collected from two of the five UST excavation stockpiles exhibited concentrations of gasoline-range TPH above the MTCA A CUL of 100 milligrams per kilogram (mg/kg). The two stockpiles exhibiting TPH concentrations above Ecology reuse guidance (Ecology, 2011) were separated and disposed of as PCS at CEMEX USA (CEMEX) located in Everett, Washington. The remaining stockpiles were used as backfill for the UST excavation.

5.1.3 Excavation-Pit Dewatering

During the removal of the four USTs, groundwater seeped into the excavation at approximately 8 feet bgs and stabilized at approximately 7 feet bgs. In order to obtain unsaturated soil samples, the excavation was dewatered and pumped into two 21,000-gallon storage tanks to await treatment by granular reactivated carbon (GAC) filters as outlined in the RAP/EDR (MFA, 2015a) and further discussed in Section 7.3.

5.1.4 Confirmation Soil Sampling

During the site assessment, soil confirmation samples were collected from the UST excavation sidewalls and base, and from beneath former fuel dispensers and product lines. Four soil samples were collected from the base of the UST excavation and one soil sample was collected from each of the four sidewalls of the UST excavation (see Figure 5-2). Base samples were collected at 12 and 14 feet bgs beneath the 500-gallon and 15,000-gallon USTs, respectively. Sidewall soil samples were collected from the capillary fringe at approximately 8 feet bgs. Groundwater was encountered at approximately 8.5 feet bgs during initial excavation activities, but eventually rose to approximately 7 feet bgs over 24 hours before reaching equilibrium with the surrounding water table.

An excavator was used to obtain soil from the excavation for sampling and from stockpiled soil removed from the excavation. Excavation and stockpile soil samples were collected from the middle of the excavator bucket, away from the surface and metal sides. Samples from below the dispensers were also collected from the middle of the excavator bucket. In addition, samples were collected in situ from the soil directly beneath the removed product lines. Soil samples were collected in accordance with USEPA Method 5035.

Laboratory reports are included in Appendix G. All UST excavation samples were analyzed by the following methods:

- GROs by the NWTPH-Gx method
- DROs by the NWTPH-Dx method
- Total lead by USEPA Method 200.8
- BTEX by USEPA Method 8021B

The discolored-soil sample (S-N2-10.0) was analyzed by the following methods:

- Petroleum hydrocarbons by the NWTPH-Hydrocarbon Identification Method (HCID)
- BTEX by USEPA Method 8021B
- VOCs, specifically halogenated VOCs, by USEPA Method 8260C
- Carcinogenic polycyclic aromatic hydrocarbons by USEPA Method 8270 SIM (selective ion monitoring)

A rapid turnaround was required for UST excavation sample results to evaluate soil for impacts and identify areas requiring additional excavation.

Analytical data and the laboratory's internal quality assurance and quality control data were reviewed to assess whether they met data quality objectives, consistent with USEPA procedures for evaluating laboratory analytical data (USEPA, 2004, 2008). A memorandum summarizing data validation procedures, data usability, and deviations from specific field and/or laboratory methods is included in Appendix H.

5.1.5 UST Site Assessment Results

Analytical results for the sidewalls and base of the UST excavation and the discolored-soil sample are shown in Table 5-2. To evaluate whether a release of petroleum constituents from the UST system may have occurred, confirmation sample results were compared to Ecology's MTCA Method A criteria for unrestricted land use. The analyzed samples did not contain concentrations of the analyzed constituents above their respective CULs.

5.1.6 PCS Disposal

Prior site investigations indicated that contaminated soil was nonhazardous. PCS identified in the UST soil stockpile was loaded directly into haul trucks and transported to CEMEX in Everett, Washington.

Loose soil was brushed off truck trailers before the vehicles left the Site to prevent soil from falling off the truck during transit.

5.2 Decommissioning of Abandoned Underground Storage Tank

During the remedial excavation (RE) activities, a closed-in-place, 650-gallon UST was found in the southern pump island dispenser area to the west of the former pump islands. The location of this abandoned UST is shown on Figure 5-1. This UST is also discussed in Section 7.2 below.

A sample of the contents of the UST was analyzed to ascertain if the UST had contained petroleum fuel and/or solvents. A sample of the UST's contents was collected and analyzed by the following methods:

- Petroleum hydrocarbons by the NWTPH-HCID method
- Polychlorinated biphenyls by USEPA Method 8082A
- VOCs by USEPA Method 8260C

Analytical results for the abandoned UST sample are summarized in Table 5-3. Soil samples were also collected adjacent to and beneath the UST to evaluate the potential extent of PCS. Samples were analyzed by FBI. Laboratory reports are included in Appendix G.

Soil sample results were compared to MTCA Method A criteria for unrestricted land use. Heavy-oil-range organics were detected in the sample. No followup analyses were requested for the sample; however, the area containing the abandoned UST was overexcavated during the RE, as discussed in Section 7.2.

6 DISPENSER ISLAND AND PRODUCT LINE DECOMMISSIONING

6.1 Dispenser Island Decommissioning

Wyser decommissioned and removed the dispenser islands on August 5 through 12, 2015. Removed concrete dispenser islands were recycled at Skagit Aggregates in Mount Vernon, Washington. Selected photographs are presented in Appendix C. Field notes are presented in Appendix D.

6.1.1 Confirmation Soil Sampling

During the site assessment, soil confirmation samples were collected from the UST excavation and beneath former fuel dispensers and product lines. Dispenser samples were collected 2 feet below the former pump island dispensers and satellites.

PCS was identified through field-screening techniques for petroleum hydrocarbons and fuel-associated VOCs; screening included the following:

- Visual
- Olfactory
- PID
- Sheen observations

PID measurements were recorded for each soil sample to evaluate the presence of elevated VOCs. Elevated PID measurements (above 20 ppm) were identified in soil samples D2-4.0, D3-8.0, and D4-4.0, collected below dispenser islands 2, 3, and 4, respectively. In addition, samples were collected in situ from the soil directly beneath the removed product lines. Soil samples were collected in accordance with USEPA Method 5035.

Soil samples were analyzed for the COIs by FBI. Laboratory reports are included in Appendix G. Dispenser and satellite island soil samples were analyzed by the following methods:

- GROs by the NWTPH-Gx method
- DROs by the NWTPH-Dx method
- BTEX by USEPA Method 8021B

A rapid turnaround was required for dispenser and satellite island sample results to evaluate soil for impacts and identify areas requiring additional excavation.

Analytical data and the laboratory's internal quality assurance and quality control data were reviewed to assess whether they met data quality objectives, consistent with USEPA procedures for evaluating laboratory analytical data (USEPA, 2004, 2008). A memorandum summarizing data validation procedures, data usability, and deviations from specific field and/or laboratory methods for dispenser islands and product lines is included in Appendix H.

6.1.2 Laboratory Analytical Results

Analytical results for the dispenser island samples are summarized in Table 6-1. Soil sample results were compared both to MTCA Method A criteria for unrestricted land use and to guideline concentration ranges for reuse of PCS (Ecology, 2011).

Elevated concentrations of gasoline, diesel, benzene, ethylbenzene, and total xylenes were identified in soil beneath four of the five sampled former dispenser island locations (see Figure 5-2).

Elevated concentrations of gasoline above the MTCA Method A CUL of 30 mg/kg were identified below three of the five dispenser islands: dispensers 2, 3, and 4. Concentrations ranged from 170 mg/kg to 1900 mg/kg.

Elevated concentrations of diesel above the MTCA Method A CUL of 2,000 mg/kg were also identified in the same sample locations: dispensers 2, 3, and 4. Concentrations ranged from 7600 to 27000 mg/kg.

Benzene was detected above the MTCA Method A CUL of 0.03 mg/kg in soil below dispensers 1, 2, and 4. Concentrations ranged between 0.13 and 0.37 mg/kg.

Total xylenes were detected at 11 and 20 mg/kg in soil below dispensers 2 and 4, respectively, above the MTCA Method A CUL of 9 mg/kg.

Ethylbenzene was detected above the MTCA Method A CUL of 6 mg/kg at only one dispenser location, dispenser 4, at 6.2 mg/kg.

Additional samples were collected beneath the dispenser island locations where exceedances were confirmed from between 9.5 and 10.0 feet bgs in an attempt to delineate the vertical extent of contamination. The lateral extent of impacts was addressed during the RE activities, as all four former dispenser island locations with at least one constituent exceeding its MTCA Method A CUL were overexcavated both laterally and vertically, as discussed in Section 7.

6.2 Product Line Decommissioning

Wyser decommissioned and removed the product lines at the Site on August 5 through 12, 2015. Removed product lines were disposed of with construction debris at the Roosevelt Regional Landfill in Roosevelt, Washington.

6.2.1 Confirmation Soil Sampling

PCS was identified through field-screening techniques for petroleum hydrocarbons and fuel-associated VOCs; screening included the following:

- Visual
- Olfactory
- PID

PID measurements were recorded for each soil sample to evaluate the presence of elevated VOCs. Elevated PID measurements (above 20 ppm) were identified in sample P1-S2-3.5, collected along the product line to the southeast of the former convenience store.

Four soil samples were collected in situ from the soil directly beneath the removed product lines. Two of the four soil samples were put on hold because of the abundant number of samples already collected from beneath the southern dispenser island area and because of the low PID readings. During the remedial action excavation, the areas where product line soil samples had been put on hold were subsequently overexcavated because of confirmed impacts to soil at depths below 5 feet bgs. Soil samples were collected in accordance with USEPA Method 5035.

Soil samples were analyzed for COIs by FBI. Laboratory reports are included in Appendix G. Product line soil samples were analyzed by the following methods:

- GROs by the NWTPH-Gx method
- DROs by the NWTPH-Dx method

- BTEX by USEPA Method 8021B

A rapid turnaround was required for product line sample results to evaluate soil for impacts and identify areas requiring additional excavation.

Analytical data and the laboratory's internal quality assurance and quality control data were reviewed to assess whether they met data quality objectives, consistent with USEPA procedures for evaluating laboratory analytical data (USEPA, 2004, 2008). A memorandum summarizing data validation procedures, data usability, and deviations from specific field and/or laboratory methods is included in Appendix H.

6.2.2 Laboratory Analytical Results

Analytical results for the product line soil samples are summarized in Table 6-2. Soil sample results were compared both to MTCA Method A criteria for unrestricted land use and to guideline concentration ranges for reuse of PCS (Ecology, 2011).

Elevated concentrations of GROs and BTEX constituents were identified in sample P1-S2-3.5, collected southeast of the former convenience store (see Figure 5-2). Concentrations of these constituents were all above their respective MTCA Method A CULs. Additional samples were collected from below the initial sampling depth and along the adjacent northern sidewall of this section of the product line in an attempt to delineate the extent of impacts. This area of product line was overexcavated during the RE activities, as discussed in Section 7.

7 SOIL REMEDIAL ACTION—EXCAVATION OF PETROLEUM-CONTAMINATED SOIL

The remedial action included excavation of soils exceeding MTCA Method A CULs, application of ISBR products, backfilling the excavation, and transporting the contaminated material off site for disposal. Selected photographs showing contaminated-material excavation, ISBR product application, and backfilling activities are presented in Appendix C. Field notes are presented in Appendix D.

7.1 Site Preparation and Layout

Before excavation, the general excavation limits were laid out by the contractor and approved by the MFA professional. Underground utilities at the Site were identified by a private utility locating company. Catch basin inserts were installed to protect all storm sewer inlets.

7.2 Excavation

The estimated excavation boundaries were developed as part of the cleanup action plan and in coordination with Ecology (Ecology, 2015a). The remediation strategy for the Site was developed to address contamination in soils and groundwater.

The following IHSs were identified in soil at the Site:

- Gasoline-range TPH
- Diesel-range TPH
- BTEX

The following IHSs were identified in groundwater at the Site:

- Gasoline-range TPH
- Diesel-range TPH
- Benzene

A remedy was selected based on Site conditions, historical characterization, eliminating risk, and the ability to meet CULs for petroleum hydrocarbons and fuel-associated VOCs (specifically BTEX constituents) in the soil and groundwater. The remedial action was designed to treat groundwater contamination through overexcavation of PCS below the groundwater table and application of ISBR treatment products in backfill material placed in the smear zone (i.e., area where contaminated soil may exist within the varying fluctuations of the water table). Excavation and ISBR treatment were determined to be the most effective way to remove soil contamination at the Site and address any residual contamination in soil and groundwater. Groundwater from each area of excavation was dewatered, contained, and treated prior to its discharge into the city's sanitary sewer manhole, located to the south of the Site, as further discussed in Section 7.3.

Excavation and ISBR application activities were completed from August 18 to October 9, 2015.

7.2.1 Initial PCS Excavation

The excavation depths were determined based on soil characterization sampling, as described in the RAP/EDR (MFA, 2015a). Confirmation samples were used to define the vertical and horizontal extent of the excavations.

Initially, there were four proposed RE areas (RE1 through RE4, shown on Figure 5-2). Each RE area was a square, roughly 15 feet by 15 feet (by 10 feet deep). The depth was determined in the field, based on field indicators/screening methods. PCS was identified through field-screening techniques for petroleum hydrocarbons and fuel-associated VOCs. Field screening was performed throughout excavation activities, with soil sampling conducted when apparent contaminant boundaries were reached. Field-screening and sampling techniques for petroleum hydrocarbons and fuel-associated VOCs (specifically BTEX constituents) included:

- Visual
- Olfactory
- PID
- Sheen testing

In general, RE areas were excavated to approximately 10 feet bgs. The shallow soil (from ground surface to approximately 4 to 5 feet bgs), was segregated and stockpiled on site for characterization to

ensure eligibility for use as backfill. Deeper excavated soil (between approximately 4 and 10 feet bgs) was continuously assessed through field screening as potential PCS. If field screening indicated that the soil was not PCS, the soil was segregated and stockpiled on site for characterization through sampling to ensure eligibility for reuse as backfill. If field screening indicated that it was PCS, then the soil was stockpiled separately or loaded directly into haul trucks, and transported off site for disposal.

Soil confirmation samples were collected and analyzed to assess the vertical and horizontal extent of the excavations. Initially, following excavation of each RE area, a soil confirmation sample was collected from each sidewall and the excavation floor, as outlined in MFA RAP/EDR's Sampling and Analysis Plan (MFA, 2015a).

Samples were submitted for COIs to FBI and analyzed by the following methods:

- GROs by NWTPH-Gx
- DROs by NWTPH-Dx
- BTEX by USEPA Method 8021B

Soil sample analytical results are summarized in Tables 7-1 through 7-5. The confirmation sample locations are shown on Figure 5-2. Confirmation sample PID readings and soil descriptions were recorded in field notes for each soil sample (see Appendix D).

Additional soil was removed in areas where field screening indicated that PCS was present and areas where confirmation samples contained gasoline-range TPH, diesel-range TPH, or BTEX concentrations above MTCA A CULs. Three of the four RE areas (RE1 through RE3) required additional soil excavation. This extended excavation is described in Section 7.2.2.

Overburden segregated for use as backfill was stockpiled and sampled in accordance with Ecology's Guidance for Remediation of Petroleum Contamination Sites (Ecology, 2011).

Stockpile samples were submitted to FBI and analyzed by the same methods as outlined above.

Table 5-1 summarizes laboratory analytical results for stockpile soil samples collected during the remedial action activities. Analytical laboratory reports and data validation memoranda are included in Appendices G and H, respectively.

7.2.2 Extended PCS Excavation

The excavation footprint was expanded in the direction of confirmation soil samples containing constituents that exceeded their respective MTCA A CULs. RE1 and RE2 exhibited exceedances in all four sidewall samples. RE3 exhibited exceedances in the north, east, and west sidewalls, while the south sidewall was below CULs. All confirmation samples from RE4 were below CULs.

The RE1 excavation extended into the former truck scale area, with the entire footprint of the former truck scale ultimately being excavated. The RE1 excavation also extended to the north, east, and south, as shown on Figure 5-2. RE1 and RE2 excavations eventually merged, as did the excavations of RE2 and RE3. Based on field indicators and screening methods (and elevated confirmation soil samples), the contamination extended north beneath the former convenience store building. The excavation

was extended to the east. After the building was demolished, the excavation was extended to the north to capture PCS that extended under the former building.

As mentioned above in Section 5.2, on August 20, 2015, during the extended PCS excavation east of RE3, Wyser uncovered an abandoned UST that had not been previously identified. It appeared to have a capacity of approximately 475 gallons and contained an unknown oil. MFA sampled the contents of the UST; laboratory results indicated that it was a motor oil (Table 5-3). On August 25, 2015, following the City of Mount Vernon fire marshal's inspection of the tank (which was found to be in good condition), the tank contents were pumped out (by Marvac) and the tank removed (by Wyser). See selected photographs provided in Appendix C.

Demolition of the former convenience store began on September 22, 2015. Following demolition and removal of debris, Wyser extended the PCS excavation beneath the former building footprint. In general, the excavation extended to approximately 10 feet bgs beneath the former product line area and to 5 feet bgs or less beneath the building footprint and south of the product line. This surface excavation is also shown on Figure 5-2. The RE3 excavation also extended east. Not only was impacted soil found in the vicinity of the product line, but it also appeared to follow a section of the concrete storm sewer line and associated catch basins. The impacted soil extended east, slightly beyond the eastern edge of the former convenience store.

Soil confirmation samples were generally collected every 20 feet along sidewalls and throughout the floor of the excavation to verify PCS removal, as per the RAP/EDR. PCS was excavated to the extent shown on Figure 5-2. Overexcavation to remove PCS was completed at all areas, with the general maximum depth of overexcavation ranging from approximately 10 to 11 feet bgs. Laboratory analytical results of all final confirmation soil samples indicated that the COIs were all below their respective MTCA Method A CULs (refer to Tables 7-2 to 7-5).

Following successful removal of PCS and ensuring that all confirmation soil samples met the COI CULs, the excavation limits were surveyed by Pacific Geomatic Services, Inc. of Mountlake Terrace, Washington. A comprehensive as-built survey showing the excavation extents is included as Appendix I.

7.2.3 PCS Disposal

Analytical results of stockpile characterization samples and excavation samples indicated presence of PCS. PCS was loaded into haul trucks and transported to an appropriately permitted disposal facility. Loose soil was brushed off truck trailers before the vehicles left the Site to prevent soil from falling off the truck during transit. A total of 6,449 tons of PCS were excavated and disposed offsite at CEMEX in Everett, Washington. A summary ticket of all trucks and associated tonnages of PCS disposed of at CEMEX is provided in Appendix J.

7.3 Groundwater Management and Dewatering

During excavation, and before backfilling, accumulated groundwater from the excavation was removed using pumps. The groundwater from the excavation was pumped into two 21,000-gallon storage tanks temporarily located in the southeast corner of the Site. Excavated groundwater was then

pumped through a sediment filter and through two GAC vessels (connected in series), as outlined in the RAP/EDR (MFA, 2015a), before being discharged to the City of Mount Vernon sanitary sewer system through a 4-inch-diameter polyvinyl chloride pipe to a manhole south of the Site. The dewatering system and discharge sanitary manhole are shown on Figure 7-1.

7.3.1 Granular Reactivated Carbon Treated Water System

As described above, groundwater was treated using a multi-unit system. The on-site water treatment system (OWTS) included two storage tanks (each 21,000 gallons in capacity), particulate filter units, and GAC vessels connected in series. Figure 7-2 presents the process flow diagram depicting the components of the OWTS.

Water-containing tanks: The tanks were equipped with over weirs and under weirs for removal of settleable solids and separated-phase hydrocarbons (i.e., free product), as well as a sorbent boom at the inlet to remove any floating free product. The tanks were also fitted with a containment berm system in order to provide secondary containment in the event of a fittings leak or other leakage issues.

Filter Unit: A bag filter/cartridge filter unit followed the OWTS unit. The filter unit removed fine suspended solids that could clog the GAC vessels in the water treatment process. The filter unit was comprised of one bag filter and two cartridge filters capable of removing particulates as small as 5 microns. A pump was installed at the inlet of the filter unit in the event that gravity flow was not sufficient to maintain a steady flow through the unit.

GAC Vessels: The final step prior to discharge was two in-line GAC vessels for removal of dissolved COIs from the water. The vessels were configured with two sets of two 2,000-pound GAC vessels in an interchangeable lead-lag formation (i.e., in series). The influent water entered the first GAC vessel (the lead), which treated the influent to the discharge criteria. The secondary GAC vessel, the lag, also assisted in this process. The system was piped and valved in such a way that the two vessels could be switched if contaminant breakthrough occurred in one of the vessels. Monitoring ports were installed after each vessel so that MFA could sample and test the post-treated water for the potential presence of COIs. All laboratory results indicated that contaminants were below associated analytical detection limits; therefore, it was not necessary to switch the vessels at any time during the remedial action.

7.3.2 Sanitary Sewer Discharge

Wyser treated all impacted groundwater generated during the remedial action activities on site. The City's discharge permit had allowed Wyser to discharge up to 150,000 gallons per day. The maximum daily discharge during site operations was 105,350 gallons, and the total discharge over the entire project was 449,540 gallons. Table 7-6 provides the daily volume of treated water discharge. Following treatment, groundwater was discharged into the city's sanitary sewer system. MFA collected a single pretreatment and several posttreatment water samples for laboratory analysis to demonstrate discharge compliance. Table 7-7 provides the analytical results of post-treatment water samples.

7.4 Backfill

Following excavation and receipt of confirmation sample results indicating compliance with associated CULs, excavations were backfilled using clean import materials and/or stockpiled overburden from on-site excavations that had been confirmed applicable for reuse by either field screening or analysis. Before imported soil was accepted and placed, verification was required that the soil did not contain concentrations of COIs, such as petroleum hydrocarbons and fuel-associated VOCs, at levels exceeding MTCA Method A CULs. This clean backfill documentation for pit run materials is provided in Appendix K. A total of 7,063 tons of pit run was used to backfill the remedial action excavations. A summary of materials and associated tonnages imported from Skagit Aggregates (also known as Big Rock Pit) is provided in Appendix K.

Backfilling was completed in two 2-foot lifts of clean backfill mixed with an ISBR product (the Regenesis Oxygen Release Compound Advanced, ORCa®). The ORCa product and application details are provided in detail below in Section 8.

The amended backfill was placed at the bottom of the excavation footprint and mixed together, and then unamended backfill was placed on top of it, again in 2-foot lifts. The bottom 4 feet of the entire excavation footprint was backfilled with clean import soil amended with ORCa. For the former truck scale area, on top of the amended backfill, the area was backfilled to the surrounding grade with clean import soil material (because site plans for the future jail facility include a stormwater retention facility in this location). Throughout the rest of the site excavation, on top of the amended backfill, the excavation footprint was backfilled with both clean import soil and clean overburden from on-site excavations. The final grade was placed and compacted to match the surrounding grade.

7.5 Compaction and Final Grade

Compaction tests were performed by Geotest Services, Inc., of Bellingham, Washington, to ensure that a compaction of 85 percent (required compaction amount specified by the Skagit County Jail architect) was being met throughout the excavation. The compaction reports are included as Appendix L.

7.6 As-Built Survey

The excavation and stockpiled clean overburden were surveyed during and at the conclusion of the excavation activities and before backfilling. The as-built survey verified that the boundary of the excavation had been met and mapped the locations of all additional excavation. A final as-built survey is included as Appendix I.

8 IN SITU BIOREMEDIATION/ENHANCED AEROBIC BIODEGRADATION

ISBR included the use of enhanced aerobic biodegradation to expedite the biodegradation of TPH and VOCs in soil and groundwater by adding ORCa to accelerate the microbial degradation of remaining petroleum-hydrocarbon-impacted vadose zone and groundwater. The addition of a controlled-release supplemental source of oxygen enables the indigenous microorganisms (bacteria) to expedite the biodegradation process. The ORCa product will, when hydrated (with groundwater), produce a controlled release of oxygen for up to 12 months on a single application, which will assist in accelerating the naturally occurring aerobic contaminant biodegradation in groundwater and saturated soils.

Regenesis ORCa was received from the manufacturer in the form of dry pellets, which were mixed directly with clean overburden and placed in two lifts at approximately 6 to 10 feet bgs. This depth is the appropriate smear zone that will be in contact with the fluctuating groundwater levels. The Regenesis ORCa and clean import material were mixed in the excavation in 2-foot lifts. ORCa product specifications are included in Appendix M.

9 SITE RESTORATION

The final inspection of the excavation work was completed on October 12, 2015. MFA issued an Engineer's Final Acceptance of Construction work on October 28, 2015, certifying that Wyser had completed all work, and submitted all required documentation supporting that work, in accordance with the construction plans and specifications associated with the Site remedial action (MFA, 2015b).

10 REMEDIAL ACTION AND PROPOSED SKAGIT COUNTY JAIL

Figure 10-1 presents an estimated extent of dissolved-phase petroleum hydrocarbon plume at the Site, based on groundwater analytical results of the RI conducted in July 2014 (MFA, 2014b). Seasonal groundwater migration directions, generally to the southwest with components to the northwest and south, are also shown. The estimated extent of the groundwater plume mirrors the remedial action area. Additionally, Figure 10-2 shows an overlay of the extent of the remedial action in relation to the proposed Skagit County Jail facility, including the footprint of the building and adjacent stormwater retention pond. The historical fueling area and the cleaned-up area are located primarily in the northern end of these features.

11 PROPOSED REPLACEMENT MONITORING WELLS

Six replacement groundwater monitoring wells (TC-1R, TC-2R, TC-3R, TC-4R, TC-5R, and TC-7) are proposed for installation within and adjacent to the remedial action excavation footprint, at inferred downgradient and upgradient locations, to evaluate the effectiveness of the remedial action and monitor the groundwater quality of this area.

The Ecology site manager authorized the locations of the proposed replacement monitoring wells on December 22, 2015 (Ecology, 2015b). Figure 11-1 presents the locations of proposed wells with respect to the site features of the proposed Skagit County Jail. Replacement of the original wells is necessary, as some of them would interfere with the proposed retention pond and/or are projected to be in the pathway of a maintenance road to be constructed in the area.

Each replacement well will be installed, using a direct-push drilling rig, to a depth of 15 feet bgs and will be constructed according to the Washington well construction standards (WAC 173-160) and procedures outlined in MFA's Focused Site Assessment Work Plan's Sampling and Analysis Plan (MFA, 2014a), with pre-packed well screen installed from 5 to 15 feet bgs.

It is anticipated that the replacement monitoring wells will be installed in early to mid-March 2016 because of current and ongoing construction activities for the jail and associated features (retention pond, underground utilities, etc.). The installed monitoring wells will be surveyed by a licensed surveyor.

12 SCHEDULED QUARTERLY GROUNDWATER EVENTS

Following installation of the replacement monitoring wells, groundwater compliance monitoring will be conducted starting in late April 2016, approximately six months after completion of remediation activities.

Quarterly groundwater compliance monitoring will be conducted for the following purposes:

- To assess the ongoing effectiveness and performance of the Site groundwater quality after completion of remedial action.
- To monitor progression of the COIs in meeting CULs at all conditional POCs. This will include monitoring of all existing monitoring wells at the Site for COIs and monitoring of geochemical parameters at selected wells to assess the biodegradation process, evaluate the trend of natural attenuation of the COIs, and the efficacy of ISBR. The Site's

hydrogeologic regime will also be evaluated through assessment of the groundwater flow conditions (see Appendix N).

- To evaluate conditions for termination of quarterly groundwater monitoring activities. The groundwater compliance monitoring plan provides procedures for groundwater monitoring associated with the remedial action at the Site (see Appendix N).

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

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TABLES



Table 5-1
Confirmation Soil Sample Analytical Results—Soil Stockpiles
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location:	UST Stockpile					Remedial Excavation/ PCS Stockpile							
	STOCKPILE-UST					RE-STOCKPILE-01			RE-STOCKPILE-02				
	Sample Name:	ST-1	ST-2	ST-3	ST-4	ST-5	REST01-01	REST01-02	REST01-03	REST02-01	REST02-01-DUP	REST02-02	REST02-03
Collection Date:	08/06/2015	08/06/2015	08/06/2015	08/06/2015	08/07/2015	08/20/2015	08/20/2015	08/20/2015	08/20/2015	08/20/2015	08/20/2015	08/20/2015	08/20/2015
MTCA A CULs (mg/kg)													
TPH (mg/kg)													
Gasoline-Range Hydrocarbons	30	190	3	2 U	11	110	43	34	22	2 U	2 U	2 U	2 U
Diesel-Range Hydrocarbons	2000	1600	110	50 U	1000	5100	560	1200	510	50 U	50 U	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 U	250 U	310	250 U	250 U	250 U	250 U	250 U
Total TPH ^a	2000	1725	235	250 U	1125	5225	685	1355	635	250 U	250 U	250 U	250 U
VOCs (mg/kg)													
Benzene	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	0.33	0.02 U	0.02 U	0.02 U	0.09	0.056	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	7	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes (total)	9	0.67	0.06 U	0.06 U	0.06 U	0.087	0.091	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
Metals (mg/kg)													
Lead	250	2.26	4.35	3.93	3.82	4.00	--	--	--	--	--	--	--

Table 5-1
Confirmation Soil Sample Analytical Results—Soil Stockpiles
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location: Sample Name: Collection Date:		Remedial Excavation/ PCS Stockpile												
		RE-STOCKPILE-03				RE-STOCKPILE-04			RE-STOCKPILE-05			RE-STOCKPILE-06		
		REST03-01	REST03-01-DUP	REST03-02	REST03-03	REST04-01	REST04-02	REST04-03	RE ST05-01	RE ST05-02	RE ST05-03	RE-ST06-1	RE-ST06-2	RE-ST06-3
Collection Date:		08/20/2015	08/20/2015	08/20/2015	08/20/2015	08/20/2015	08/20/2015	08/20/2015	08/21/2015	08/21/2015	08/21/2015	08/25/2015	08/25/2015	08/25/2015
MTCA A CULs (mg/kg)														
TPH (mg/kg)														
Gasoline-Range Hydrocarbons	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diesel-Range Hydrocarbons	2000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Total TPH ^a	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
VOCs (mg/kg)														
Benzene	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	7	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes (total)	9	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
Metals (mg/kg)														
Lead	250	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-1
Confirmation Soil Sample Analytical Results—Soil Stockpiles
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location: Sample Name: Collection Date:		Remedial Excavation/ PCS Stockpile								
		RE-STOCKPILE-07			RE-STOCKPILE-08			RE-STOCKPILE-09		
		RE-ST07-1	RE-ST07-2	RE-ST07-3	RE-ST08-1	RE-ST08-2	RE-ST08-3	RE-ST09-1	RE-ST09-2	RE-ST09-3
	MTCA A CULs (mg/kg)	08/27/2015	08/27/2015	08/27/2015	08/31/2015	08/31/2015	08/31/2015	09/02/2015	09/02/2015	09/02/2015
TPH (mg/kg)										
Gasoline-Range Hydrocarbons	30	2 U	2 U	2 U	2 U	2 U	2 U	6.5	2.2	2 U
Diesel-Range Hydrocarbons	2000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Total TPH ^a	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
VOCs (mg/kg)										
Benzene	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	7	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes (total)	9	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
Metals (mg/kg)										
Lead	250	--	--	--	--	--	--	--	--	--

Table 5-1
Confirmation Soil Sample Analytical Results—Soil Stockpiles
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location: Sample Name: Collection Date:		Remedial Excavation/ PCS Stockpile									
		RE-STOCKPILE-10			RE-STOCKPILE-11				RE-STOCKPILE-12		
		RE-ST10-1	RE-ST10-2	RE-ST10-3	RE-ST11-1	RE-ST11-2	RE-ST11-3	RE-ST11-4	RE-ST12-1	RE-ST12-2	RE-ST12-3
	MTCA A CULs (mg/kg)	09/03/2015	09/03/2015	09/03/2015	09/08/2015	09/08/2015	09/08/2015	09/08/2015	09/16/2015	09/16/2015	09/16/2015
TPH (mg/kg)											
Gasoline-Range Hydrocarbons	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diesel-Range Hydrocarbons	2000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Total TPH ^a	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
VOCs (mg/kg)											
Benzene	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	7	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.021
Xylenes (total)	9	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
Metals (mg/kg)											
Lead	250	--	--	--	--	--	--	--	--	--	--

Table 5-1
Confirmation Soil Sample Analytical Results—Soil Stockpiles
Former Truck City Site
Skagit County
Mount Vernon, Washington

NOTES:

Detected result values are in **bold** font.

Detected result values are above MTCA A CULs.

-- = not analyzed.

CUL = cleanup level.

mg/kg = milligrams per kilogram.

MTCA = Model Toxics Control Act.

PCS = petroleum-contaminated soil.

TPH = total petroleum hydrocarbons.

U = Result is non-detect.

UST = underground storage tank.

VOC = volatile organic compound.

^aTotal TPH is sum of diesel- and motor-oil-range hydrocarbon results.

Table 5-2
Confirmation Soil Sample Analytical Results—UST Site Assessment
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location: Sample Name: Collection Date: Collection Depth (ft bgs):	B-T1 B-T1-12.0 08/06/2015 12	B-T2 B-T2-12.0 08/06/2015 12	B-T3 B-T3-12.0 08/07/2015 12	B1-T4 B1-T4-14.0 08/07/2015 14	B2-T4 B2-T4-14.0 08/07/2015 14	S-E1 S-E1-8.0 08/06/2015 8	S-N1 S-N1-8.0 08/06/2015 8	S-N2 S-N2-10.0 08/07/2015 10	S-S1 S-S1-8.0 08/06/2015 8	S-W1 S-W1-8.0 08/06/2015 8	
MTCA Method A CULs (mg/kg)											
TPH (mg/kg)											
Gasoline-Range Hydrocarbons	30	2 U	2 U	2.7	2.8	28	2 U	2 U	--	2 U	2 U
Diesel-Range Hydrocarbons	2000	50 U	50 U	50 U	50 U	1100	50 U	50 U	--	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	--	250 U	250 U
Total TPH ^a	2000	250 U	250 U	250 U	250 U	1225	250 U	250 U	--	250 U	250 U
TPH Identification											
Gasoline-Range Hydrocarbons	NV	--	--	--	--	--	--	--	Not Detected	--	--
Diesel-Range Hydrocarbons	NV	--	--	--	--	--	--	--	Not Detected	--	--
Motor-Oil-Range Hydrocarbons	NV	--	--	--	--	--	--	--	Not Detected	--	--
VOCs (mg/kg)											
1,1,1-Trichloroethane	2	--	--	--	--	--	--	--	0.05 U	--	--
1,1-Dichloroethane	NV	--	--	--	--	--	--	--	0.05 U	--	--
1,1-Dichloroethene	NV	--	--	--	--	--	--	--	0.05 U	--	--
1,2-Dichloroethane	NV	--	--	--	--	--	--	--	0.05 U	--	--
Benzene	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U
Chloroethane	NV	--	--	--	--	--	--	--	0.5 U	--	--
cis-1,2-Dichloroethene	NV	--	--	--	--	--	--	--	0.05 U	--	--
Ethylbenzene	6	0.02 U	0.02 U	0.02 U	0.02 U	0.028	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U
m,p-Xylene	NV	--	--	--	--	--	--	--	0.1 U	--	--
Methylene chloride	0.02	--	--	--	--	--	--	--	0.5 U	--	--
o-Xylene	NV	--	--	--	--	--	--	--	0.05 U	--	--
Tetrachloroethene	0.05	--	--	--	--	--	--	--	0.025 U	--	--
Toluene	7	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.05 U	0.02 U	0.02 U
trans-1,2-dichloroethene	NV	--	--	--	--	--	--	--	0.05 U	--	--
Trichloroethene	0.03	--	--	--	--	--	--	--	0.02 U	--	--
Vinyl chloride	NV	--	--	--	--	--	--	--	0.05 U	--	--
Xylenes (total)	9	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	--	0.06 U	0.06 U
PAHs (mg/kg)											
Benzo(a)anthracene	NV	--	--	--	--	--	--	--	0.01 U	--	--
Benzo(a)pyrene	0.1	--	--	--	--	--	--	--	0.01 U	--	--
Benzo(b)fluoranthene	NV	--	--	--	--	--	--	--	0.01 U	--	--
Benzo(k)fluoranthene	NV	--	--	--	--	--	--	--	0.01 U	--	--
Chrysene	NV	--	--	--	--	--	--	--	0.01 U	--	--
Dibenzo(a,h)anthracene	NV	--	--	--	--	--	--	--	0.01 U	--	--
Indeno(1,2,3-cd)pyrene	NV	--	--	--	--	--	--	--	0.01 U	--	--

Table 5-2
Confirmation Soil Sample Analytical Results—UST Site Assessment
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location:	B-T1	B-T2	B-T3	B1-T4	B2-T4	S-E1	S-N1	S-N2	S-S1	S-W1	
Sample Name:	B-T1-12.0	B-T2-12.0	B-T3-12.0	B1-T4-14.0	B2-T4-14.0	S-E1-8.0	S-N1-8.0	S-N2-10.0	S-S1-8.0	S-W1-8.0	
Collection Date:	08/06/2015	08/06/2015	08/07/2015	08/07/2015	08/07/2015	08/06/2015	08/06/2015	08/07/2015	08/06/2015	08/06/2015	
Collection Depth (ft bgs):	12	12	12	14	14	8	8	10	8	8	
MTCA Method A CULs (mg/kg)											
Metals (mg/kg)											
Lead	250	2.77	3.23	1 U	2.09	3.67	1.38	2.27	--	1.34	2.71
<p>NOTES:</p> <p>Detected results are in bold font.</p> <p>Results that exceed MTCA A cleanup levels are shaded. Non-detect results are not evaluated against MTCA A levels.</p> <p>-- = not analyzed.</p> <p>CUL = cleanup level.</p> <p>ft bgs = feet below ground surface.</p> <p>mg/kg = milligrams per kilogram.</p> <p>MTCA Method A = Model Toxics Control Act Method A.</p> <p>NV = no value.</p> <p>PAH = polycyclic aromatic hydrocarbon.</p> <p>TPH = total petroleum hydrocarbons.</p> <p>U = Result is non-detect.</p> <p>UST = underground storage tank.</p> <p>VOC = volatile organic compound.</p> <p>^oTotal TPH is sum of diesel- and motor-oil-range hydrocarbon results.</p>											

Table 5-3
Product Sample Identification Analytical Results—Abandoned UST
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location:	PL-UST-650
Sample Name:	PL-UST-650
Collection Date:	08/21/2015
PCBs (mg/kg)	
Aroclor 1016	2 U
Aroclor 1221	2 U
Aroclor 1232	2 U
Aroclor 1242	2 U
Aroclor 1248	2 U
Aroclor 1254	2 U
Aroclor 1260	2 U
VOCs (mg/kg)	
1,1,1-Trichloroethane	<100 U
1,1-Dichloroethane	<100 U
1,1-Dichloroethene	<100 U
1,2-Dichloroethane	<100 U
Chloroethane	<1,000 U
cis-1,2-Dichloroethene	<100 U
Methylene chloride	<1,000 U
Tetrachloroethene	<50 U
trans-1,2-dichloroethene	<100 U
Trichloroethene	<40 U
Vinyl chloride	<100 U
TPH Identification (Presence/Absence)	
Gasoline	Not Detected
Diesel	Not Detected
Lube Oil	DETECT
NOTES: Detected results are in bold font. mg/kg = milligrams per kilogram. ND = not detected. PCB = polychlorinated biphenyl. TPH = total petroleum hydrocarbons. U = Result is non-detect. UST = underground storage tank. VOC = volatile organic compound.	

Table 6-1
Confirmation Soil Sample Analytical Results—Dispenser Islands
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location: Sample Name: Collection Date: Collection Depth (ft bgs):		D1 D1-4.0 08/12/2015 4	D1-B D1-B-9.5 08/18/2015 9.5	D2 D2-4.0 08/12/2015 4	D2-B D2-B-10.0 08/18/2015 10	D3 D3-8.0 08/12/2015 8	D4 D4-4.0 08/12/2015 4	D4-B D4-B-10.0 08/18/2015 10	D5 D5-4.0 08/12/2015 4
MTCA Method A CUL (mg/kg)									
TPH (mg/kg)									
Gasoline-Range Hydrocarbons	30	6.2	2 U	170	2 U	310 J	1,900	2 U	2 U
Diesel-Range Hydrocarbons	2000	50 U	50 U	7,600	50 U	10,000 J	27,000	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 J	360	250 U	250 U
Total TPH ^a	2000	250 U	250 U	7,725	250 U	10,125 J	27,360	250 U	250 U
VOCs (mg/kg)									
Benzene	0.03	0.13	0.02 U	0.37	0.02 U	0.02 UJ	0.13	0.02 U	0.02 U
Ethylbenzene	6	0.02 U	0.02 U	1.5	0.02 U	0.64 J	6.2	0.02 U	0.02 U
Toluene	7	0.02 U	0.02 U	3.9	0.02 U	0.02 UJ	0.63	0.02 U	0.02 U
Xylenes (total)	9	0.06 U	0.06 U	11	0.06 U	1.8 J	20	0.06 U	0.06 U
<p>NOTES:</p> <p>Calculated sums use the highest non-detect value when all constituents are non-detect. When detect and non-detect values are summed, one-half the non-detect value is used.</p> <p>Detected results are in bold font.</p> <p>Results that exceed MTCA A cleanup levels are shaded. Non-detect results are not evaluated against MTCA A values.</p> <p>CUL = cleanup level.</p> <p>ft bgs = feet below ground surface.</p> <p>J = Result is an estimated value.</p> <p>mg/kg = milligrams per kilogram.</p> <p>MTCA Method A = Model Toxics Control Act Method A.</p> <p>TPH = total petroleum hydrocarbons.</p> <p>U = Result is non-detect.</p> <p>VOC = volatile organic compound.</p> <p>^aTotal TPH is the sum of diesel- and motor-oil-range hydrocarbon results.</p>									

Table 6-2
Confirmational Soil Sample Analytical Results—Product Lines
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location:		P1-S1	P1-S2	P1-S2-B1	P1-S2-SN
Sample Name:		P1-S1-3.5	P1-S2-3.5	P1-S2-B1-10.0	P1-S2-SN-9.0
Collection Date:		08/12/2015	08/12/2015	08/18/2015	08/18/2015
Collection Depth (ft bgs):		3.5	3.5	10	9
MTCA Method A CUL (mg/kg)					
TPH (mg/kg)					
Gasoline-Range Hydrocarbons	30	2 U	40,000	2 U	2 U
Diesel-Range Hydrocarbons	2000	50 U	1,800	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U
Total TPH ^a	2000	250 U	1,925	250 U	250 U
VOCs (mg/kg)					
Benzene	0.03	0.02 U	7	0.02 U	0.02 U
Ethylbenzene	6	0.02 U	770	0.02 U	0.02 U
Toluene	7	0.02 U	1,400	0.02 U	0.02 U
Xylenes (total)	9	0.06 U	4,400	0.06 U	0.06 U
<p>NOTES:</p> <p>Calculated sums use the highest non-detect value when all constituents are non-detect. When detect and non-detect values are summed, one-half the non-detect value is used.</p> <p>Detected results are in bold font.</p> <p>Results that exceed MTCA A cleanup levels are shaded. Non-detect results are not evaluated against MTCA A levels.</p> <p>CUL = cleanup level.</p> <p>ft bgs = feet below ground surface.</p> <p>mg/kg = milligrams per kilogram.</p> <p>MTCA Method A = Model Toxics Control Act Method A.</p> <p>TPH = total petroleum hydrocarbons.</p> <p>U = Result is non-detect.</p> <p>VOC = volatile organic compound.</p> <p>^aTotal TPH is the sum of diesel- and motor-oil-range hydrocarbon results.</p>					

Table 7-1
Confirmation Soil Sample Analytical Results—Former Truck Scale
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location:	FTS-S-BN	FTS-S-BS	FTS-S-SE1	FTS-S-SS	FTS-S-SW1	FTS-S-SW2	FTS-N-B	FTS-N-SN	FTS-N-SW	
Sample Name:	FTS-S-BN-6.0	FTS-S-BS-5.0	FTS-S-SE1-5.0	FTS-S-SS-5.0	FTS-S-SW1-6.0	FTS-S-SW2-5.0	FTS-N-B-10.0	FTS-N-SN-9.0	FTS-N-SW-9.0	
Collection Date:	08/24/2015	08/24/2015	08/24/2015	08/24/2015	08/24/2015	08/24/2015	08/26/2015	08/26/2015	08/26/2015	
Collection Depth (ft bgs):	6	5	5	5	6	5	10	9	9	
MTCA Method A CUL (mg/kg)										
TPH (mg/kg)										
Gasoline-Range Hydrocarbons	30	2 U	2 U	2 U	2 U	3	2 U	2 U	2 U	2 U
Diesel-Range Hydrocarbons	2000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Total TPH ^a	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
VOCs (mg/kg)										
Benzene	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	7	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes (total)	9	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
<p>NOTES:</p> <p>Calculated sums use the highest non-detect value when all constituents are non-detect. When detect and non-detect values are summed, one-half the non-detect value is used.</p> <p>CUL = cleanup level.</p> <p>ft bgs = feet below ground surface.</p> <p>mg/kg = milligrams per kilogram.</p> <p>MTCA Method A = Model Toxics Control Act Method A.</p> <p>TPH = total petroleum hydrocarbons.</p> <p>U = Result is non-detect.</p> <p>VOC = volatile organic compound.</p> <p>^aTotal TPH is the sum of diesel- and motor-oil-range hydrocarbon results.</p>										

Table 7-2
Confirmation Soil Sample Analytical Results—RE1 Area
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location: Sample Name: Collection Date: Collection Depth (ft bgs):	RE1-SE RE1-SE-9.0 08/19/2015 9	RE1-BN RE1-BN-10.0 08/19/2015 10	RE1-BS RE1-BS-10.0 08/19/2015 10	RE1-SN RE1-SN-9.0 08/19/2015 9	RE1-SW RE1-SW-9.0 08/19/2015 9	RE1-SS RE1-SS-8.5 08/19/2015 8.5	RE1-SW2 RE1-SW2-9.5 08/21/2015 9.5	RE1-SW3 RE1-SW3-9.5 08/21/2015 9.5	RE1-SE2 RE1-SE2-9.0 08/24/2015 9	RE1-SE3 RE1-SE3-10.0 08/24/2015 10	RE1-SN2 RE1-SN2-9.0 08/27/2015 9	RE1-SS2 RE1-SS2-10.0 08/27/2015 10	RE1-SS3 RE1-SS3-10.0 08/27/2015 10	RE1-SN3 RE1-SN3-11.0 09/16/2015 11
MTCA Method A CUL (mg/kg)														
TPH (mg/kg)														
Gasoline-Range Hydrocarbons	30	2,300	2 U	2 U	750	32	61	2 U	2 U	8.3	2 U	2 U	2 U	2 U
Diesel-Range Hydrocarbons	2000	9,200	50 U	50 U	13,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	200
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	310	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Total TPH ^a	2000	9,325	250 U	250 U	13,155	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	325
VOCs (mg/kg)														
Benzene	0.03	1.1	0.02 U	0.02 U	0.42	0.55	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	20	0.02 U	0.02 U	0.1 U	1.2	0.17	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	7	9.5	0.02 U	0.02 U	5.4	0.12	0.11	0.02 U	0.02 U	0.029	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes (total)	9	7.5	0.06 U	0.06 U	30	1.1	0.37	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
NOTES: Calculated sums use the highest non-detect value when all constituents are non-detect. When detect and non-detect values are summed, one-half the non-detect value is used. Detected results are in bold font. Results that exceed MTCA A cleanup levels are shaded. Non-detect results are not evaluated against MTCA A levels. CUL = cleanup level. ft bgs = feet below ground surface. mg/kg = milligrams per kilogram. MTCA Method A = Model Toxics Control Act Method A. TPH = total petroleum hydrocarbons. U = Result is non-detect. VOC = volatile organic compound. ^a Total TPH is the sum of diesel- and motor-oil-range hydrocarbon results.														

Table 7-3
Confirmation Soil Sample Analytical Results—RE2 Area
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location:	RE2-B	RE2-SE	RE2-SN	RE2-SS	RE2-SW	RE2-B2	RE2-B3	RE2-SS2	RE2-SS3	RE2-B4
Sample Name:	RE2-B-10.0	RE2-SE-10.0	RE2-SN-9.0	RE2-SS-9.0	RE2-SW-9.0	RE2-B2-10.0	RE2-B3-10.0	RE2-SS2-8.0	RE2-SS3-9.0	RE2-B4-10.0
Collection Date:	08/20/2015	08/20/2015	08/20/2015	08/20/2015	08/20/2015	08/28/2015	08/28/2015	08/31/2015	08/31/2015	09/04/2015
Collection Depth (ft bgs):	10	10	9	9	9	10	10	8	9	10
MTCA Method A CUL (mg/kg)										
TPH (mg/kg)										
Gasoline-Range Hydrocarbons	30	2 U	39	4,600	1,100	240	2 U	2 U	2 U	2 U
Diesel-Range Hydrocarbons	2000	50 U	180	1,100	1,800	250	50 U	50 U	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Total TPH ^a	2000	250 U	305	1,225	1,925	375	250 U	250 U	250 U	250 U
VOCs (mg/kg)										
Benzene	0.03	0.02 U	0.02 U	0.2 U	0.11	0.11	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	0.02 U	0.11	29	4.3	2.3	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	7	0.046	0.16	28	7.4	0.75	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes (total)	9	0.06 U	0.2	46	12	1.3	0.06 U	0.06 U	0.06 U	0.06 U

Table 7-3
Confirmation Soil Sample Analytical Results—RE2 Area
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location:	RE2-B5	RE2-SN2	RE2-SN3	RE2-SN4	RE2-SN5	RE2-SS4	RE2-SS5	RE2-SS6	RE2-B6	RE2-SE2
Sample Name:	RE2-B5-10.0	RE2-SN2-10.0	RE2-SN3-10.0	RE2-SN4-10.0	RE2-SN5-9.0	RE2-SS4-10.0	RE2-SS5-10.0	RE2-SS6-9.0	RE2-B6-10.0	RE2-SE2-9.5
Collection Date:	09/04/2015	09/02/2015	09/02/2015	09/02/2015	09/04/2015	09/02/2015	09/02/2015	09/04/2015	09/10/2015	09/10/2015
Collection Depth (ft bgs):	10	10	10	10	9	10	10	9	10	9.5
MTCA Method A CUL (mg/kg)										
TPH (mg/kg)										
Gasoline-Range Hydrocarbons	30	2 U	51 J	71	91	2 U	53	2 U	2 U	2 U
Diesel-Range Hydrocarbons	2000	50 U	300	100	330	50 U	130	50 U	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Total TPH ^a	2000	250 U	425	225	455	250 U	255	250 U	250 U	250 U
VOCs (mg/kg)										
Benzene	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.1
Ethylbenzene	6	0.02 U	0.46 J	0.23	0.65	0.02 U	0.09	0.02 U	0.02 U	0.02 U
Toluene	7	0.02 U	0.36 J	0.38	0.51	0.02 U	0.062	0.02 U	0.02 U	0.02 U
Xylenes (total)	9	0.06 U	0.42 J	0.34	0.33	0.06 U	0.1	0.06 U	0.06 U	0.092

Table 7-3
Confirmation Soil Sample Analytical Results—RE2 Area
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location:	RE2-SE3	RE2-B7	RE2-SE4	RE2-SE5	RE2-SE6	RE2-SN6	RE2-SN7	RE2-SN8	RE2-SN9	RE2-SS7	
Sample Name:	RE2-SE3-9.5	RE2-B7-11.0	RE2-SE4-9.5	RE2-SE5-9.5	RE2-SE6-10.0	RE2-SN6-10.5	RE2-SN7-10.5	RE2-SN8-11.0	RE2-SN9-9.0	RE2-SS7-9.5	
Collection Date:	09/10/2015	09/14/2015	09/14/2015	09/14/2015	09/15/2015	09/16/2015	09/16/2015	09/16/2015	09/21/2015	09/30/2015	
Collection Depth (ft bgs):	9.5	11	9.5	9.5	10	10.5	10.5	11	9	9.5	
MTCA Method A CUL (mg/kg)											
TPH (mg/kg)											
Gasoline-Range Hydrocarbons	30	3.2	2 U	4.1	2 U	2 U	2 U	3.6	2 U	2 U	2 U
Diesel-Range Hydrocarbons	2000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Total TPH ^a	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
VOCs (mg/kg)											
Benzene	0.03	0.063	0.02 U	0.049	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	0.02 U	0.02 U	0.06	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	7	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes (total)	9	0.099	0.06 U	0.33	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U

Table 7-3
Confirmation Soil Sample Analytical Results—RE2 Area
Former Truck City Site
Skagit County
Mount Vernon, Washington

NOTES:

Calculated sums use the highest non-detect value when all constituents are non-detect. When detect and non-detect values are summed, one-half the non-detect value is used.

Detected results are in bold font.

Results that exceed MTCA A cleanup levels are shaded. Non-detect results are not evaluated against MTCA A levels.

CUL = cleanup level.

ft bgs = feet below ground surface.

J = Result is an estimated value.

mg/kg = milligrams per kilogram.

MTCA Method A = Model Toxics Control Act Method A.

TPH = total petroleum hydrocarbons.

U = Result is non-detect.

VOC = volatile organic compound.

^aTotal TPH is the sum of diesel- and motor-oil-range hydrocarbon results.

Table 7-4
Confirmation Soil Sample Analytical Results—RE3 Area
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location: Sample Name: Collection Date: Collection Depth (ft bgs):	RE3-B RE3-B-10.0 08/20/2015 10	RE3-SE RE3-SE-9.0 08/20/2015 9	RE3-SN RE3-SN-9.0 08/20/2015 9	RE3-SN2 RE3-SN2-9.0 08/25/2015 9	RE3-SS RE3-SS-9.0 08/20/2015 9	RE3-SW RE3-SW-9.0 08/20/2015 9	RE3-B2 RE3-B2-9.5 09/14/2015 9.5	RE3-SE2 RE3-SE2-9.0 09/14/2015 9	RE3-B3 RE3-B3-3.5 09/15/2015 3.5	RE3-SE3 RE3-SE3-3.0 09/15/2015 3	RE3-SE4 RE3-SE4-3.0 09/15/2015 3	
MTCA Method A CUL (mg/kg)												
TPH (mg/kg)												
Gasoline-Range Hydrocarbons	30	2 U	3.4	400	10	2 U	14	2 U	2 U	2 U	2 U	
Diesel-Range Hydrocarbons	2000	50 U	50 U	570	50 U	50 U	50 U	50 U	50 U	50 U	50 U	
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	
Total TPH ^a	2000	250 U	250 U	695	250 U	250 U	250 U	250 U	250 U	250 U	250 U	
VOCs (mg/kg)												
Benzene	0.03	0.02 U	0.046	0.1 U	0.044	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	
Ethylbenzene	6	0.02 U	0.039	3.8	0.4	0.02 U	0.08	0.02 U	0.02 U	0.02 U	0.02 U	
Toluene	7	0.02 U	0.09	0.89	0.11	0.02 U	0.11	0.02 U	0.02 U	0.02 U	0.02 U	
Xylenes (total)	9	0.06 U	0.23	14	0.72	0.06 U	0.24	0.06 U	0.06 U	0.06 U	0.06 U	

Table 7-4
Confirmation Soil Sample Analytical Results—RE3 Area
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location:	RE3-SE5	RE3-B4	RE3-B5	RE3-SE5	RE3-SE6	RE3-SE7	RE3-SE8	RE3-SE9	RE3-B10	RE3-B6	RE3-B7
Sample Name:	RE3-SE5-3.0	RE3-B4-7.0	RE3-B5-10.0	RE3-SE5-8.0	RE3-SE6-7.0	RE3-SE7-8.0	RE3-SE8-9.0	RE3-SE9-3.5	RE3-B10-10.0	RE3-B6-10.0	RE3-B7-3.0
Collection Date:	09/15/2015	09/17/2015	09/17/2015	09/17/2015	09/17/2015	09/17/2015	09/18/2015	09/18/2015	09/28/2015	09/28/2015	09/28/2015
Collection Depth (ft bgs):	3	7	10	8	7	8	9	3.5	10	10	3
MTCA Method A CUL (mg/kg)											
TPH (mg/kg)											
Gasoline-Range Hydrocarbons	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diesel-Range Hydrocarbons	2000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	110	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	300	250 U	250 U
Total TPH ^a	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	410	250 U	250 U
VOCs (mg/kg)											
Benzene	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	7	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes (total)	9	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U

Table 7-4
Confirmation Soil Sample Analytical Results—RE3 Area
Former Truck City Site
Skagit County
Mount Vernon, Washington

Location:	RE3-B8	RE3-B9	RE3-SN3	RE3-SN4	RE3-SN5	RE3-SN6	RE3-SN7	RE3-SN8	RE3-SN9	RE3-SN10
Sample Name:	RE3-B8-10.0	RE3-B9-4.0	RE3-SN3-8.0	RE3-SN4-7.5	RE3-SN5-8.0	RE3-SN6-7.0	RE3-SN7-6.0	RE3-SN8-2.5	RE3-SN9-2.0	RE3-SN10-2.0
Collection Date:	09/28/2015	09/28/2015	09/28/2015	09/28/2015	09/28/2015	09/28/2015	09/28/2015	09/28/2015	09/28/2015	09/28/2015
Collection Depth (ft bgs):	10	4	8	7.5	8	7	6	2.5	2	2
MTCA Method A CUL (mg/kg)										
TPH (mg/kg)										
Gasoline-Range Hydrocarbons	30	2 U	2 U	4.4	2 U	2 U	2 U	2 U	2 U	2 U
Diesel-Range Hydrocarbons	2000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Total TPH ^a	2000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
VOCs (mg/kg)										
Benzene	0.03	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	7	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes (total)	9	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U

Table 7-4
Confirmation Soil Sample Analytical Results—RE3 Area
Former Truck City Site
Skagit County
Mount Vernon, Washington

NOTES:

Calculated sums use the highest non-detect value when all constituents are non-detect. When detect and non-detect values are summed, one-half the non-detect value is used.

Detected results are in bold font.

Results that exceed MTCA A cleanup levels are shaded. Non-detect results are not evaluated against MTCA A levels.

CUL = cleanup level.

ft bgs = feet below ground surface.

mg/kg = milligrams per kilogram.

MTCA Method A = Model Toxics Control Act Method A.

TPH = total petroleum hydrocarbons.

U = Result is non-detect.

VOC = volatile organic compound.

^aTotal TPH is the sum of diesel- and motor-oil-range hydrocarbon results.

**Table 7-5
Confirmation Soil Sample Analytical Results—RE4 Area
Former Truck City Site
Skagit County
Mount Vernon, Washington**

Location: Sample Name: Collection Date: Collection Depth (ft bgs):	RE4-B RE4-B-10.0 08/19/2015 10	RE4-SE RE4-SE-8.0 08/19/2015 8	RE4-SN RE4-SN-8.5 08/19/2015 8.5	RE4-SS RE4-SS-9.0 08/19/2015 9	RE4-SW RE4-SW-9.0 08/19/2015 9
MTCA Method A CUL (mg/kg)					
TPH (mg/kg)					
Gasoline-Range Hydrocarbons	30	2 U	2 U	2 U	2 U
Diesel-Range Hydrocarbons	2000	50 U	50 U	50 U	50 U
Motor-Oil-Range Hydrocarbons	2000	250 U	250 U	250 U	250 U
Total TPH ^a	2000	250 U	250 U	250 U	250 U
VOCs (mg/kg)					
Benzene	0.03	0.02 U	0.02 U	0.02 U	0.02 U
Ethylbenzene	6	0.02 U	0.02 U	0.02 U	0.02 U
Toluene	7	0.02 U	0.02 U	0.02 U	0.02 U
Xylenes (total)	9	0.06 U	0.06 U	0.06 U	0.06 U

Table 7-5
Confirmation Soil Sample Analytical Results—RE4 Area
Former Truck City Site
Skagit County
Mount Vernon, Washington

NOTES:

Calculated sums use the highest non-detect value when all constituents are non-detect. When detect and non-detect values are summed, one-half the non-detect value is used.

CUL = cleanup level.

ft bgs = feet below ground surface.

mg/kg = milligrams per kilogram.

MTCA Method A = Model Toxics Control Act Method A.

TPH = total petroleum hydrocarbons.

U = Result is non-detect.

VOC = volatile organic compound.

^aTotal TPH is the sum of diesel- and motor-oil-range hydrocarbon results.

Table 7-6
Treated Groundwater Discharge to Sanitary Sewer
Former Truck City Site
Skagit County
Mount Vernon, Washington

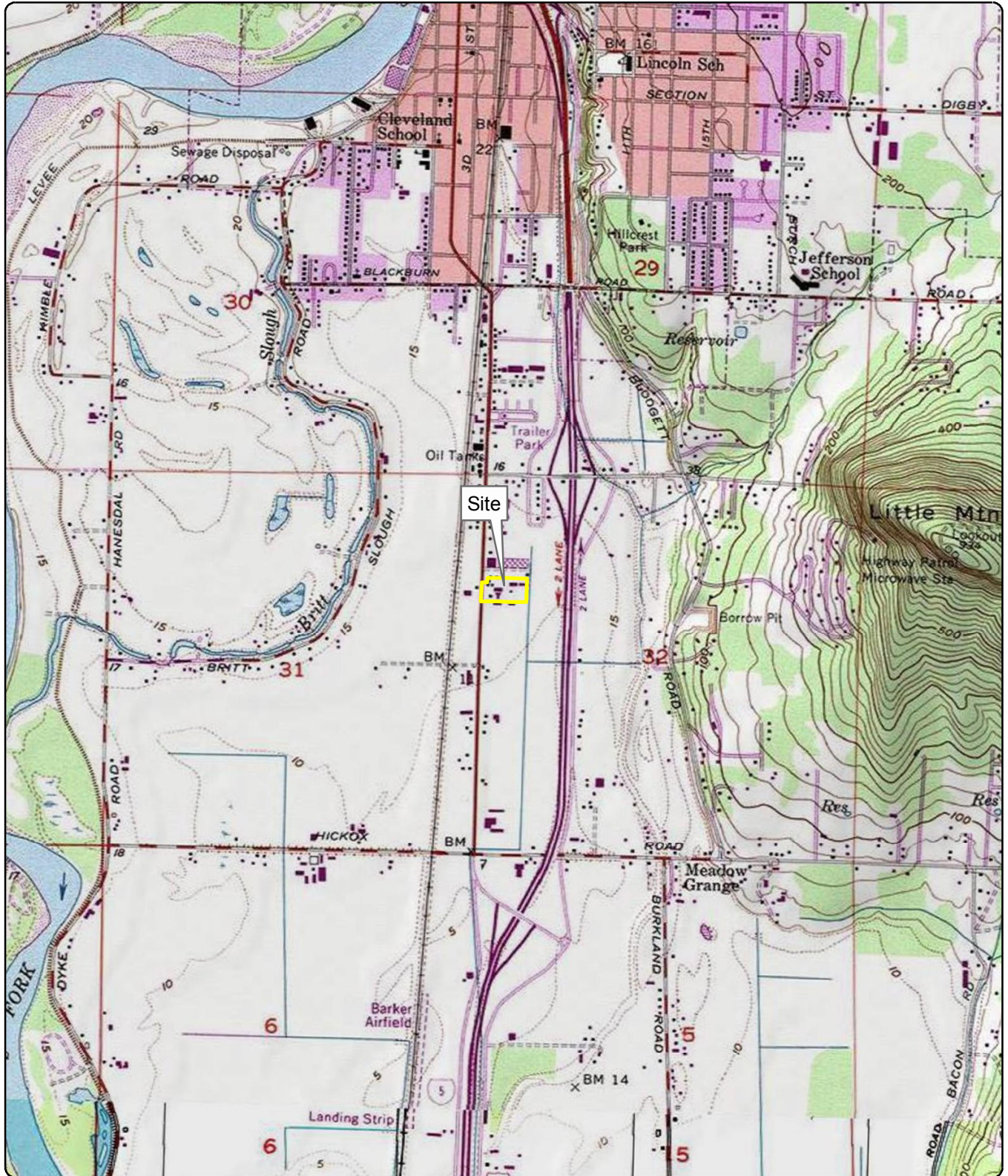
Date	Time	Daily Discharge (gallons)	Running Total Discharge (gallons)	Comments
08/20/2015	--	--	--	Permit allows up to 150,000 gallons per day
08/20/2015	1445	9,000	9,000	
08/21/2015	1100	9,000	18,000	
08/21/2015	1500	1,000	19,000	
08/24/2015	1010	4,000	23,000	
08/24/2015	1515	1,600	24,600	
08/25/2015	1200	1,200	25,800	
08/26/2015	700	800	26,600	
08/26/2015	1248	12,200	38,800	
08/27/2015	1504	6,800	45,600	
08/28/2015	1200	4,800	50,400	
08/28/2015	1400	4,800	55,200	
08/31/2015	0826	1,500	56,700	
08/31/2015	1250	7,200	63,900	
08/31/2015	1530	800	64,700	
09/01/2015	0700	-	64,700	
09/01/2015	1200	2,900	67,600	
09/01/2015	1530	6,300	73,900	
09/02/2015	1500	25,400	99,300	
09/03/2015	1500	-	99,300	
09/04/2015	1500	23,200	122,500	
09/08/2015	0830	--	--	New meter installed (1.5-inch diameter flow valve)
09/08/2015	1400	28,900	151,400	
09/09/2015	1300	38,100	189,500	
09/10/2015	1530	16,900	206,400	
09/11/2015	1400	8,900	215,300	
09/14/2015	1530	21,800	237,100	
09/15/2015	1530	22,190	259,290	
09/16/2015	1530	17,900	277,190	
09/18/2015	1430	28,110	305,300	
09/28/2015	1530	105,350	410,650	
09/29/2015	1515	29,550	440,200	
09/30/2015	1500	9,340	449,540	

Table 7-7
Confirmation Groundwater Sample Analytical Results—Treated Groundwater Discharge
Former Truck City Site
Skagit County
Mount Vernon, Washington

	MTCA A CUL (ug/L)	BT-PRE-1	BT-POST-1	BT-Post-2	BT-POST-3	BT-POST-4	BT-POST-5	BT-POST-6	BT-POST-7	BT-POST-8
		08/18/2015	08/18/2015	08/21/2015	08/25/2015	08/28/2015	09/02/2015	09/09/2015	09/16/2015	09/29/2015
TPH (ug/L)										
Gasoline-Range Hydrocarbons	800	120	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Diesel-Range Hydrocarbons	500	2,400	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Motor-Oil-Range Hydrocarbons	500	600	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
VOCs (ug/L)										
Benzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	1000	1.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes, Total	1000	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
NOTES: Detected result values are in bold font. Results that exceed MTCA A cleanup levels are shaded. Non-detect results are not evaluated against MTCA A levels. CUL = cleanup level. MTCA A = Model Toxics Control Act Method A. TPH = total petroleum hydrocarbons. U = Result is non-detect. ug/L = micrograms per liter. VOC = volatile organic compound.										

FIGURES





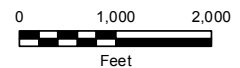
Source: US Geological Survey (1990) 7.5-minute topographic quadrangle: Mount Vernon Section 32, Township 34 North, Range 4 East

**Figure 1-1
Site Location**

Former Truck City Site
Mount Vernon, Washington



This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.





Source: Aerial photograph obtained from Esri
ArcGIS Online; parcels obtained from Skagit County.

Aerial Imagery Date: 2010



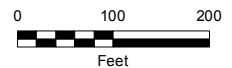
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Legend

-  Site
-  Parcels

Figure 1-2 Site Parcel Map Former Truck City Site Mount Vernon, Washington



Project: 0714.02 Produced By: jmiller Approved By: Print Date: 01/25/2016 Path: X:\0714.03.01 Truck City Engineering Design Report\Projects\Remediation Action Report\Fig_2-1 Site Features and Previous Environmental Investigations.mxd

Figure 2-1
Pre-Remedial Action Site
Features and Previous
Environmental Investigations
 Former Truck City Site
 Mount Vernon, Washington



- Previous Investigation**
- Hand Auger - Surface Sediment Sample
 - Soil Borings
 - ⊕ Active Monitoring Well
 - ⊗ Decommissioned - No Steel Monument
 - ⊗ Decommissioned - Steel Monument
 - Former Soil Excavation Area
 - UST
 - Septic System
 - Parcel Boundary
 - ⊠ Catch Basin

Aerial Imagery Date: 2010

- Notes:
1. Site features were digitized from figures prepared by Materials Testing & Consulting, Inc., Associated Environmental Group, LLC, and Applied Geotechnology, Inc.
 2. The locations of all features are approximate.



Source: Aerial photograph obtained from Esri ArcGIS Online; parcels obtained from Skagit County

This product is for informational purposes and may not have been prepared for, or be suitable for, legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Path: X:\0714.03.01 Truck City Engineering Design Report\Projects\Remediation Action Report\Fig. 2-2 Site Features and Locations of MFA Investigation.mxd
 Approved By: Yen-Vy Van Print Date: 01/25/2016
 Produced By: jmlter Project: 0714.02



Figure 2-2
Pre-Remedial Action Site
Features and Locations
of MFA Investigation
 Former Truck City Site
 Mount Vernon, Washington

- MFA Investigation**
- Monitoring Well
- Previous Investigation**
- Existing Monitoring Well
 - Former Soil Excavation Extent, 1993
 - Decommissioned/Removed Monitoring Well
 - Catch Basin
- Underground Utilities**
- Communications
 - Electric
 - Gas
 - Water
 - UST
 - Septic System
 - Site Boundary
 - Parcel Boundary

Aerial Imagery Date: 2010

- Notes:**
1. Site features were digitized from figures prepared by Materials Testing & Consulting, Inc., Associated Environmental Group, LLC, and Applied Geotechnology, Inc. Utilities and well positions imported from survey by Pacific Geomatic Services in July 2014.
 2. The locations of digitized features are approximate.
 3. UST = underground storage tank



Source: Aerial photograph obtained from Esri ArcGIS Online; parcels obtained from Skagit County; well and utility positions from Pacific Geomatic Services, July 2014.



This product is for informational purposes and may not have been prepared for, or be suitable for, legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Project: 0714.02 Produced By: jmlr Approved By: yvvan Print Date: 01/04/2016 Path: X:\0714.03.01 Truck City Engineering Design Report\Projects\Remediation Action Report\Fig. 5-1 Site Overview.mxd

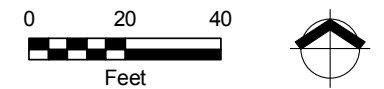


**Figure 5-1
Site Overview -
Remedial Action**
Former Truck City Site
Mount Vernon, Washington

MFA Investigation

- Monitoring Well
- Decommissioned/ Removed Monitoring Well
- Historical Monitoring Well
- Estimated Remedial Action Extent, 2015
- UST
- Parcel Boundary
- Catch Basin

- Notes:
1. Site features were digitized from figures prepared by Materials Testing & Consulting, Inc., Associated Environmental Group, LLC, and Applied Geotechnology, Inc.
 2. The locations of all features are approximate.



Source: Aerial photograph (2010) obtained from Esri ArcGIS Online; parcels obtained from Skagit County.

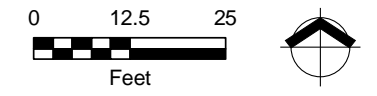
Project: 0714.02 Produced By: jmliller Approved By: Yen-Yu Van Print Date: 01/04/2016 Path: X:\0714.03.01.Truck City Engineering Design Report\Projects\Remediation Action Report\Fig. 5-2 Soil Remedial Action.mxd

**Figure 5-2
Soil Remedial Action –
Samples Locations**

Former Truck City Site
Mount Vernon, Washington

Legend

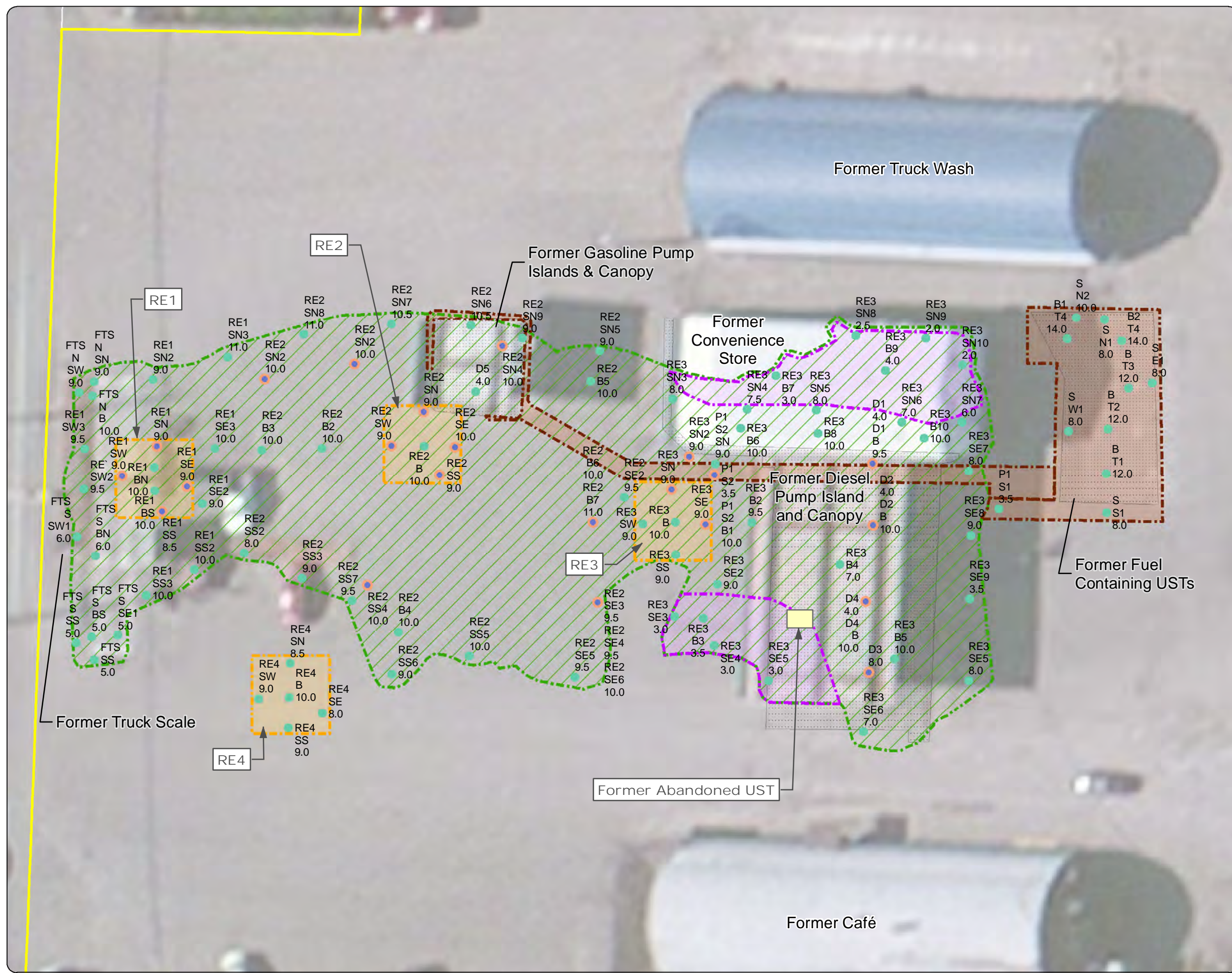
- Site Boundary
 - Sample Location (does not exceed cleanup level)
 - Multiple Samples (final over-excavation samples below cleanup levels)
 - Former Abandoned UST
 - Existing Concrete Pavement
- Remedial Excavation & Bioremediation Extent**
- Residual Initial PCS Excavation Extent
 - Remedial Excavation & Bioremediation Extent (depth approximately 10 feet bgs)
 - Shallow Soil Remedial Excavation Extent (depth < 5 feet bgs)
 - USTs and Product Lines Excavation Extent



- Notes:**
1. All excavation area were backfilled to grade.
 2. The locations of digitized features are approximate and not to be used for design or planning purposes.
 3. bgs = below ground surface
 4. RE = remedial excavation
 5. PCS = petroleum contaminated soil
 6. UST = underground storage tank

Source: Aerial photograph obtained from Bing Maps, 2010; parcels, and utility positions from Pacific Geomatic Services, July 2014

This product is for informational purposes and may not have been prepared for, or be suitable for, legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.








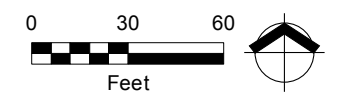
Path: X:\0714_03.01 Truck City Engineering Design Report\Projects\Remediation Action Report\Fig. 7-1 Overview of On-Site Water Treatment and Discharge System.mxd
 Project: 0714.02
 Produced By: Jmiller
 Approved By: Yern-Van
 Print Date: 01/19/2016



Figure 7-1
Overview of On-Site
Water Treatment and
Discharge System
 Former Truck City Site
 Mount Vernon, Washington

Legend

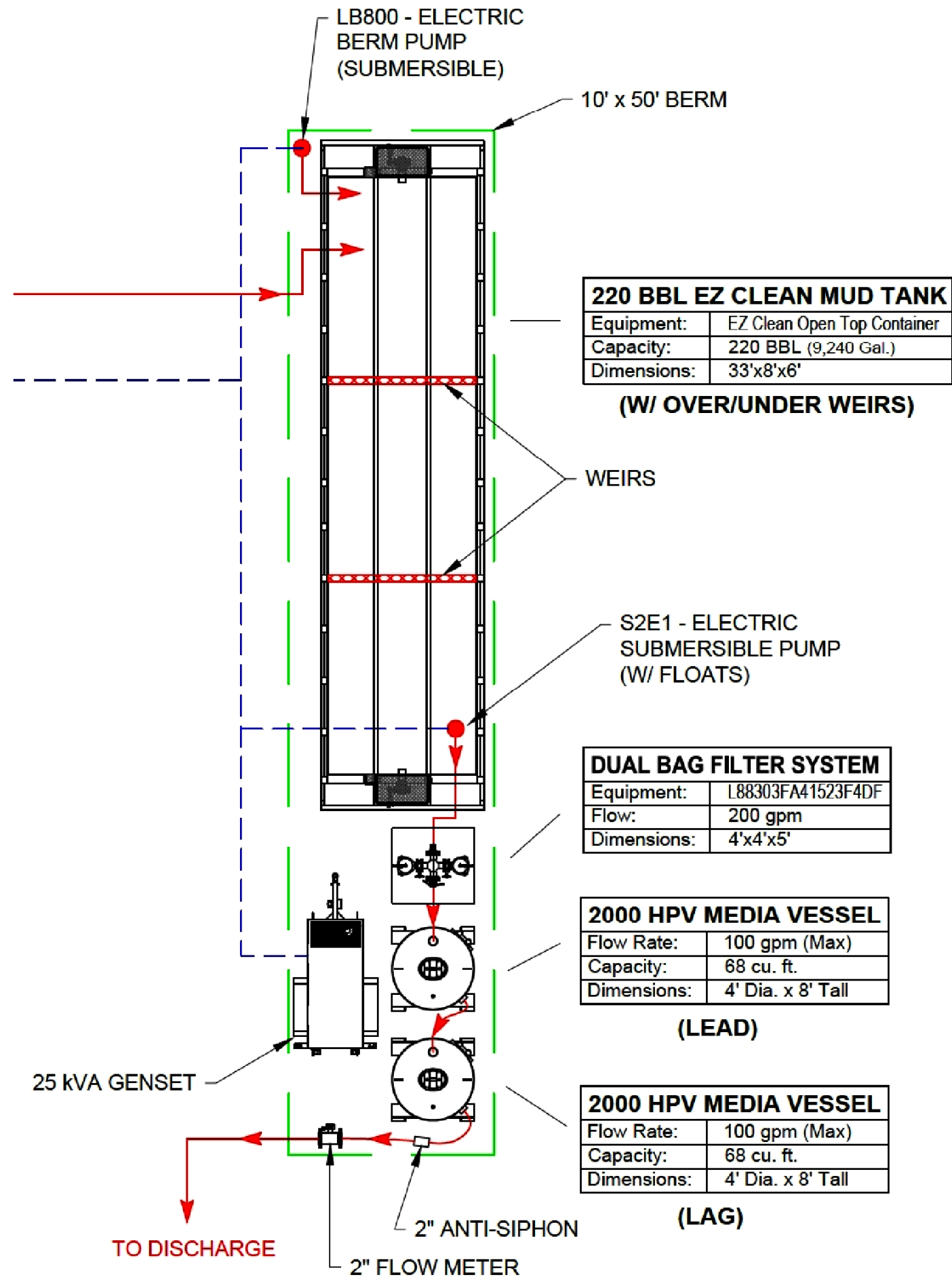
-  Sanitary Sewer Manhole for Treated Water Discharge
-  Treatment System Feature
-  Treatment System Pipe
-  Discharge Pipe
-  Chain-link fence



Notes:
 1. All excavation area were backfilled to grade.
 2. The locations of digitized features are approximate and not to be used for design or planning purposes.
 Source: Aerial photograph obtained from Esri ArcGIS Online.

This product is for informational purposes and may not have been prepared for, or be suitable for, legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

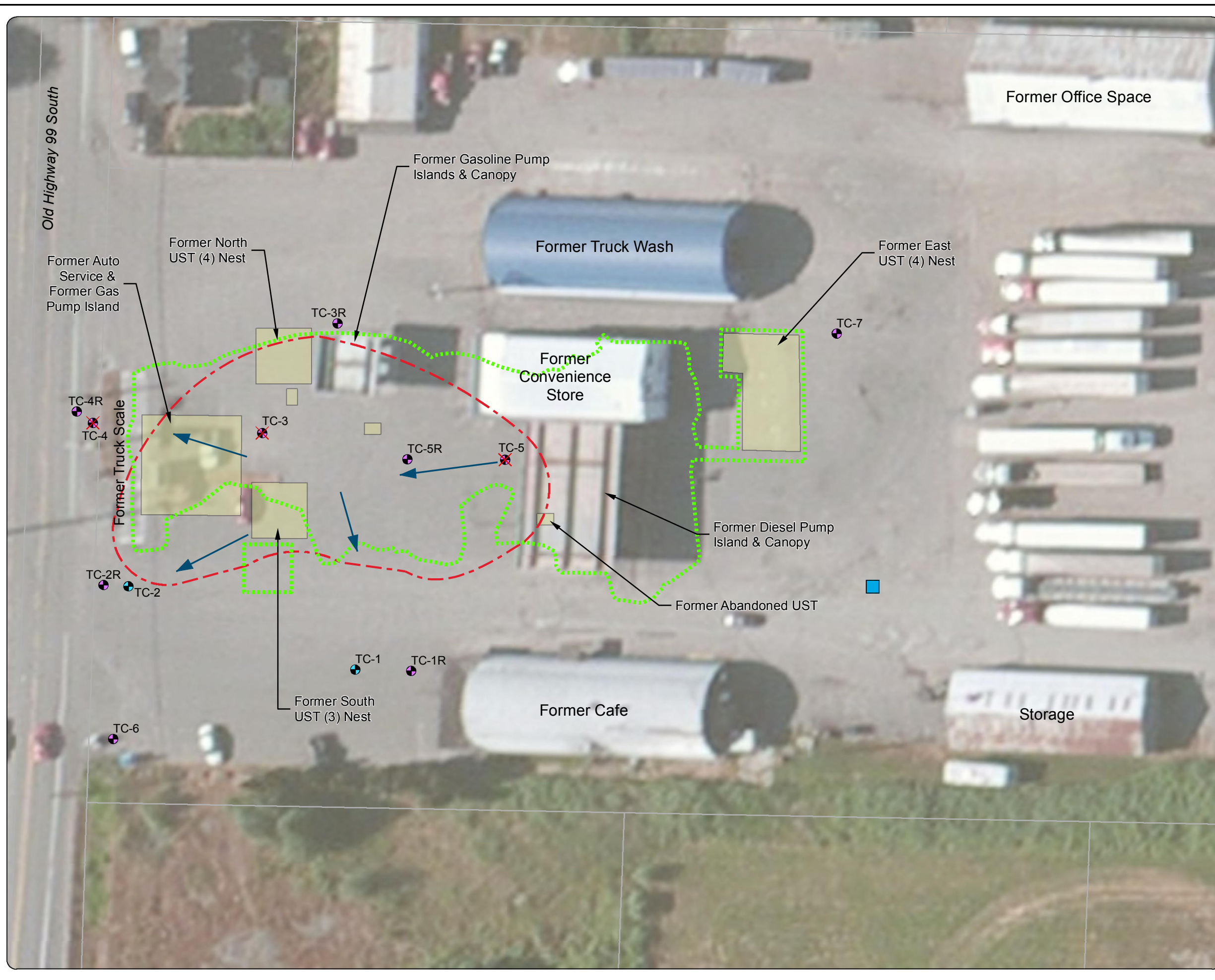




**Figure 7-2
On-Site Water
Treatment System –
Process Flow Diagram**

Former Truck City Site
Mount Vernon, Washington

Project: 0714.02 Produced By: jmlr Approved By: ywan Print Date: 01/04/2016 Path: X:\0714.03.01 Truck City Engineering Design Report\Projects Remediation Action Report\Fig_10-1 Estimated Extent of Groundwater Plume wRA Extent.mxd



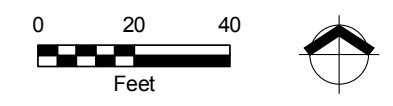
**Figure 10-1
Estimated Extent of
Groundwater Plume**

Former Truck City Site
Mount Vernon, Washington

- MFA Investigation**
- Monitoring Well
 - ✘ Decommissioned/ Removed Monitoring Well
 - Proposed To Be Decommissioned By Removal
 - ➔ Seasonal Groundwater Flow Directions
 - ⬡ Estimated Remedial Action Extent, 2015
 - ⬡ Estimated Extent Of Groundwater Contamination
 - UST
 - Parcel Boundary
 - Catch Basin

Notes:

1. Site features were digitized from figures prepared by Materials Testing & Consulting, Inc., Associated Environmental Group, LLC, and Applied Geotechnology, Inc.
2. The locations of all features are approximate.



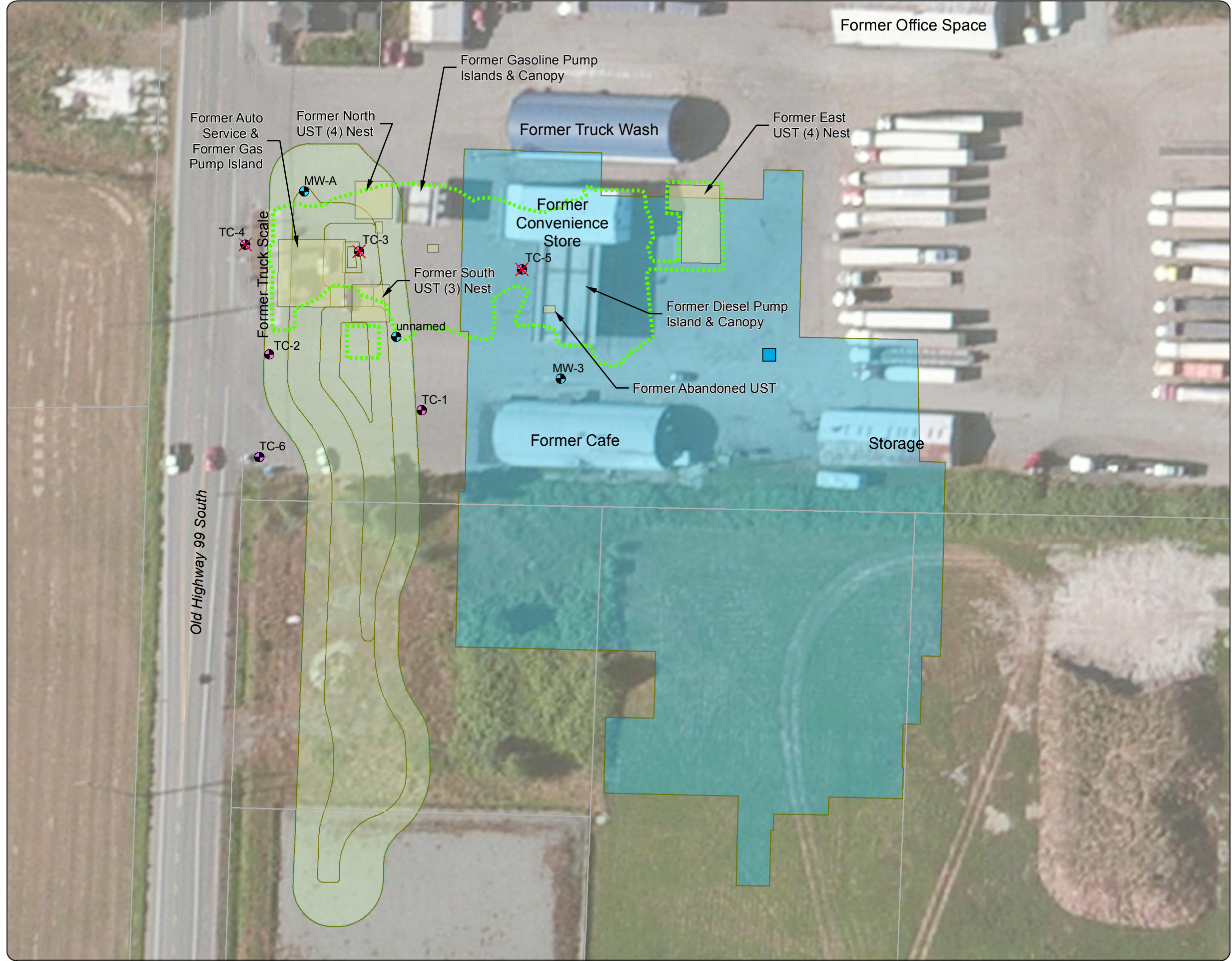
Source: Aerial photograph (2010) obtained from Esri ArcGIS Online; parcels obtained from Skagit County.

This product is for informational purposes and may not have been prepared for, or be suitable for, legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Project: 0714.02 Produced By: jmlr Approved By: ywan Print Date: 01/04/2016 Path: X:\0714.03.01 Truck City Engineering Design Report\Projects\Remediation Action Report\Fig_10-2 Remedial Action and Proposed Skagit County Jail.mxd

**Figure 10-2
Remedial Action and
Proposed Skagit County Jail**

Former Truck City Site
Mount Vernon, Washington

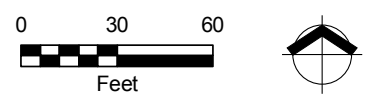


- UST
- Parcel Boundary
- Catch Basin
- Proposed Jail Building Footprint
- Proposed Retention Pond

- MFA Investigation**
- Monitoring Well
 - Decommissioned/ Removed Monitoring Well
 - Historic Monitoring Well
 - Estimated Remedial Action Extent, 2015

Notes:

1. Site features were digitized from figures prepared by Materials Testing & Consulting, Inc., Associated Environmental Group, LLC, and Applied Geotechnology, Inc.
2. The locations of all features are approximate.
3. Retention Pond and Building Footprint from DLR Group.



Source: Aerial photograph (2010) obtained from Esri ArcGIS Online; parcels obtained from Skagit County.



This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Project: 0714.02 Produced By: jmlr Approved By: Print Date: 01/04/2016 Path: X:\0714.03\01 Truck City Engineering Design Report\Projects\Remediation Action Report\Fig. 11-1 Proposed Mont Wells Locations.mxd



**Figure 11-1
Proposed Replacement
Monitoring Wells Locations**

Former Truck City Site
Mount Vernon, Washington

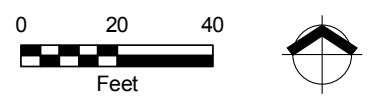
- Proposed Jail Building Footprint
- Proposed Retention Pond
- Estimated Remedial Action Extent, 2015

MFA Investigation

- Existing Monitoring Well
- X

 Decommissioned/ Removed Monitoring Well
- Proposed Replacement Monitoring Well

- Notes:
1. Site features were digitized from figures prepared by Materials Testing & Consulting, Inc., Associated Environmental Group, LLC, and Applied Geotechnology, Inc.
 2. The locations of all features are approximate.



Source: Aerial photograph (2010) obtained from Esri ArcGIS Online; parcels obtained from Skagit County.



This product is for informational purposes and may not have been prepared for, or be suitable for, legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

APPENDIX A

ASBESTOS AND REGULATED UNIVERSAL WASTES
ABATEMENT



T# 223104

PO BOX 94291
SEATTLE, WA 98124
(206) 343-1247
(206) 343-7445 FAX
EPA ID# WAH 000 026 371

BILL OF LADING

No 19116

WO#

- ALASKA
EPA ID # AKR 000 201 897
- OREGON
EPA ID # ORQ 000 026 789
- WASHINGTON - ECOLIGHTS
EPA ID # WAH 000 026 371
- WASHINGTON - TOTAL RECLAIM
EPA ID # WAD 009 482 803

GENERATOR OF WASTE:

Name: OLD TRUCK CITY
 Address: 3228 OLD HWY 99 S
 City/State/Zip: MT Vernon, WA 98274
 EPA I.D. #: _____
 Contact: _____
 Phone: _____

BILLING INFORMATION:

Name: ENVIRONMENTAL WASTE
 Address: PO BOX 2503
 City/State/Zip: MT Vernon, WA 98273
 Contact: _____
 Phone: _____
 PO #: _____

I certify that the material described below was properly identified and prepared for transportation in accordance with all rules and regulations of the federal, state and local governments in whose jurisdictions the materials originated, passed through, or are recycled in.

Generator Signature: [Signature] Print Name: Jimmy MacEwen Month: 8 Day: 6 Year: 15

I certify that the material described below was tendered to me for transport in accordance with all rules and regulations.
 Transporter Signature: [Signature] Company: TAX Month: 8 Day: 6 Year: 15

MATERIAL	AMOUNT RECEIVED	AMOUNT PROCESSED	UNIT PRICE	EXTENDED PRICE	INITIALS
STRAIGHT LAMPS 10ft 8ft 4ft	23# 21# 63#				
CIRCULAR/U-SHAPED					
COMPACTS (CFLS)	9#				
CRUSHED LAMPS *					
ACCIDENTLY BROKEN LAMPS					
HID LAMPS	10#				
FIXTURES					
OTHER:					
PCBS	284#				
BATTERIES					
NON-PCB BALLASTS	264#				
PCB BALLASTS (NOT AK) *	284#				
OFF SPEC FEE / LABOR					
TRANSPORTATION					

Notes: 0550 PCB
0556 NON PCB
08'
010'
024'
03 SM. Box

WO 36686
1210-1238

CASH CREDIT CARD ON ACCOUNT TOTAL \$ _____ PAID INITIALS _____

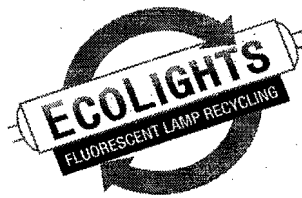
I certify that the material described above was received and consolidated for shipment to EcoLights Northwest for recycling on the date indicated.
 Signature of Authorized Agent: _____ Print Name: _____ Company: _____ Date Received: Month: _____ Day: _____ Year: _____

CERTIFICATE OF RECYCLING

By accepting the waste described above, EcoLights certifies to the waste generator that the transportation, storage and processing methods employed are in accordance with all applicable federal, state and local laws.
 Signature of Authorized Agent: [Signature] Print Name: Philip Nelson Date Received: Month: 8 Day: 7 Year: 15
 EcoLights Northwest, LLC Total Reclaim, Inc.

ECOLIGHTS NORTHWEST, LLC

PO BOX 94291
SEATTLE, WA 98124



Invoice 156722
Invoice Date 08/18/2015

(206) 343-7443

Bill To:

ENVIRONMENTAL ABATEMENT SERVIC
PO BOX 2503
MT VERNON, WA 98273

Customer #	Ship Via	F.O.B.	Terms		
02ENVABS-001			NET 30 DAYS		
Quantity	Item Description		Unit of Measure	Unit Price	Extended Price
	BOL # / Ticket #	Purchase Order #	Generator		Taxable
OLD TRUCK CITY SITE 3228 OLD HWY 99 S RD, MT VERNON WA					
107.00	MIXED FLUORESCENT BULBS 19116 / 223104		LBS	0.5500	58.85 N
9.00	COMPACT FLUORES BULBS LB 19116 / 223104		LBS	2.7500	24.75 N
10.00	H.I.D. BULBS/LB 19116 / 223104		LBS	2.2500	22.50 N
264.00	NON PCB BALLASTS 19116 / 223104		LBS	0.0000	0.00 N
284.00	PCB NON-LEAKING BALLASTS 19116 / 223104		LBS	0.8000	227.20 N
OLD TRUCK CITY SITE 3228 OLD HWY 99 S RD, MT VERNON WA					
1.00	HAZ WASTE MANI- LABEL FEE 36686		EACH	50.0000	50.00 N
120.00	SURCHARGE - MILES DRIVEN 36686		MILES	0.3600	43.20 N
1.00	TRANSPORTATION 36686		EACH	150.0000	150.00 N

Thank you for using Ecolights Northwest for your Recycling Services.

Non-Taxable Subtotal	576.50
Taxable Subtotal	0.00
Tax	0.00
Total Invoice	576.50





SUBMITTAL No. 6

TO Maul Foster Alongi
 ATTN **Yen Vy Van**
 PHONE 206.858.7618

DATE 8/11/15
 PROJECT Truck City
 PROJECT NO SKG-15-1427
 NUMBER OF PAGES 2

FAX
 FROM **Darren Ness**
 CC
 SEND VIA Electronic Mail

QTY	DESCRIPTION	ORIGINAL	COPY	FOR APPROVAL	INFORMATION & USE	COMMENT & REVIEW	REQUEST FOR SERVICE	PER YOUR REQUEST
1	Asbestos Completion Letter		X		X			

NOTES

For your file, enclosed is the Asbestos Completion Letter from Environmental Abatement Services.

Document1

The documents accompanying this telecopy transmission contain confidential information belonging to the sender, which is legally privileged. The information is intended only for the use of the individual(s) or entity named above. If you are not the intended recipient, you are hereby notified than any disclosure, copying, distribution or the taking of any action in reliance on the contents of this telecopied information is strictly prohibited. If you have received this telecopy in error, please immediately notify us by telephone at the number listed below to arrange for return of the original documents to us. Thank you.

Environmental Abatement Services Inc

8/7/2015

Darren Ness
Wyser Construction, Inc

Asbestos Abatement Project Completed at:
**The Food Mart, the CB Shop, the Moose Lodge/Café, and the Truck Wash
at the old Truck City site at 3228 Old Hwy 99 S Rd, Mount Vernon, WA**

Per the Asbestos Survey conducted by **Peter Snider**, (certification #147486), EAS (contractor #ENVIRAS014RA, asbestos certification #01279) removed asbestos containing material from the above address specifically, **2618 SF of sheet vinyl and mastic, 8 SF of asbestos paper, 900 SF of VAT and mastic, 70 LF window putty, 732 SF of roofing and sealant, 1 cubic yard of vermiculite, and 300 SF of CAB.** According to local state and federal regulations, materials containing more than one percent (1%) asbestos must be removed prior to any remodel, renovation or demolition activity.

The material was removed by Certified Asbestos Workers under the direct supervision of a Certified Asbestos Supervisor in accordance with all applicable local, state and federal regulations on **8/7/2015**. The materials collected were packaged for final disposal in compliance with all applicable federal, state and local laws.

If materials are identified less than 1% asbestos on the survey work practices and worker protection must be in compliance with WAC 2962-62-077. Additional information is available with directive WRD 23.30 available on the Washington State Department of Labor and Industries website.

The building surveyed, the materials found to contain more than 1% asbestos removed and properly disposed of in accordance with all applicable regulations. A copy of the survey with laboratory report, and this letter, may be used as documentation of the completion of asbestos identification and removal. Any planned remodeling, renovation, or demolition activities should be approved to proceed.

Sincerely,



CATHERINE D MARQUEZ
OWNER

APPENDIX B

DECOMMISSIONED-WELL DOCUMENTATION





SUBMITTAL No. 6

TO Maul Foster Alongi
 ATTN **Yen Vy Van**
 PHONE 206.858.7618

DATE 8/13/15
 PROJECT Truck City
 PROJECT NO SKG-15-1427
 NUMBER OF PAGES 4

FAX
 FROM **Darren Ness**
 CC
 SEND VIA Electronic Mail

QTY	DESCRIPTION	ORIGINAL	COPY	FOR APPROVAL	INFORMATION & USE	COMMENT & REVIEW	REQUEST FOR SERVICE	PER YOUR REQUEST
1	Well Decommission Logs		X		X			

NOTES

Enclosed for your file are the well decommission logs provided by Holt Services.

Document1

The documents accompanying this telecopy transmission contain confidential information belonging to the sender, which is legally privileged. The information is intended only for the use of the individual(s) or entity named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this telecopied information is strictly prohibited. If you have received this telecopy in error, please immediately notify us by telephone at the number listed below to arrange for return of the original documents to us. Thank you.

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT

Notice of Intent No. AE 32881

Construction/Decommission

Construction
 Decommission ORIGINAL INSTALLATION Notice
of Intent Number RE 10182

Type of Well

Resource Protection
 Geotechnical Soil Boring

Consulting Firm Maul Foster Alongi

Property Owner C/o Wyser const. / Truck City St.
Site Address 3216 Old Hwy 99 S.
City Mount Vernon County Skagit

Unique Ecology Well ID
Tag No. TC-3 / BIP 878

Location 1/4 SW 1/4 SW Sec 32 Twn 34N R 4 or WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards

Lat/Long (s,t,r still Required) Lat Deg _____ Lat Min/Sec _____
Long Deg _____ Long Min/Sec _____

Materials used and the information reported above are true to my best knowledge and belief

Driller Trainee Name (Print) Dale Smith
Driller/Trainee Signature Dale Smith
Driller/Trainee License No. 1229

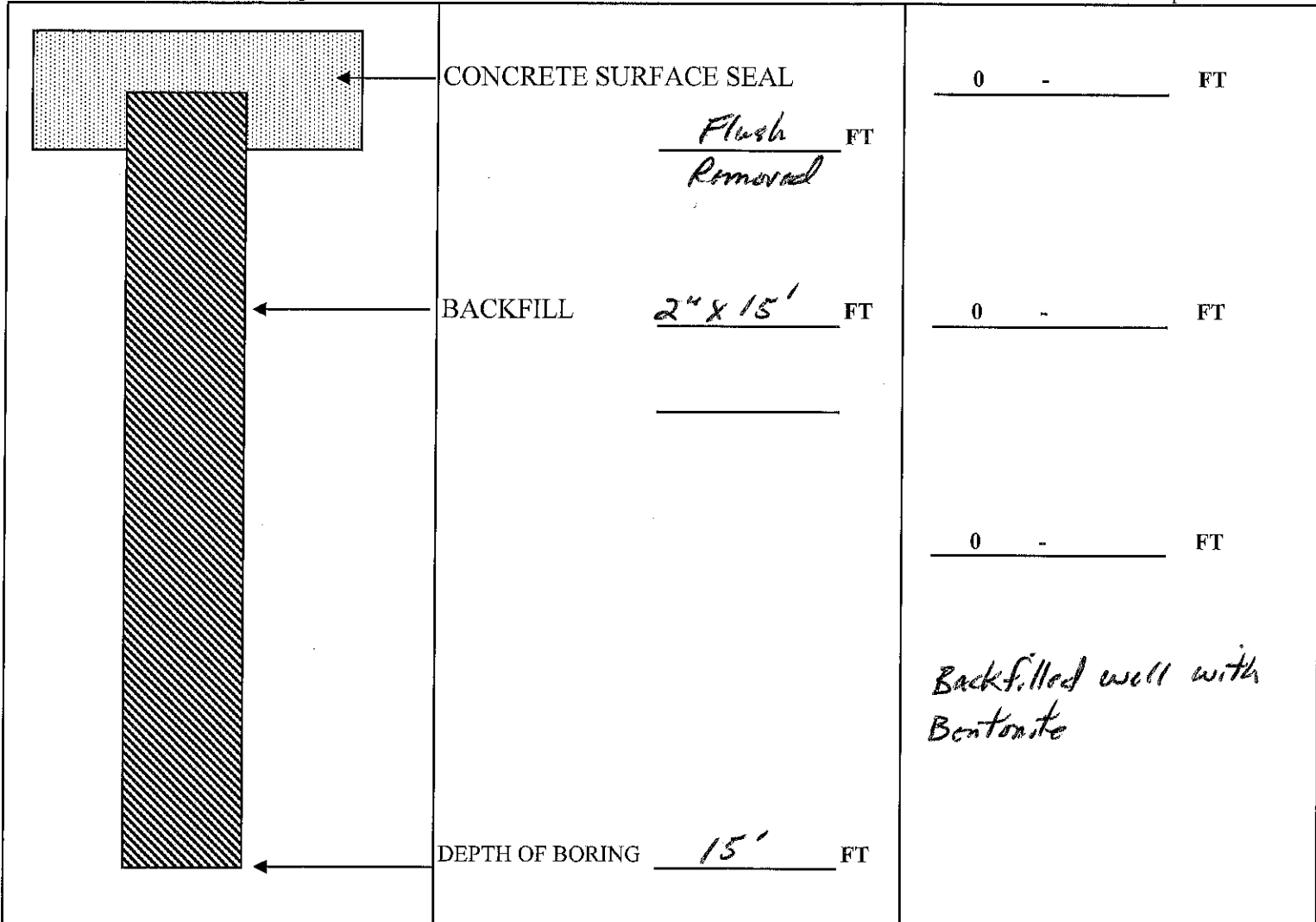
Tax Parcel No. _____
Cased or Uncased Diameter _____ Static Level _____
Work/Decommission Start Date 7-16-15
Work/Decommission Completed Date 7-16-15

If trainee, licensed drillers'
Signature and License No. _____

Construction/Design

Well Data

Formation Description



Scale 1" = _____

Page 1 of 1

ECY 050-12 (Rev=v 2/01)

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT

Notice of Intent No. AE32881

Construction/Decommission

Construction
 Decommission ORIGINAL INSTALLATION Notice
of Intent Number RE10182

Type of Well

Resource Protection
 Geotechnical Soil Boring

Consulting Firm Moul Foster Alongi

Property Owner C/O Wyser Const / Truck City Stg
Site Address 3216 Old Hwy 99 S.
City Mount Vernon County Skagit

Unique Ecology Well ID
Tag No. TC-4 / BIP 879

Location 1/4 SW 1/4 SW Sec 32 Twn 34N R 4 or EW
WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards

Lat/Long (s,t,r Lat Deg _____ Lat Min/Sec _____
still Required) Long Deg _____ Long Min/Sec _____

Materials used and the information reported above are true to my best knowledge and belief

Tax Parcel No. _____

Driller Trainee Name (Print) Dale Smith
Driller/Trainee Signature Dale Smith
Driller/Trainee License No. 1229

Cased or Uncased Diameter _____ Static Level _____

Work/Decommission Start Date 7-16-15

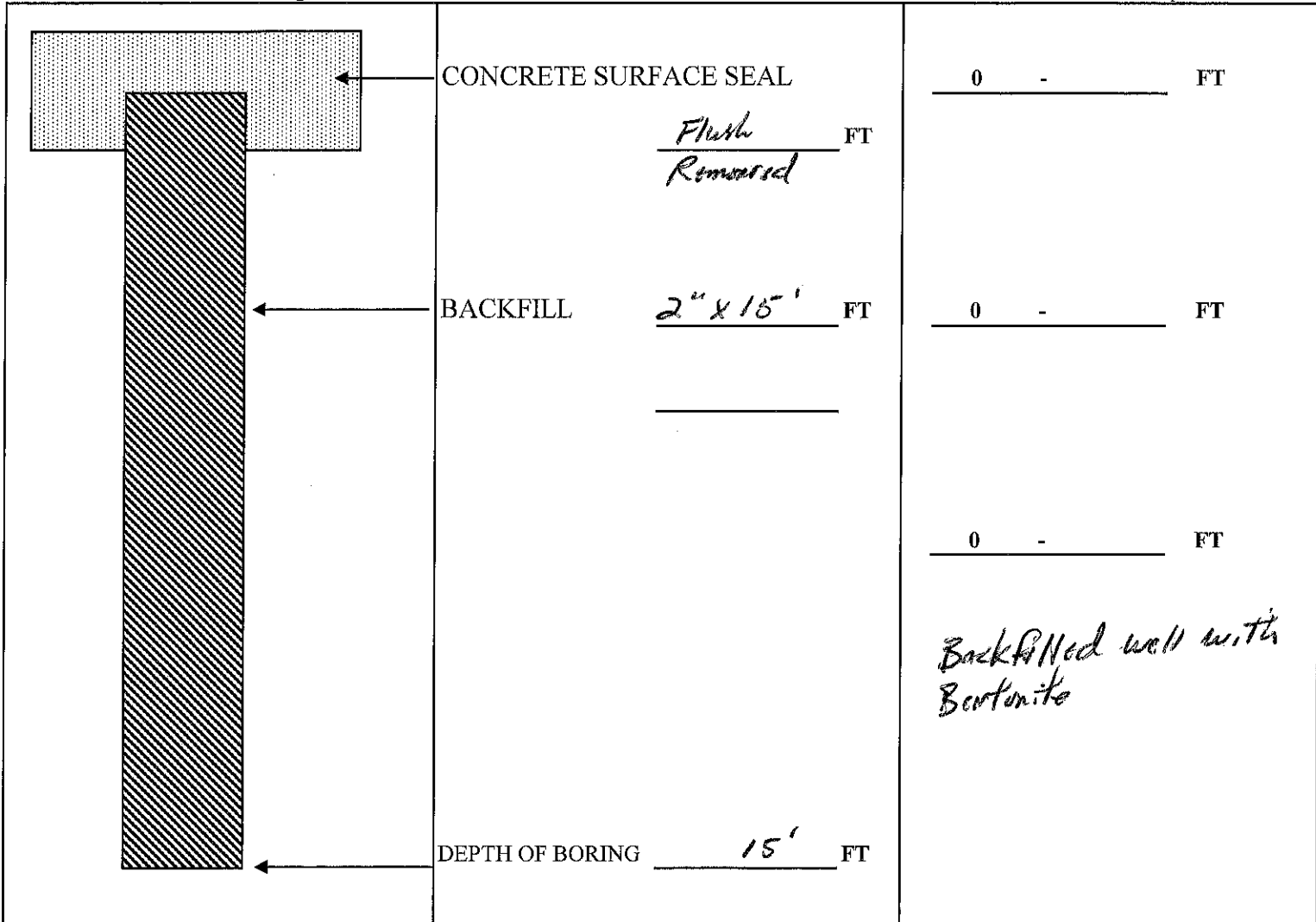
If trainee, licesned drillers' _____
Signature and License No. _____

Work/Decommission Completed Date 7-16-15

Construction/Design

Well Data

Formation Description



Scale 1" = _____

Page 1 of 1

ECY 050-12 (Rev=v 2/01)

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT

Notice of Intent No. AE 32881

Construction/Decommission

Construction
 Decommission *ORIGINAL INSTALLATION Notice*
of Intent Number RE 10182

Type of Well

Resource Protection
 Geotechnical Soil Boring

Consulting Firm Maul Foster Alongi

Property Owner C/O Wyser Coast. Hwy City St.
Site Address 3216 Old Hwy 99S
City Mount Vernon County Skagit

Unique Ecology Well ID
Tag No. TC-5/BIP-880

Location 1/4 SW 1/4 SW Sec 32 Twn 34N R 4 or WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards

Lat/Long (s,t,r Lat Deg _____ Lat Min/Sec _____
still Required) Long Deg _____ Long Min/Sec _____

Materials used and the information reported above are true to my best knowledge and belief

Tax Parcel No. _____

Driller Trainee Name (Print) Dale Smith
Driller/Trainee Signature Dale Smith
Driller/Trainee License No. 1229

Cased or Uncased Diameter _____ Static Level _____

Work/Decommission Start Date 7-16-15

If trainee, licesned drillers' _____
Signature and License No. _____

Work/Decommission Completed Date 7-16-15

Construction/Design

Well Data

Formation Description

	CONCRETE SURFACE SEAL _____ FT	0 - _____ FT
	BACKFILL <u>Flush Removed</u> <u>2" x 15" well</u> _____ FT	0 - _____ FT
	DEPTH OF BORING <u>15'</u> FT	0 - _____ FT Backfilled well with Bentonite

Scale 1" = _____

Page 1 of 1

ECY 050-12 (Rev=v 2/01)

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT

Notice of Intent No. AE 32881

Construction/Decommission

Construction
 Decommission ORIGINAL INSTALLATION Notice
of Intent Number RE 10182

Type of Well

Resource Protection
 Geotechnical Soil Boring

Consulting Firm Maul Foster Alongi

Property Owner C/o Wyser const. / Truck City St.
Site Address 3216 Old Hwy 99 S.
City Mount Vernon County Skagit

Unique Ecology Well ID
Tag No. TC-3 / BIP 878

Location 1/4 SW 1/4 SW Sec 32 Twn 34N R 4 or WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards

Lat/Long (s,t,r still Required) Lat Deg _____ Lat Min/Sec _____
Long Deg _____ Long Min/Sec _____

Materials used and the information reported above are true to my best knowledge and belief

Driller Trainee Name (Print) Dale Smith
Driller/Trainee Signature Dale Smith
Driller/Trainee License No. 1229

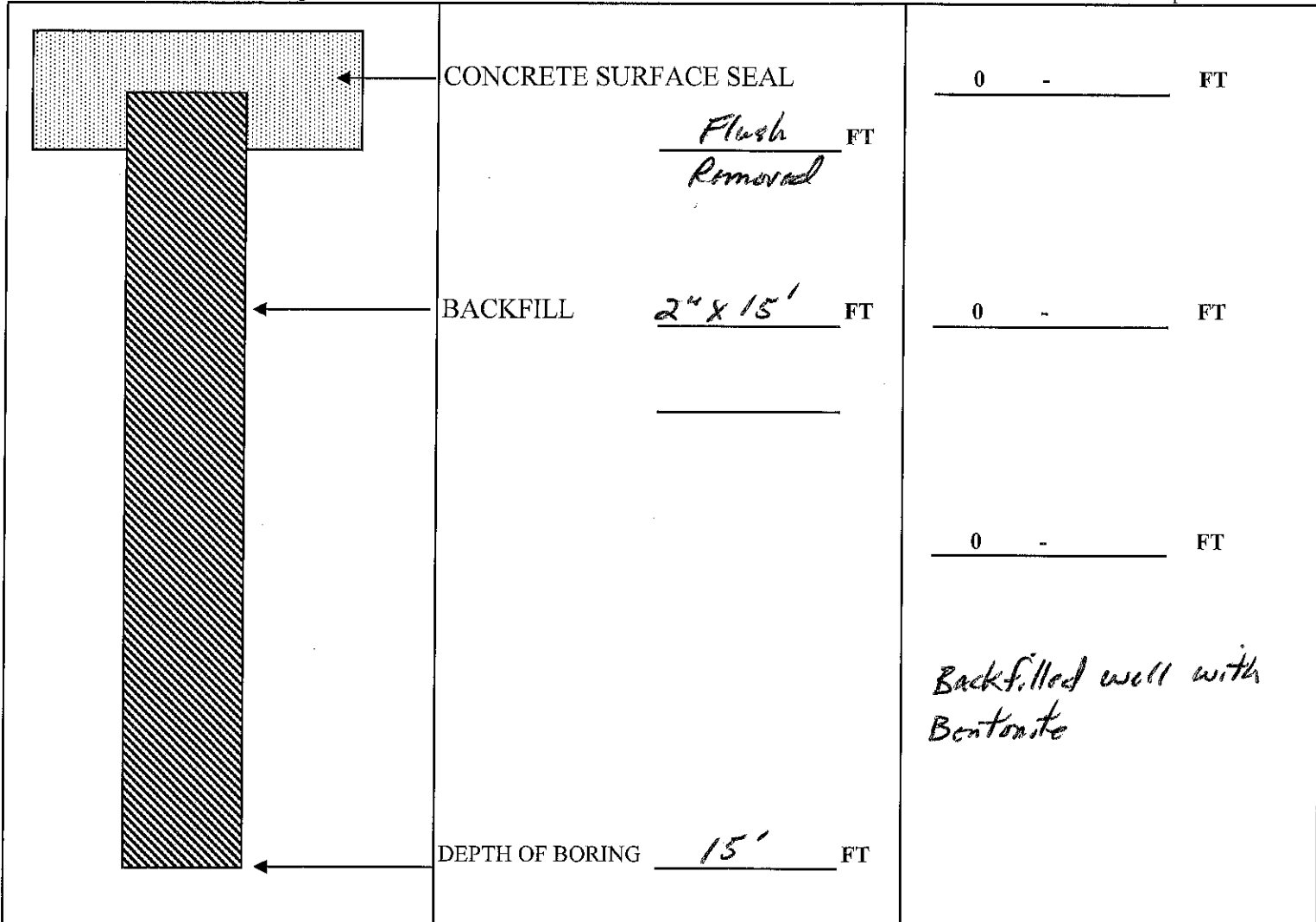
Tax Parcel No. _____
Cased or Uncased Diameter _____ Static Level _____
Work/Decommission Start Date 7-16-15
Work/Decommission Completed Date 7-16-15

If trainee, licensed drillers'
Signature and License No. _____

Construction/Design

Well Data

Formation Description



Scale 1" = _____

Page 1 of 1

ECY 050-12 (Rev=v 2/01)

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT

Notice of Intent No. AE32881

Construction/Decommission

Construction
 Decommission ORIGINAL INSTALLATION Notice
of Intent Number RE10182

Type of Well

Resource Protection
 Geotechnical Soil Boring

Consulting Firm Moul Foster Alongi

Property Owner C/O Wyser Const / Truck City stop
Site Address 3216 Old Hwy 99 S.
City Mount Vernon County Skagit

Unique Ecology Well ID
Tag No. TC-4 / BIP 879

Location 1/4 SW 1/4 SW Sec 32 Twn 34N R 4 or EW
WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards

Lat/Long (s,t,r Lat Deg _____ Lat Min/Sec _____
still Required) Long Deg _____ Long Min/Sec _____

Materials used and the information reported above are true to my best knowledge and belief

Tax Parcel No. _____

Driller Trainee Name (Print) Dale Smith
Driller/Trainee Signature Dale Smith
Driller/Trainee License No. 1229

Cased or Uncased Diameter _____ Static Level _____

Work/Decommission Start Date 7-16-15

If trainee, licesned drillers' _____
Signature and License No. _____

Work/Decommission Completed Date 7-16-15

Construction/Design

Well Data

Formation Description

	<p>CONCRETE SURFACE SEAL</p> <p><u>Flush</u> FT <u>Reversed</u></p> <p>BACKFILL <u>2" x 15'</u> FT</p> <p>DEPTH OF BORING <u>15'</u> FT</p>	<p><u>0</u> - <u> </u> FT</p> <p><u>0</u> - <u> </u> FT</p> <p><u>0</u> - <u> </u> FT</p> <p><i>Backfilled well with Bentonite</i></p>
--	---	---

Scale 1" = _____

Page 1 of 1

ECY 050-12 (Rev=v 2/01)

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

CURRENT

Notice of Intent No. AE 32881

Construction/Decommission

Construction
 Decommission *ORIGINAL INSTALLATION Notice*
of Intent Number RE 10182

Type of Well

Resource Protection
 Geotechnical Soil Boring

Consulting Firm Maul Foster Alongi

Property Owner C/O Wyser Coast. Hwy City St.
Site Address 3216 Old Hwy 99S
City Mount Vernon County Skagit

Unique Ecology Well ID
Tag No. TC-5/BIP-880

Location 1/4 SW 1/4 SW Sec 32 Twn 34N R 4 or WWM

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards

Lat/Long (s,t,r Lat Deg _____ Lat Min/Sec _____
still Required) Long Deg _____ Long Min/Sec _____

Materials used and the information reported above are true to my best knowledge and belief

Driller Trainee Name (Print) Dale Smith
Driller/Trainee Signature Dale Smith
Driller/Trainee License No. 1229

Tax Parcel No. _____

Cased or Uncased Diameter _____ Static Level _____

Work/Decommission Start Date 7-16-15

If trainee, licesned drillers' _____
Signature and License No. _____

Work/Decommission Completed Date 7-16-15

Construction/Design

Well Data

Formation Description

	<p>CONCRETE SURFACE SEAL</p> <p><u>Flush Removed</u> FT</p> <p>BACKFILL</p> <p><u>2" x 15" well</u> FT</p> <p>DEPTH OF BORING <u>15'</u> FT</p>	<p><u>0 -</u> FT</p> <p><u>0 -</u> FT</p> <p><u>0 -</u> FT</p> <p><i>Backfilled well with Bentonite</i></p>
--	---	---

Scale 1" = _____

Page 1 of 1

APPENDIX C

SITE PHOTOGRAPHS





MAUL
FOSTER
ALONGI

SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

1

Description

Decommissioning and removal of one 500-gallon underground storage tank (UST) and one 15,000-gallon UST, looking north. Photo taken on 8/6/2015.



Photo No.

2

Description

UST excavation pit, looking east. Photo taken on 8/6/2015.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

3

Description

UST excavation and dewatering, looking west.
Photo taken on 8/7/2015.



Photo No.

4

Description

Excavation of fuel product line, looking west. Photo taken on 8/12/2015.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

5

Description

Excavation of fuel product line and former dispenser islands, looking south. Photo taken on 8/12/2015.



Photo No.

6

Description

Former truck scale and Baker Tanks in the background, looking south. Photo taken on 8/12/2015.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

7

Description

Overexcavation of product line area to the southeast of the former convenience store, looking west. Photo taken on 8/18/2015.

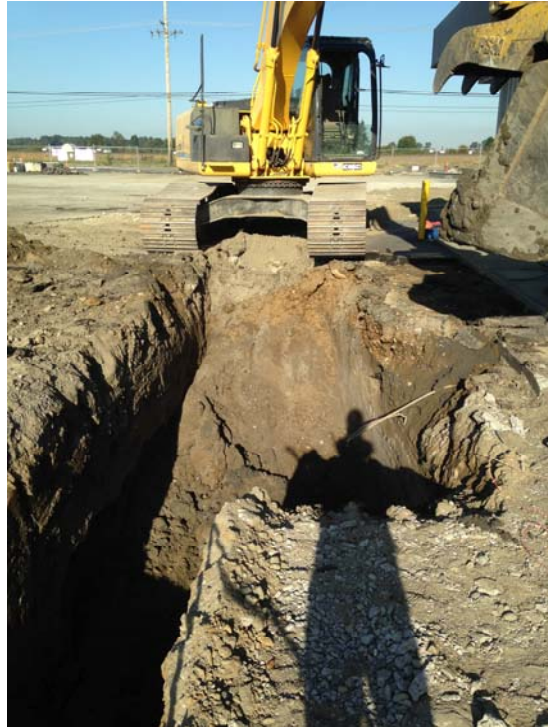


Photo No.

8

Description

South dispenser island excavation showing location of abandoned UST, looking north. Photo taken on 8/20/2015.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

9

Description

Granular activated carbon filters and sediment filters, looking south. Photo taken on 8/21/2015.



Photo No.

10

Description

Water-treatment system, including two 21,000-gallon Baker Tanks, sediment filters, granular activated carbon filters, looking south. Photo taken on 8/21/2015.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

11

Description

Overexcavation of RE1,
looking north. Photo
taken on 8/21/2015.



Photo No.

12

Description

Backfilled former UST
excavation area, looking
north. Photo taken on
8/21/2015.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

13

Description

Excavation of abandoned 650-gallon UST, looking east. Photo taken on 8/25/2015.



Photo No.

14

Description

Decommissioned, abandoned 650-gallon UST. Photo taken on 8/25/2015.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

15

Description

Interface between historical backfill material and native soil in the western excavation area, looking northwest. Photo taken on 8/28/2015.



Photo No.

16

Description

Extent of western excavation area, looking west.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

17

Description

Staining observed along eastern wall of western excavation, looking east. Photo taken on 9/3/2015.



Photo No.

18

Description

Southern excavation limits of western excavation. Photo taken on 9/4/2015.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

19

Description

Stained soil south of the former convenience store, looking east. Photo taken on 9/4/2015.



Photo No.

20

Description

Northern boundary of western excavation. Photo taken on 9/8/2015.



SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

21

Description

Dewatered excavation and initial backfilling of imported clean fill material in excavation area near former truck scale. Photo taken on 9/8/2015.



Photo No.

22

Description

Stained soil south of the former convenience store, looking east. Photo taken on 9/10/2015.



SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

23

Description

Shewn in water to the south of the former convenience store, looking north. Photo taken on 9/14/2015.



Photo No.

24

Description

Preparation of ORCa application to imported clean backfill, looking north. Photo taken on 9/16/2015.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

25

Description

ORCa application, prior to mixing with imported clean backfill, looking east. Photo taken on 9/11/2015.



Photo No.

26

Description

ORCa application and mixing with imported clean backfill, looking north. Photo taken on 9/10/2015.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

27

Description

Demolition of former convenience store, looking north. Photo taken on 9/24/2015.



Photo No.

28

Description

Excavation extent of eastern excavation, looking east. Photo taken on 9/29/2015.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

29

Description

Remedial excavation
backfilled to grade,
looking north toward the
former Truck Wash.
Photo taken on
10/12/2015.



Photo No.

30

Description

Remedial excavation
backfilled to grade,
looking west. Photo
taken on 10/12/2015.





SITE PHOTOGRAPHS

Project Name: Truck City
Project Number: 0714.03.01
Location: 3216 Old Highway 99 South,
Mount Vernon, Washington

Photo No.

31

Description

Remedial excavation
backfilled to grade,
looking west. Photo
taken on 10/12/2015.



APPENDIX D

FIELD NOTES



9/30/15 - Wednesday

0714.03.01-2A

Conditions: clear & Sunny
(continuation of August 2015 - September 2015
Truck City field notes)

Time

- | | |
|------|---|
| 1200 | Geotest on site |
| 1205 | Garbage/debris truck on site |
| 1230 | Proctor tests at approx. 5 ft depth along the northern wall of the excavation read between 80 - 83.5. Additional compaction was done on the area to reach readings above 85 |
| 1305 | FBI courier at site for sample pick-up |
| 1308 | Proctor tests to south of former convenience store all above 85 at 6.5 depth |
| 1320 | Truck & trailer → PCS |
| 1330 | Northern wall of western excavation was re-tested by Geotest after additional compaction. Results were determined at 85 > 86 with the proctor |
| 1400 | Geotest off site
Truck & trailer → PCS |
| 1405 | Wyser continued backfilling ^{northern} area of western excavation |
| 1500 | Wyser & CRW off site |

Monday - 10/5/15

074.03.01-2A

Conditions: clear and sunny

- 0810 CRU arrives on site
Mitch of Wyser on site, 18-55 lb bags of ORCA delivered
- 915 Begin applying ORC to backfilled soil
Truck & trailer → PCS
- 930 Truck & trailer
- 935 Vac truck on site for clean up of Baker tanks
- 1000 Mix ORCA with clean backfill to 6.5 ft bags within area to the south of the former convenience store, as well as areas below foundation of former convenience store, no ORCA left on site
- 1145 1 truck & trailer → PCS
- 1200 1 truck & trailer → PCS
→ last truck of PCS removed from site
Wyser continues to break up concrete footings and the convenience store foundation for disposal
- 1210 Wyser compacts ORCA mixed surface with roller equipment
- 1320 1 Truck & trailer → concrete/asphalt off site
- 1430 1 truck & trailer → clean backfill on site/remove
- 1452 1 truck & trailer → clean backfill onsite concrete
- 1530 CRU off site → remove concrete off site from site

10/6/15 - Tuesday

0714.03.01-2A

Conditions: cloudy and cool, low 50s

830 - crew arrives on site, Wyser already on site

1 truck + trailer → concrete pick up

→ import sand drop off

Mike of Wyser indicated prior to my arrival:

32 picked up concrete

1 drop off sand

856 1 truck + trailer → drop off import sand
→ pick up concrete

930 1 truck? trailer → drop import fill

1010 1 truck? trailer → drop import fill
→ pick up concrete

*start meter

reading = ~~23497~~

1030 1 truck? trailer → import sand drop

1040 Spread imported sand as a 1-1.5 ft lift
in the excavation area to the south of
the former convenience store. Wyser
Using a roller to compact sand in
excavation after each lift

1125 1 truck? trailer → import drop of sand

1140 1 truck? trailer → imported sand

Wyser disperses clean fill in south east
corner of convenience store to 34 feet
below grade.

1215 2 truck + trailer → deposit imported sand

1230 As of 1230, two 1-1.5 ft lifts were
laid and compacted in the southeast
corner of the excavation to the south
of the former convenience store, ~ 4 ft below
grade

1304 1 truck? trailer → deposit import sand

1315 1 truck? trailer → deposit import sand

1330 Geotest arrives on site

1350 4 ft lift area had 2 tests performed
one at 95, second at 96

1400 2 truck? trailer → import sand

1405 Geotest off site

1500 1 truck? trailer → import sand

1505 1 truck? trailer → import sand

10/12/15: Monday

0714.03.01-2A

1315 CRW on site

Wyser sweeping site

1320 CRW begin inspecting site for closeout checklist

- site ~~is~~ has been backfilled to grade with approved imported sand and existing clean overburden soil
- all garbage created from site activities has been removed from the site
- the property has been swept on paved surfaces ~~and~~
- signage has been removed from fencing
- stormwater controls have been removed
- an excavator, roller, and sweeper remain at site and will be removed by end of day on Tuesday, Oct. 13th
- all fencing will be removed from site by end of the day Tues. Oct. 13
- sanitary bucket will be removed by COB on Tues, Oct, 13
- cement barriers along Old Highway 99 will remain onsite, unless removed by the County, barriers were onsite prior to Wyser's arrival
- all 55-gallon drums storing IDW from previous investigation work ~~are~~ were removed from site
- area of excavation has been compacted with roller and smoothed-out to be in grade with the surrounding ground surface
- ~~point~~ monitoring well monument broken by heavy machinery rolling over it
 - located to the west of the moose lodge restaurant

confirmed by Mike R. of Wyser @ 1330

1420 - Property owner onsite to inspect buildings

1440 - CRW offsite

Truck City,
Mt. Vernon, WA

0714.03.01

Tasks 03:02A

August 2015 -
September 2015



Rite in the Rain®

ALL-WEATHER

FIELD

Nº 353-MX

MAUL FOSTER ALONGI, INC.

0714.03.E14-03

Truck City,
Mt. Vernon
UST Excavation

Thursday

Date: 8/16/15

Conditions: Cloudy with light rain

655: Carolyn Wise of MFA onsite

658: CRIO of MFA meet with Mike, David,
Darren, of Wyser Construction
to plan for day

705: Hang poster on fence, Dale Myers on site

710: Begin excavating overburden soil

overburden soil: brown, med-fine grain,
native? laminated, sa grains, some
gravel, no odor, moist-dry
piping, coarse, r-sa gravel along
piping, gray colored

Native fill = blue gray, ps med. sand
sa-sr grain, no odor
groundwater at ~10 feet during
time of excavation

830: Removed tank 1 from excavation

Dimensions 15'x8', no pitting or corrosion
observed

845: Removed tank 2 from excavation

Dimensions: 15'x8', no pitting or corrosion
observed

900: Annette of DOE onsite

Ademadu

Soil Conditions

* → ^{native} interface of backfill and native at 5 ft bgs.
throughout the excavation, capillary
fringe observed at approximately
Below 8 feet bgs throughout
excavation

No strong odors observed during
tanks 1 or 2's removal

8/6/15

909 - Collect ^{PID} sample base of tank 1
~~2~~ (formerly contained gasoline)
PID = 0.0 ppm

915 - Collect ^{PID} sample base of tank 2
PID = 3.7 ppm
(formerly containing gasoline)

930 - Mar Vac onsite to clean out fuel lines

945 - Tank 3 pulled out of excavation
~~1002 =~~ some fuel-like liquid
running on south side of tank
groundwater slightly deeper than
previous excavation areas

TANK 3 - PID = ~~0.0 ppm~~
47.4 ppm

TANK 3: Dimensions 8'x15'

no obvious signs of
corrosion or pitting
on tank, ^{heavy} fuel-like floating
substance observed in water
of excavation along S boundary
(formerly contained gasoline) of tank 3

1000 Begin excavation of tank 4,
a 15,000 gallon diesel tank

1030 Remove Tank 4 → formerly containing
↳ some rust present gasoline diesel
26'x10'

↳ no pitting or corrosion observed
PID = 4.8 ppm

@ Base of 15K tank, rounded-sr cobbles ~3 ft thick

1130 - Collect sample from bottom of TANK 1
PID = 0.0 ppm
B-T1-12-0

silty sand, loose, gray, m-f, ps

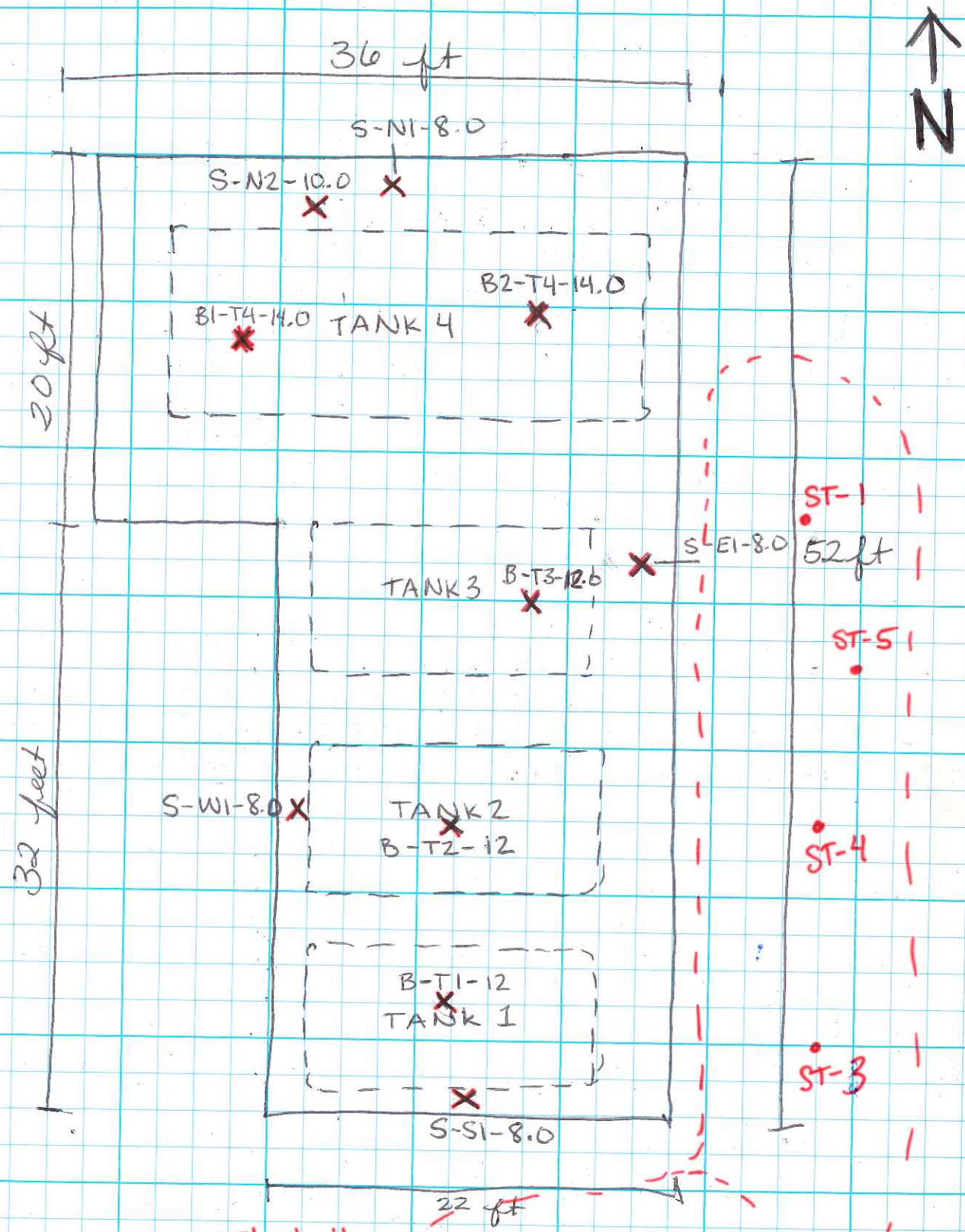
1138: Collect sample from bottom of TANK 2
B-T2-12-0
PID = 0.0 ppm

silty sand, loose, gray, m-f, ps, some
silt

1145: Dale Myers offsite

8/16/15

E. UST Nest Investigation



-- = stockpile
 X - sample location

Sample Table

Sample ID	Date	Time	PID (ppm)
S-W1-8.0	8/6/15	1204	0.0
S-S1-8.0	8/6/15	1150	0.0
B-T1-12.0	8/6/15	1130	0.0
B-T2-12.0	8/6/15	1138	0.0
S-N1-8.0	8/6/15	1300	0.0
S-E1-8.0	8/6/15	1330	0.7
ST-1	8/6/15	1340	47.4
ST-2	8/6/15	1345	5.7
ST-3	8/6/15	1350	4.2
ST-4	8/6/15	1355	3.1
ST-5	8/7/15	1045	26.2
B1-T4-14.0	8/7/15	1000	0.0
B2-T4-14.0	8/7/15	1130	17.8
B-T3-12.0	8/7/15	1300	0.0
S-N2-10.0	8/7/15	4155	0.0

Time	Notes
1150	Collect south sidewall sample from UST excavation pit, capillary fringe zone @ 8.0 ft <ul style="list-style-type: none"> ◦ no odor ◦ PID = 0.0 ppm ◦ Sample ID: S-SI-8.0 ◦ Soil type: silty sand, gray, moist, f-m grain
1204	Collect soil sample from west sidewall of UST excavation pit, from capillary fringe <ul style="list-style-type: none"> ◦ no odor ◦ PID = 0.0 ppm ◦ Sample ID: S-WI-8.0 ◦ Soil type: silty sand, gray, m-f grain, loose, moist
1300	Collect sample at north sidewall within capillary fringe at \approx 8.0 ft bgs <ul style="list-style-type: none"> ◦ no odor ◦ PID = 0.0 ppm ◦ Sample ID: S-NI-8.0 ◦ Soil Type: silty sand, loose, gray, m-f, moist
1330	Annette Ademasu of Ecology off site Collect sidewall soil sample along east side of UST excavation within capillary fringe at approximately 8 ft bgs <ul style="list-style-type: none"> ◦ no odor ◦ PID = 0.7 ppm ◦ Sample ID: S-EI-8.0 ◦ Soil Type: silty sand, gray, m-f, loose, moist
1340	Collect stockpile sample from north end of stockpile (see map) \approx 200-300 yd ³ <ul style="list-style-type: none"> ◦ PID = 47.4 ppm ◦ slight odor ◦ Sample ID = ST-1
1345	Collect stockpile composite sample from south end of stockpile <ul style="list-style-type: none"> ◦ no odor ◦ PID = 5.7 ppm ◦ ST-2

0714.03.01-03

8/6/15

<u>Time</u>	<u>Comments</u>
1350	Collect composite stockpile sample from southeast corner of stockpile <ul style="list-style-type: none">◦ no odor◦ PID = 4.2 ppm◦ Sample ID = ST-3
1352	Courier from FBI arrives to collect samples
1354	Courier offsite with samples
1355	Collect composite soil sample from middle of stockpile (see map) <ul style="list-style-type: none">◦ no odor◦ PID = 3.1 ppm◦ Sample ID = ST-4
1400	Wyser begins covering UST excavation with plastic wrap
1410	UST excavation stockpile covered with plastic wrap
1430	Wyser begins excavation potholing near water and gas line on western portion of site to provide access for Cascade Natural Gas to cap line
1600	Wyser Construction and Carolyn of MFA off site

0714.03.01-03

8/7/15

Friday 8/7/15

Conditions = partly cloudy ? sunny

- | Time | Comments |
|------|--|
| 715 | Carolyn Wise of MFA arrives on site
Wyser construction already on site |
| 730 | Two of the 5,000 gallon USTs formerly containing gasoline loaded on truck for off site disposal |
| 735 | Dale Myers of Ecology on site |
| 815 | Water level in ^{UST} excavation pit rose between from approximately 10 ft bgs to 7.5 ft bgs as measured from the side of the excavation
Water in pit observed to be lt. brown, sludgy |
| 900 | Begin pumping out water from excavation in order to collect confirmation soil samples from base of excavation at Tanks 3 and 4. |
| 915 | Observed brown-reddish brown colored soil along northern sidewall of excavation pit (see map), slightly discolored water seeping from discolored soil area. |
| 1000 | Dale Myers off site
Collect confirmational soil sample from base of Tank 4 at approximately 14 feet bgs
- cobbles observed at base of Tank 4
• r-sr, 2-3 in. diameter, gray
• Soil Sample
• no odor
• PID = 0.0 ppm
• poorly-graded ^{silty} sand, gray, loose, |

0714:03.01-03

8/7/15

Time	Comments
1030	15,000 gallon tank loaded and secured for off site disposal
1045	Collect additional composite soil stockpile sample <ul style="list-style-type: none"> ◦ PID = 26.2 ppm ◦ no odor ◦ Sample ID = ST-5
1100	Continue dewatering UST excavation for base confirmational samples
1130	Collect confirmational soil sample from base of east side of 15K gallon UST <ul style="list-style-type: none"> ◦ no odor ◦ PID = 17.8 ppm ◦ Sample ID = B2-T4-14.0 ◦ Soil Type = silty sand, gray, moist, loose, f-m
1155	Collect additional sidewall sample from UST excavation from light brown soil area @ 10.0 ft bgs <ul style="list-style-type: none"> ◦ no odor ◦ PID = 0.0 ppm ◦ Sample ID = S-N2-10.0 ◦ Soil Type = light brown, ps sand, m-f, loose, moist
1200	Break for lunch
1230	Continue dewatering excavation
1300	Collect confirmational sample from base of TANK 3's former location @ ¹² / _{ft} bgs <ul style="list-style-type: none"> ◦ slight odor ◦ PID = 0.0 ppm ◦ Sample ID = B-T3-12.0
	◦ Soil Type = gray, silty sand, moist, loose - cobbles observed at base, 2-3 in in diameter, r-sv

<u>Time</u>	<u>Comments</u>
1305	Charlie Wend of sheriff's department visited site
1308	Charlie Wend off site
1310	Wyser begins breaking up and removing overburden concrete from top of UST excavation area
1430	FBI courier arrives on site to collect soil samples and drop off additional coolers
1545	Rick of Mt. Vernon planning depart. arrives on site
1550	Rick off site
1615	Carolyn of MFA off site

Conditions: partly cloudy; warm Wednesday
8/12/15

Time	Comments
645	MFA (CRIO) and Wyser (Mike & Dawnen) on site
700	Dale Myers on site
715	Sump pump to east of truck scale was noted by Wyser during decommissioning to not have had a base, Wyser noted odor during excavation. Truck scale base noted to have some discoloring and ooze
730	Begin excavating around product lines to below pea gravel layer
800	Collect product line sample 1 <ul style="list-style-type: none">• no odor• PID = 0.0 ppm• Sample ID = PL1-S1• Soil Type = below pea gravel light brown fine sand, ps, moist-dry loose
845	Odor observed in trench pit of product lines off SW corner of convenience store during excavation of product line to gasoline tanks
915	Collect product line sample where diesel line elbows to South pump islands below pea gravel @ 4 ft <ul style="list-style-type: none">• strong odor• PID = 139.7 ppm• Sample ID = PL1-S2• Soil Type = SS, light gray moist, m. stiff 1/4 grain

Time	Comments
950	<p>Collect confirmational sample from base of dispenser 1 @ 4 ft</p> <ul style="list-style-type: none"> ◦ no odor ◦ PID = 19.1 ppm ◦ Sample ID = D1-4.0 ◦ Soil Type = light grey sand w/ gravel; moist, loose-m-dense 60% sand, m-f 30% gravel, f, or-sa 10% fines
1025	<p>Collect sample from base of pump island 3, significant pea gravel backfill</p> <ul style="list-style-type: none"> ◦ strong odor ◦ PID = 92.1 ppm ◦ Sample ID = D3-8.0 ◦ Soil Type; light gray, SS, f, moist → water observed at base of excavation
1050	<p>Collect grab PID sample from product line 2 at 3.5 feet</p> <p>PID = 1.4 ppm (P2-grab)</p>
1055	<p>Collect sample from product line P1-S2-3.5</p> <ul style="list-style-type: none"> ◦ strong strong odor ◦ PID = over range ◦ Sample Soil Type = SS, m-f, moist loose, slight strong odor poorly sorted m-f sand
1200-	<p>Collect soil sample P2-S1-3.5</p> <ul style="list-style-type: none"> ◦ no odor ◦ PID ◦ Soil type = light brown, SS, v-f, dry-moist, loose

0714.03.01-03/2a

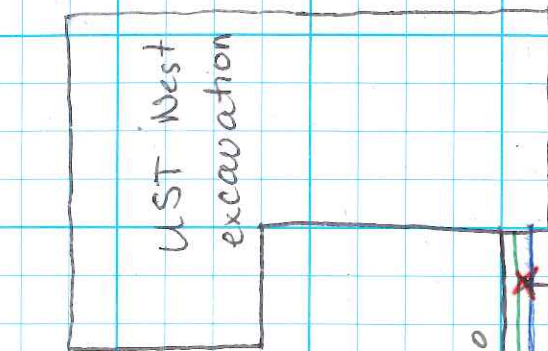
8/12/15

Time	Comments
1215	Break for lunch
1300	Collect confirmational soil sample (3) along product line 1 - slight odor - PID = 18.3 ppm - ID = P1-S3-3.5 - Type = 40% gravel 40% sand 20% fines, lt brown, m. stiff, moist
1326	Collect confirmational soil sample from base of Tank 4 - strong odor - PID = 408.7 ppm - ID = D4-4.0 - Type = light grey silty sand, ps, m-f grain, loose, moist
1330	Dale Myers of Ecology off site
1345	Collect confirmation soil sample beneath dispenser 5 • no odor • PID = 3.4 ppm • ID = D5-4.0 • Type: 50% gravel, f-m, light brown 40% sand, sa-r, m. stiff 10% fines, moist
1400	Attempted to collect additional soil sample beneath pump island 5 Soil was excavated to 10 ft bgs and observed to be coarse gravel, angular with very few fines, encountered groundwater @ approx. 8 ft bgs unable to collect supplemental sample
1430	Courier from FBI collects samples
1445	Demob equipment

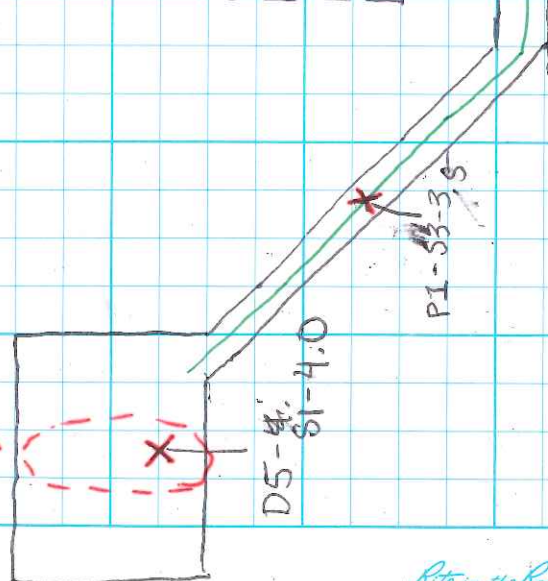
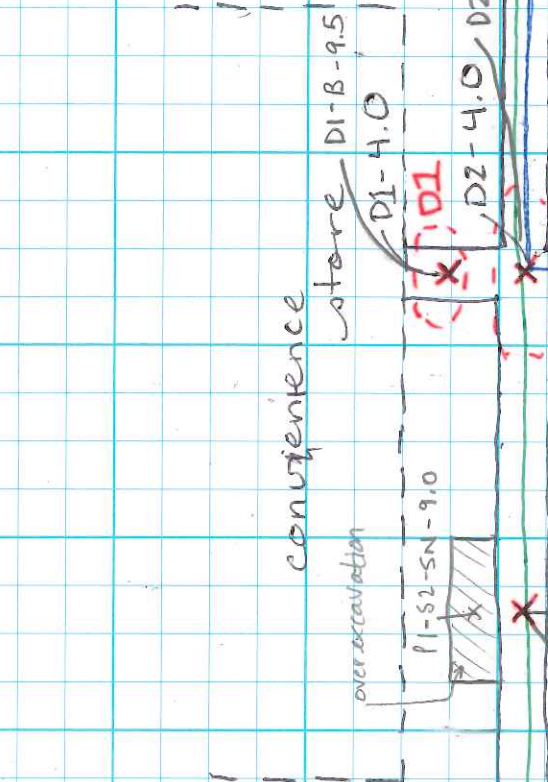
N ↑

Scale

5 ft = 1 box

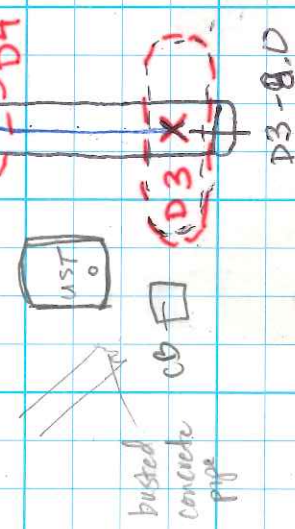


convenience store
over excavation



— = diesel fuel line

— = gasoline fuel line



D3-B.0

8/12/15

PID Summary for Samples Collected on 8/12/15

ID	PID (ppm)
P1-S1-3.5	0.0
D2-4.0	139.7 ppm
D1-4.0	19.1
D3-8.0	92.1
P1-S2-3.5	over range (>5000)
P2-S3-3.5	4.7 18.3
D4-4.0	408.7
D5-4.0	3.4
P2-S1-3.5	4.7

1600 - Carolyn Wise of MFA off site
Wyser Construction off site

8/18/15

ASK ARRIVED ON SITE @ 0640 WYSER ON SITE

ECY (DANE MYERS) ARRIVED @ 0700

OVER EXCAVATING P1-S2. STRONG PETROLEUM ODORS PRESENT

COLLECTED PID READINGS DURING OVER-EXCAVATION.

LOCATION	DEPTH	PID	
P1-S2	6-8' bgs	270 ppm	
P1-S2-B1-10.0	10'	3.7	→ COLLECTED BASE/FLOOR SAMPLE (P1-S2-B1-10.0) 0745
P1-S2-SN1	5'	80	sidewall north side
	7'	40	
P1-S2-SN-9.0	9'	16	→ COLLECTED SAMPLE P1-S2-SN-9.0 (0830)
P1-S2-SS	5'		sidewall south side
	7'		strong odors - didn't collect PID.
		98	continuing excavator down to water.
	10.5'	58	
D1-B-5.0	5.0'	178	over excavating D1 location.
D1-B-7	7'	35	
D1-B-9.5	9.5'	38	collected sample D1-B-9.5 (0930)

@ 0930 WYSER (MIKE) BEGAN LOADING SCRAP METAL INTO TRAILER, DARRIN OFF SITE.

@ 1035 WYSER STARTING/CONTINUING OVER EXCAVATION

D2-B-9.0	9.0	180	STRONG ODOR WILL CONT. EXC TO WATER
D2-B-10.0	10.0'	30	collected sample D2-B-10.0 (hit GW)
D4-B-5	5'	80	strong odors
	7'	118	
D4-B-10.0	10'	30	Reached GW. Slight odor. Collected sample D4-B-10.0 @ 1100:

@ 1130 WYSER MOVED TO REI AREA.

@ 1200 ECY LEFT SITE. BACK NEXT WEEK (IF NECESSARY)

BAKED TANK SAMPLING, BEGAN

PRE-TREATMENT - began purging @ 1200, water is turbid to sl turbid, no odor, sl. sheen?

TIME	PURGE VOL	TEMP °C	COND. ^{NS} /cm	DO mg/L	PH	ORP	TURBIDITY
1207	1 GAL	25.76	563	2.11	6.60	26.4	~77 NTU
1214	2	25.59	563	2.14	6.69	34.1	~76
1217	2.5	25.63	563	2.17	6.70	39.1	~79

SAMPLE COLLECTED @ 1220. BT-PRE-1

POST TREATMENT - began purging @ ~~1350~~ 1350, water is clear, no odor or sheen

TIME	VOL	TEMP	COND.	DO	PH	ORP	TURB
1352	1	24.79	1750	0.40	7.38	29.5	3.01
1355	2.5	23.63	1055	0.22	7.52	26.9	4.55
1359	5	21.06	690 ^{NS}	0.15	7.79	28.6	9.36

collected sample (BT-POST-1), 1400

CITY OF MN. CAME BY SITE. INSPECTED WATER TREATMENT SYSTEM,
(TOM + CHAD)

WANTS TO SEE ANALYTICAL RESULTS PRIOR TO DISCHARGE.

PERMIT DAILY DISCHARGE MAX IS 150,000 GPD, WONT BE A PROBLEM.

WE WILL COPY CITY w/ RESULTS.

□ NEED TO LOOK INTO SAMPLING FREQUENCY TO CHECK FILTERS, CITY WILL PROVIDE INPUT.

WYSEK OFFSITE @ 0345

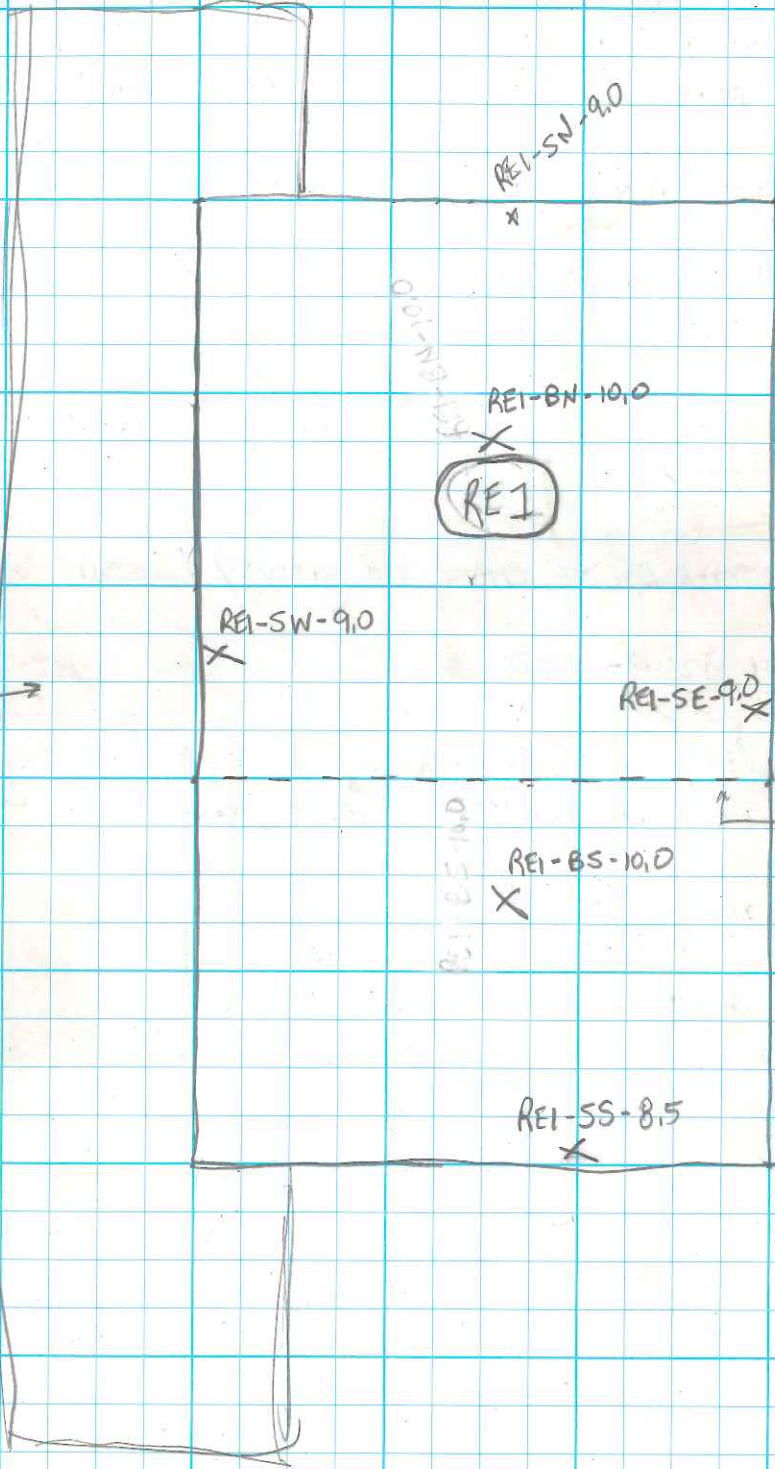
MFA OFFSITE @ 0410.



RE1

Top ~4' excavated and stockpiled separately for re-use as backfill (pending sampling/results)

← 5' →



RE1-BN-10.0 P10
0.1
brown to gray, silty SAND
damp/moist
~~1220~~
RE1-BS-10.0 0.0
1230 same as BN

RE1-SN-9.0 P10
x 5000
1330 strong odor
gray, silty SAND, wet
RE1-SE-9.0 x 5000
1345 strong odor
gray silty SAND, wet

original RE1 extent
→ expanded limits from elevated sample.

RE1-SS-8.5 P10
1400 227 ppm
gray, very silty, w/ organics

RE1-SW-9.0? P10
1410 65 ppm
gray, silty clay-like, no odor

8/19/15

ASK + WYSER ARRIVED ON SITE @ 0645.

PUMP ISLAND EXCAVATION FROM YESTERDAY FILLED W/ GW (a couple feet)
RE1 EXCAVATION ALSO FILLED W/ GW,
- BOTH HAVE A SHEEN OVER THE WATER. (SEE PHOTOS)

WYSER CONTINUING TO DIG RE4 AND MOVING CONTAMINATED STOCKPILE

EXCAVATED RE4 AREA. SEE NEXT PAGE.

WYSER DEWATERING RE1 SO WE CAN COLLECT SAMPLES.
ALSO BEGINNING RE2 AREA.

MARK FROM THE CITY CAME BY TO CHECK ON STATUS / SCHEDULE. @ ~1230

WYSER TAKING LUNCH 1230 - 1320,

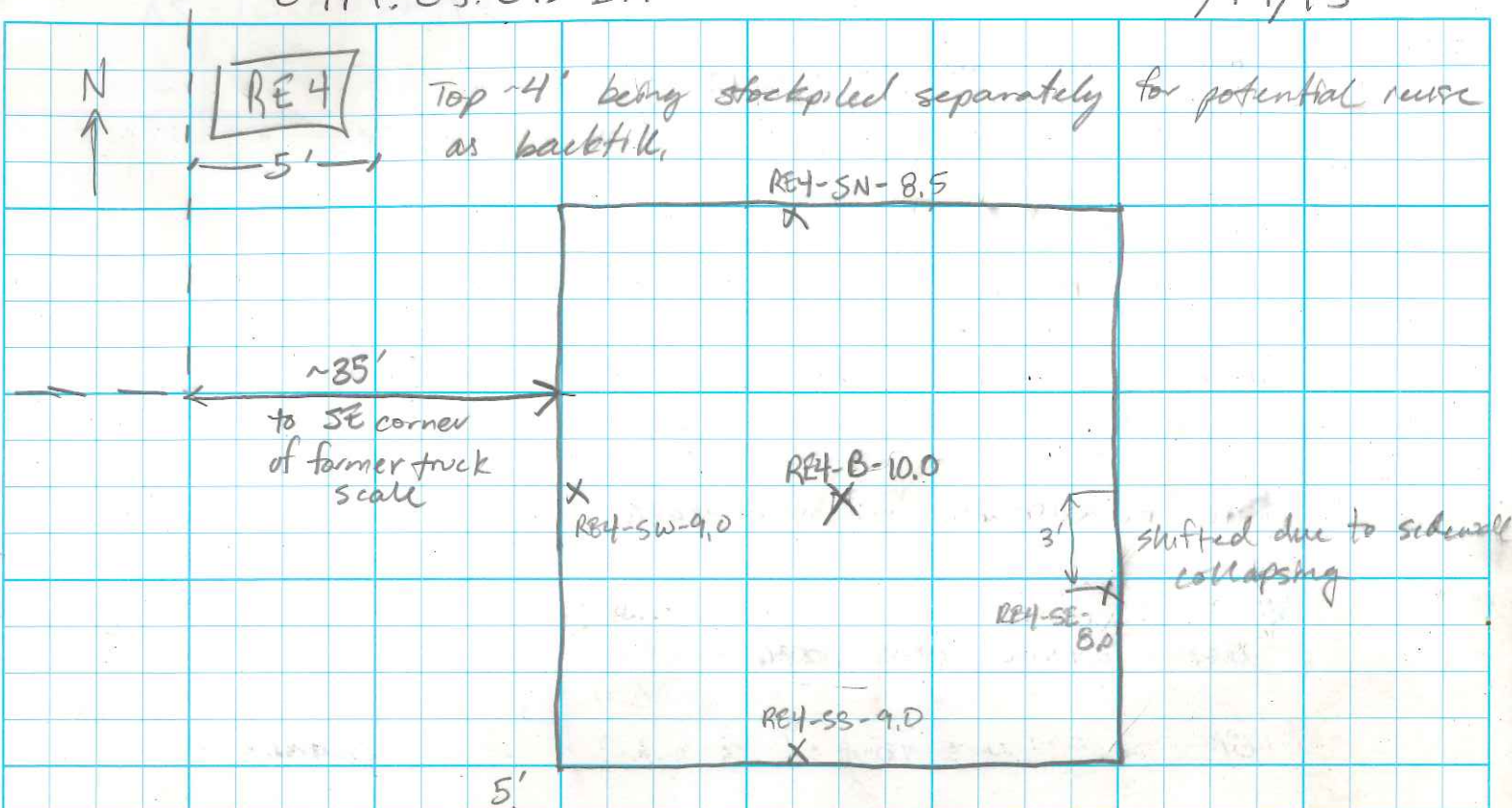
EXCAVATING RE2 AREA. CLEAN MATERIAL WITHIN TOP ~4'. STOCKPILED SEPARATELY
DARK BLACK LAYER STARTING ~5' LGS. STRONG ODOR.
EXCAVATED DOWN TO ~9', GW PRESENT.

@ 1430

WYSER STARTING TO DIG RE3

MIKE (WYSER) OFFSITE @ 1500 (TO GET SUPPLIES FOR DISCHARGING WATER)

COURIER (PBI) PICKUP SAMPLES @ 1500,



Soil/gravel within top 4' appear clean. No PID detection. No odors/staining.

(dry) Brown, sl. silty SAND w/ abundant gravel (gravel to cobbles)
↳ angular

Top 5' looked clean, stockpiled separately. Some staining present on N side of excavation around 7' bgs.

@ 7' bgs, gray silt layer w/ sl. petroleum odor. Continued excavation.

PID reading still 0.0 ppm. Checked other "dirty" stockpile and PID is working properly (detects volatiles at other stockpile)

Clay layer present around 9' bgs, sl. odor(?)

Reached clay groundwater @ 9.5-10 ft.

SAMPLE	LOCATION	DEPTH	PID	TIME
RE4-B-10.0	Center floor	10.0'	0.0	1040
RE4-SW-9.0	W. sidewall, center	9.0'	0.0	1055
RE4-SS-9.0	S. sidewall, center	9.0'	0.0	1110
RE4-SE-8.0	E. Sidewall, 3' S. of center	8.0'	0.0	1125
RE4-SN-8.5	N. sidewall, near center	8.5'	0.0	1145

very fine silt, clay like
very gravelly. difficult
to collect sample.
Sidewall kept collapsing.

8/20/15 ACE

0650 ASK ON SITE. MIKE LOADING TRUCKS W/ PL STOCKPILE.
0705 TRUCK LEAVING SITE.

0740 STARTING TO DEWATER RE 2. PRIOR TO SAMPLING (AFTER RE3)

0830 DARREN IS ON SITE. WYSEK SETTING-UP WATER DISCHARGE PIPE.
WAITING ON FLOW METER.

0945 MIKE BEGINNING TO OVEREX PL AREA.
PID AMBIENT AIR. RANGING FROM 5-100 (?)

1015 DARREN OFFSITE. WYSEK LOPPED BREAK

1045 GAS. CO. ON SITE.

1400 UNCOVERED UST. ~4' x 6' (~650 gallons).

1500 MIKE OFFSITE. KELLEN(?) PILING ASPHALT FOR TOMORROW AM.

1515. FINAL TRUCK OF SAND DELIVERED TO SITE.

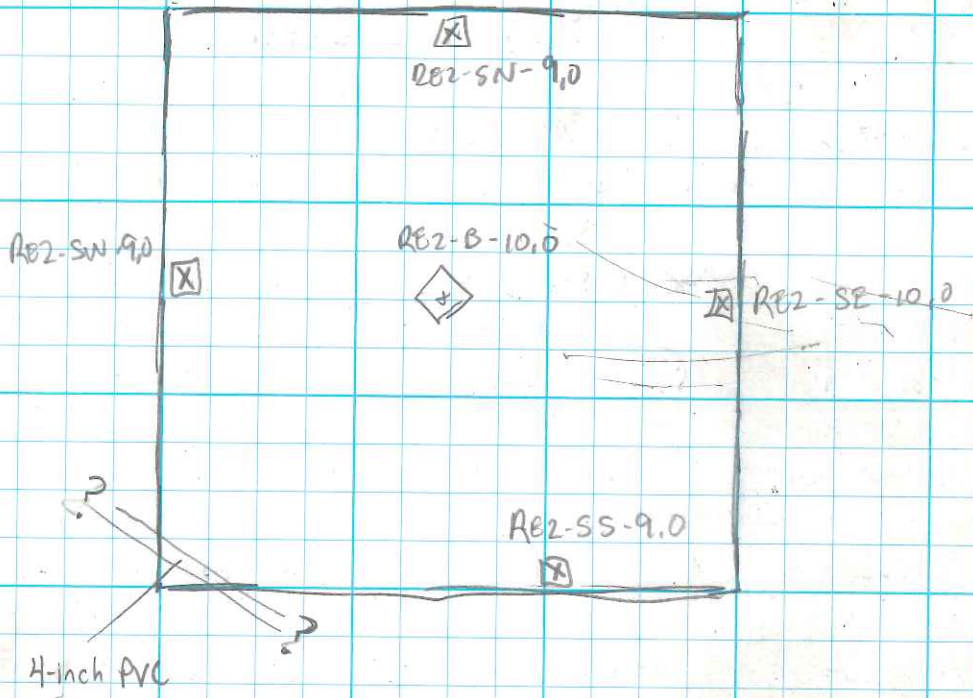
TREATED WATER DISCHARGE

8/20/15	—	02270 x 100	} 7,000 GALLONS DISCHARGED
8/20/15	1445	022361 x 100	
8/21/15	1100	02245 x 100	} 1,000 GALLONS DISCHARGED ON 8/21
8/21/15	1500	02246 x 100	

(NEW LOG CREATED) → SEVERAL PAGES



RE2

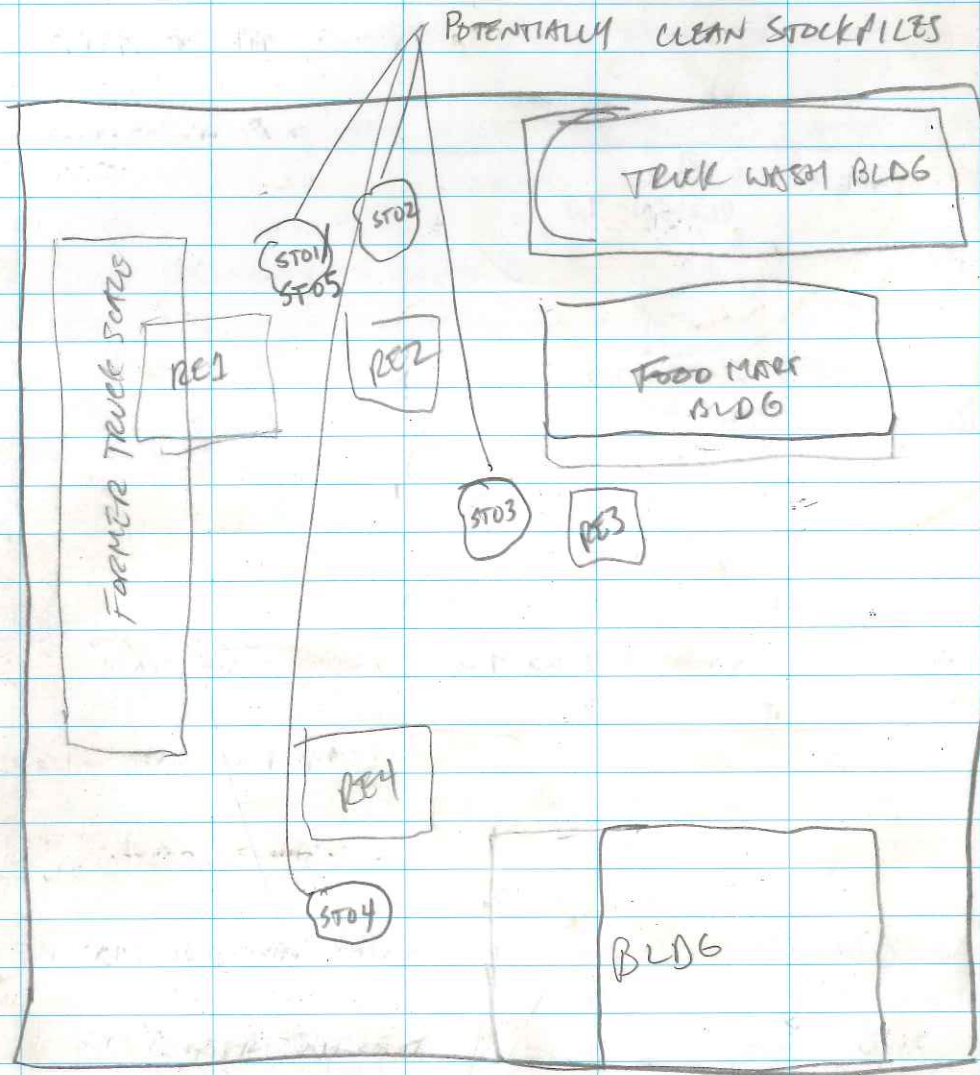


TOP 4' BGS APPEARED CLEAN. DARK (BLACK) LAYER ~ 5', STRONG PETR. ODORS.

CB

SAMPLE	TIME	P10	NOTES
RE2-B-10.0	0845	7.5 ppm	(WET) GRAY SILTY SAND : NO ODOR SAMPLE SATURATED
RE2-SE-10.0	0905	211	(WET) GRAY TO BLACK, SL. SANDY GRAVELLY SILT strong odor, SAMPLE SATURATED
RE2-SS-9.0	0915	* 5000	GRAY TO BLACK, SILTY SAND STRONG ODOR
RE2-SW-9.0	0930	* 5000	GRAY TO BLACK, SANDY SILT, STRONG ODOR w/trace gravel
RE2-SN-9.0	0945	* 5000	GRAY, SANDY SILT, STRONG ODOR

↑
N
STOCKPILES
NOT TO SCALE



SAMPLE NAME	TIME
ST01-01	1040
ST01-02	1050
ST01-03	1055
ST02-01	1120
ST02-01-DUP	1125
ST02-02	1130
ST02-02-DUP	
ST02-03	1145
ST02-03-DUP	
ST03-01	1200
ST03-01-DUP	1205
ST03-02	1210
ST03-03	1215
ST04-01	1225
ST04-02	1230
ST04-03	1235

NTS

CLEAN STOCKPILE 1 (ST01). BROWN SL. SANDY SILT w/ abundant gravels (to cobbles)

↳ ST01 HAD DETECTIONS OF CONTAMINATION → COMBINED w/ PCS STOCKPILES

curb

B206

Sidewalk

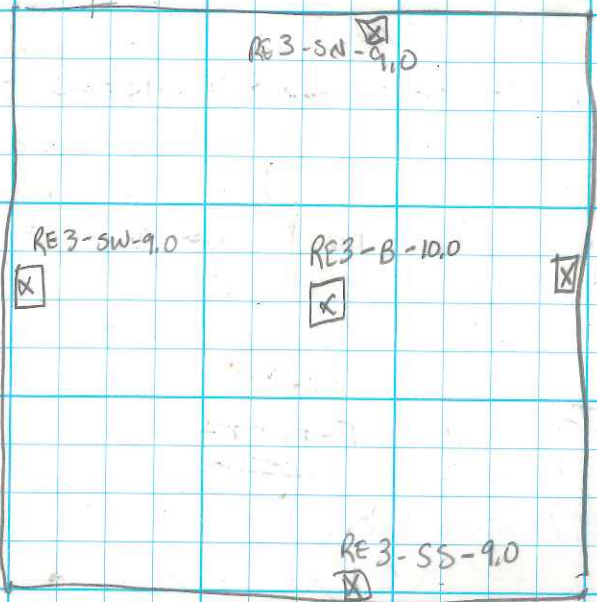
RE3-SN2-9.0

overexcavation 8/25



RE3

~10' (8' to overhang/Awning (sp?))



WATER PRESENT IN EXC.
AFTER SAMPLING.
SIMILAR TO GW IN PL
AREA - GREEN ON TOP

SAMPLE	TIME	PID		
RE3-B-10.0	0725	7 ppm	(DAMP TO WET)	GRAY, SL. SILTY SAND (SATURATED)
RE3-SE-9.0	0735	5		GRAY, SL. SILT w/ trace sand
RE3-SS-9.0	0750	5		SAME AS SE Brown to grey, SL. sandy SILT
RE3-SW-9.0	0805	25		GRAY VERY FINE SILT w/ trace organics
RE3-SN-9.0	0830	*5000	GRAY	SL. SANDY SILT SANDY SILT w/ trace organics
RE3-SN2-9.0	1120	*5000		GRAY + BLACK, SL. gravelly sandy silt.

8/21/15

0650 ASK ON SITE. MIKE CURRENTLY LOADING TRUCK w/ PCS FROM PL AREA.
 0700 ASK PREP FOR SAMPLING UST IN PLATEAU FOR PCBs, CHL SOLVENTS, HYDROCAR

0730 COLLECTED ON SAMPLE IN AMBER JAR. PL-UST-650 @ 0730

0800 COLLECTING PARAMETERS FROM WATER TREATMENT DISCHARGE.

TIME	TEMP	COND	DO	PH	ORP	TURB
0800	19.54°C	550 μ S/cm	1.18 mg/L	7.01	96.8	14.7 NTU
0802	19.60	552	0.62	7.24	94.5	14.4
0804	19.63	553	0.43	7.32	93.6	

SAMPLE COLLECTED @ 0810 BT-POST-2

0900 WYSEB BEGINNING RE1 OVER EXC.

1040 TWO TRUCKS ARRIVE TO HAUL PCS

1045 SAMPLING NEW STOCKPILE FROM RE1 over excavation overburden

ST05-01 1045
 ST05-02 1050
 ST03-03 1055

1230 BEGAN OVEREXCAVATING WEST SIDEWALL OF RE1.

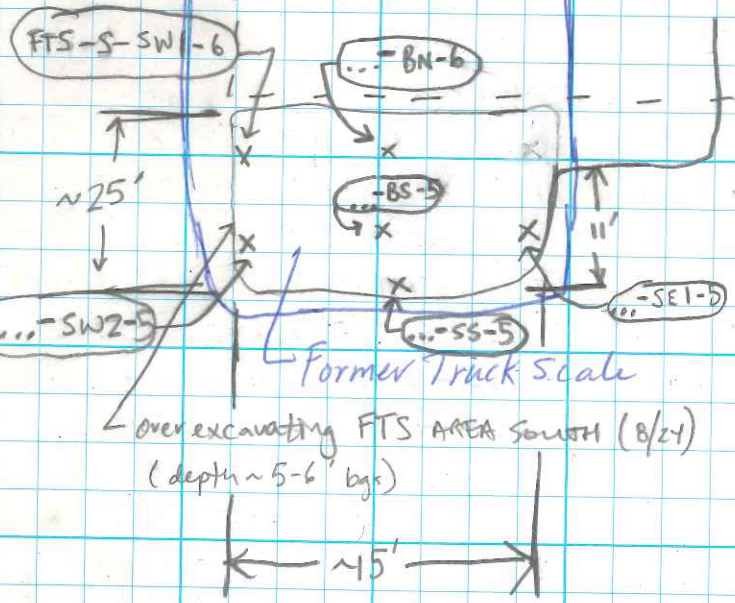
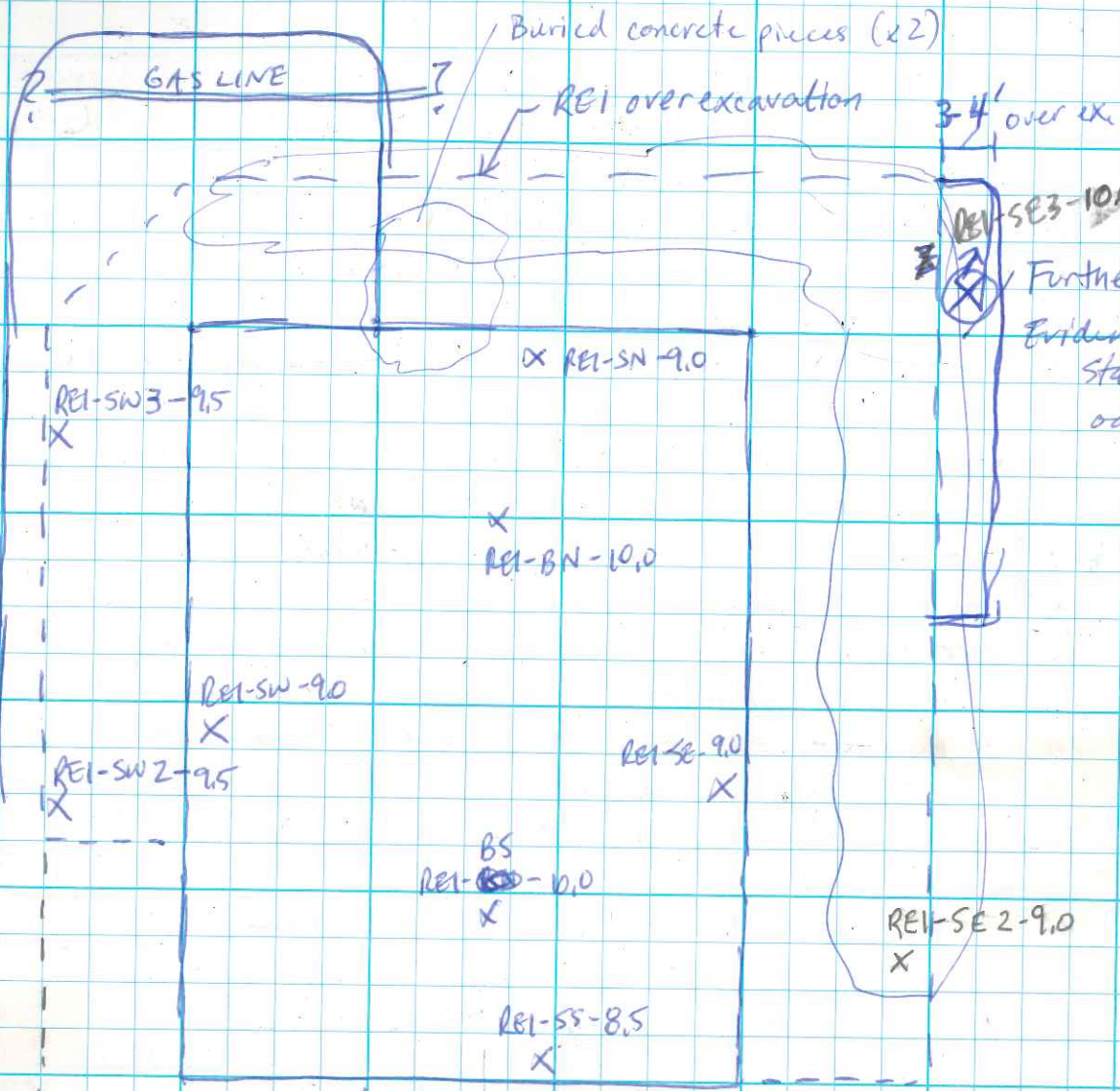
1245 TRUCKS ON SITE TO HAUL PCS ~~SOIL~~

1300 FBI COURIER ON SITE.

1500 WYSEB WRAPS UP.

1530 ASK OFFSITE TO DELIVER SAMPLES TO LAB.

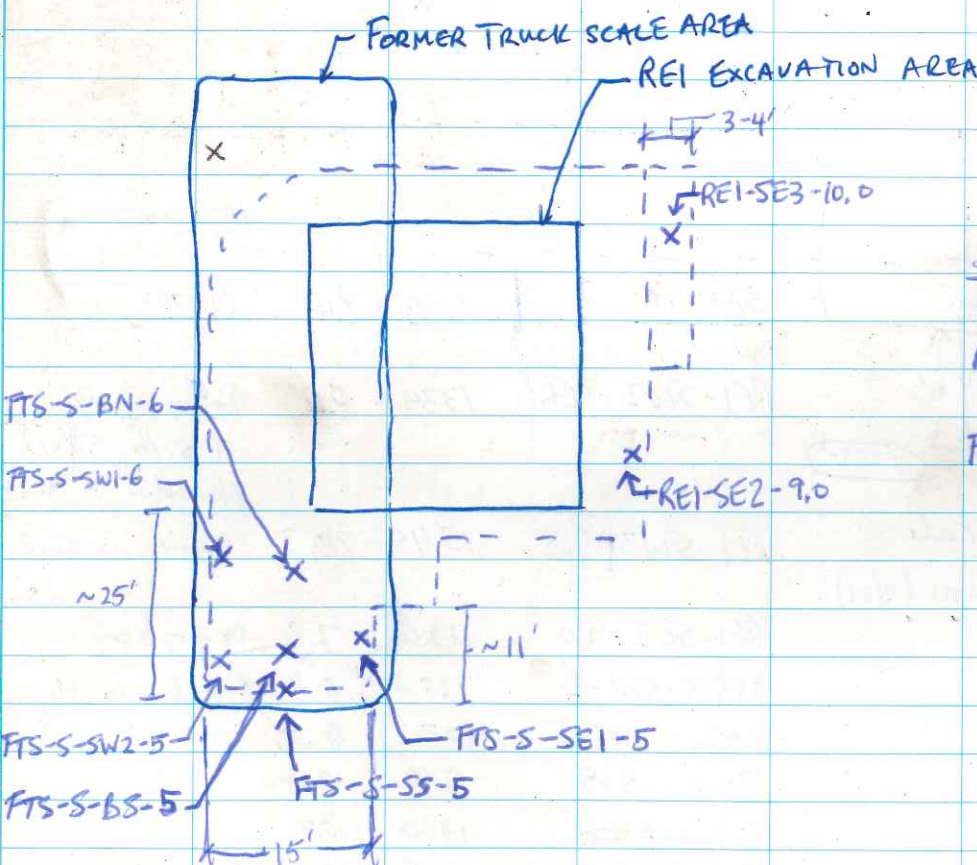
N
↑
NOT TO SCALE



SAMPLES	TIME	PID	NOTES
REI-SW2-9.5	1335	0.0	Damp, gray sl silty SAND No odor
REI-SW3-9.5	1345	10.3	SAME AS SW2.
REI-SE2-9.0	1120	7.8	Dk gray to gray, sandy SILT w/ ground
FTS-S-SW1-6	1220	0.0	Brown to gray, sl. Sandy SILT
FTS-S-SW2-5	1230	0.0	SAME
FTS-S-SS-5	1245	2.7	SAME
FTS-S-BN-6	1300	0.5	
FTS-S-BS-5	1315	0.1	
FTS-S-SE1-5	1325	0.0	
SAMPLE SATURATED ← REI-SE3-10.0	1500	30.0	Gray, Sl. silty SAND

8/24/15

- 0700 ASK ON SITE. WYBOR CROW (K2) READY HERE LOADING TRUCKS
SETTING UP WATER DISCHARGE. ↳ 2 truck + trailers
- 0720 TRUCK + TRAILER LOAD OF BACKFILL DELIVERED ON SITE
THEN LOADING TRUCK W/ ASPHALT.
- 0830 TRUCK + TRAILER ON SITE TO HAUL PCS STOCKPILE.
- 0850 TRUCK + TRAILER FOR PCS
- 0855 TRUCK + TRAILER OF BACKFILL MATERIAL → LOADING ON ASPHALT.
- 1000 LOADING PCS INTO TRUCK + TRAILER
- 1030 LOADING PCS INTO TRUCK + TRAILER.
- 1040 TRUCK + TRAILER OF BACKFILL → LOADING PCS
- 1130 ~~GEOTECH~~ GEOTECH ON SITE TO TEST COMPACTION IN FORMER LUST AREA
LOADING ADDITIONAL TRUCK + TRAILERS.
OVER EXCAVATED FORMER TRUCK SCALE AREA SOUTH (FTS-S)
ASK COLLECTED SAMPLES.
- 1345-1430 ANOTHER GEOTECH GUY ON SITE. (SOUND TESTING, SEATTLE)
↳ TANK DECOMMISSIONING / TANK CUT
- 1500 TRUCK + TRAILER BACKFILL → HAULING PCS



SAMPLE	TIME	PID
REI-SE2-9.0	1120	7.8
REI-SE3-10.0	1500	30.0
* SAMPLE SATURATED		
FTS-S-SW1-6	1220	0.0
... -SW2-5	1230	0.0
... -SS-5	1245	2.7
... -BN-6	1300	0.5
... -BS-5	1315	0.1
... -SE1-5	1325	0.0

TREATED WATER DISCHARGE LOG

	DATE (TIME)	METER READING	DAILY DISCHARGE	RUNNING TOTAL DISCHARGE
	8/20 (AM)	02227 x 100	← INITIAL FLOW	METER READINGS
	8/20 (1445)	02236 x 100 gal	7000 gal	7,000 gal
	8/21 (1100)	02245 x 100	900	7,900
	8/21 (1500)	02246 x 100	100	8,000
	8/24 (1010)	02250 x 100	400	8,400
	8/24 (1515)	02251.6 x 100	160	8,560
	8/25 (1200)	02252.8 x 100	120	8,680
	8/26 (700)	02253.6 x 100	80	8,760
INCORRECT READINGS (OFF BY FACTOR OF 10)	8/26 (1248)	02265.8 x 100	1220	9980 (same at 1500)
	8/27 (1504)	02272.6 x 100	680	10,660
	8/28 (1200)	02277.4 x 100	480	11,140
	8/28 (1400)	02282.2 x 100	480	11,620
	8/31 (826)	02283.7 x 100	150	(refer to excel spreadsheet)
	8/31 (1250)	02290.9 x 100	720	
	8/31 (1530)	02291.7 x 100	80	
	9/1 (700)	02291.7 x 100	-	
	9/1 (1200)	02294.6 x 100		
	9/1 (1530)	02300.9 x 100		
<hr/>				
	9/2 (1500)	023263 x 100		
	9/3	→ NO WATER DISCHARGED		
	9/4 (1500)	023495 x 100		
	9/8 (700)	023496 x 100		
	9/8 (830)	00156700	* → new meter!	
	9/8 (1230)	00178800		
	9/8 (1600)	00185600		
	9/9 (1500)	00223700		
	9/10 (1530)	00240600		
	9/14 (1530)	00271300		
	9/15 (1530)	00293490		
	9/16 (1530)	00311390		
	9/18 (1430)	00339500		
	9/28 (1530)	00444850		
	9/29 (1515)	00474000		
	9/30 (1530)	00483740		

8/25/15

0700 ASK ON SITE. WYSER ALREADY LOADED 3 TRUCK + TRAILERS OF PCS.
STARTING TO OVEREX. RE2.

0850-0945 MARVAC ON SITE TO PUMP CONTENTS OF TANK.

1000 ASK COLLECTING STOCKPILE (RE-STOB) SAMPLES

ID	TIME
RE-STOB-1	1000
RE-STOB-2	1010
RE-STOB-3	1020

1105 FIRE DEPT. (STEVE) ON SITE TO INSPECT TANK IN PL AREA.
SAYS WE'RE OK TO PULL IT, NO SIGNS OF FITTING OR DAMAGE - DONT NEED TO SAMPLE
★ ~~IF WE DO~~ IF WE DO collect samples, HE'D LIKE US TO DIFFERENTIATE
NAMES FROM PREVIOUS USTs

1100-1130 OVER EX. AT NORTH SIDEWALL OF RE3. COLLECTED SAMPLE

RE3-SN2-9.0 @ 1120

1145 WYSER PULLED TANK. NO SAMPLES COLLECTED YET. FIRE MARSHALL
SAID WE WERE 'OK' W/OVT SAMPLES; PLUS AREA LIKELY TO
BE OVER-EXCAVATED ANYWAYS.

1200 ASK COLLECTING WATER SAMPLE FROM DISTAF86

TIME	TEMP	COND.	DO	PH	ORP	TURB
1200	21.25°C	668 µS/cm	1.51 mg/L	6.61	74.5	6.8 NTU
1203	21.14	668	0.64	6.79	79.1	7.02

BT-POST-3 @ 1205

STOCKPILE (CLEAN)
[RE-STOG]



REZ

OVER EXCAVATION

gas line
Not yet
decommissioned

original RE + Ex (15 x 15)

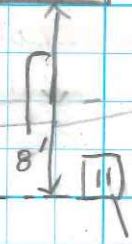
Staining + odor
~ 8-10' bgs

TOP 5 ft PLACED IN
A SEPARATE STOCKPILE
FOR RE-USE AT BACKFILL

Staining + odor
~ 4-10' bgs

Staining + odor
~ 1' thick
(9-10' bgs)

Staining + odor
~ 8-10' bgs



Exist. CB

8/26/15

Conditions: partly cloudy ? sunny

700 - CRW on site, Wyser on site removing soil for off site disposal

* Refer to notes on 8/24 ^{next page} for additional sample locations at RE1: the former truck scale area

800 Wyser removes asphalt from around RE2, all sides

815 Wyser initiates discharge of treated water from Baker tanks to sanitary sewer

830 Begin dewatering former truck scale ? RE1 area

900 Begin excavating north end of former truck scale

915 Observed strong odors within excavated soil beginning at about 6 feet to 10 feet

945 Collect west sidewall sample from former scale

1000 Collect north sidewall sample from former scale

1100 Collect base sample from former truck scale

1130 Attempted to collect east sidewall sample, PID readings on grab samples were all above range (> 5000 ppm)

1200 Lunch, tire of backhoe popped, needs to be replaced

1230 Begin removing asphalt between RE1 & FTS to RE2 in anticipation of lateral expansion from either RE area

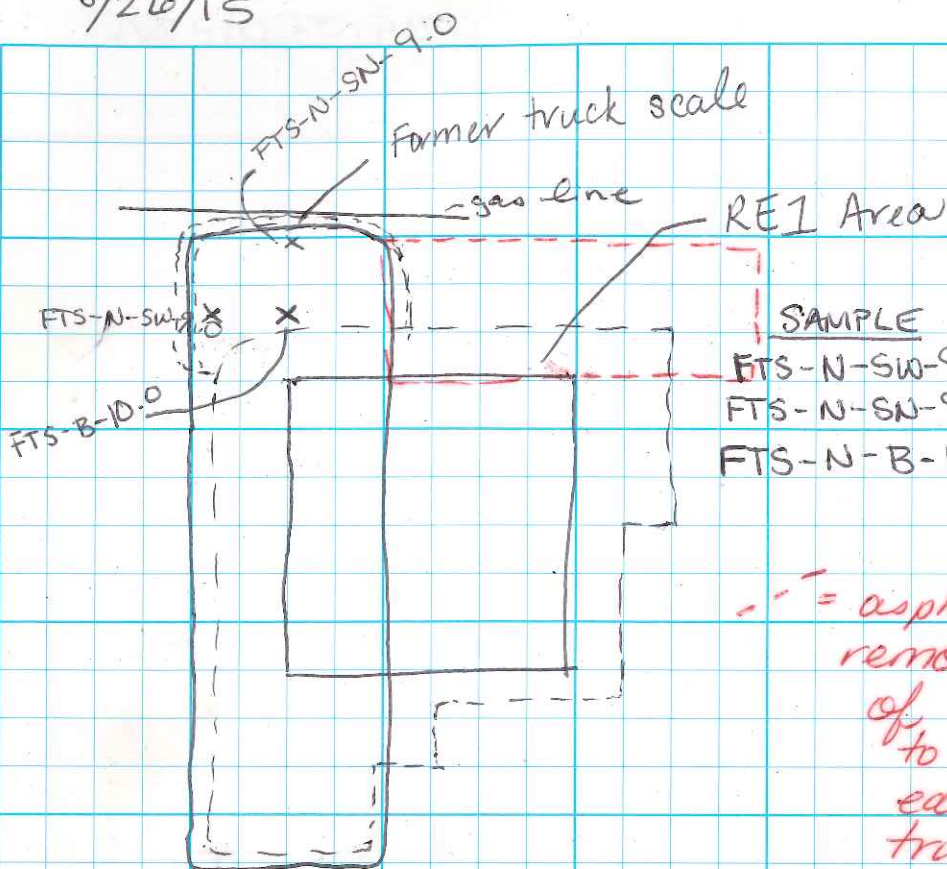
1340 FBI courier on site / off site

1400 Wyser removes top 4 ft of soil between RE1 & RE2 in anticipation for sampling 8/27 AM

1530 CRW off site

8/26/15

0714-03-01-2A



SAMPLE	TIME	PID	NOTES
FTS-N-SW-9.0	9:45	0.0	sandy silt
FTS-N-SN-9.0	1000	0.0	" "
FTS-N-B-10.0	1100	0.0	Sat.

- - = asphalt and top soil removed in anticipation of collecting samples to north of REI? east of the former truck scale

SAMPLE	SOIL TYPE
FTS-N-SW-9.0	sandy silt, lt grey, soft, f sand grains, trace woody; leafy debris, no odor
FTS-N-SN-9.0	SAA; no odor
FTS-N-B-10.0	Sand (SP), lt grey, m-f grains, no odor

8/27/15

Conditions: sunny with few clouds

- 705 - CRW on site, Wyser already on site loading PCS into truck for off site disposal
sheen observed in water within former truck scale ? REI area
- 730 - JLC on site of MFA
- 800 - Marc Estuold on site ? Roger Howard
- 815 - Darren Ness on site
- 830 - Marc ? Roger off site
- 840 - De watered former truck scale, JLC off site
- 900 - Darren off site
- 950 - Collect a northern sidewall sample of REI
- 1030 - Significant sheen in sand ^{in water} at northwestern expansion area of REI at approximately 10 - 10.5 ft
from Backfill material to north of expansion gray-colored from 8-10 ft bgs
→ Refer to location 2 on field map
- 1200 - Lunch
- 1230 - over excavate south edge of REI
- 1310 - color change in soil south of REI at ~ 7 ft
- 1422 - Collect second south sidewall sample from REI
- 1425 - FBI courier ^{onsite} to pick up samples
- 1440 - Collect ~~second~~ ^{third} south sidewall sample from REI
- 1450 - Begin excavating 5-10 depth in area between RE1 & RE2
- 1550 CRW ? Wyser off site

8/27/15

0714.03.01-2A

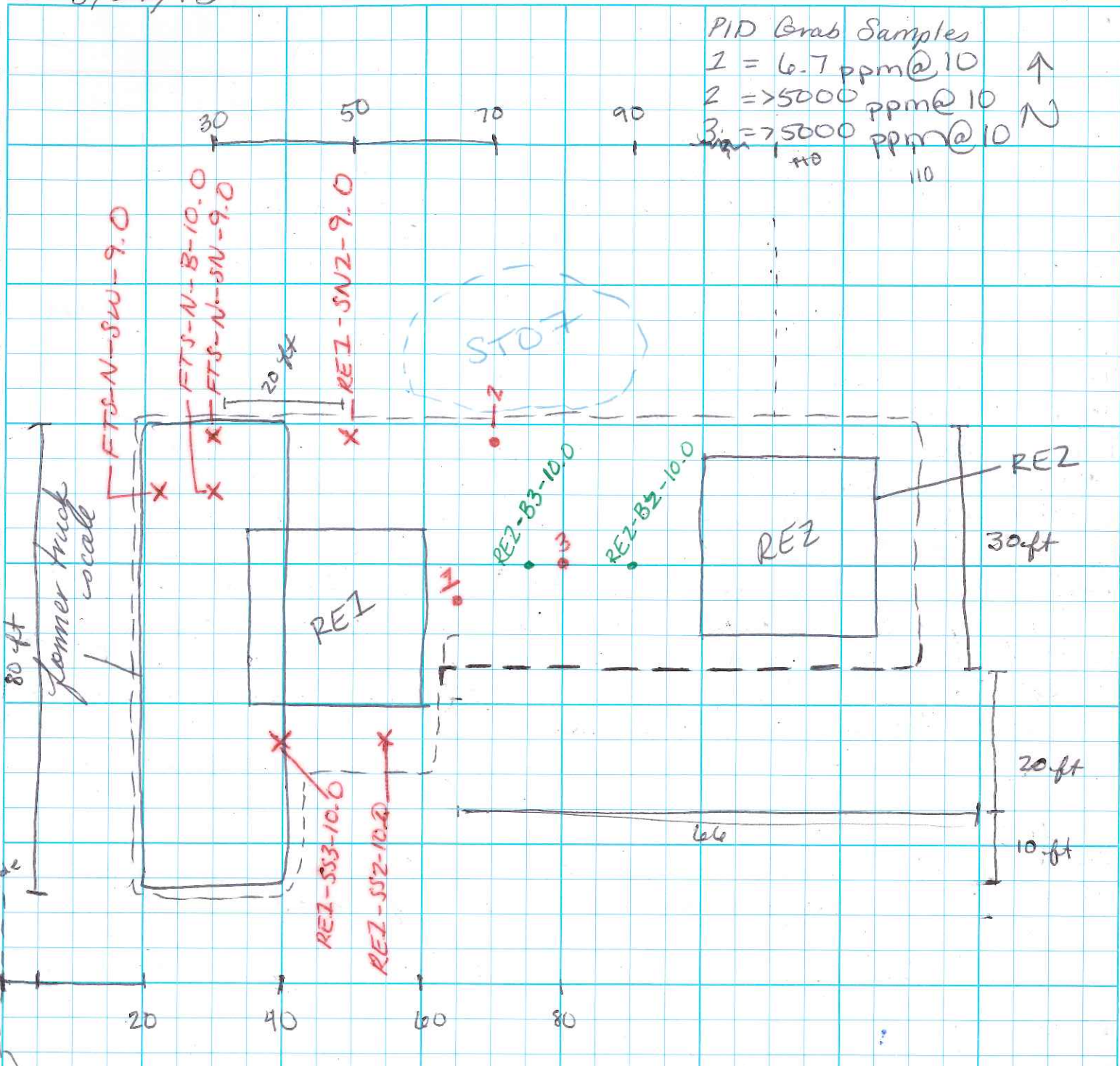
PID Grab Samples

1 = 6.7 ppm @ 10

2 = 5000 ppm @ 10

3 = 7500 ppm @ 10

↑
N



Time	Sample	PID	Notes
950	REZ-SN2-9.0	0.0	lt. gray, SS, moist, m-f
1210	RE-ST07-1	0.0	brown, SW, a-sa, m-c, d-m
1215	RE-ST07-2	0.0	SAA
1220	RE-ST07-3	0.0	SAA
1422	REZ-SS2-10.0	1.2	SW, gray, m-c, a-sa, moist
1440	REZ-SS3-10.0	3.4	lt. gray, SM, f, firm, moist

8/28/15

0714.03.01-2A

- Conditions = cool, partly cloudy
- 700 CRW arrives on site
Wyser already on site, finishing loading 4th dump truck? pup
- 710 Sheen observed in water in western excavation (RE1, RE2, + FTS) : RE3
- 730 New backhoe arrives on site
- 800 Wyser begins consolidating stockpiles to provide access to south wall of western excavation
- 900 Truck on site for removal of PCS
- 1000 Cascade Natural Gas on site to cap gas line
PSE on site to verify lack of electric connection
- 1010 Began discharging treated water to sanitary system
- 1030 Sheen observed in water in area between RE1 ; RE2
- 1100 Truck arrives for PCS pickup
- 1200 Wyser breaks for lunch
- 1210 Collect water quality parameters from post treated water
- 1230 Collect water sample from Baker Tank
- 1300 Truck arrives for PCS pickup
1344. FBI courier arrives to pick up samples
- 1415 Cascade Natural Gas off site
- 1420 Truck arrives for asphalt pickup : disposal off site
- 1530 CRW + Wyser off site

Sample	Time	PID	Notes
RE2-B2-10.0	1140	0.0	SP, lt grey, loose, m-f
RE2-B3-10.0	1150	0.0	SP, lt grey, loose, m-f
BT-POST-4	1230	-	-

Water Quality Parameters

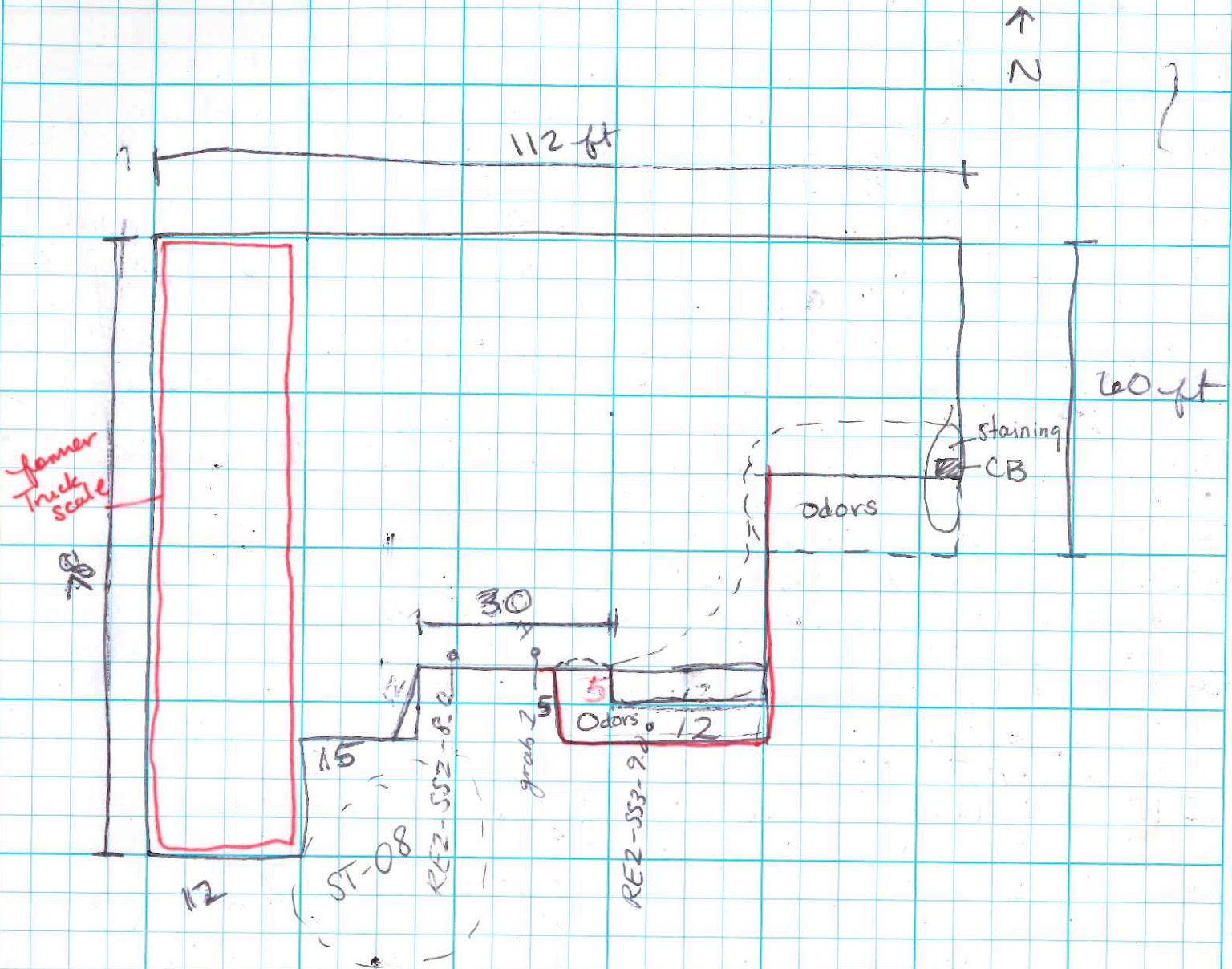
Time	Temp	DO ^{m%}	pH	ORP	Cond.	Turb
1210	19.84	1.30	6.81	79.5	771	10.20
1215	19.72	0.86	7.13	76.9	771	8.93
1220	19.62	0.80	7.21	76.0	771	7.87

8/31

0714.03.01-2A

Conditions: rainy, cloudy, windy

- 700 CRW arrives on site
Wyser already on site and loading
PCS into truck for disposal
- 730 2 dump trucks loaded with PCS
for off site disposal
- 800 1 dump truck loaded with PCS for disposal
- 830 Begin excavating southwest sidewall of RE2
area between RE1 & RE2
- 840 1 dump truck loaded with PCS
- 930 Collect southwest sidewall sample (RE2-SS2)
- 1000 2 dump trucks loaded with PCS
- 1045 Collect southwest sidewall sample
(RE2-SS3-9.0)
- 1145 1 dump truck loaded with PCS
- 1210 1 dump truck loaded with PCS
- 1215 1 dump truck loaded with PCS
- 1230 Lunch
- 1300 Odors observed in area to the southwest
of RE2
- 1322 FBI on site
- 1350 1 dump truck loaded with PCS
- 1410 1 dump truck loaded with PCS
- 1430 Continue to over-excavating south
side of RE2
- 1530 CRW and Wyser off site



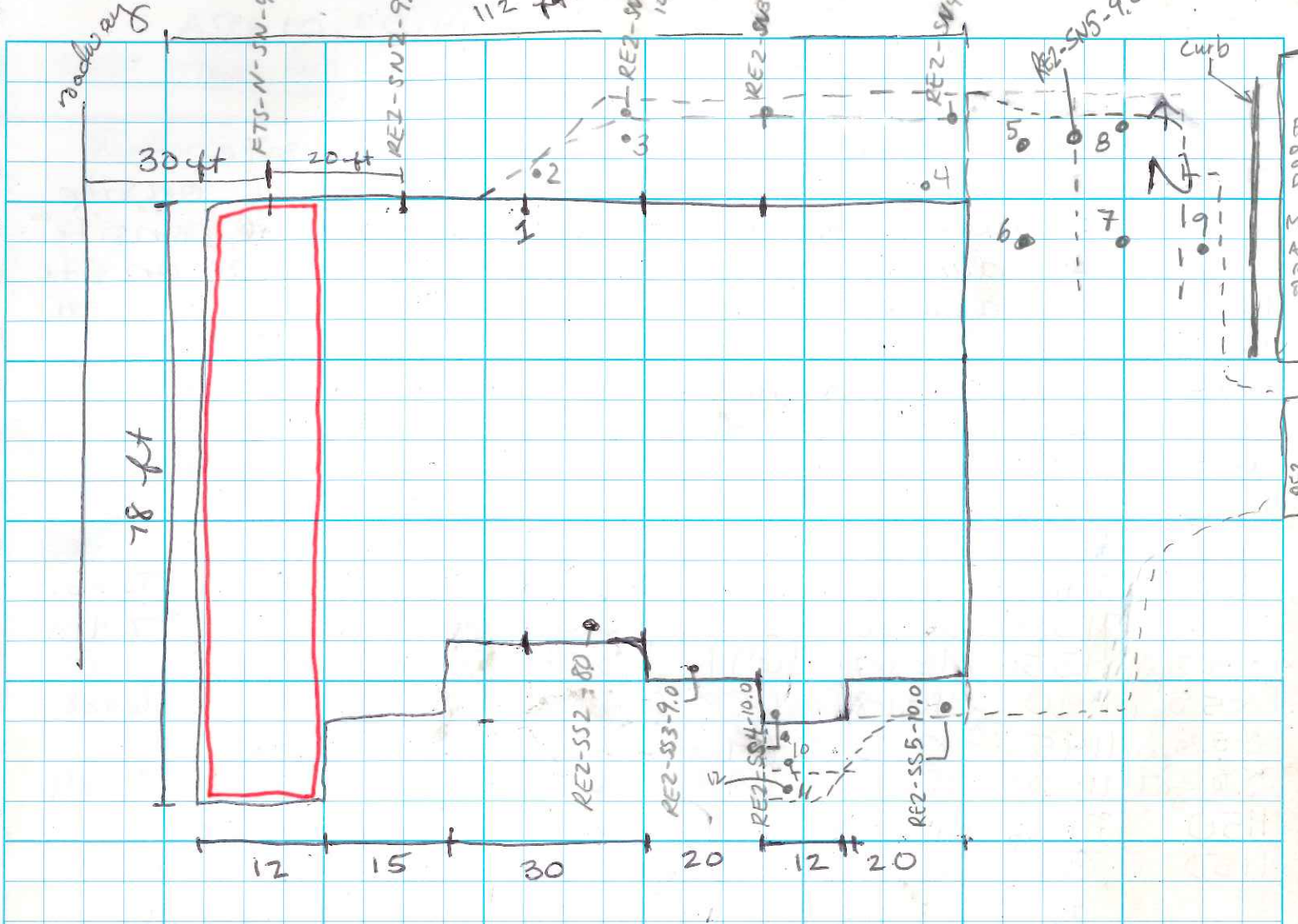
Time	Sample	PID	Notes
915	RE-ST08-1	0.0	
930	RE2-SS2-8.0	0.0	GP, brown-lt grey, f-c, a-sa, m
945	RE-ST08-2	0.0	
	1. (grab)	3.7	
1013	RE-ST08-3	0.0	
1045	RE2-SS3-9.0	0.0	GP, brown/gray, f-c, sa-a, moist

9/1/15

0714.03.01-02A

Conditions: cloudy and cool

- 700 CRW arrives on site
Wyser already on site and working to reposition stockpiles north of REZ
- 710 1 dump truck on site for PCS removal
- 745 1 dump truck on site for PCS "
- 750 1 dump truck on site for PCS "
- 920 1 dump truck on site for PCS "
- 930 Continue to remove stock piled ^{soil} ~~sample~~ from north side of REZ
- 1000 1 dump truck on site for PCS removal
- 1100 1 dump truck " " " " "
- 1142 1 dump truck " " " " "
- 1200 1 dump truck
- 1305 Wyser replaced silt filters in Baker Tank
- 1308 1 dump truck
- 1344 1 dump truck
- 1400 Continue clearing out north side of REZ
- 1540 CRW: Wyser off site



Sample	PID	Depth	Type
1	174.2 ppm	9.0	
2	322.4 ppm	8.0	
3	340.2 ppm	8.0	
4	342.4 ppm	8.0	
815	REZ-SN2-10.0 42.6 ppm	10.0	SS, grey, moist, mf
910	REZ-SN3-10.0 242.2 ppm	10.0	SAA
1320	REZ-SN4-10.0 222.4 ppm	10.0	SAA
1340	REZ-SS4-10.0 22.8 ppm	10.0	SAA
1350	RE-STD9-1 0.0 ppm	-	GP, brown, a, f-c
1400	RE-STD9-2 0.0 ppm	-	SAA
1405	RE-STD9-3 0.0 ppm	-	SAA
1450	REZ-SS5-10.0 0.0 ppm	10.0	
<u>9/3/15</u>	5 3.4 ppm	~9	samples (9/4/15) pid 11 33 ppm 12 314 ppm
	6 ± 5000 ppm	~8	
	7 ± 5000 ppm	~8	
	8 7.2 ppm	~8	
	9 ± 5000 ppm	~8	
	10 28.0 ppm	~10	

9/2 - Wednesday

0714.03.01-02A

Conditions: partly cloudy

- 700 CRW on site
AK onsite, Wyser already on site
- 705 2 dump trucks for PCS removal on site
- 710 1 dump truck for PCS removal on site
- 920 1 dump truck for PCS removal on site
- 1000 1 dump truck for PCS " " "
- 1005 Tony Silva on site
- 1010 Wyser continuing to ^{over-}excavate base of north side of REZ
- 1125 1 dump truck on site for PCS removal
- 1130 Begin collecting water sample from Baker Tank

Vol	Time	Temp	Cond.	DO ^{mg/L}	PH	ORP	Turb.
	1130	16.66	690	30.3	6.83	59.7	7.41
~ 4.5 gal	1135	16.67	691	3.25	6.95	59.0	
~ 5.0 gal	1140	16.68	688	3.72	7.06	58.3	6.68
~ 5.25 gal	1145	17.13	691	3.70	7.12	55.4	
~ 6 gal	1150	18.16	693	3.77	7.17	55.1	9.64

- 1150 Pump on Baker tank ran out of fuel
- 1150 City official arrived on edge of site to take photos of work outside fence
- 1200 Take water sample from Baker tank
BT-POST-5
- 1215 lunch
- 1305 Tony Silva off site
- 1320 Collect soil sample REZ-SN4-10.0 from n. sidewall of REZ
- 1340 Collect soil sample REZ-SS4-10.0 from S. sidewall of REZ

9/3/15 THURSDAY

0714.03.01-2a

Weather: partly cloudy, ~50°, windy

0700 ASK ON SITE. WYSER (DARREN, MIKE, KELLEN) ON SITE.

0745 TRUCK ON SITE TO PICK-UP BACKLOG

0800 DARREN OFF SITE. ASK COLLECTING STOCKPILE (CLEAN OVERBURDEN) SAMPLES,

RE-ST10-1 0750

RE-ST10-2 0755

RE-ST10-3 0800

0815 GEOTEST ~~ON~~ ON SITE TO COLLECT SAMPLES (FOR PROCTOR TESTING) FROM
CLEAN OVERBURDEN STOCKPILES,

MIKE PULLING-UP ASPHALT WEST OF RE2 (EAST OF FOOD MART)

0835 GEOTEST OFFSITE

~1030 START TO EXCAVATE AREA BETWEEN RE2 + RE3 + FOOD MART.

WILL COLLECT PIP READINGS AS WE GO.

1200 HALF HOUR LUNCH BREAK (WYSER)

1230- EXCAVATING OVERBURDEN

NO WATER DISCHARGE.

NO TRUCKS FOR PLS,

1530 ASK OFFSITE TO DELIVER SAMPLES TO LAB,

9/4/15 FRIDAY

07H40301-2a

WEATHER: Foggy & OVERCAST, ~45-50°

0700 ASK ON SITE. WYSEK ALREADY ON SITE. LOADING ASPHALT - 1 TR + TR.

0825 TRUCK + TRAILER TO LOAD ASPHALT.

WYSEK MOVING CLEAN OVERBURDEN W/ LOADER (BACKHOE), LOADING TRUCKS,
OVER-EX C REZ-SS4

0940 TRUCK + TRAILER DELIVERED BACKFILL (FOR FTS AREA). WILL LOAD W/ ASPHALT

LOADER DELIVERED TO SITE.

DENATERING RE1/RE2.

1030 MOVING CLEAN STOCKPILE.

1115 TRUCK + TRAILER DELIVERED BACKFILL

LOADING ASPHALT.

1215 WYSEK LUNCH. J. CLARK ON SITE

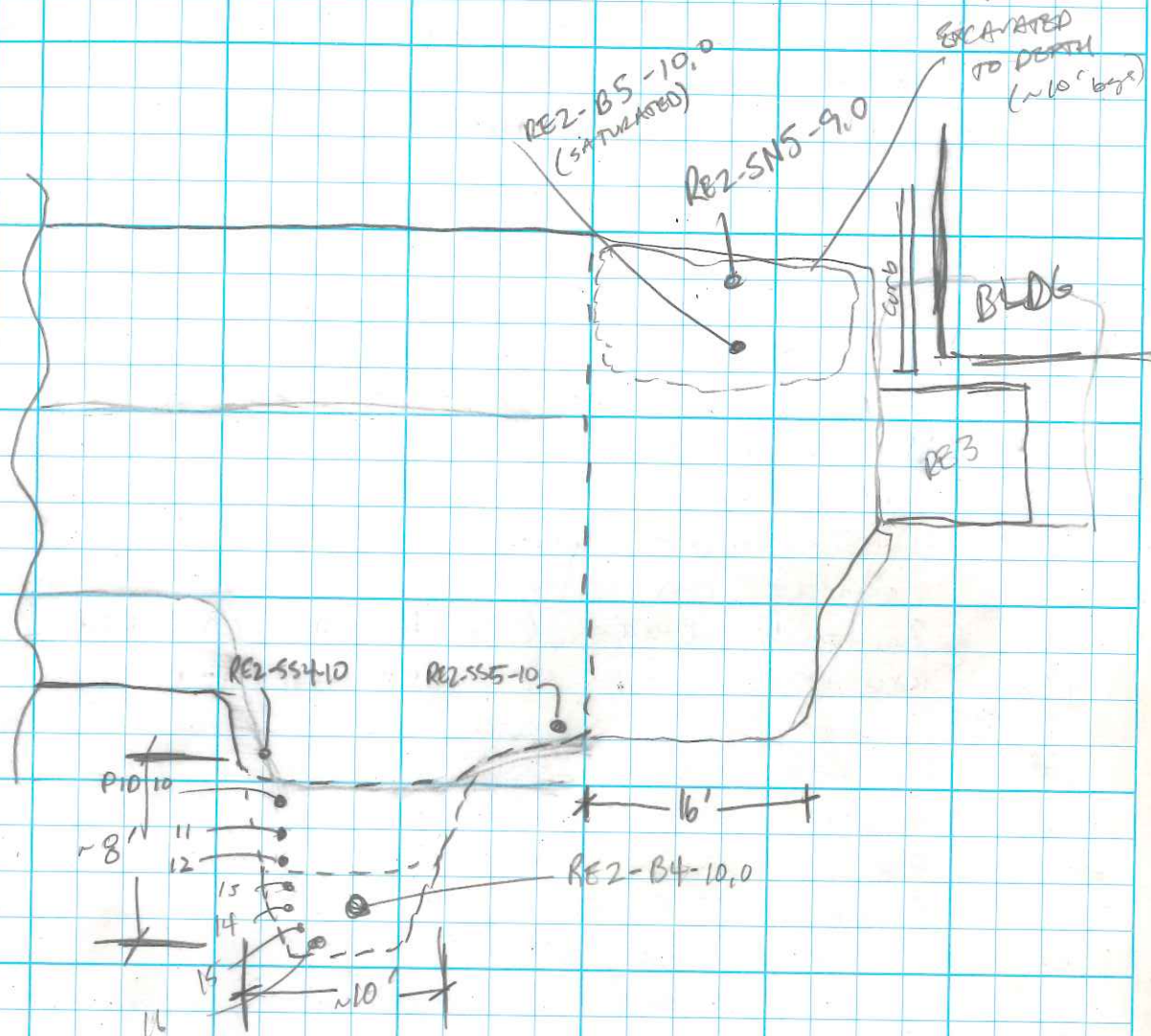
1310 BACKFILL - TRUCK + TRAILER.

LOADING ASPHALT.

EXCAVATING TO DEPTH REZ-SN (WEST OF FOOD MART), COLLECTED SUBSURFACE

1430 BACKFILL - TRUCK + TRAILER, ~~LOADING W/ ASPHALT~~

AND FLOOR SAMPLES



PID READINGS

10	28 ppm
11	33
12	314
13	128
14	50
15	75
16	16

SAMPLED RE2-SS6-9.0 @ 0925

RE2-B4-10.0 @ 0945
* SATURATED

RE2-SNS-9.0 @ 1400

RE2-B5-10.0 @ 1405
* SATURATED!

9/8/15 - Tuesday

Conditions: cloudy and cool, some light rain early in the morning

700 CRW arrives on site
Wysor on site

730 Wysor begins dewatering excavation
Excavator temporarily in need of repair

800 Wysor changed meter out for meter with larger diameter ($3/4$ in. to $1\frac{1}{2}$ in.) for Baker Tank discharge

815 1 truck load of clean backfill deposited at site

900 Wysor surveyor on site

930 Comcast on site

938 2 truck loads of backfill deposited

948 Repair man for excavator on site

1010 Collect RE-STII-1 (soil) from east stockpile

1015 Collect RE-STII-2 (soil) " " "

1035 Repair man for excavator off site
Excavator repaired

1040 Collect RE-STII-3

1045 Collect RE-STII-4

1100 1 truck on site depositing imported fill

1155 Lunch, 2 trucks offloading import fill on site

1225 Continue to dewater western excavation

1345 Surveyor off site

1400 Begin to backfill south end of former truck scale with imported fill
Create base layer of fill of approximately 6 in. at depth prior to ORC application

1430 Begin backfilling ^{base} bottom extent of RE4 w/ amended backfill

1435 2 trucks on site for imported fill deposit

1500 JLC, Marc Estvold, ? Roger Howard on site

1515 Marc, Justin, ? Roger off site

1530 RE4 filled with 30 lbs of ORC

treatment up to 6.5 ft bgs
ORC mixed with imported fill on bottom

3' and clean stockpile material from 3'-grade

ORC Treatment Notes

- dewater
- back-fill ~~3-6~~⁶⁻⁸ inch } add ORC treatment incrementally
- ORC on top
- mix with bucket
- go up to 6.5 ft (10-6.5 ft)
-

1600 CRW : Wyser off site

9/9 - Wednesday - 07H.03.01-02A

Conditions: foggy with some sun

700 CRW: Wyser on site
Continue to treat excavation water
and discharge to sanitary system

800 Begin collecting water quality parameters
from treated water, meter at 192500 gallons

Time	Temp.	Cond	DO ^{mg/L}	pH	ORP	Turb.
800	18.27	787	3.07	6.61	42.7	13.87
805	18.36	788	2.93	6.73	40.0	10.12
810	18.39	788	2.85	6.82	38.6	9.88
815	18.38	788	2.90	6.88	38.3	9.63

820 Collect water sample (BT-POST-6)
from output of treated Baker tank
water

830 Wyser begins excavating lower 5-10 ft
of impacted soil ^{part of} ~~between~~ RE2

1030 Begin dewatering western excavation
Continue stockpiling imported fill near former
truck scale in preparation of ORC application
to back fill

1335 FBI onsite for sample pick up

1530 CRW: Wyser off site

→ ~~B~~ Excavator was being repaired
most of day, fixed @ \approx 2:30 PM 9/9

9/9/15



Stockpiles

former truck scale

BLDG

RE1

RE2

RE3

Backfill Stockpile,

Storage
orders
at P-9

RE2-E2-95

(not to scale)

RE2-S3-95

RE2-06-10.0

Stockpile



Stockpile

Back-filled 9/8

ORC

9/10/15, THURSDAY

0714.0301-02A

WEATHER: foggy ~50°

- 0700 ASK ON SITE, WYSEB ALREADY ON SITE.
LOADING TRUCK + TRAILER W/ PCS.
- 0720 LOADING TRUCK + TRAILER W/ PCS.
- 0740 TRUCK + TRAILER LOAD OF BACKFILL MATERIAL (DID NOT HAUL PCS)
WYSEB HOOKING-UP 2ND PUMP TO INCREASE DEWATERING.
- 0830 TRUCK AND TRAILER OF BACKFILL MATERIAL
- 0845 STOPPED DEWATERING. DARDEN ON SITE. (0845-0935)
- 0905 LOADING TRUCK + TRAILER, W/ PCS
GEO TEST ON SITE. (ZACH)
- 0915 TRUCK + TRAILER OF BACKFILL
WYSEB MIXING IN ORC/BACKFILLING FORMER TRUCK SCALE.
- ADDED 1-2 FT OF IMPORT BACKFILL MATERIAL.
- PLACED ORC PELLETS ON TOP (55 lb ORC per 13'x13'x2 ft)
- MIXED ORC W/ 1-2 FT BACKFILL.
- PLACED IMPORT BACKFILL OVERTOP THE AMENDED BACKFILL IN ~~2~~ 2-FT LIFTS.
- 1005 TRUCK + TRAILER OF BACKFILL
- 1045 2ND LIFT OF AMENDED BACKFILL IN FORMER TRUCK SCALE.
- 1055 TRUCK + TRAILER OF BACKFILL
- 1135 LOADING PCS INTO TRUCK + TRAILER.
- 1145 GEOTEST BACK ON SITE. TOOK COMPACTION TEST IN FORMER TRUCK SCALE
BOTH TEST PASSED (>85%)
- 1315 TRUCK + TRAILER OF BACKFILL
WYSEB IS SWEEPING THE TRUCK ACCESS ROAD.
- 1405 TRUCK + TRAILER OF BACKFILL
- 1450 TRUCK + TRAILER OF BACKFILL
- 1500-1530 ASK COLLECTED CONFIRMATION SAMPLES SE OF REL.

002406⁰⁰

9/11/15, FRIDAY

0714.03.01-02A

WEATHER: Partly cloudy → Sunny ~55°

0700. ASK ON SITE WYSEB ALREADY ON SITE. MIKE LOADING TRUCKS,
2 TRUCK + TRAILERS LOADED W/ PCS,

0750 TRUCK + TRAILER OF BACKFILL, DARREN OFF-SITE.

WYSEB MOVING CLEAN STOCKPILE MATERIAL TO SOUTH OF REI FOR FUTURE
BACKFILL. ALSO MOVING PCS NEAR PRODUCT LINE AREA.

0920 TRUCK + TRAILER → PCS

TRUCK + TRAILER OF BACKFILL DELIVERED

0925 TRUCK + TRAILER → PCS

WYSEB STARTING DISCHARGE OF TREATED WATER.

0940 OVER EXCAVATING IN PRODUCT LINE AREA.

1010 TRUCK + TRAILER OF BACKFILL

1020 ORC DELIVERY

1055 BACKFILL TRUCK + TRAILER

1100-1120 ~~RE~~ SPREADING ORC

1120 TRUCK + TRAILER → PCS

1135 TRUCK + TRAILER → PCS

1250 BACKFILL TRUCK + TRAILER

1235 BACKFILL TRUCK + TRAILER

1315 TRUCK + TRAILER → PCS

1345-1420 GEOTEST ON SITE (SHAWN). COMPACTION TESTS ALL ABOVE 85%

1350 TRUCK + TRAILER → PCS

1415 BACKFILL TRUCK + TRAILER

1510 BACKFILL TRUCK + TRAILER

WATER METER
00249500 @ 1400

↑
N
(NTS)

FOOD MART BLDG

PRODUCT LINE AREA
OVER-EXCAVATION

REI
(NTS)

STAINING IN SOIL

9/14/15 Monday

0714.03.01-2A

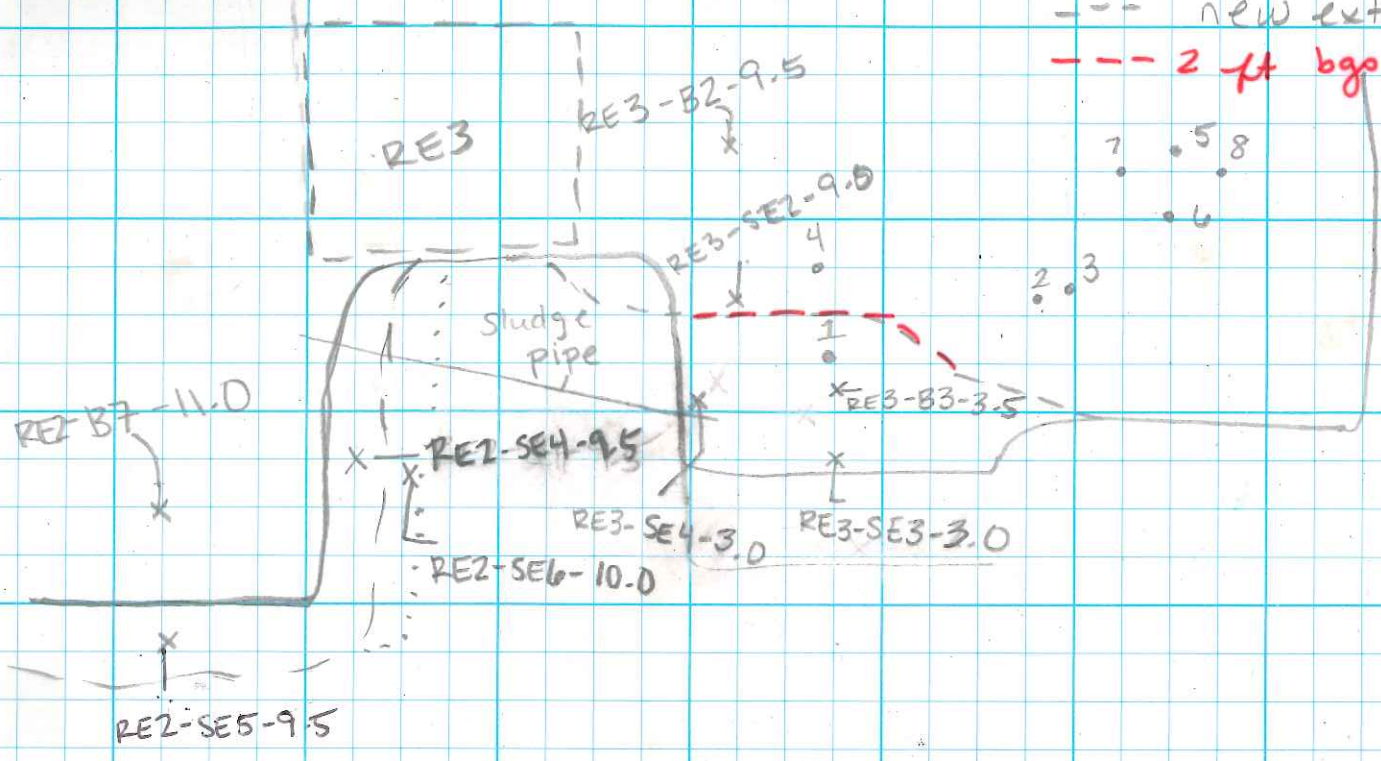
Weather: Overcast, cool

- 700 CRW on site, Wyser already on site (Mike & Kaylen)
Loading truck with PCS
- 730 Truck & trailer → import fill
- 815 Truck & trailer → PCS, surveyors on site
- 830 Completed marker test to check PID operation
- 845 Collect RE2-SE4-9.5
- 900 Truck & trailer → PCS
- 915 Collect RE2-SE5-9.5
- 1005 Truck & trailer → PCS
- 1030 Darren, Dan of Wyer on site, surveyors off site
- 1055 Darren, Dan off site
- 1210 Truck & trailer → PCS
- 1300 Collect RE2-B7-11.0
- 1305 Sheen observed in standing water south of convenience store
- 1310 Collect RE3-B2-9.5
- 1315 Collect RE3-SE2-9.0
- 1400 FBI on site to collect samples/off site
- 1411 Truck & trailer → PCS
- 1450 Truck & trailer → PCS
- 1545 CRW & Wyser off site

9/14/15

Building

— previous extent
 --- new extent
 --- 2 ft bgs grade



PID	Sample	Type	Depth
23.8 ppm	RE2-SE4-9.5	SP, grey, med., moist	9.5
0.0 ppm	RE2-SE5-9.5	SAA (same as above)	9.5
5.3 ppm	1	SAA	2
126.7 ppm	2	Silt w/ organics, moist, odor	5
381.1 ppm	3	SP, grey, odor, moist	6
0.0 ppm	4	SAA	7
0.0 ppm	RE2-B7-11.0	SAA, saturated	11.0
0.0 ppm	RE3-B2-9.5	SP, grey, saturated, m-f	9.5
0.0 ppm	RE3-SE2-9.0	SP, grey, m-f, moist	9.0
582.4 ppm	5	SAA	9.0
787.6 ppm	6	SAA	8.0
7.13 ppm	7	SAA	10.0
0.0 ppm	8	SAA	10.0
0.0 ppm	RE3-SE3-3.0	fine SP lt. brown, moist	3.0
0.0 ppm	RE3-SE4-3.0	SAA	3.0
0.0 ppm	RE3-B3-3.5	SAA	3.5
0.0 ppm	RE2-SE6-10.0	SAA	10.0

Site in the Center

9/15/15 Tuesday

0714.03.01-2A

Conditions: cool : cloudy

700 crew on site

Wyoer already on site

Truck ? trailer → PCS

730 Truck ? trailer → import fill

830 Truck ? trailer → import fill

920 Truck ? trailer → PCS

930 Noticeable sheen in water coming out of
soil SE of convenience store

931 Truck ? trailer → import fill

932 Truck ? trailer → PCS

1016 Truck ? trailer → import fill

1045 2 Truck ? trailer → PCS

1130 Truck ? trailer → import fill

1110 Collect RE3-SE3-3.0

1120 Collect RE3-SE4-3.0

1130 Collect RE3-B2-3.5

1200 Collect RE2-SE6-10.0

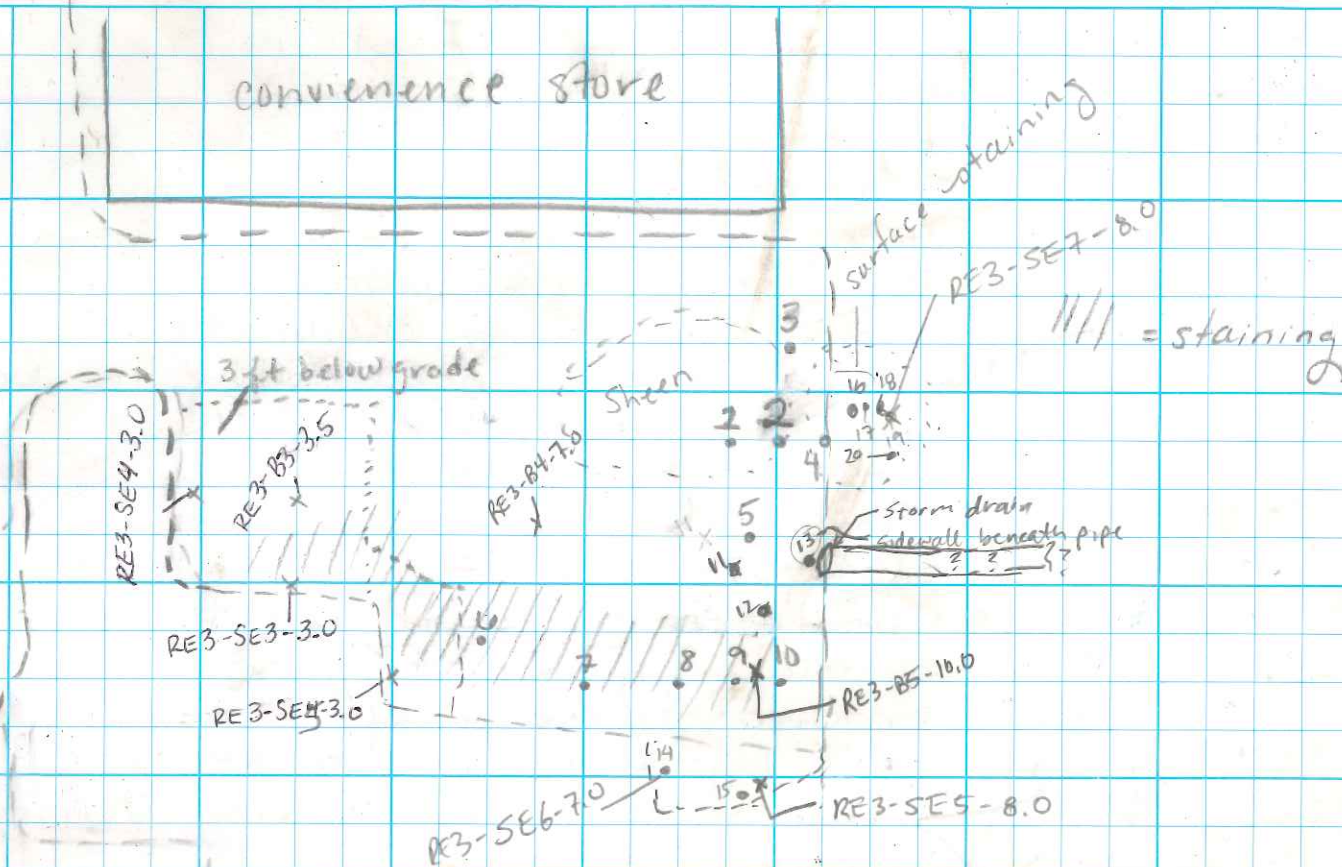
1315 Collect RE3-SE5-3.0

1325 2 Truck ? trailers → PCS

1407 FBI onsite/off site

↑
N
NTS

Convenience store



Sample	PID	Depth	#	PID	DEPTH
1	100 ppm	8.0			
2	343 ppm	8.0	16	77.1	7.0 bys
3	35.8 ppm	8.0	17	470.2	~7
4	180.2 ppm	8.0	18	63.5	~7
5	> 5000 ppm	7.0	19	30	~8
6	18.7 ppm	3.0	20	40.0	~9
7	56.1 ppm	3.5			
8	345.6 ppm	4.0			
9	229.2 ppm	4.0			
10	104.7 ppm	6.0			
11	0.1 ppm	8.0			
12	0.1 ppm	9.0			
13	390.5 ppm	3.0			
14	40.1 ppm	7.5			
15	34.0 ppm	8.0			

7.5
Rate in the rain
8.0

9/16/15 - Wednesday

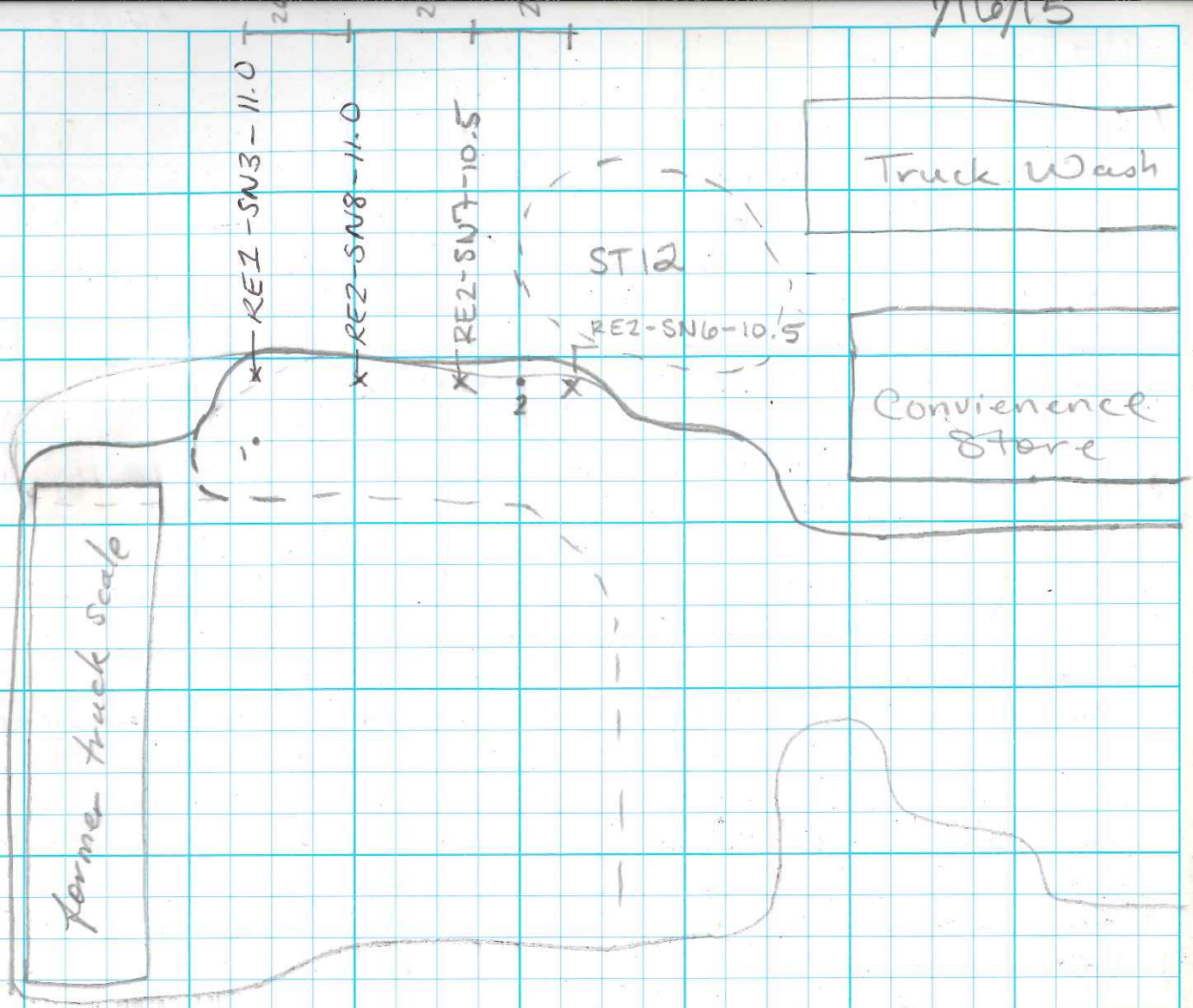
0714.03.01-2A

Conditions: partly sunny, cool

- 700 CRW on site
Wyser already on site and removing asphalt from northern edge of western excavation
- 830 Collect turbidity readings, calibrate turbidity meter, changed out filter bags
- 835 - Turbidity = 24.49 NTU
- 840 - Turbidity = 15.91 NTU
- 845 - Turbidity = 9.86 NTU
- 850 Collect BT-POST-17 water sample from post treated water at Baker Tanks
- 900 Wyser continuing to dewater excavation and removed top 6 ft of material along north wall of western excavation
- 1050 Rich Prosser of the City of Mt. Vernon onsite/off site
- 1115 Sheen observed in water seeping from northern edge of the excavation
- 1200 Collect REZ-SN6-10.5 soil sample (sidewall)
- 1210 Collect RE-ST12-1 stockpile soil sample
- 1215 Collect REZ-SN7-10.5 sidewall soil sample
- 1230 Collect RE-ST12-2 stockpile soil sample
- 1240 Collect RE-ST12-3 " " "
- 1305 Collect REZ-SN8-11.0 sidewall soil sample
- 1315 Collect REZ-SN3-11.0 " " "
- 1420 FBI onsite/offsite for sample pick up
- 1445 Began back-filling area to south of REZ
- 1500 Applied ORC to first 2 ft of filled material (8-10 ft bgs)

7/16/15

NTS
↑
N



Sample	PID	Depth	Comments
1	302.7	10.0	SP, lt. grey, saturated, m-f
REZ-SN6-10.5	0.0	10.5	SAA (same as above)
2	23.3	10.5	SAA
REZ-SN7-10.5	23.6	10.5	SAA
RE-ST12-1	0.0	-	Gravel, m-c, a, dry
RE-ST12-2	0.0	-	SAA
RE-ST12-3	0.0	-	SAA

0714.03.01-02A

9/17/15, THURSDAY

WEATHER: OVERCAST, ~50°

3RD T+T ←

- 0700 ASK ON SITE, WYSER ALREADY ON SITE. LOADING TRUCK+TRAILER W/PCS
SETTING UP Dewatering pump ~~AND DISCHARGE PUMP~~
WYSER OVER EX PL AREA AND MOVING CLEAN IMPORT TO REZ AREA FOR ORC
- 0745 TRUCK+TRAILER OF BACKFILL MATERIAL
- 0835 TRUCK+TRAILER OF BACKFILL MATERIAL
- 0852 LOADING PCS INTO TRUCK+TRAILER, ~~2~~ X 3
- 0930 TRUCK+TRAILER OF BACKFILL MATERIAL
APPLYING 2ND LIFT FOR ORC TREATMENT IN REZ AREA.
- 1015 TOLD FROM CAT RENTAL ON SITE.
TRUCK+TRAILER OF BACKFILL MATERIAL
- 1040 ORC (2ND LIFT) MIXER, WYSER WILL NOT PLACE BACKFILL FROM CLEAN SIDEWALKS
OVER TOP.
- 1055 TRUCK+TRAILER - LOADING PCS X 3
- 1200 TRUCK+TRAILER OF BACKFILL MATERIAL
- 1300 LOADING PCS INTO TRUCK+TRAILERS X 3, TRUCK+TRAILER OF BACKFILL
- 1400 TRUCK+TRAILER OF BACKFILL
ASK COLLECTING CONFIRMATION SAMPLES, WYSER OVER-EX. EAST/NORTH EAST
SIDEWALK OF REZ/
PL AREA.
- 1520 ASK OFF SITE - DROPPING SAMPLES OFF @ LAB.

9/18/15 FRIDAY

WEATHER: OVERCAST, ~50°

- 0700 ASK ON SITE, WYSER LOADING PCS INTO TRUCKS, (4 T+T's)
Dewatering + DISCHARGE, PULLING ASPHALT EAST SIDEWALK NEAR STORM SEWER
- 0900 TRUCK+TRAILER FOR PCS REMOVAL (3 T+T's)
- 0950 TRUCK+TRAILER FOR PCS REMOVAL (1)
- 1055 TRUCK+TRAILER FOR PCS REMOVAL (2)
2 TRUCK+TRAILERS OF BACKFILL
- 1400 TRUCK+TRAILER FOR PCS (1)
TRUCK+TRAILER FOR ASPHALT
- 1415 TRUCK+TRAILER OF BACKFILL
- 1430 ASK OFF SITE FOR LAB

TRUCK WASH BLDG

N

6

Food MART
(now gone)

ID	PID	DEPTH
1	40.0	9.0
2	2.7	9.0
3	4.3	7.0
4	0.0	3.0
5	0.0	3.5

checked
PID
w/ sharpie
→ it's
working
property

RE3-SE7-8.0

1
~14'

2/3 RE3-SE8-9.0 @ 1150

RE3-SE9-3.5
@ 1310

6" beneath pipe

Storm sewer

RE3-SE5-8.0

10'

~20'

~40'

/// = surface excavation

PID	ID	PID	~ DEPTH
	6	0.0	~ 8-9' bgs

9/21/15 MONDAY

0714, 03.01-02A

Weather: Partly cloudy, ~50°

0700 ASK ON SITE. MIKE ON SITE. STARTING TO LOAD PCS (x3?)

2 PUMPS WERE STOLEN FROM THE SITE OVER THE WEEKEND

WYSEB HAS 1 PUMP LEFT AND SET IT UP FOR DEWATERING

DARREN ON SITE, OPPOSITE @ ~0815.

0915 TRUCK + TRAILER - LOAD W/PCS x 2

1130 TRUCK + TRAILER - LOAD W/PCS x 2

1415 ASK COLLECTED CONFIRMATION SAMPLE FROM REZ-SN

9/28/15, MONDAY

WEATHER: Clear + hazy, ~45°

0700 ASK + WYSEB ARRIVE ON SITE.

WYSEB SETTING UP DEWATERING + TREATMENT/DISCHARGE

POTHOLE #1 (see sketch for location)

Dark staining near surface. 0-1' bgs follow brown to lite brown sand, followed by grey silt (clay-like).

P.O

O.I from ~7' bgs @ 1150.

POTHOLE #2 → Same as Pothole #1.

9/28

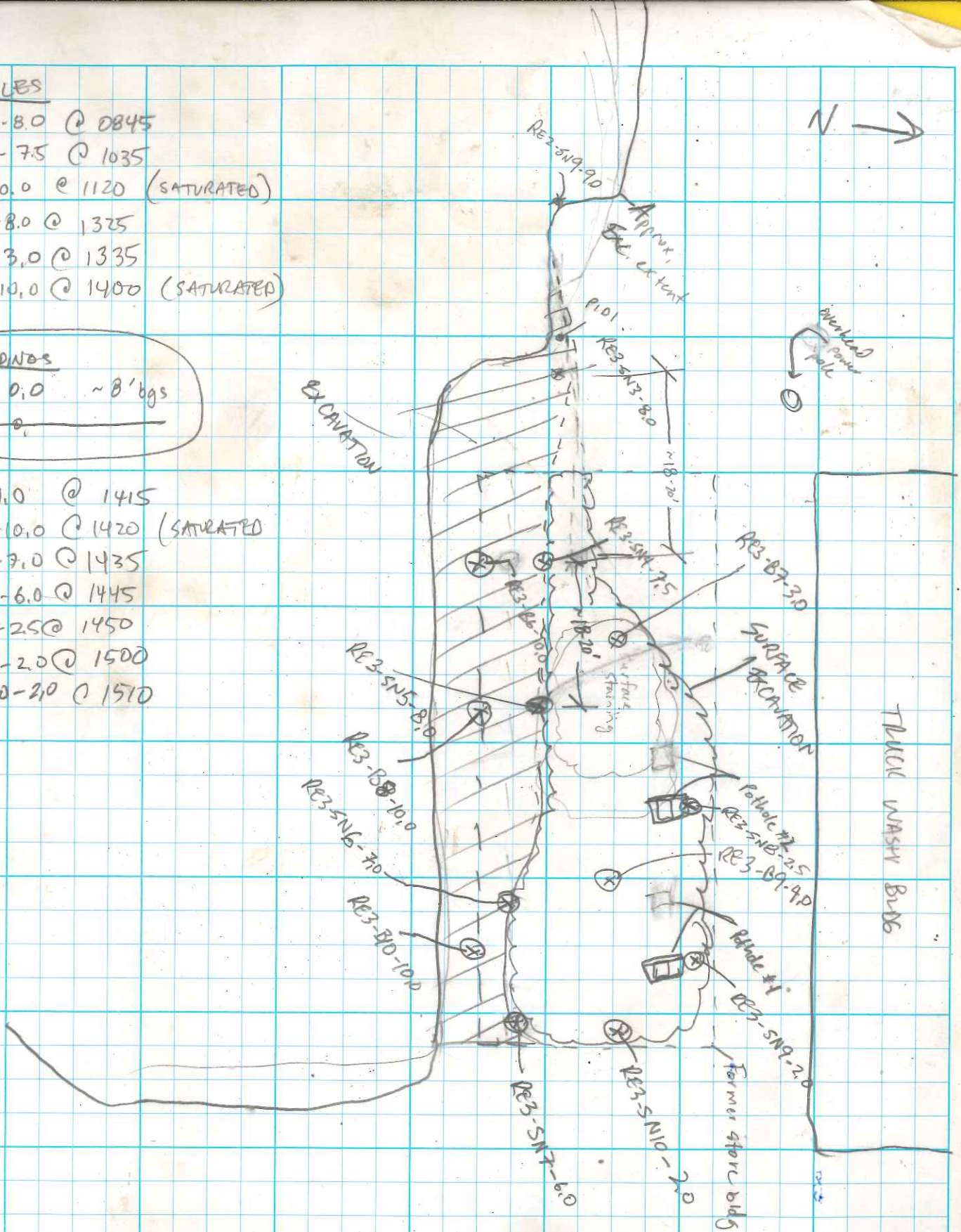
SAMPLES

- RE3-SN3-8.0 @ 0845
- RE3-SN4-7.5 @ 1035
- RE3-B6-10.0 @ 1120 (SATURATED)
- RE3-SN5-8.0 @ 1325
- RE3-B7-3.0 @ 1335
- RE3-B8-10.0 @ 1400 (SATURATED)

P10 READINGS

- | | | |
|---|-----|----------|
| 1 | 0.0 | ~ 8' bgs |
| 2 | 0 | |

- RE3-B9-4.0 @ 1415
- RE3-B10-0.0 @ 1420 (SATURATED)
- RE3-SN6-7.0 @ 1435
- RE3-SN7-6.0 @ 1445
- RE3-SN8-2.5 @ 1450
- RE3-SN9-2.0 @ 1500
- RE3-SN10-2.0 @ 1510



9/29/15 - Tuesday

0714.03.01-2A

Conditions: Sunny A 50s

700 Crew: Wyser on site

800 Begin to collect water quality parameters from Baker tanks treated water
Turbidity & measurements:

800 " 8.10 NTU

805 " 6.34 NTU

810 " 5.71 NTU

815 Collect treated water sample
BT-POST-8

850 Begin backfilling area to west of convenience ^{store}

945 Darren of Wyser on site

1015 Darren off site

1030 Mix ORC into 8-10 ft bgs of clean backfill
along northern edge of western excavation

1130 Apply ORC to 8-6 ft bgs layer of
clean backfill along northern edge of
western excavation

1200 Lunch

1230 Begin compacting 6-10 ft depth of ORC
treated backfill

1235 Yen-Vy Van of MFA on site

1255 Yen-Vy off site

1330 Begin backfilling excavation to the
south of the former convenience store
and pump islands with imported sand

1445 JP of Geotest on site

- all tests were above 85 (94, 90)

1530 Crew, Geotest, and Wyser off site

9/30/15 - Wednesday, Conditions: sunny & cool

700 Wyser and crew on site, Wyser begins
loading 2 truck & trailer → PCS

730 Truck for garbage debris (a building) loaded

810 Truck & trailer → PCS

815 Surveyors on site

930 2 truck & trailer → PCS

1000 Surveyors off site, 1 truck → garbage/debris

1120 Collect REZ-SS7-9.5, PID=2.8 ppm, ^{m-}grey SS, saturated

1130 2 truck & trailer → PCS

(refer to next notebook)

APPENDIX E

UST DECOMMISSIONING DOCUMENTATION



July 14 2015 - I waive the "wait time" of this notice, Contractor will supply construction schedule to A. Adenese. Amitt Redford



DEPARTMENT OF
ECOLOGY
State of Washington

UNDERGROUND STORAGE TANK (UST)

30-DAY NOTICE

(See back of form for instructions)

FOR OFFICE USE ONLY

Site ID # 5354

FS ID # _____

Please the appropriate box: Intent to Install Intent to Close

HQ (360)407-7170 / Central (509)575-2490 / Eastern (509)329-3400 / Northwest (425)649-7000 / Southwest (360)407-6300

SITE INFORMATION		OWNER INFORMATION (this form will be returned to this address)	
Tag or UBI number		Skagit County Facilities Management	
Truck City		UST Owner/Operator	
Site Name		1800 Continental Place	
3216 Old Highway 99 South		Mailing Address/PO Box	
Site Physical Address		Mount Vernon	98273
Mount Vernon	98273	City	Zip Code
City	Zip Code	Skagit County/360.416.1300	
Site Phone Number		Owner/Operator Phone Number	
		Owner/Operator Email Address	

TANK INFORMATION

Tank ID	Substance Stored	Capacity	Date Project is Expected to Begin	Comments:
TS-DIE	Diesel	15,000 g	July 29, 2015	
TS-REG	Unleaded Gas	5,000 g	July 29, 2015	
TS-SUP	Unleaded Gas	5,000 g	July 29, 2015	
TS-UN	Unleaded Gas	5,000 g	July 29, 2015	

1) SERVICE PROVIDER INFORMATION - check the appropriate boxes

PLEASE NOTE: INDIVIDUALS PERFORMING UST SERVICES MUST BE ICC CERTIFIED OR HAVE PASSED ANOTHER QUALIFYING EXAM APPROVED BY THE DEPARTMENT OF ECOLOGY.

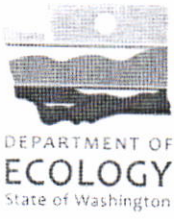
Installer Decommissioner Site Assessor

Wyser Construction Co., Inc.	Darren Ness
Service Provider Company Name	Contact Person
Mike Redford	206.678.5122
Certified Service Provider Name	Contact Phone Number
ICC00061806	Darren@wyserdirt.com
ICC Certification #	Contact Email Address

2) SERVICE PROVIDER INFORMATION (REQUIRED IF USING MORE THAN ONE PROVIDER) - check the appropriate boxes

Installer Decommissioner Site Assessor

Service Provider Company Name	Contact Person
Certified Service Provider Name	Contact Phone Number
ICC Certification #	Contact Email Address



TEMPORARY CLOSURE NOTICE FOR UNDERGROUND STORAGE TANKS

UST ID #: 5354
County: Skagit

This notice certifies that temporary closure activities were performed and conducted in accordance with Chapter 173-360 WAC. Instructions are found on the back page.

I. UST FACILITY		II. OWNER/OPERATOR INFORMATION	
Facility Compliance Tag #:	<u>A8119</u>	Owner/Operator Name:	<u>Old 99 LLC</u>
UST ID #:	<u>5354</u>	Business Name:	<u>Point B Transportation</u>
Site Name:	<u>Truck City Truck stop</u>	Address:	<u>3228 Old Highway 99 South</u>
Site Address:	<u>3228 Old Hwy 99 South</u>	City:	<u>Mt. Vernon</u> State: <u>WA</u> Zip: <u>98273</u>
City:	<u>Mt. Vernon WA 98273</u>	Phone:	<u>360-424-7528 ext 102 or ext 106</u>
Phone:	<u>360-424-7528 ext 102 or 106</u>	Email:	<u>Bart@olmsteadtransportation.com</u>

III. TANK INFORMATION				
TANK ID	DATE LAST USED	TANK CAPACITY	LAST SUBSTANCE STORED	EMPTY (Y/N) <small>(less than 1" product)</small>
#1 5000	12/31/14	5000	Prem.	YES
#2 5000			unk	
#3 5000			unk	
#4 15,000		15000	#2 Diesel	

IV. CHECKLIST (check all that apply)	
<input checked="" type="checkbox"/>	Facility compliance tag is attached (only applicable if temporarily closing <u>all</u> tanks for longer than 3 months).
<input type="checkbox"/>	Business License is current and annual tank fees will continue to be paid. There is a designated Class A/B certified tank operator for this site.
<input type="checkbox"/>	Vent lines are open; tank fill ports and dispenser nozzles are locked.
<input checked="" type="checkbox"/>	Tank(s) are empty and receipt is attached proving tanks were pumped and now contain less than 1" product.
<input type="checkbox"/>	Tank(s) are not empty (i.e. contain greater than 1" product). I will continue to use (insert leak detection method) _____ as my method for monitoring tank(s) for leaks. The last month's passing leak test or sensor status report is attached.
<input type="checkbox"/>	The most recent corrosion protection testing, if applicable, was conducted on (insert date) _____. Routine testing and repairs will continue to be made. The impressed current system, if applicable, will remain ON and the 60 day (or monthly) Volt/Amp checks will continue to be made.

V. REQUIRED SIGNATURE	
<small>Signature acknowledges UST(s) comply with UST regulation WAC 173-360-380 Temporary Closure Requirements.</small>	
<u>1-23-15</u> Date	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <u>Patty Smith</u> Signature of Tank Owner or Authorized Representative </div> <div style="width: 45%;"> <u>Patty Smith</u> Print or Type Name </div> </div>

Invoice



Date	Invoice #
1/27/2015	4967

Bill To
Truck City Truck Stop 22529 Knapp Road Mt. Vernon, WA 98273

P.O. No.	Terms	Project
	Due on Receipt	

Item	Quantity	Description	Rate	Amount
		1/27/2015		
		Project: Remove & dispose of gasoline and #2 Diesel from (3) three 5,000 gallon and (1) one 15,000 gallon underground storage tanks (UST'S) at Truck City Truck Stop Mt. Vernon WA.		
Disposal	550	550 gallons disposal @\$0.75/gallon	0.75	412.50
Vac Tank	3	Hours Vac Tank and operator @ \$100/hour	100.00	300.00
Labor	3	Hours Labor @ \$65/hour	65.00	195.00
		Sub-Total		907.50
		Sales Tax	8.50%	77.14
			Subtotal	\$907.50

			Total	\$984.64
--	--	--	--------------	-----------------

Phone #	Fax #	E-mail	Web Site
(360) 398-0134	(360) 398-2311	ultratank2012@gmail.com	www.ultratankservices.com

853.11

60 - Day Insection Results for Impressed Current Cathodic Protection Systems

FACILITY NAME: Truck City
 AMP RANGE RECOMMENDED: 1.5 AMPS to 3 AMPS
 VOLTAGE RANGE RECOMMENDED: 8 VOLTS to 11 VOLTS

Date	Your Name	Voltage Reading	Amp Reading	Is your System Running Properly?/Hours
2-1-14	Bart	10.5	2.5	yes 03623.10
3-1-14	Bart	10.5	2.4	yes 4293.30
4-1-14	Bart	10.7	2.4	yes 4939.90
5-1-14	Bart	10.6	2.4	yes 5083.41
6-1-14	Bart	10.5	2.4	yes 6457.83
7-1-14	Bart	10.5	2.5	yes 7171.42
8-1-14	Bart	10.6	2.6	yes 7901.50
9-1-14	Bart	10.6	2.6	yes 8620.94
10-1-14	Bart	10.8	2.7	yes 9368.13
11-1-14	Bart	10.7	2.5	yes 10149.10
12-1-14	Bart	10.5	2.5	yes 10842.20
1-1-15	Bart	10.8	2.5	yes 11585.2
1-28-15	Bart	10.5	2.4	yes 12233
2-12-15	Bart	10.8	2.5	yes 12449

-Tanks empty

- A) If the rectifier voltage and/or amperage output(s) are outside the recommended operating levels, contact a cathodic protection expert to address the problem.
- B) NEVER turn off the rectifier.
- C) KEEP THIS RECORD FOR AT LEAST 6 MONTHS AFTER THE DATE OF THE LAST READING.

60-Day Inspection Results for Impressed Current Cathodic Protection Systems

FACILITY NAME: TRUCK CITY

AMP RANGE RECOMMENDED: 1.5 AMPS to 3 AMPS

VOLTAGE RANGE RECOMMENDED: 8 VOLTS to 11 VOLTS

Date	Your Name	Voltage Reading	AMP Reading	Is your System Running Properly?
10-1-10	Rick	10.1	2.4	743371.2
11-1-10	Rick	10.1	2.5	750387.2
1-10-11	Rick	10.1	2.4	767712.4
2-1-11	Rick	10.2	2.5	772710.1
3-4-11	Bart	10.5	2.4	780323.3
4-11-11	Rick	10.5	2.4	789503.4
5-2-11	Rick	10.5	2.5	794533.3
7-1-11	Rick	10.4	2.5	808683.6
8-1-11	Rick	10.5	2.5	816287.7
9-2-11	Rick	10.4	2.4	823969.7
10-17-11	Rick	10.2	2.5	834803.3
11-4-11	Rick	10.1	2.4	839103.3
12-2-11	Rick	10.3	2.4	845824.3
1-1-12	Rick	10.2	2.3	852989.1
2-5-12	Rick	10.3	2.4	861423.4
3-2-12	Rick	10.2	2.4	867643.3
4-1-12	Rick	10.2	2.4	874687.3
5-4-12	Rick	10.1	2.3	882624.9
6-1-12	Rick	10.2	2.4	889354.1

- If the rectifier voltage and/or amperage output(s) are outside the recommended operating levels, contact a cathodic protection expert to address the problem.
- Never turn off your rectifier.
- KEEP THIS RECORD FOR AT LEAST 6 MONTHS AFTER THE DATE OF THE LAST READING.

60-Day Inspection Results for Impressed Current Cathodic Protection Systems

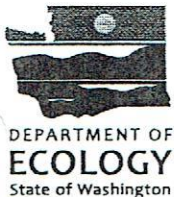
FACILITY NAME: TRUCK CITY

AMP RANGE RECOMMENDED: 1.5 AMPS to 3 AMPS

VOLTAGE RANGE RECOMMENDED: 8 VOLTS to 11 VOLTS

Date	Your Name	Voltage Reading	AMP Reading	Is your System Running Properly?
7-1-12	RICK	10.2	2.4	896601.2
8-3-12	RICK	10.1	2.3	904432.3
9-8-12	RICK	10.1	2.3	913062.1
9-30-12	RICK	10.2	2.3	918354.9
12-1-12	RICK	10.1	2.4	933153.2
1-2-13	RICK	10.1	2.4	941017.4
2-1-13	RICK	10.2	2.4	947993.3
3-1-13	RICK	10.1	2.3	954934.2
3-31-13	RICK	10.1	2.2	962031.4
5-1-13	RICK	10.2	2.3	969593.4
6-1-13	RICK	10.2	2.4	976923.1
6-30-13	RICK	10.1	2.3	983865.1
8-1-13	Bart	10.2	2.3	991427.0
9-1-13	Bart	10.2	2.4	99986.22
10-3-13	Bart	10.3	2.5	00663.42
10-26-13	J. Keppel NCL	10.0	2.9	12692.7
11-1-13	Bart	10.1	2.3	2109.77
12-1-13	Johannes NCL	10.2	2.4	
1-1-14	Bart	10.3	2.4	2879.43

- If the rectifier voltage and/or amperage output(s) are outside the recommended operating levels, contact a cathodic protection expert to address the problem.
- Never turn off your rectifier.
- KEEP THIS RECORD FOR AT LEAST 6 MONTHS AFTER THE DATE OF THE LAST READING.



UST ID #: _____

County: SKagit

PERMANENT CLOSURE NOTICE FOR UNDERGROUND STORAGE TANKS

This notice certifies that permanent closure activities were performed and conducted in accordance with Chapter 173-360 WAC. Instructions are found on the back page.

I. UST FACILITY			II. OWNER/OPERATOR INFORMATION			
Facility Compliance Tag #:			Owner/Operator Name:			
UST ID #:			Business Name:			
Site Name: <u>TRUCK CITY</u>			Address:			
Site Address: <u>3216 OLD HIGHWAY 99 SOUTH</u>			City:		State:	Zip:
City: <u>MT. VERNON</u>			Phone:			
Phone:			Email:			
III. CERTIFIED UST DECOMMISSIONER						
Company Name: <u>WYSER CONSTRUCTION</u>			Service Provider Name: <u>MIKE REDFORD</u>			
Address: <u>19015 104th AVE SE</u>			Certification Type: <u>ICC</u>			
City: <u>SNOHOMISH</u>		State: <u>WA</u>	Zip: <u>98246</u>	Cert. No.: <u>1CC00001806</u>		Exp. Date: <u>3/2017</u>
Provider Phone: <u>425.742.0898</u>			Provider Email: <u>dairre@wyserdirt.com</u>			
Provider Signature: <u>Michael Redford</u>			Date: <u>10/22/15</u>			
IV. TANK INFORMATION						
TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	removal	CLOSURE METHOD		CLOSURE DATE
				closed-in-place	change-in-service	
<u>TS-DIE</u>	<u>15,000g</u>	<u>DIESEL</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>8/6/15</u>
<u>TS-REU</u>	<u>5,000g</u>	<u>UNLEADED</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>8/6/15</u>
<u>TS-SUP</u>	<u>5,000g</u>	<u>UNLEADED</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>8/6/15</u>
<u>TS-UN</u>	<u>5,000g</u>	<u>UNLEADED</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>8/6/15</u>
			□	□	□	
			□	□	□	
V. REQUIRED SIGNATURE						
<i>Signature acknowledges UST(s) comply with UST regulation WAC 173-360-380 Temporary Closure Requirements.</i>						
Date	Signature of Tank Owner/Operator or Authorized Representative			Print or Type Name		

873126

**MOUNT VERNON FIRE DEPARTMENT
INSTALLATION PERMIT**

PERMIT: 15-042

FOR INSPECTION CALL:
336-6277
74-HOURS NOTICE REQUIRED

APPLICANT TO COMPLETE NUMBERED SPACES ONLY

JOB ADDRESS (AND NAME IF APPLICABLE)		
1. 3228 OLD HIGHWAY 99 SOUTH ROAD - NEW SKAGIT COUNTY JAIL SITE (OLD TRUCK CITY TRUCK STOP)		
OWNER		PHONE
2. SKAGIT COUNTY		360336.9400
MAILING ADDRESS		ZIP
1800 CONTINENTAL PLACE	MOUNT VERNON, WA	98273
CONTRACTOR	STATE LICENSE NO.	CITY BUSINESS NO.
3. WYSER CONSTRUCTION, INC	WYSERCI045N9	
MAILING ADDRESS	ZIP	PHONE
19015 109 TH AVENUE SE	SNOHOMISH, WA 98296	425.742.0898
ARCHITECT OR DESIGNER		PHONE
4. DARREN NESS 206.678.5122		
MAILING ADDRESS		ZIP
USE OF BUILDING		
5. .		
CLASS OF WORK: <input type="checkbox"/> NEW <input type="checkbox"/> ADDITION <input type="checkbox"/> ALTERATION <input type="checkbox"/> REPAIR		
6. DESCRIBE WORK:		
7. REMOVE (1) 15,000 GAL DIESEL AND (3) 5,000 GAL GASOLINE UNDERGROUND STORAGE TANKS.		

SPECIAL CONDITIONS:			INSPECTION AND PLAN REVIEW FEES		
			NO	INSPECTION	FEE
				SPRINKLER SYSTEM	
				FIRE ALARM SYSTEM	
				KITCHEN FIRE SUPPRESSION SYSTEM	
				SPRAY BOOTH SUPPRESSION SYSTEM	
				HALON/CO2 SUPPRESSION SYSTEM	
				STANDPIPE SYSTEM	
				FIRE PUMP	
				UNDERGROUND TANK:	
				INSTALLATION	
			4	REMOVAL	500.00
				ABANDONMENT	
				ABOVE-GROUND TANK	
				LIQUEFIED PETROLEUM TANK	
				COMPRESSED GASES:	
				FLAMMABLE 2,500 C.F.	
				NON-FLAMMABLE 6,000 C.F.	
				FIREWORKS STAND	
				INSPECTION TOTAL	
				\$	
				PLAN REVIEW	
				\$	
				TOTAL FEE	\$ 500.00

APPLICATION ACCEPTED BY:	PLANS CHECKED BY:	RECEIPT
		INITIAL DATE

NOTICE
THIS PERMIT BECOMES NULL AND VOID IF WORK OR CONSTRUCTION AUTHORIZED IS NOT COMMENCED WITHIN 180 DAYS, OR IF CONSTRUCTION OR WORK IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AT ANY TIME AFTER WORK IS COMMENCED.

I HEREBY CERTIFY THAT I HAVE READ AND EXAMINED THIS APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT. ALL PROVISIONS OF LAWS AND ORDINANCES GOVERNING THIS TYPE OF WORK WILL BE COMPLIED WITH WHETHER SPECIFIED HEREIN OR NOT. THE GRANTING OF A PERMIT DOES NOT PRESUME TO GIVE AUTHORITY TO VIOLATE OR CANCEL THE PROVISIONS OF ANY OTHER STATE OR LOCAL LAW REGULATING CONSTRUCTION OR THE PERFORMANCE OF CONSTRUCTION.

SIGNATURE OF CONTRACTOR OR AGENT

06-15

(DATE)

SIGNATURE OF OWNER (IF OWNER)

(DATE)

PERMIT ISSUED BY: CHIEF OF FIRE PREVENTION

7/16/15
(DATE)

Mount Vernon Fire Department

Prevention Bureau

1901 North LaVenture Road
Mount Vernon, WA 98273

Commercial Tank Removal Permit

Office (360) 336-6277
Fax (360) 336-6247

HAVE THIS PERMIT ON SITE DURING FIRE DEPARTMENT INSPECTION

Site Address: 3228 Old Hwy 99 South Road (P29546)	Permit: 15-042
Tenant: Old Truck City Truck Stop (New County Jail Site)	Phone:
Property Owner: Skagit County	Phone: (360) 336-9400
Contractor: Wyser Construction, Inc.	Phone: (425) 742-0898 Darren Ness
Number of tanks to be removed: (1) 15,000 gal Diesel and (3) 5,000 gal Gas	

NOTE: Signatures below confirm only tank removal was performed to satisfy requirements of the International Fire Code, and do not confirm presence or absence of product in the ground.

COMMERCIAL TANK REMOVAL

*Comply with the following procedures for commercial tank removal.

**A Fire Department employee signature below constitutes confirmation the tank removal occurred.

Inspector Signature: *Rick Prosser*

Date: 8-6-15

Print Name: RICK PROSSER

1. Permit is required to remove underground tanks.
2. Department of Ecology shall be notified of closure of registered tank thirty (30) days prior.
3. Tank(s) may be removed only after the Fire Department inspection.
4. Two (2) 20BC portable fire extinguishers are to be on the site within 50 feet of the operation.
5. Rope or ribbon barricades must be provided, circling 10 feet from the operation or be enclosed in a fenced yard.
6. Approved "NO SMOKING" signs must be posted in readily visible locations.
7. No hot works allowed unless the tanks are certified safe.
8. Determine what product is in the tank (heating oil, kerosene, waste oil, etc.).
9. Have the residual heating oil or petroleum product pumped from the tank by a tank decommissioning company, a tank cleaning company, or a used oil recycler.
10. Disconnect the suction, inlet, gauge and vent lines; remove section of connecting lines which are not to be used further.
11. To insure that the tank atmosphere is inert, 1 lbs of dry ice per 50 gallons liquid capacity of the tank must be inserted in the tank. This shall be done prior to the use of heavy equipment for excavating.
 - Wait a minimum of 60 minutes for dry ice to vaporize. Vapors should begin to show at the fill-pipe at this time which should be left open.
 - CO-2 fire extinguishers or compressed gas are not to be used for inerting purposes as this produces static electricity which may result in an explosion.
12. A certified firm shall collect and monitor soil and water samples. In the event that soil and water samples are found to be contaminated, that site shall be cleaned per EPA regulations (not required for residential tanks unless obvious contamination). If there is product in the ground, you will be notified to contact the Department of Ecology for further guidance.

YOU MUST CONTACT THE FIRE DEPARTMENT AT LEAST
24 HOURS IN ADVANCE TO SCHEDULE AN INSPECTION



DEPARTMENT OF
ECOLOGY
State of Washington

SITE CHECK/SITE ASSESSMENT CHECKLIST FOR UNDERGROUND STORAGE TANKS

UST ID #: 5354

County: Skagit

This checklist certifies that site check or site assessment activities were performed in accordance with Chapter 173-360 WAC. Instructions are found on the last page.

I. UST FACILITY		II. OWNER/OPERATOR INFORMATION	
Facility Compliance Tag #:		Owner/Operator Name: Skagit County	
UST ID #: 5354		Business Name: Truck City	
Site Name: Truck City Truck Stop		Address: 3216 Old Highway 99 S Road	
Site Address: 3228 Old Highway 99 S Road		City: Mt. Vernon	State: WA Zip: 98273
City: Mt. Vernon		Phone: (360) 770-3994	
Phone: N/A		Email: mestvold@comcast.net	
III. CERTIFIED SITE ASSESSOR			
Service Provider Name: Carolyn Wise		Company Name: Maul Foster & Alongi, Inc.	
Cell Phone: (360)690-5982	Email: cwise@maulfoster.com	Address: 1329 N. State Street, Ste. 301	
Certification #: ICC8277112	Exp. Date: 9/13/16	City: Bellingham	State: WA Zip: 98225
IV. TANK INFORMATION			
TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
TS-DIE	15,000	Diesel	8/6/2015
TS-REG	5,000	Unleaded Gasoline	8/6/2015
TS-SUP	5,000	Unleaded Gasoline	8/6/2015
TS-UN	5,000	Unleaded Gasoline	8/6/2015
V. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT (check one)			
<input checked="" type="checkbox"/> Release investigation following permanent UST system closure (i.e. tank removal or closure-in-place).			
<input type="checkbox"/> Release investigation following a failed tank and/or line tightness test.			
<input type="checkbox"/> Release investigation following discovery of contaminated soil and/or groundwater.			
<input type="checkbox"/> Release investigation directed by Ecology to determine if the UST system is the source of offsite impacts.			
<input type="checkbox"/> UST system is undergoing a "change-in-service", which is changing from storing a regulated substance (e.g. gasoline) to storing a non-regulated substance (e.g. water).			
<input type="checkbox"/> Directed by Ecology for UST system permanently closed or abandoned before 12/22/1988.			
<input type="checkbox"/> Other (describe):			

VI. CHECKLIST

**The site assessor must check each of the following items and include it in the report.
Sections referenced below can be found in the Ecology publication
*Guidance for Site Checks and Site Assessments for Underground Storage Tanks.***

	YES	NO
1. The location of the UST site is shown on a vicinity map.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. A brief summary of information obtained during the site inspection is provided (Section 3.2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. A summary of UST system data is provided (Section 3.1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. The soils characteristics at the UST site are described. (Section 5.2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Is there any apparent groundwater in the tank excavation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. A brief description of the surrounding land use is provided. (Section 3.1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. The name and address of the laboratory used to perform analyses is provided. The methods used to collect and analyze the samples, including the number and types of samples collected, are also documented in the report. The data from the laboratory is appended to the report.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. The following items are provided in one or more sketches:		
• Location and ID number for all field samples collected	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• If applicable, groundwater samples are distinguished from soil samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Location of samples collected from stockpiled excavated soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Tank and piping locations and limits of excavation pit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Adjacent structures and streets	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Approximate locations of any on-site and nearby utilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. If sampling procedures are different from those specified in the guidance, has justification for using these alternative sampling procedures been provided? (Section 3.4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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. Any sample exceeding MTCA Method A cleanup standards are highlighted or bolded.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Any factors that may have compromised the quality of the data or validity of the results are described.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred. The requirements for reporting confirmed releases can be found in WAC 173-360-372.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

VII. REQUIRED SIGNATURES

Signature acknowledges the Site Check or Site Assessment complies with UST regulations WAC 173-360-360 through -395.

Carolyn Wise

Print or Type Name

Signature of Certified Site Assessor

Date

SITE CHECK/SITE ASSESSMENT CHECKLIST

FOR UNDERGROUND STORAGE TANKS

INSTRUCTIONS

This checklist must accompany the results of a Site Check Report, which is performed if a release of petroleum or other regulated substance is suspected. It is also required to accompany a Site Assessment Report, which is required following the permanent closure or “change-in-service” of an underground storage tank system. This form is required to be filled out whether or not contamination is found. This checklist is to be completed by the Site Assessor and submitted **within thirty days of completing** these activities to the following address:

Dept. of Ecology
UST Section
PO Box 47655
Olympia, WA 98504-7655

- I./II. UST Facility and Owner/Operator Information:** Fill out these sections completely. If you do not know your UST ID number, include the facility compliance tag number.
- III. Service Provider Information:** It is the responsibility of the ICC-certified Site Assessor to ensure that sampling and documentation procedures are completed in accordance with Ecology’s *Guidance for Site Checks and Site Assessment for Underground Storage Tanks*.
- IV. Tank Information:** Use the same Tank identification numbers listed on the facility’s Business License which is based on the most recent UST Addendum on file with Ecology. List the last substance stored in each tank, the tank sizes and the date the site check or site assessment was completed.
- V. Required Signature:** The Site Assessor signature certifies these procedures were followed.

All confirmed releases must be reported to Ecology by the owner within 24 hours and by service providers within 72 hours of discovery. A Site Characterization Report must be submitted to Ecology within 90 days after confirming a release.

Further questions? Please contact your regional office below and ask for a tank inspector to assist you.

Regional Office	Counties Served
Central (509) 575-2490	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima
Eastern (509) 329-3400	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman
HQ (360) 407-7170	Federal facilities in Western Washington
Northwest (425) 649-7000	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom
Southwest (360) 407-6300	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

or find a complete list of UST inspectors at:
www.ecy.wa.gov/programs/tcp/ust-lust/people.html

APPENDIX F

UST DISPOSAL DOCUMENTATION





Serving You Since 1958

1265 South Anacortes Street
P.O. Box 376
Burlington, WA 98233-0376
(360) 757-6096, FAX (360) 757-8820

WEIGH
NUMBER
W- 42859

NAME WISON CONST DATE 8/7/15

HAULER L & L TRANSPORT

COMMODITY 2 TANKS

TRUCK # _____ LOAD # _____

FROM _____

TO _____

FEE _____

DRIVER ON DRIVER OFF

1st GROSS
2nd GROSS
1st TARE
2nd TARE

CERTIFIED SCALE		NET - COMMENTS
GROSS & TARE CERTIFIED SCALE WEIGHTS		
08:16AM 07AUG15 GROSS	48960 LB	
09:09AM 07AUG15 TARE	38640 LB	

WEIGHED BY [Signature]

♻️ THIS FORM IS PRINTED ON RECYCLED PAPER

ORIGINAL

2 small tanks



**Skagit River
Steel & Recycling, Inc.**

Serving You Since 1958
1265 South Anacortes Street
P.O. Box 376
Burlington, WA 98233-0376
(360) 757-6096, FAX (360) 757-8820

**WEIGH
NUMBER
W- 42861**

NAME Wiser Construction DATE _____

HAULER _____

COMMODITY Unpre #1 Tank

TRUCK # _____ LOAD # _____

FROM _____

TO _____

FEE _____

DRIVER ON

DRIVER OFF

1st GROSS

2nd GROSS

1st TARE

2nd TARE

CERTIFIED SCALE		
GROSS & TARE CERTIFIED SCALE WEIGHTS		NET - COMMENTS
10:00AM 07AUG15	GROSS	43840 LB
10:22AM 07AUG15	TARE	38640 LB

WEIGHED BY _____

♻️ THIS FORM IS PRINTED ON RECYCLED PAPER

ORIGINAL

1 small Tank



Serving You Since 1958

1265 South Anacortes Street
P.O. Box 376
Burlington, WA 98233-0376
(360) 757-6096, FAX (360) 757-8820

WEIGH
NUMBER
W- 42863

NAME Wiser Construction DATE 8-7-2015

HAULER L&L Transport

COMMODITY Unpret 1 Tank

TRUCK # _____ LOAD # _____

FROM _____

TO _____

FEE _____

DRIVER ON

DRIVER OFF

1st GROSS

2nd GROSS

1st TARE

2nd TARE

CERTIFIED SCALE

GROSS & TARE CERTIFIED SCALE WEIGHTS

NET - COMMENTS

12:04PM 07AUG15 GROSS 51960 LB

12:31PM 07AUG15 TARE 38580 LB

WEIGHED BY AG

♻️ THIS FORM IS PRINTED ON RECYCLED PAPER

ORIGINAL

Big Tank

Invoice



Date	Invoice #
1/27/2015	4967

Bill To
Truck City Truck Stop 22529 Knapp Road Mt. Vernon, WA 98273

P.O. No.	Terms	Project
	Due on Receipt	

Item	Quantity	Description	Rate	Amount
		1/27/2015 Project: Remove & dispose of gasoline and #2 Diesel from (3) three 5,000 gallon and (1) one 15,000 gallon underground storage tanks (UST'S) at Truck City Truck Stop Mt. Vernon WA.		
Disposal	550	550 gallons disposal @\$0.75/gallon	0.75	412.50
Vac Tank	3	Hours Vac Tank and operator @ \$100/hour	100.00	300.00
Labor	3	Hours Labor @ \$65/hour	65.00	195.00
		Sub-Total		907.50
		Sales Tax	8.50%	77.14
			Subtotal	\$907.50

			Total	\$984.64
--	--	--	--------------	----------

Phone #	Fax #	E-mail	Web Site
(360) 398-0134	(360) 398-2311	ultratank2012@gmail.com	www.ultratankservices.com

APPENDIX G

ANALYTICAL LABORATORY REPORTS



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 4, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included is the amended report from the testing of material submitted on August 6, 2015 from the Truck City 0714.02, F&BI 508100 project. Sample ID S-N1-8.30 has been amended to S-N1-8.0.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0810R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 10, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on August 6, 2015 from the Truck City 0714.02, F&BI 508100 project. There are 17 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0810R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 6, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.02, F&BI 508100 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508100 -01	S-W1-8.0
508100 -02	S-S1-8.0
508100 -03	B-T1-12.0
508100 -04	B-T2-12.0
508100 -05	S-N1-8.0
508100 -06	S-E1-8.0
508100 -07	ST-1
508100 -08	ST-2
508100 -09	ST-3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/10/15
 Date Received: 08/06/15
 Project: Truck City 0714.02, F&BI 508100
 Date Extracted: 08/06/15
 Date Analyzed: 08/06/15 and 08/07/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
S-W1-8.0 508100-01	<0.02	<0.02	<0.02	<0.06	<2	98
S-S1-8.0 508100-02	<0.02	<0.02	<0.02	<0.06	<2	98
B-T1-12.0 508100-03	<0.02	<0.02	<0.02	<0.06	<2	98
B-T2-12.0 508100-04	<0.02	<0.02	<0.02	<0.06	<2	99
S-N1-8.0 508100-05	<0.02	<0.02	<0.02	<0.06	<2	84
S-E1-8.0 508100-06	<0.02	<0.02	<0.02	<0.06	<2	99
ST-1 508100-07	<0.02	<0.02	0.33	0.67	190	110
ST-2 508100-08	<0.02	<0.02	<0.02	<0.06	3.0	98
ST-3 508100-09	<0.02	<0.02	<0.02	<0.06	<2	98
Method Blank 05-1603 MB	<0.02	<0.02	<0.02	<0.06	<2	99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/10/15
 Date Received: 08/06/15
 Project: Truck City 0714.02, F&BI 508100
 Date Extracted: 08/06/15
 Date Analyzed: 08/06/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 56-165)
S-W1-8.0 508100-01	<50	<250	91
S-S1-8.0 508100-02	<50	<250	84
B-T1-12.0 508100-03	<50	<250	87
B-T2-12.0 508100-04	<50	<250	99
S-N1-8.0 508100-05	<50	<250	85
S-E1-8.0 508100-06	<50	<250	85
ST-1 508100-07	1,600	<250	85
ST-2 508100-08	110	<250	83
ST-3 508100-09	<50	<250	89
Method Blank 05-1568 MB	<50	<250	85

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-W1-8.0	Client:	Maul Foster Alongi
Date Received:	08/06/15	Project:	Truck City 0714.02, F&BI 508100
Date Extracted:	08/07/15	Lab ID:	508100-01
Date Analyzed:	08/07/15	Data File:	508100-01.017
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	91	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	2.71

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-S1-8.0	Client:	Maul Foster Alongi
Date Received:	08/06/15	Project:	Truck City 0714.02, F&BI 508100
Date Extracted:	08/07/15	Lab ID:	508100-02
Date Analyzed:	08/07/15	Data File:	508100-02.020
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	91	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	1.34

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-T1-12.0	Client:	Maul Foster Alongi
Date Received:	08/06/15	Project:	Truck City 0714.02, F&BI 508100
Date Extracted:	08/07/15	Lab ID:	508100-03
Date Analyzed:	08/07/15	Data File:	508100-03.021
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	91	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	2.77

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-T2-12.0	Client:	Maul Foster Alongi
Date Received:	08/06/15	Project:	Truck City 0714.02, F&BI 508100
Date Extracted:	08/07/15	Lab ID:	508100-04
Date Analyzed:	08/07/15	Data File:	508100-04.022
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	90	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	3.23

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-N1-8.0	Client:	Maul Foster Alongi
Date Received:	08/06/15	Project:	Truck City 0714.02, F&BI 508100
Date Extracted:	08/07/15	Lab ID:	508100-05
Date Analyzed:	08/07/15	Data File:	508100-05.023
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	91	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	2.27

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-E1-8.0	Client:	Maul Foster Alongi
Date Received:	08/06/15	Project:	Truck City 0714.02, F&BI 508100
Date Extracted:	08/07/15	Lab ID:	508100-06
Date Analyzed:	08/07/15	Data File:	508100-06.024
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	92	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	1.38

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	ST-1	Client:	Maul Foster Alongi
Date Received:	08/06/15	Project:	Truck City 0714.02, F&BI 508100
Date Extracted:	08/07/15	Lab ID:	508100-07
Date Analyzed:	08/07/15	Data File:	508100-07.026
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	92	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	2.26

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	ST-2	Client:	Maul Foster Alongi
Date Received:	08/06/15	Project:	Truck City 0714.02, F&BI 508100
Date Extracted:	08/07/15	Lab ID:	508100-08
Date Analyzed:	08/07/15	Data File:	508100-08.027
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	91	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	4.35

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	ST-3	Client:	Maul Foster Alongi
Date Received:	08/06/15	Project:	Truck City 0714.02, F&BI 508100
Date Extracted:	08/07/15	Lab ID:	508100-09
Date Analyzed:	08/07/15	Data File:	508100-09.028
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	92	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	3.93

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	NA	Project:	Truck City 0714.02, F&BI 508100
Date Extracted:	08/07/15	Lab ID:	I5-434 mb
Date Analyzed:	08/07/15	Data File:	I5-434 mb.015
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	AP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	89	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/10/15

Date Received: 08/06/15

Project: Truck City 0714.02, F&BI 508100

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508087-06 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	92	69-120
Toluene	mg/kg (ppm)	0.5	103	70-117
Ethylbenzene	mg/kg (ppm)	0.5	103	65-123
Xylenes	mg/kg (ppm)	1.5	100	66-120
Gasoline	mg/kg (ppm)	20	95	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/10/15

Date Received: 08/06/15

Project: Truck City 0714.02, F&BI 508100

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508100-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	90	99	63-146	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	90	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/10/15

Date Received: 08/06/15

Project: Truck City 0714.02, F&BI 508100

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 508100-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/kg (ppm)	50	2.20	106	103	59-148	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	106	80-120

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

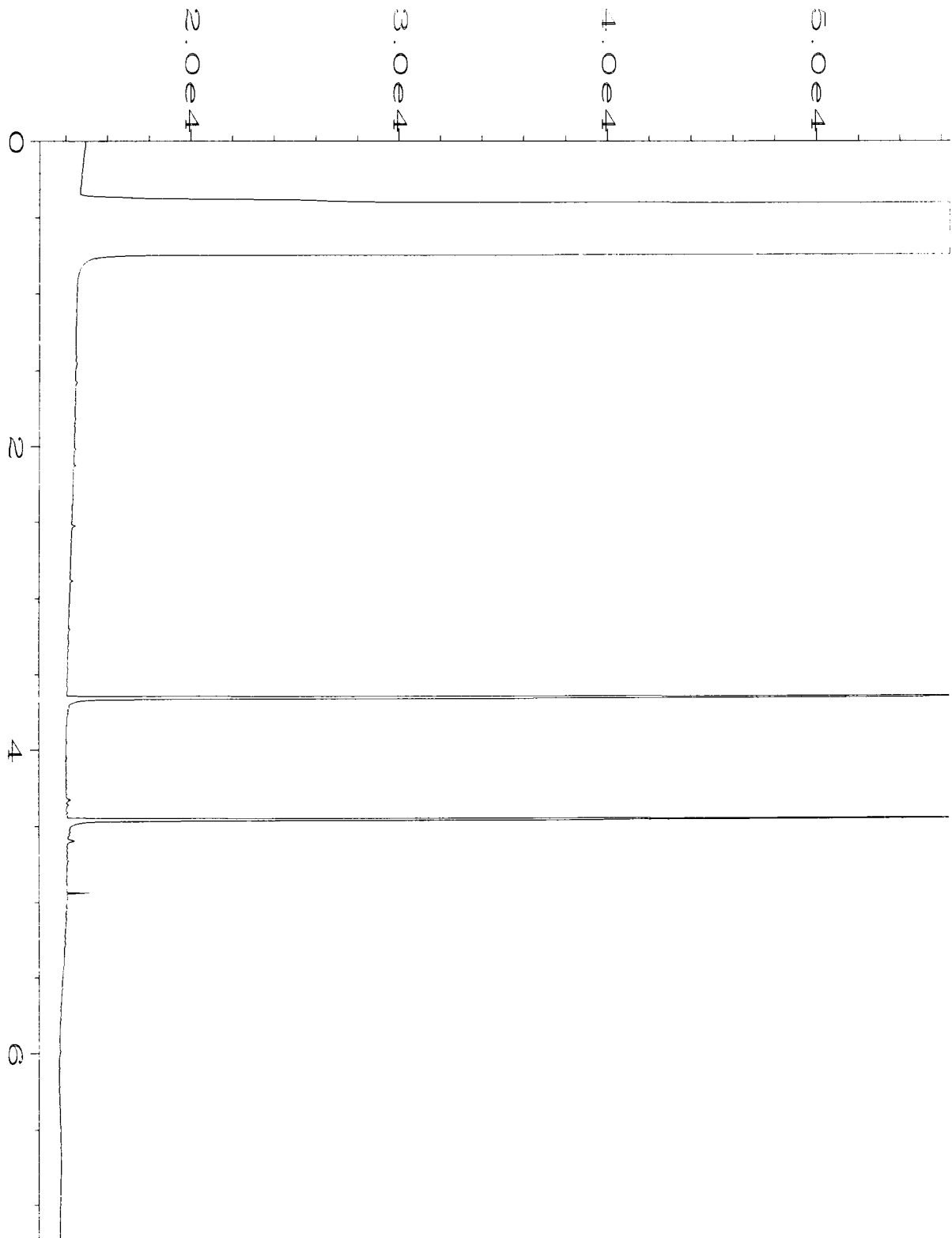
nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

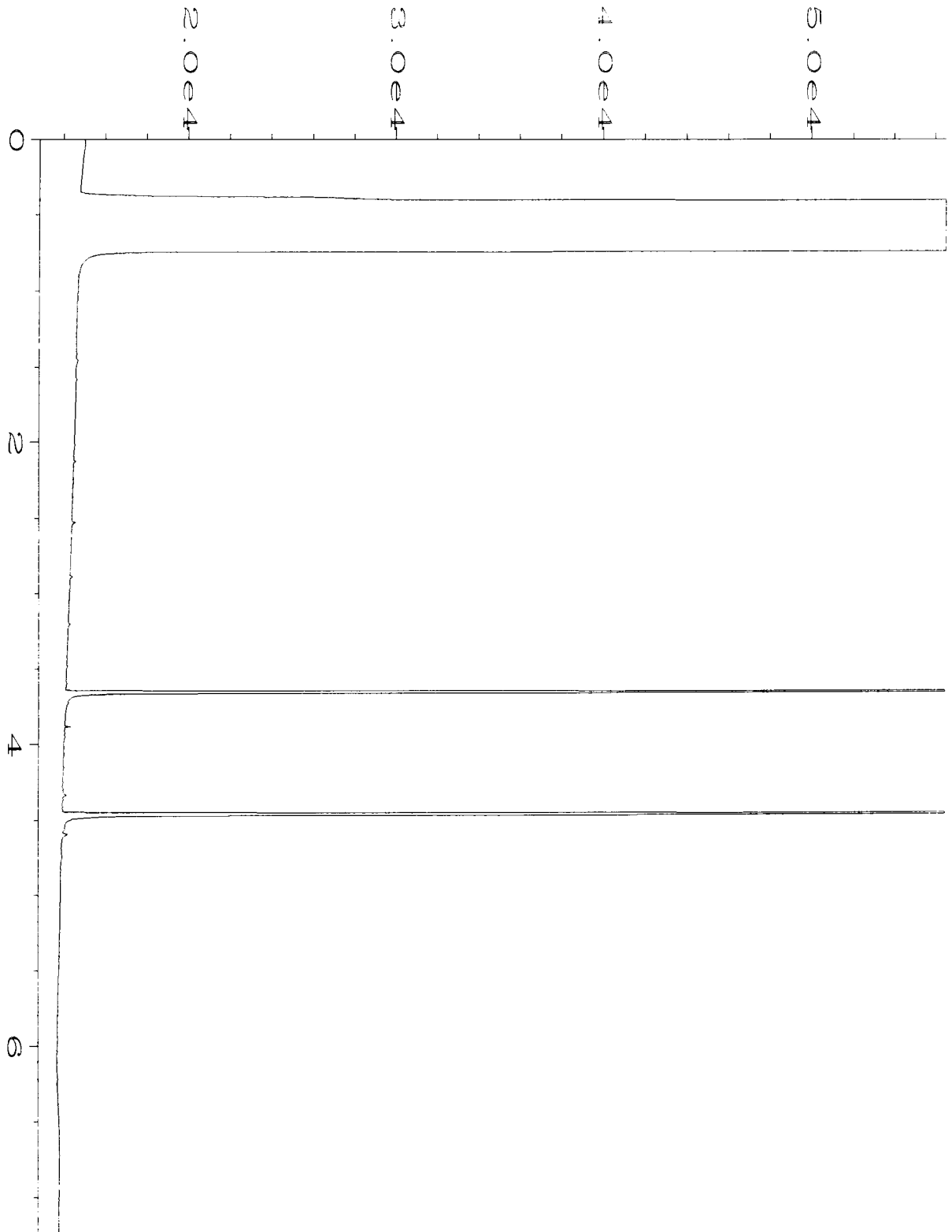
ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

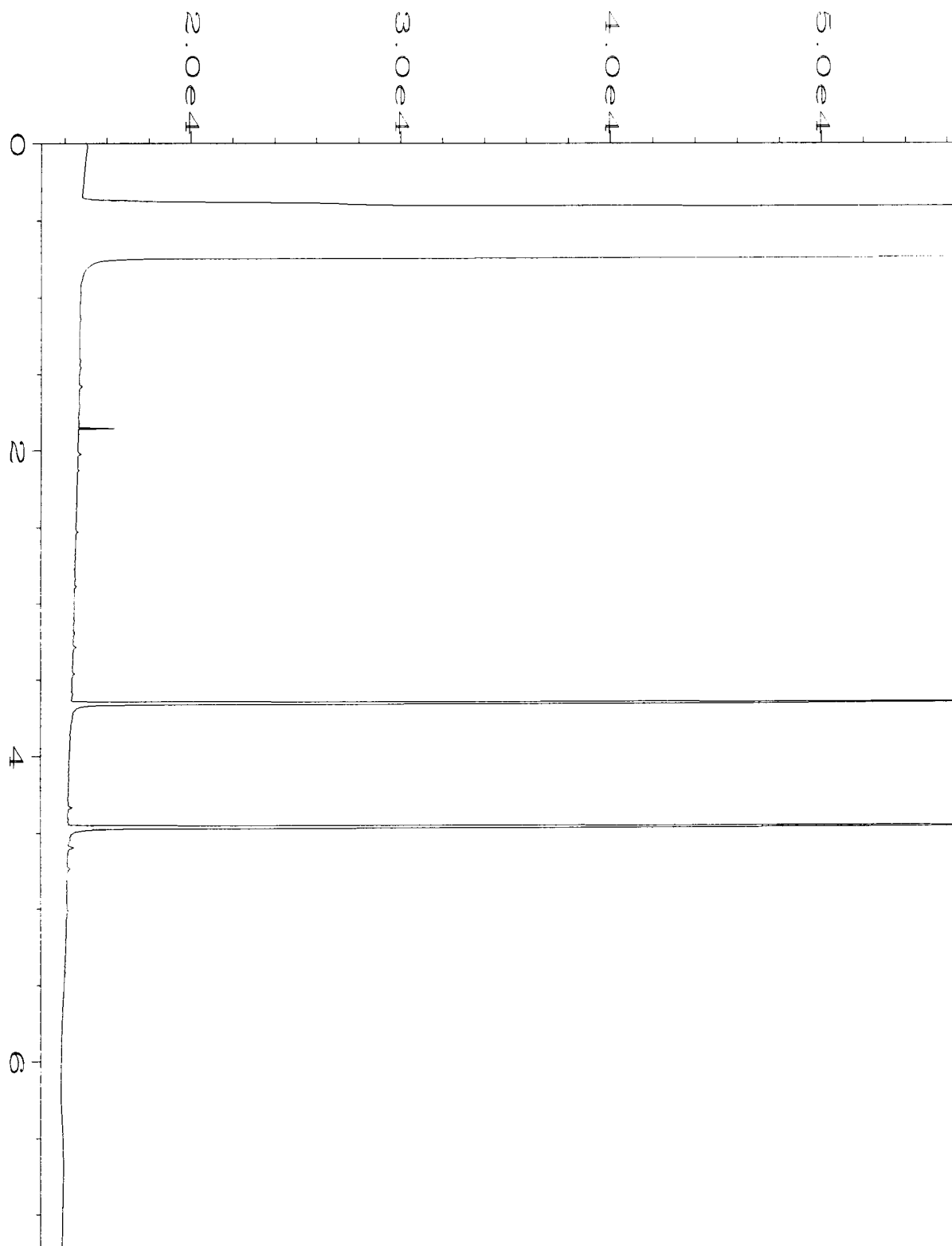
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



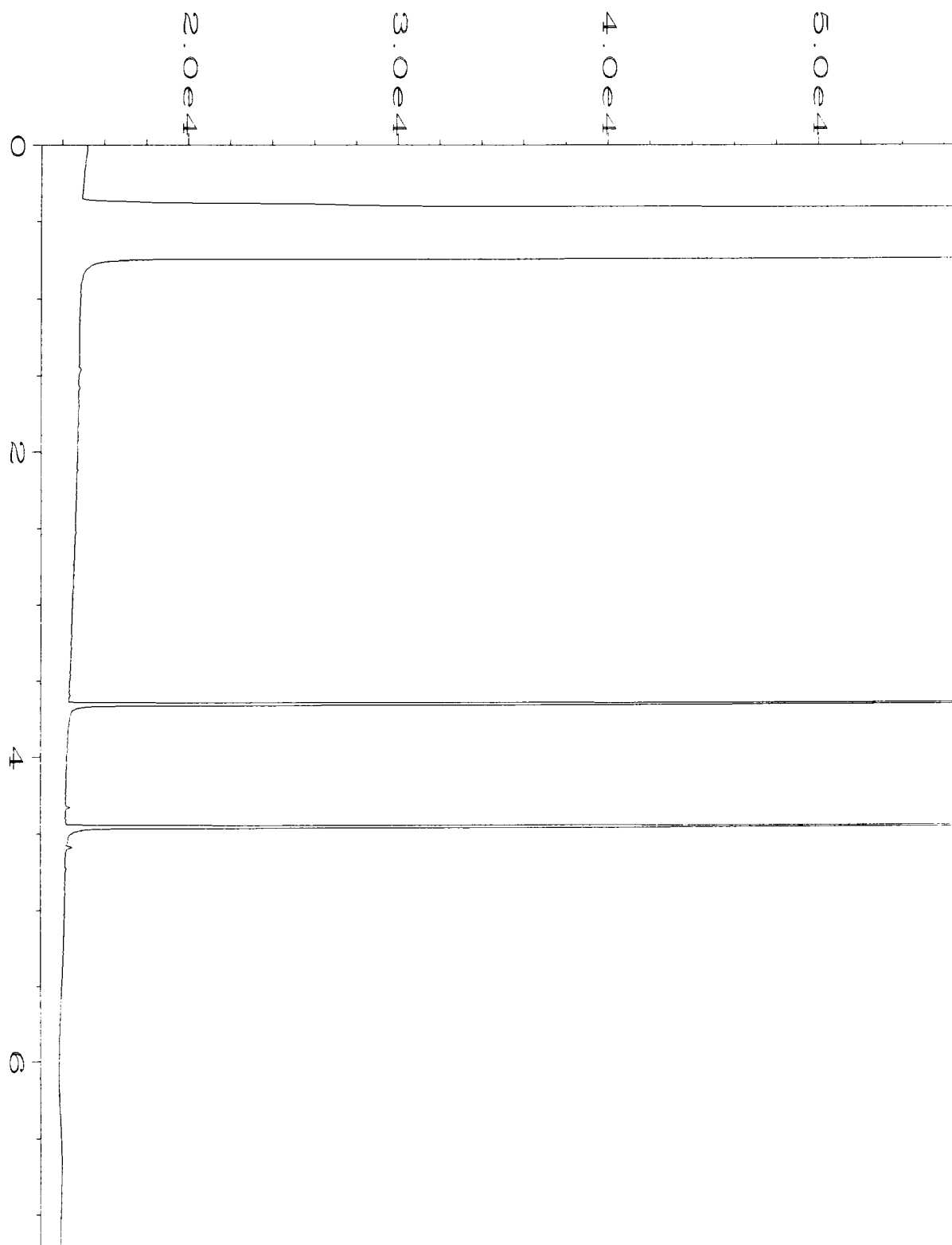
Data File Name	: C:\HPCHEM\1\DATA\08-06-15\037F0901.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 37
Instrument	: GC1	Injection Number	: 1
Sample Name	: 508100-01	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 06 Aug 15 05:43 PM	Analysis Method	: DX.MTH
Report Created on:	07 Aug 15 08:44 AM		



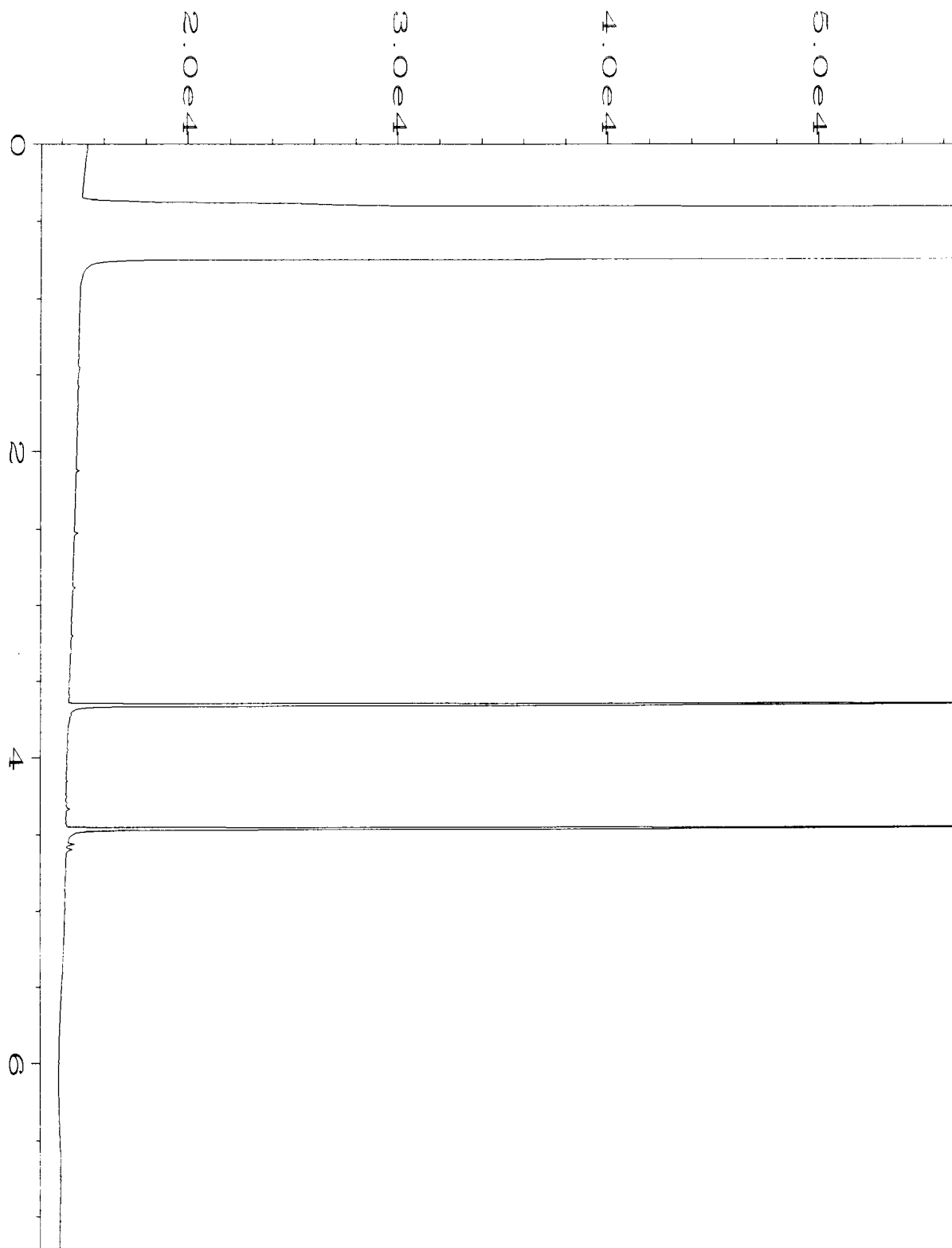
Data File Name	: C:\HPCHEM\1\DATA\08-06-15\038F0901.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 38
Instrument	: GC1	Injection Number	: 1
Sample Name	: 508100-02	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 06 Aug 15 05:54 PM	Analysis Method	: DX.MTH
Report Created on:	07 Aug 15 08:44 AM		



Data File Name	: C:\HPCHEM\1\DATA\08-06-15\039F0901.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 39
Instrument	: GC1	Injection Number	: 1
Sample Name	: 508100-03	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 06 Aug 15 06:05 PM	Analysis Method	: DX.MTH
Report Created on:	07 Aug 15 08:44 AM		

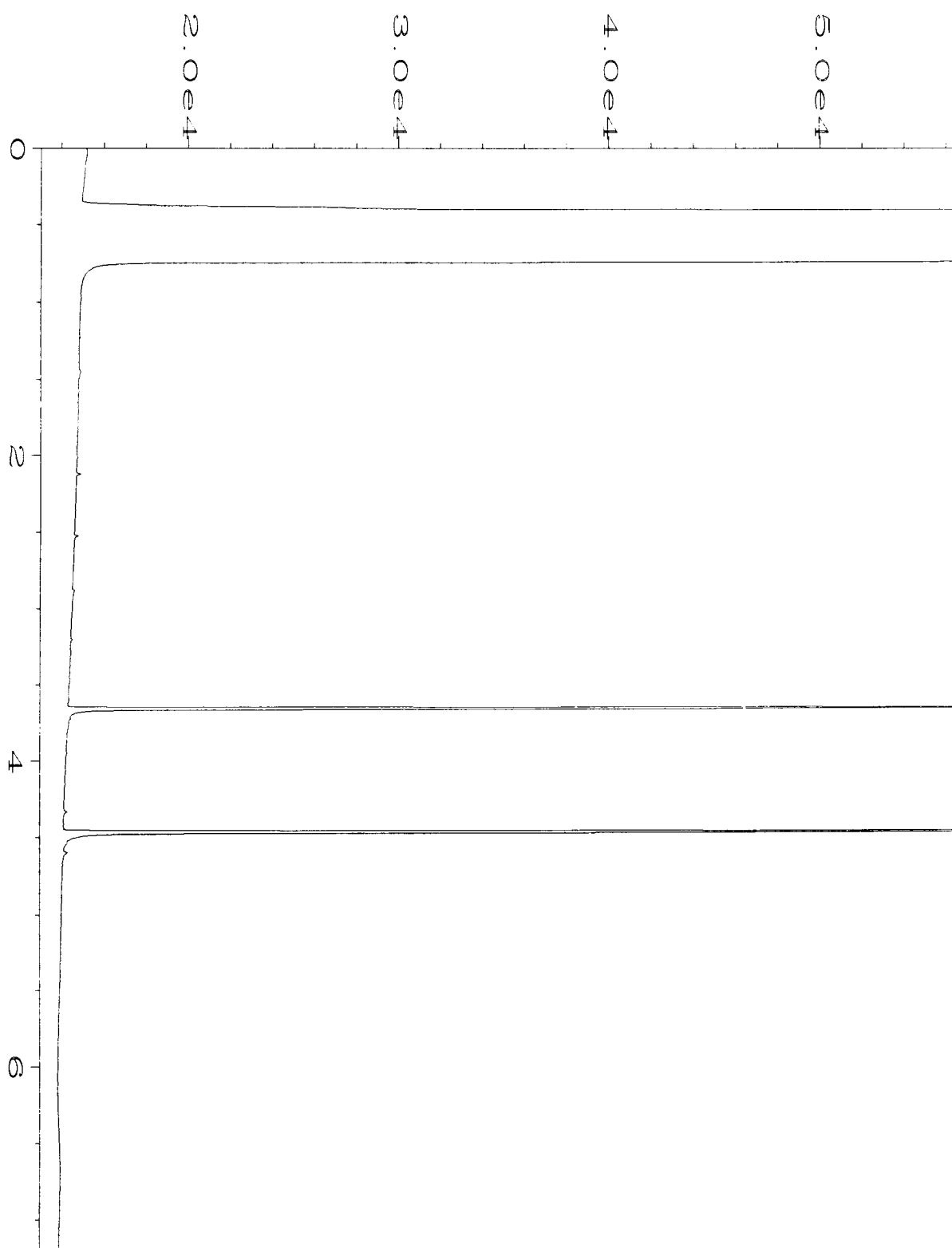


Data File Name	: C:\HPCHEM\1\DATA\08-06-15\040F0901.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 40
Instrument	: GC1	Injection Number	: 1
Sample Name	: 508100-04	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 06 Aug 15 06:17 PM	Analysis Method	: DX.MTH
Report Created on:	07 Aug 15 08:44 AM		

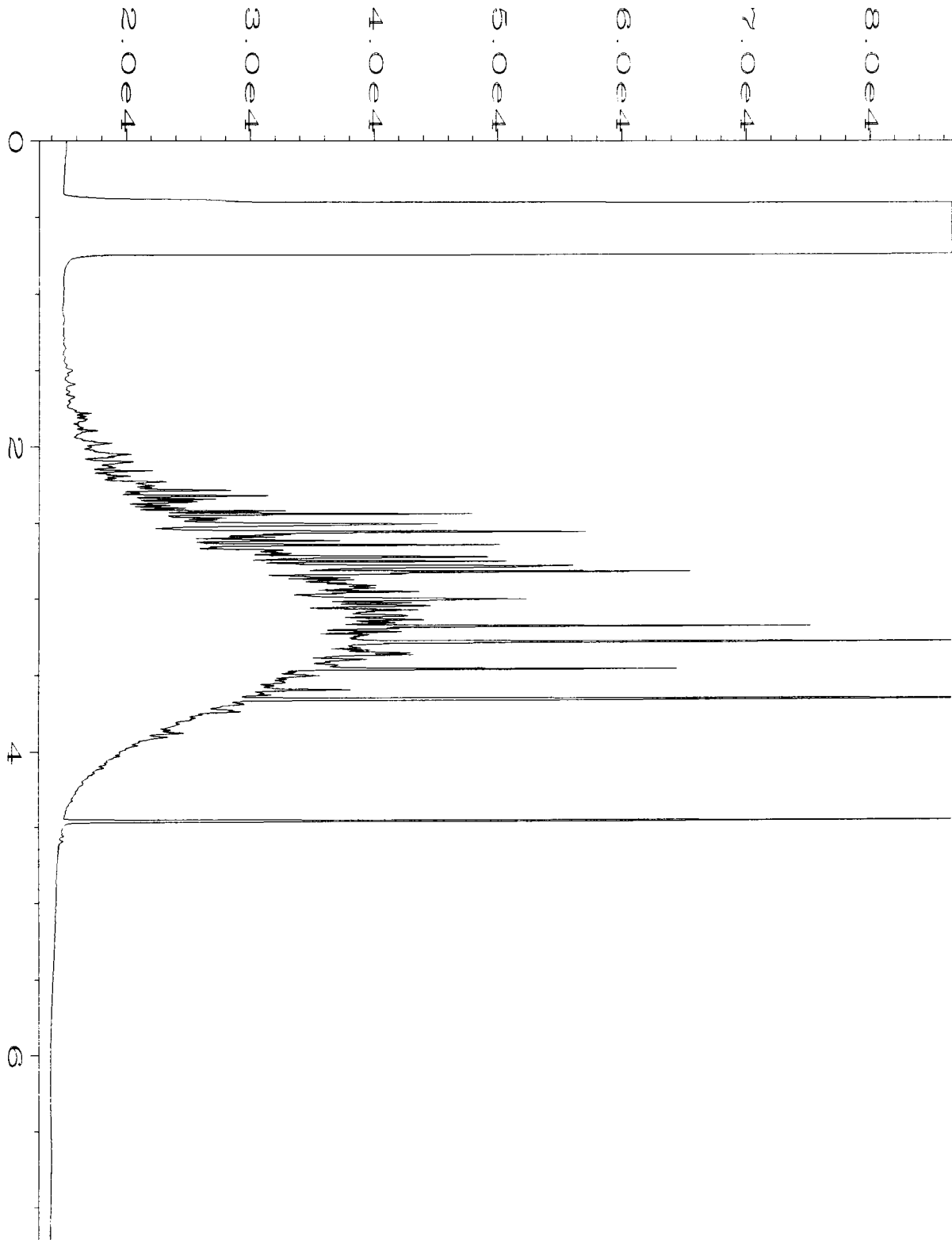


Data File Name : C:\HPCHEM\1\DATA\08-06-15\041F0901.D
 Operator : mwdl
 Instrument : GC1
 Sample Name : 508100-05
 Run Time Bar Code:
 Acquired on : 06 Aug 15 06:28 PM
 Report Created on: 07 Aug 15 08:45 AM

Page Number : 1
 Vial Number : 41
 Injection Number : 1
 Sequence Line : 9
 Instrument Method: DX.MTH
 Analysis Method : DX.MTH

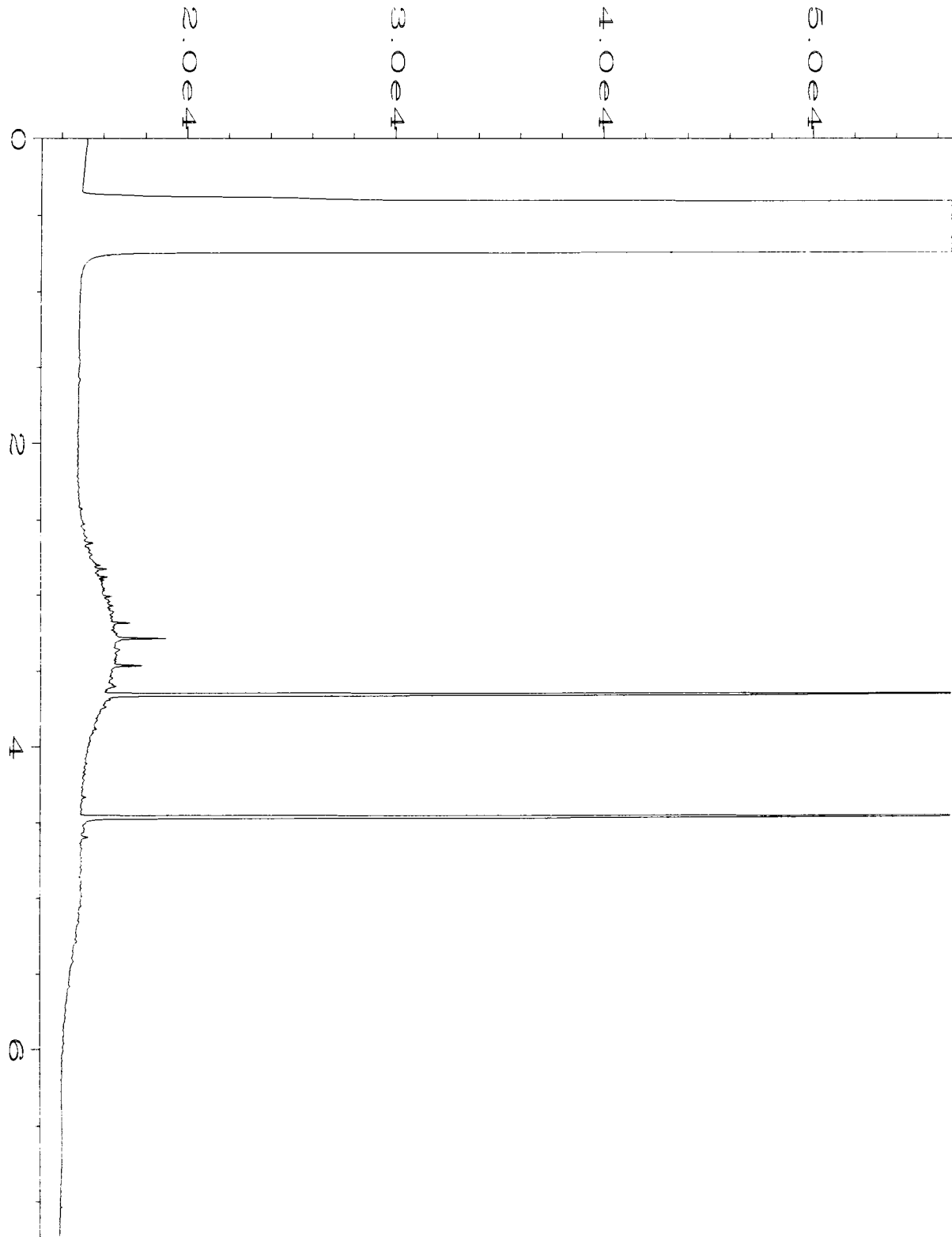


Data File Name	: C:\HPCHEM\1\DATA\08-06-15\042F0901.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 42
Instrument	: GC1	Injection Number	: 1
Sample Name	: 508100-06	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 06 Aug 15 06:39 PM	Analysis Method	: DX.MTH
Report Created on:	07 Aug 15 08:45 AM		



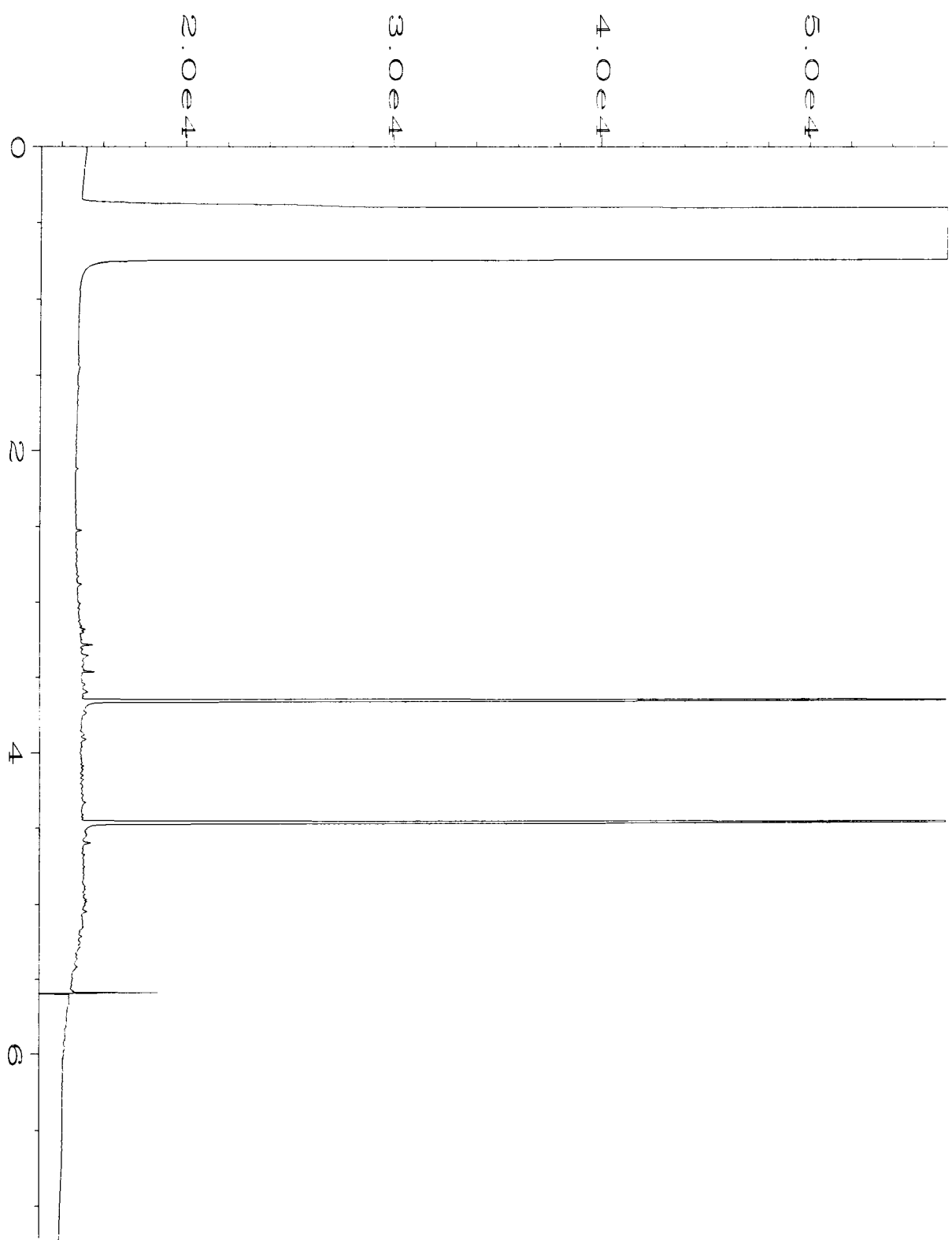
Data File Name	: C:\HPCHEM\1\DATA\08-06-15\043F0901.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 43
Instrument	: GC1	Injection Number	: 1
Sample Name	: 508100-07	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 06 Aug 15 06:51 PM	Analysis Method	: DX.MTH
Report Created on:	07 Aug 15 08:45 AM		

Date:
Time:
Operator:

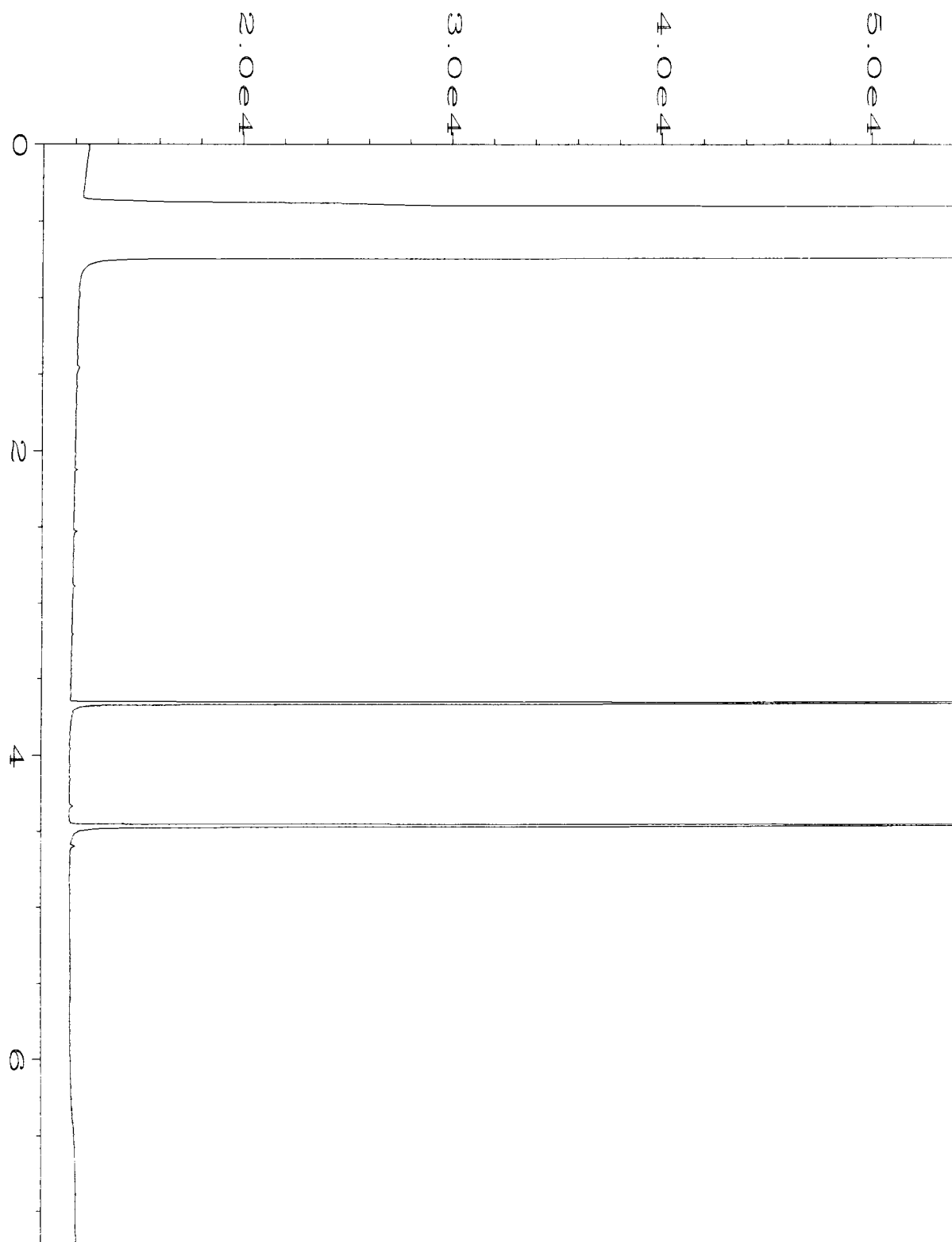


Data File Name : C:\HPCHEM\1\DATA\08-06-15\044F0901.D
Operator : mwdl
Instrument : GC1
Sample Name : 508100-08
Run Time Bar Code:
Acquired on : 06 Aug 15 07:02 PM
Report Created on: 07 Aug 15 08:45 AM
Page Number : 1
Vial Number : 44
Injection Number : 1
Sequence Line : 9
Instrument Method: DX.MTH
Analysis Method : DX.MTH

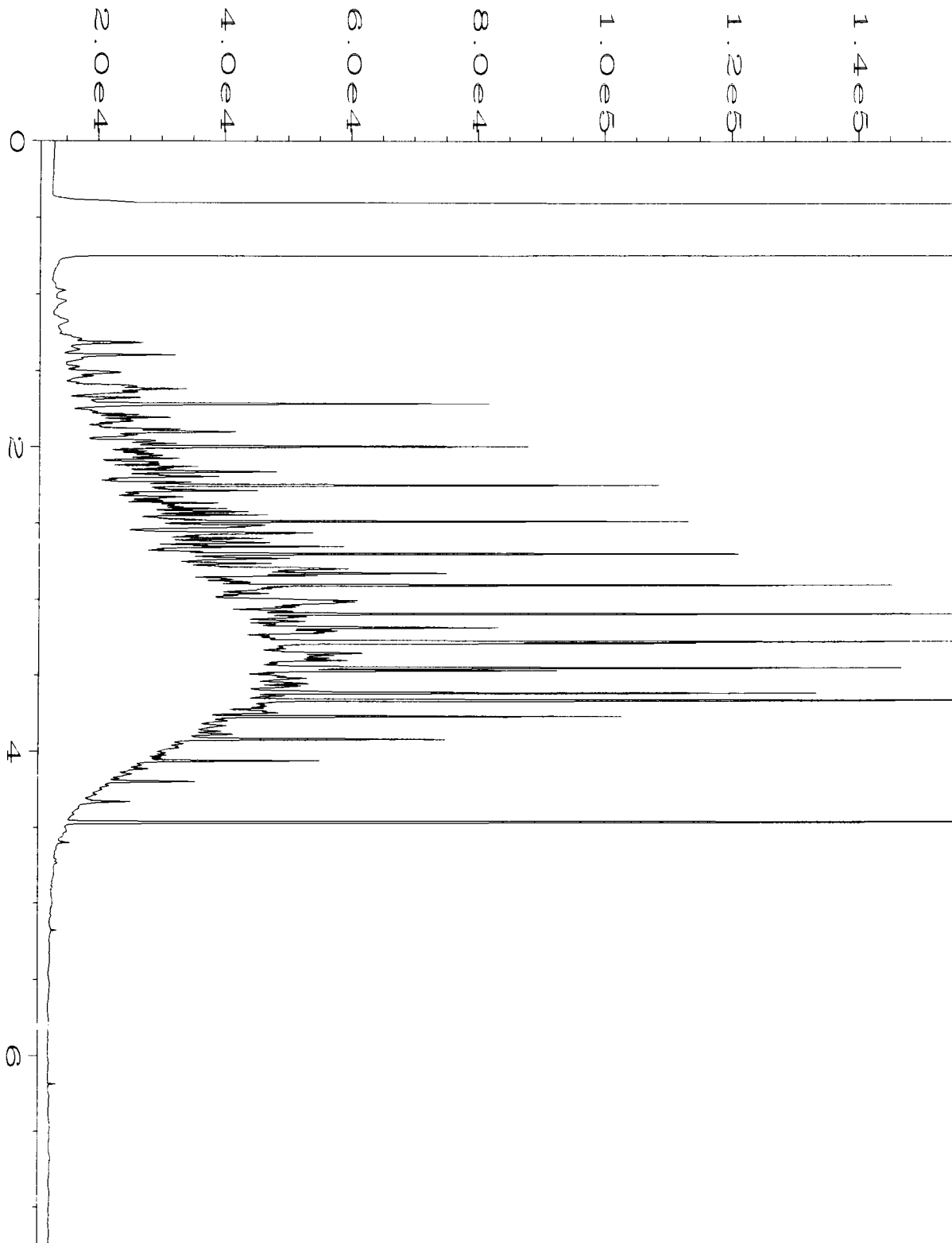
0
2
4
6
8
10



Data File Name	: C:\HPCHEM\1\DATA\08-06-15\045F0901.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 45
Instrument	: GC1	Injection Number	: 1
Sample Name	: 508100-09	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 06 Aug 15 07:14 PM	Analysis Method	: DX.MTH
Report Created on:	07 Aug 15 08:45 AM		



Data File Name	: C:\HPCHEM\1\DATA\08-06-15\033F0901.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 33
Instrument	: GC1	Injection Number	: 1
Sample Name	: 05-1568 mb	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 06 Aug 15 04:58 PM	Analysis Method	: DX.MTH
Report Created on:	07 Aug 15 08:45 AM		



Data File Name	: C:\HPCHEM\1\DATA\08-06-15\003F0201.D	Page Number	: 1
Operator	: mwdl	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 Dx 44-94C	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 06 Aug 15 06:35 AM	Analysis Method	: DX.MTH
Report Created on:	07 Aug 15 08:48 AM		

568 100

SAMPLE CHAIN OF CUSTODY

ME 08-06-15

402 / US2

Send Report To Yen-Vy Van

Company Mawi Foster Alongi

Address 41329 N. State St - 54301

City, State, ZIP Bellingham, WA 98225

Phone # 2533205378 Fax # _____

SAMPLERS (signature) <u>Carolyn Deise</u>	PROJECT NAME/NO. <u>Truck City - 0714.02</u>	PO#
REMARKS <u>ST-1 Lead - 24hr TAT</u>	<u>All other SAs TAT per YVW 8/6/15</u>	

Page # 1 of 1

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH RS
 Rush charges authorized by _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED							Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS				
S-W1-8.0	01 ^{EF}	8/6/15	1204	S	45	X	X	X							not saturated
S-S1-8.0	02 ^T	8/6/15	1150	S	41	X	X	X							not saturated
B-T1-12.0	03	8/6/15	1130	S	41	X	X	X							Saturated
B-T2-12.0	04	8/6/15	1138	S	41	X	X	X							Saturated
S-N1-8.0	05	8/6/15	1300	S	4	X	X	X							not sat
S-E1-8.0	06	8/6/15	1330	S	4	X	X	X							not sat
ST-1	07	8/6/15	1340	S	4	X	X	X							not sat
ST-2	08	"	1345	S	4	X	X	X							not sat
ST-3	09	8/6/15	1350	S	4	X	X	X							not sat

Friedman & Brya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS/COC/COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Carolyn Deise</u>	<u>Carolyn Deise</u>	<u>MFA</u>	<u>8/6/15</u>	<u>1412</u>
Relinquished by:				
Received by:	<u>VN</u>		<u>8/6/15</u>	<u>1412</u>
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 14, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on August 7, 2015 from the Truck City, PO 0714-03, F&BI 508128 project. There are 21 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c:
MFA0814R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 7, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City, PO 0714-03 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508128 -01	ST-4
508128 -02	B1-T4-14.0
508128 -03	ST-5
508128 -04	B2-T4-14.0
508128 -05	S-N2-10.0
508128 -06	B-T3-12.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/14/15
Date Received: 08/07/15
Project: Truck City, PO 0714-03, F&BI 508128
Date Extracted: 08/10/15
Date Analyzed: 08/10/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID
Results Reported as Not Detected (ND) or Detected (D)**

**THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE
WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION
WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT**

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
S-N2-10.0 508128-05	ND	ND	ND	83
Method Blank 05-1596 MB	ND	ND	ND	80

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/14/15
 Date Received: 08/07/15
 Project: Truck City, PO 0714-03, F&BI 508128
 Date Extracted: 08/07/15
 Date Analyzed: 08/07/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
ST-4 508128-01	<0.02	<0.02	<0.02	<0.06	11	95
B1-T4-14.0 508128-02	<0.02	<0.02	<0.02	<0.06	2.8	95
ST-5 508128-03	<0.02	<0.02	0.090	0.087	110	86
B2-T4-14.0 508128-04	<0.02	<0.02	0.028	<0.06	28	95
B-T3-12.0 508128-06	<0.02	<0.02	<0.02	<0.06	2.7	93
Method Blank 05-1607 MB	<0.02	<0.02	<0.02	<0.06	<2	94

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/14/15
Date Received: 08/07/15
Project: Truck City, PO 0714-03, F&BI 508128
Date Extracted: 08/07/15
Date Analyzed: 08/07/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 56-165)
ST-4 508128-01	1,000	<250	121
B1-T4-14.0 508128-02	<50	<250	112
ST-5 508128-03	5,100	<250	111
B2-T4-14.0 508128-04	1,100	<250	115
B-T3-12.0 508128-06	<50	<250	108
Method Blank 05-1582 MB	<50	<250	93

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	ST-4	Client:	Maul Foster Alongi
Date Received:	08/07/15	Project:	Truck City, PO 0714-03, F&BI 508128
Date Extracted:	08/10/15	Lab ID:	508128-01
Date Analyzed:	08/10/15	Data File:	508128-01.036
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	92	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	3.82

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	B1-T4-14.0	Client:	Maul Foster Alongi
Date Received:	08/07/15	Project:	Truck City, PO 0714-03, F&BI 508128
Date Extracted:	08/10/15	Lab ID:	508128-02
Date Analyzed:	08/10/15	Data File:	508128-02.037
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	88	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	2.09

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	ST-5	Client:	Maul Foster Alongi
Date Received:	08/07/15	Project:	Truck City, PO 0714-03, F&BI 508128
Date Extracted:	08/10/15	Lab ID:	508128-03
Date Analyzed:	08/10/15	Data File:	508128-03.038
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	91	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	4.00

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	B2-T4-14.0	Client:	Maul Foster Alongi
Date Received:	08/07/15	Project:	Truck City, PO 0714-03, F&BI 508128
Date Extracted:	08/10/15	Lab ID:	508128-04
Date Analyzed:	08/10/15	Data File:	508128-04.039
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	90	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	3.67

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-T3-12.0	Client:	Maul Foster Alongi
Date Received:	08/07/15	Project:	Truck City, PO 0714-03, F&BI 508128
Date Extracted:	08/10/15	Lab ID:	508128-06
Date Analyzed:	08/10/15	Data File:	508128-06.041
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	89	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	Truck City, PO 0714-03, F&BI 508128
Date Extracted:	08/10/15	Lab ID:	I5-435 mb
Date Analyzed:	08/10/15	Data File:	I5-435 mb.008
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Internal Standard:	% Recovery:	Lower	Upper
Holmium	88	Limit:	Limit:
		60	125

Analyte:	Concentration
	mg/kg (ppm)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	S-N2-10.0	Client:	Maul Foster Alongi
Date Received:	08/07/15	Project:	Truck City, PO 0714-03, F&BI 508128
Date Extracted:	08/10/15	Lab ID:	508128-05 1/5
Date Analyzed:	08/10/15	Data File:	081015.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	117	31	163
Benzo(a)anthracene-d12	106	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	Truck City, PO 0714-03, F&BI 508128
Date Extracted:	08/10/15	Lab ID:	05-1585 mb 1/5
Date Analyzed:	08/10/15	Data File:	081005.D
Matrix:	Soil	Instrument:	GCMS6
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97	31	163
Benzo(a)anthracene-d12	91	24	168

Compounds:	Concentration mg/kg (ppm)
Benz(a)anthracene	<0.01
Chrysene	<0.01
Benzo(a)pyrene	<0.01
Benzo(b)fluoranthene	<0.01
Benzo(k)fluoranthene	<0.01
Indeno(1,2,3-cd)pyrene	<0.01
Dibenz(a,h)anthracene	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	S-N2-10.0	Client:	Maul Foster Alongi
Date Received:	08/07/15	Project:	Truck City, PO 0714-03, F&BI 508128
Date Extracted:	08/10/15	Lab ID:	508128-05
Date Analyzed:	08/11/15	Data File:	081107.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	102	55	145
4-Bromofluorobenzene	99	65	139

Compounds:	Concentration mg/kg (ppm)
Benzene	<0.03
Toluene	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	Truck City, PO 0714-03, F&BI 508128
Date Extracted:	08/10/15	Lab ID:	05-1580 mb
Date Analyzed:	08/10/15	Data File:	081027.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration mg/kg (ppm)
Benzene	<0.03
Toluene	<0.05
Ethylbenzene	<0.05
m,p-Xylene	<0.1
o-Xylene	<0.05
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/14/15

Date Received: 08/07/15

Project: Truck City, PO 0714-03, F&BI 508128

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508105-09 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	90	69-120
Toluene	mg/kg (ppm)	0.5	100	70-117
Ethylbenzene	mg/kg (ppm)	0.5	98	65-123
Xylenes	mg/kg (ppm)	1.5	100	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/14/15

Date Received: 08/07/15

Project: Truck City, PO 0714-03, F&BI 508128

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508119-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	95	100	63-146	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	111	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/14/15

Date Received: 08/07/15

Project: Truck City, PO 0714-03, F&BI 508128

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 508103-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/kg (ppm)	50	9.65	95	93	59-148	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	99	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/14/15

Date Received: 08/07/15

Project: Truck City, PO 0714-03, F&BI 508128

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL
SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM**

Laboratory Code: 508127-01 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.01	90	23-144
Chrysene	mg/kg (ppm)	0.17	<0.01	94	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.01	107	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.01	107	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.01	100	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.01	108	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.01	111	31-146

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benz(a)anthracene	mg/kg (ppm)	0.17	93	91	51-115	2
Chrysene	mg/kg (ppm)	0.17	97	98	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	107	107	56-123	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	109	109	54-131	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	103	102	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	117	123	49-148	5
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	120	129	50-141	7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/14/15

Date Received: 08/07/15

Project: Truck City, PO 0714-03, F&BI 508128

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 508128-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	32	28	10-138	13
Chloroethane	mg/kg (ppm)	2.5	<0.5	53	47	10-176	12
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	49	46	10-160	6
Methylene chloride	mg/kg (ppm)	2.5	<0.5	66	61	10-156	8
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	60	57	14-137	5
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	67	63	19-140	6
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	70	68	25-135	3
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	76	73	12-160	4
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	69	64	10-156	8
Benzene	mg/kg (ppm)	2.5	<0.03	67	64	29-129	5
Trichloroethene	mg/kg (ppm)	2.5	<0.02	69	66	21-139	4
Toluene	mg/kg (ppm)	2.5	<0.05	67	64	35-130	5
Tetrachloroethene	mg/kg (ppm)	2.5	0.023	67	64	20-133	5
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	70	67	32-137	4
m,p-Xylene	mg/kg (ppm)	5	<0.1	73	70	34-136	4
o-Xylene	mg/kg (ppm)	2.5	<0.05	71	68	33-134	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/14/15

Date Received: 08/07/15

Project: Truck City, PO 0714-03, F&BI 508128

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	67	22-139
Chloroethane	mg/kg (ppm)	2.5	88	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	87	47-128
Methylene chloride	mg/kg (ppm)	2.5	91	42-132
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	94	67-127
1,1-Dichloroethane	mg/kg (ppm)	2.5	97	68-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	99	72-113
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	103	56-135
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	102	62-131
Benzene	mg/kg (ppm)	2.5	95	68-114
Trichloroethene	mg/kg (ppm)	2.5	99	64-117
Toluene	mg/kg (ppm)	2.5	92	66-126
Tetrachloroethene	mg/kg (ppm)	2.5	92	72-114
Ethylbenzene	mg/kg (ppm)	2.5	95	64-123
m,p-Xylene	mg/kg (ppm)	5	96	78-122
o-Xylene	mg/kg (ppm)	2.5	95	77-124

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

508128

SAMPLE CHAIN OF CUSTODY

ME 08/07/15

Page # 1 of 1

Send Report To Yen-Vy Van
 Company Mowl Foster Alongi
 Address 411 First Avenue S, Suite 610
 City, State, ZIP Seattle, WA 98104
 Phone # 2533205378 Fax #

SAMPLERS (signature) <u>Carolyn De</u>	PROJECT NAME/NO. <u>Truck City</u>	PO# <u>0714-03</u>
REMARKS <u>* Run standard from per all lead analyses</u>		

TURNAROUND TIME <input type="checkbox"/> Standard (2 Weeks) <input checked="" type="checkbox"/> RUSH	SAMPLE DISPOSAL: <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions
--	---

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED							Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	CPAH		AVOC+BTEX
ST-4	01E	8/6/15	1355	S	5/4	X	X	X						Standard turn
B1-T4-14.0	02	8/7/15	1000	S	4	X	X	X						Saturated
ST-5	03	8/7/15	1045	S	4	X	X	X						Standard turn
B2-T4-14.0	04	8/7/15	1130	S	4	X	X	X						Saturated
S-N2-10.0	05	8/7/15	1155	S	4	X	X	X						Hold All At Analyses
B-T3-12.0	06	8/7/15	1300	S	4	X	X	X						Saturated

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORENSIC OCCUR 1004

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Reinquished by: <u>Carolyn De</u>	<u>Carolyn De</u>	<u>Carolyn De</u>	<u>De</u>	<u>MFA</u>		8/7/15	1430
Received by: <u>Mowl</u>	<u>Mowl</u>	<u>Vino H</u>	<u>H</u>	<u>FB1</u>		8/7/15	1430
Reinquished by:							
Received by:							

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 13, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the additional results from the testing of material submitted on August 12, 2015 from the Truck City, PO 0714.03, F&BI 508194 project. There are 6 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA1013R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 12, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City, PO 0714.03, F&BI 508194 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508194 -01	P1-S2-3.5
508194 -02	P2-S1-3.5
508194 -03	D3-8.0
508194 -04	D1-4.0
508194 -05	D2-4.0
508194 -06	P1-S1-3.5
508194 -07	D4-4.0
508194 -08	P1-S3-3.5
508194 -09	D5-4.0

Sample D3-8.0 was analyzed out of hold time. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/15
Date Received: 08/12/15
Project: Truck City, PO 0714.03, F&BI 508194
Date Extracted: 10/09/15
Date Analyzed: 10/09/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
D3-8.0 ht 508194-03	<0.02	<0.02	0.64	1.8	310	112
Method Blank 05-2069 MB2	<0.02	<0.02	<0.02	<0.06	<2	92

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/15
Date Received: 08/12/15
Project: Truck City, PO 0714.03, F&BI 508194
Date Extracted: 10/09/15
Date Analyzed: 10/09/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 48-168)
D3-8.0 ht 508194-03	10,000	<250	90
Method Blank 05-2085 MB2	<50	<250	82

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/15

Date Received: 08/12/15

Project: Truck City, PO 0714.03, F&BI 508194

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 510127-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	79	66-121
Toluene	mg/kg (ppm)	0.5	86	72-128
Ethylbenzene	mg/kg (ppm)	0.5	86	69-132
Xylenes	mg/kg (ppm)	1.5	87	69-131
Gasoline	mg/kg (ppm)	20	100	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/15

Date Received: 08/12/15

Project: Truck City, PO 0714.03, F&BI 508194

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 510125-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	106	102	64-133	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	101	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

508194

SAMPLE CHAIN OF CUSTODY

ME 08/12/15

Page # 152 of 703

Send Report To Ken-Vy Van

Company Maul Foster Alongi

Address 411 First Avenue S, Suite 600

City, State, ZIP Seattle, WA 98104

Phone # 2533205378 Fax # _____

SAMPLERS (signature) Carolyn D. Wise

PROJECT NAME/NO. Truck City

PO# 0714.03

REMARKS

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS			
P1-S2-3.5	01E	8/12/15	1055	S	5	X	X	X						
P2-S1-3.5	02	8/12/15	1200	S	5	X	X	X						Hold
D3-8.0	03	8/12/15	1025	S	5	X	X	X						Hold
D2-4.0	04	8/12/15	950	S	5	X	X	X						analyze for PCB
D2-4.0	05	8/12/15	915	S	5	X	X	X						MC
P2-S1-3.5	06	8/12/15	800	S	5	X	X	X						
D4-4.0	07	8/12/15	1326	S	5	X	X	X						
P2-S3-3.5	08	8/12/15	1360	S	5	X	X	X						Hold
D5-4.0	09	8/12/15	1345	S	5	X	X	X						

Friedman & Bryna, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\COC.DOC

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>Carolyn D. Wise</u>	<u>Carolyn D. Wise</u>	<u>Carolyn D. Wise</u>	<u>MEFA</u>	<u>8/12/15</u>	<u>1428</u>		
<u>[Signature]</u>	<u>WNTA</u>	<u>WNTA</u>	<u>FR1</u>	<u>8/12/15</u>	<u>1428</u>		
Received by:							
Relinquished by:							
Relinquished by:							
Received by:							

Samples received at 4:00

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 13, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the additional results from the testing of material submitted on August 12, 2015 from the Truck City, PO 0714.03, F&BI 508194 project. There are 6 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA1013R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 12, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City, PO 0714.03, F&BI 508194 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508194 -01	P1-S2-3.5
508194 -02	P2-S1-3.5
508194 -03	D3-8.0
508194 -04	D1-4.0
508194 -05	D2-4.0
508194 -06	P1-S1-3.5
508194 -07	D4-4.0
508194 -08	P1-S3-3.5
508194 -09	D5-4.0

Sample D3-8.0 was analyzed out of hold time. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/15
Date Received: 08/12/15
Project: Truck City, PO 0714.03, F&BI 508194
Date Extracted: 10/09/15
Date Analyzed: 10/09/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
D3-8.0 ht 508194-03	<0.02	<0.02	0.64	1.8	310	112
Method Blank 05-2069 MB2	<0.02	<0.02	<0.02	<0.06	<2	92

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/15
Date Received: 08/12/15
Project: Truck City, PO 0714.03, F&BI 508194
Date Extracted: 10/09/15
Date Analyzed: 10/09/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 48-168)
D3-8.0 ht 508194-03	10,000	<250	90
Method Blank 05-2085 MB2	<50	<250	82

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/15

Date Received: 08/12/15

Project: Truck City, PO 0714.03, F&BI 508194

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 510127-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	79	66-121
Toluene	mg/kg (ppm)	0.5	86	72-128
Ethylbenzene	mg/kg (ppm)	0.5	86	69-132
Xylenes	mg/kg (ppm)	1.5	87	69-131
Gasoline	mg/kg (ppm)	20	100	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/13/15

Date Received: 08/12/15

Project: Truck City, PO 0714.03, F&BI 508194

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 510125-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	106	102	64-133	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	101	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

508194

SAMPLE CHAIN OF CUSTODY ME 08/12/15

152/703

Send Report To Yen-Vy Van
 Company Maul Footer Alongi
 Address 411 First Avenue S, Suite 600
 City, State, ZIP Seattle, WA 98104
 Phone # 2533205378 Fax # _____

SAMPLERS (signature) Carolyn Wise PO# _____
 PROJECT NAME/NO. Truck City 0714.03
 REMARKS _____

Page # _____ of _____
 TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by _____
 SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED					Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270		HFS
P1-S2-3.5	01E	8/12/15	1055	S	5	X	X					
P2-S1-3.5	02	8/12/15	1200	S	5	X	X					Hold
D3-8.0	03	8/12/15	1025	S	5	X	X					Hold
D1-4.0	04	8/12/15	950	S	5	X	X					analyze per PUP 10/9/15
D2-4.0	05	8/12/15	915	S	5	X	X					ML
P1-S1-3.5	06	8/12/15	800	S	5	X	X					
D4-4.0	07	8/12/15	1326	S	5	X	X					
P1-S3-3.5	08	8/12/15	1300	S	5	X	X					Hold
D5-4.0	09	8/12/15	1345	S	5	X	X					

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\COC.DOC

Relinquished by: Carolyn Wise SIGNATURE
 Relinquished by: Yen-Vy Van SIGNATURE
 Received by: Yen-Vy Van SIGNATURE
 Relinquished by: _____ SIGNATURE
 Received by: _____ SIGNATURE

PRINT NAME: Carolyn Wise
 COMPANY: MFA
 DATE: 8/12/15 TIME: 1428
VINHA
 COMPANY: FBI
 DATE: 8/12/15 TIME: 1428
 Samples received at: 4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 18, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on August 12, 2015 from the Truck City, PO 0714.03, F&BI 508194 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c:
MFA0818R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 12, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City, PO 0714.03, F&BI 508194 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508194 -01	P1-S2-3.5
508194 -02	P2-S1-3.5
508194 -03	D3-8.0
508194 -04	D1-4.0
508194 -05	D2-4.0
508194 -06	P1-S1-3.5
508194 -07	D4-4.0
508194 -08	P1-S3-3.5
508194 -09	D5-4.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/18/15
 Date Received: 08/12/15
 Project: Truck City, PO 0714.03, F&BI 508194
 Date Extracted: 08/12/15
 Date Analyzed: 08/12/15 and 08/13/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
P1-S2-3.5 508194-01 1/50	7.0	1,400	770	4,400	40,000	111
D1-4.0 508194-04	0.13	<0.02	<0.02	<0.06	6.2	94
D2-4.0 508194-05 1/5	0.37	3.9	1.5	11	170	95
P1-S1-3.5 508194-06	<0.02	<0.02	<0.02	<0.06	<2	96
D4-4.0 508194-07 1/5	0.13	0.63	6.2	20	1,900	127
D5-4.0 508194-09	<0.02	<0.02	<0.02	<0.06	<2	83
Method Blank 05-1614 MB	<0.02	<0.02	<0.02	<0.06	<2	97

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/18/15
Date Received: 08/12/15
Project: Truck City, PO 0714.03, F&BI 508194
Date Extracted: 08/12/15
Date Analyzed: 08/12/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 53-144)
P1-S2-3.5 508194-01	1,800 x	<250	89
D1-4.0 508194-04	<50	<250	90
D2-4.0 508194-05	7,600	<250	94
P1-S1-3.5 508194-06	<50	<250	88
D4-4.0 508194-07	27,000	360 x	129
D5-4.0 508194-09	<50	<250	90
Method Blank 05-1655 MB	<50	<250	91

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/18/15

Date Received: 08/12/15

Project: Truck City, PO 0714.03, F&BI 508194

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508189-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	89	69-120
Toluene	mg/kg (ppm)	0.5	105	70-117
Ethylbenzene	mg/kg (ppm)	0.5	103	65-123
Xylenes	mg/kg (ppm)	1.5	103	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/18/15

Date Received: 08/12/15

Project: Truck City, PO 0714.03, F&BI 508194

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508179-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	94	100	63-146	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	97	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 2, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the additional results from the testing of material submitted on August 18, 2015 from the Truck City 0714.03, F&BI 508306 project. There are 6 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Justin Clary
MFA0902R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 18, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03, F&BI 508306 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508306 -01	P1-S2-B1-10.0
508306 -02	P1-S2-SN-9.0
508306 -03	D1-B-9.5
508306 -04	D2-B-10.0
508306 -05	D4-B-10.0
508306 -06	BT-PRE-1
508306 -07	BT-POST-1

Per your request, sample P1-S2-B1-10.0 was reextracted and reanalyzed.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/02/15
Date Received: 08/18/15
Project: Truck City 0714.03, F&BI 508306
Date Extracted: 08/24/15
Date Analyzed: 08/24/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
P1-S2-B1-10.0 508306-01	<0.02	<0.02	<0.02	<0.06	<2	92
Method Blank 05-1643 MB	<0.02	<0.02	<0.02	<0.06	<2	106

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/02/15
Date Received: 08/18/15
Project: Truck City 0714.03, F&BI 508306
Date Extracted: 08/24/15
Date Analyzed: 08/24/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 48-168)
P1-S2-B1-10.0 508306-01	<50	<250	111
Method Blank 05-1724 MB	<50	<250	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/02/15

Date Received: 08/18/15

Project: Truck City 0714.03, F&BI 508306

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508400-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	82	69-120
Toluene	mg/kg (ppm)	0.5	83	70-117
Ethylbenzene	mg/kg (ppm)	0.5	81	65-123
Xylenes	mg/kg (ppm)	1.5	82	66-120
Gasoline	mg/kg (ppm)	20	85	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/02/15

Date Received: 08/18/15

Project: Truck City 0714.03, F&BI 508306

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508368-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	440	119	122	73-135	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	122	74-139

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

508306

SAMPLE CHAIN OF CUSTODY

HE 08-18-15

181 / 803 / 01

Send Report To John-Vu Van
 Company Maul Foster Aloney
 Address 411 First Ave S. Suite 610
 City, State, ZIP Seattle, WA 98104
 Phone # 2533205378 Fax # _____

SAMPLERS (signature) Carolyn Olse
 PROJECT NAME/NO. Truck City
 PO# 0714.03
 REMARKS _____

Page # _____ of _____
 TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by _____
 SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED							Per YWV 8/19/15 Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS				
P1-S2-B1-10.0	01A-E	8/18/15	745	S	5	X	X	X							Saturated
P1-S2-SN-9.0	02-T	8/18/15	830	S	5	X	X	X							
D1-B-9.5	03	8/18/15	930	S	5	X	X	X							
D2-B-10.0	04	8/18/15	1045	S	5	X	X	X							Saturated
D4-B-10.0	05	8/18/15	1100	S	5	X	X	X							Saturated
BT-PRE-1	06	8/18/15	1220	W	5	X	X	X							
BT-POST-1	07	8/18/15	1400	W	5	X	X	X							
															Samples received at 5°C

Friedman & Bryna, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS/COC/COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>[Signature]</u>	<u>Carolyn Olse</u>	<u>MFA</u>	<u>8/18/15</u>	<u>1444</u>
<u>[Signature]</u>	<u>Elizabeth Walker-Bays</u>	<u>MFA</u>	<u>8/18/15</u>	<u>1444</u>
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

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Seattle, WA 98119-2029
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fbi@isomedia.com
www.friedmanandbruya.com

August 21, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on August 18, 2015 from the Truck City, PO 0714.03, F&BI 508306 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0821R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 18, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City, PO 0714.03 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508306 -01	P1-S2-B1-10.0
508306 -02	P1-S2-SN-9.0
508306 -03	D1-B-9.5
508306 -04	D2-B-10.0
508306 -05	D4-B-10.0
508306 -06	BT-PRE-1
508306 -07	BT-POST-1

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/15
 Date Received: 08/18/15
 Project: Truck City, PO 0714.03, F&BI 508306
 Date Extracted: 08/18/15
 Date Analyzed: 08/18/15 and 08/19/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
P1-S2-B1-10.0 508306-01	<0.02	<0.02	<0.02	<0.06	<2	99
P1-S2-SN-9.0 508306-02	<0.02	<0.02	<0.02	<0.06	<2	100
D1-B-9.5 508306-03	<0.02	<0.02	<0.02	<0.06	<2	100
D2-B-10.0 508306-04	<0.02	<0.02	<0.02	<0.06	<2	100
D4-B-10.0 508306-05	<0.02	<0.02	<0.02	<0.06	<2	82
Method Blank 05-1630 MB	<0.02	<0.02	<0.02	<0.06	<2	99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/15
Date Received: 08/18/15
Project: Truck City, PO 0714.03, F&BI 508306
Date Extracted: 08/18/15
Date Analyzed: 08/19/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 52-124)
BT-PRE-1 508306-06	<1	1.4	<1	<3	120	80
BT-POST-1 508306-07	<1	<1	<1	<3	<100	82
Method Blank 05-1628 MB	<1	<1	<1	<3	<100	80

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/15
Date Received: 08/18/15
Project: Truck City, PO 0714.03, F&BI 508306
Date Extracted: 08/18/15
Date Analyzed: 08/18/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 56-165)
P1-S2-B1-10.0 508306-01	<50	<250	96
P1-S2-SN-9.0 508306-02	<50	<250	93
D1-B-9.5 508306-03	<50	<250	94
D2-B-10.0 508306-04	<50	<250	100
D4-B-10.0 508306-05	<50	<250	97
Method Blank 05-1700 MB	<50	<250	88

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/15
Date Received: 08/18/15
Project: Truck City, PO 0714.03, F&BI 508306
Date Extracted: 08/19/15
Date Analyzed: 08/19/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 41-152)
BT-PRE-1 508306-06	2,400 x	600 x	96
BT-POST-1 508306-07	<50	<250	91
Method Blank 05-1672 MB2	<50	<250	88

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/15

Date Received: 08/18/15

Project: Truck City, PO 0714.03, F&BI 508306

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508306-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	0.022	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	83	69-120
Toluene	mg/kg (ppm)	0.5	98	70-117
Ethylbenzene	mg/kg (ppm)	0.5	97	65-123
Xylenes	mg/kg (ppm)	1.5	97	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/15

Date Received: 08/18/15

Project: Truck City, PO 0714.03, F&BI 508306

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508250-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	102	65-118
Toluene	ug/L (ppb)	50	101	72-122
Ethylbenzene	ug/L (ppb)	50	106	73-126
Xylenes	ug/L (ppb)	150	103	74-118
Gasoline	ug/L (ppb)	1,000	94	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/15

Date Received: 08/18/15

Project: Truck City, PO 0714.03, F&BI 508306

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508284-07 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	90	81	64-133	11

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	91	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/15

Date Received: 08/18/15

Project: Truck City, PO 0714.03, F&BI 508306

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	93	99	63-142	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

508306

SAMPLE CHAIN OF CUSTODY

ME 08-18-15

181 / 803 / 07

Send Report To Gen-Vu Van

Company Maul Foster Aloney

Address 411 First Ave S. Suite 610

City, State, ZIP Seattle, WA 98104

Phone # 2533205378 Fax # _____

SAMPLERS (signature) Carolyn Dore

PROJECT NAME/NO. Truck City

PO# 0714.03

REMARKS

Page # _____ of _____

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by _____

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS		
P1-S2-B1-10.0	01A-E	8/18/15	745	S	5	X	X	X					Saturated
P1-S2-SN-9.0	02-T	8/18/15	830	S	5	X	X	X					
D1-B-9.5	03	8/18/15	930	S	5	X	X	X					
D2-B-10.0	04	8/18/15	1045	S	5	X	X	X					coaturated
D4-B-10.0	05	8/18/15	1100	S	5	X	X	X					coaturated
BT-PRE-1	06	8/18/15	1220	W	5	X	X	X					
BT-POST-1	07	8/18/15	1400	W	5	X	X	X					

Samples received at 5 °C

SIGNATURE

Relinquished by: Carol Dore

PRINT NAME

Carolyn Dore

COMPANY

MFA

DATE

8/18/15

TIME

1444

Received by:

Steve P. Wynn Esq

Elizabeth Weber Esq

EB

8/18/15 1444

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 27, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on August 19, 2015 from the Truck City 0714.03.01, F&BI 508337 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0827R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 19, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 508337 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508337 -01	RE4-B-10.0
508337 -02	RE4-SW-9.0
508337 -03	RE4-SS-9.0
508337 -04	RE4-SE-8.0
508337 -05	RE4-SN-8.5
508337 -06	RE1-BN-10.0
508337 -07	RE1-BS-10.0
508337 -08	RE1-SN-9.0
508337 -09	RE1-SE-9.0
508337 -10	RE1-SS-8.5
508337 -11	RE1-SW-9.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15
 Date Received: 08/19/15
 Project: Truck City 0714.03.01, F&BI 508337
 Date Extracted: 08/19/15
 Date Analyzed: 08/19/15, 08/20/15 and 08/22/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE4-B-10.0 508337-01	<0.02	<0.02	<0.02	<0.06	<2	84
RE4-SW-9.0 508337-02	<0.02	<0.02	<0.02	<0.06	<2	82
RE4-SS-9.0 508337-03	<0.02	<0.02	<0.02	<0.06	<2	85
RE4-SE-8.0 508337-04	<0.02	<0.02	<0.02	<0.06	<2	84
RE4-SN-8.5 508337-05	<0.02	<0.02	<0.02	<0.06	<2	84
RE1-BN-10.0 508337-06	<0.02	<0.02	<0.02	<0.06	<2	83
RE1-BS-10.0 508337-07	<0.02	<0.02	<0.02	<0.06	<2	84
RE1-SN-9.0 508337-08 1/5	0.42	5.4	<0.1	30	750	105
RE1-SE-9.0 508337-09 1/5	1.1	9.5	20	7.5	2,300	130
RE1-SS-8.5 508337-10	<0.02	0.11	0.17	0.37	61	87
RE1-SW-9.0 508337-11	0.55	0.12	1.2	1.1	32	85
Method Blank 05-1634 MB	<0.02	<0.02	<0.02	<0.06	<2	84

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15
 Date Received: 08/19/15
 Project: Truck City 0714.03.01, F&BI 508337
 Date Extracted: 08/19/15
 Date Analyzed: 08/19/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 56-165)
RE4-B-10.0 508337-01	<50	<250	111
RE4-SW-9.0 508337-02	<50	<250	110
RE4-SS-9.0 508337-03	<50	<250	109
RE4-SE-8.0 508337-04	<50	<250	107
RE4-SN-8.5 508337-05	<50	<250	117
RE1-BN-10.0 508337-06	<50	<250	111
RE1-BS-10.0 508337-07	<50	<250	126
RE1-SN-9.0 508337-08	13,000	310 x	119
RE1-SE-9.0 508337-09	9,200	<250	126
RE1-SS-8.5 508337-10	<50	<250	119
RE1-SW-9.0 508337-11	<50	<250	109
Method Blank 05-1707 MB	<50	<250	121

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15

Date Received: 08/19/15

Project: Truck City 0714.03.01, F&BI 508337

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508337-03 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	93	66-121
Toluene	mg/kg (ppm)	0.5	98	72-128
Ethylbenzene	mg/kg (ppm)	0.5	101	69-132
Xylenes	mg/kg (ppm)	1.5	99	69-131
Gasoline	mg/kg (ppm)	20	95	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15

Date Received: 08/19/15

Project: Truck City 0714.03.01, F&BI 508337

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508337-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	115	114	63-146	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	116	79-144

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

508337

SAMPLE CHAIN OF CUSTODY

ME 8/19/15

RO3/VSS

Send Report To Ken-Vy Van

Company Maul Foster Aron61

Address 411 First Ave S, Suite 610

City, State, ZIP Seattle, WA 98104

Phone # (253) 320-5378 Fax #

SAMPLERS (signature) Andrew Sparks

PROJECT NAME/NO. TRACK CITY / 0714.03.01

PO#

REMARKS

TRACK CITY / 0714.03.01

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	
RE4-B-10.0	01AE	8/19/15	1040	Soil	5	X	X	X				
RE4-SW-9.0	02AE		1055			X	X	X				
RE4-SS-9.0	03		1110			X	X	X				
RE4-SE-8.0	04		1125			X	X	X				
RE4-SN-8.5	05		1145			X	X	X				
RE1-BN-10.0	06		1220			X	X	X				Gravelly sample
RE1-BS-10.0	07		1230			X	X	X				* SAMPLE SATURATED
RE1-SN-9.0	08		1330			X	X	X				* SAMPLE SATURATED
RE1-SE-9.0	09		1345			X	X	X				* SAMPLE SATURATED
RE1-SS-8.5	10		1400			X	X	X				* SAMPLE SATURATED

Samples received at _____

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Andrew Sparks</u>	ANDREW SPARKS	Maul Foster Aron61	8/19/15	1500
<u>Ann Weber</u>	Ann Weber - Bruya	FZ B1	8/19/15	"
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 1, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on August 20, 2015 from Truck City 0714.03.01, F&BI 508363 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Justin Clary
MFA0901R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 20, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 508363 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508363 -01	RE3-B-10.0
508363 -02	RE3-SE-9.0
508363 -03	RE3-SS-9.0
508363 -04	RE3-SW-9.0
508363 -05	RE3-SN-9.0
508363 -06	RE2-B-10.0
508363 -07	RE2-SE-10.0
508363 -08	RE2-SS-9.0
508363 -09	RE2-SW-9.0
508363 -10	RE2-SN-9.0
508363 -11	REST01-01
508363 -12	REST01-02
508363 -13	REST01-03
508363 -14	REST02-01
508363 -15	REST02-02
508363 -16	REST02-03
508363 -17	REST03-01
508363 -18	REST03-02
508363 -19	REST03-03
508363 -20	REST04-01
508363 -21	REST04-02
508363 -22	REST04-03
508363 -23	REST02-01-DUP
508363 -24	REST03-01-DUP

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/20/15

Project: Truck City 0714.03.01, F&BI 508363

Date Extracted: 08/20/15

Date Analyzed: 08/20/15, 08/21/15, 08/22/15 and 08/24/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE3-B-10.0 508363-01	<0.02	<0.02	<0.02	<0.06	<2	83
RE3-SE-9.0 508363-02	0.046	0.090	0.039	0.23	3.4	105
RE3-SS-9.0 508363-03	<0.02	<0.02	<0.02	<0.06	<2	83
RE3-SW-9.0 508363-04	<0.02	0.11	0.080	0.24	14	105
RE3-SN-9.0 508363-05 1/5	<0.1	0.89	3.8	14	400	99
RE2-B-10.0 508363-06	<0.02	0.046	<0.02	<0.06	<2	101
RE2-SE-10.0 508363-07	<0.02	0.16	0.11	0.20	39	104
RE2-SS-9.0 508363-08 1/10	0.11 j	7.4	4.3	12	1,100	114
RE2-SW-9.0 508363-09 1/10	0.11 j	0.75	2.3	1.3	240	102
RE2-SN-9.0 508363-10 1/10	<0.2	28	29	46	4,600	156

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/20/15

Project: Truck City 0714.03.01, F&BI 508363

Date Extracted: 08/20/15

Date Analyzed: 08/20/15, 08/21/15, 08/22/15 and 08/24/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
REST01-01 508363-11	<0.02	<0.02	0.056	0.091	43	100
REST01-02 508363-12	<0.02	<0.02	<0.02	<0.06	34	102
REST01-03 508363-13	<0.02	<0.02	<0.02	<0.06	22	104
REST02-01 508363-14	<0.02	<0.02	<0.02	<0.06	<2	84
REST02-02 508363-15	<0.02	<0.02	<0.02	<0.06	<2	105
REST02-03 508363-16	<0.02	<0.02	<0.02	<0.06	<2	105
REST03-01 508363-17	<0.02	<0.02	<0.02	<0.06	<2	103
REST03-02 508363-18	<0.02	<0.02	<0.02	<0.06	<2	102
REST03-03 508363-19	<0.02	<0.02	<0.02	<0.06	<2	104
REST04-01 508363-20	<0.02	<0.02	<0.02	<0.06	<2	100

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/20/15

Project: Truck City 0714.03.01, F&BI 508363

Date Extracted: 08/20/15

Date Analyzed: 08/20/15, 08/21/15, 08/22/15 and 08/24/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
REST04-02 508363-21	<0.02	<0.02	<0.02	<0.06	<2	101
REST04-03 508363-22	<0.02	<0.02	<0.02	<0.06	<2	100
REST02-01-DUP 508363-23	<0.02	<0.02	<0.02	<0.06	<2	102
REST03-01-DUP 508363-24	<0.02	<0.02	<0.02	<0.06	<2	84
Method Blank 05-1636 MB2	<0.02	<0.02	<0.02	<0.06	<2	86
Method Blank 05-1638 MB	<0.02	<0.02	<0.02	<0.06	<2	84

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15
 Date Received: 08/20/15
 Project: Truck City 0714.03.01, F&BI 508363
 Date Extracted: 08/20/15
 Date Analyzed: 08/20/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
RE3-B-10.0 508363-01	<50	<250	91
RE3-SE-9.0 508363-02	<50	<250	100
RE3-SS-9.0 508363-03	<50	<250	101
RE3-SW-9.0 508363-04	<50	<250	91
RE3-SN-9.0 508363-05	570	<250	89
RE2-B-10.0 508363-06	<50	<250	89
RE2-SE-10.0 508363-07	180	<250	89
RE2-SS-9.0 508363-08	1,800	<250	101
RE2-SW-9.0 508363-09	250	<250	92
RE2-SN-9.0 508363-10	1,100	<250	101
REST01-01 508363-11	560	<250	93
REST01-02 508363-12	1,200	310	94

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15
 Date Received: 08/20/15
 Project: Truck City 0714.03.01, F&BI 508363
 Date Extracted: 08/20/15
 Date Analyzed: 08/20/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 56-165)
REST01-03 508363-13	510	<250	94
REST02-01 508363-14	<50	<250	101
REST02-02 508363-15	<50	<250	98
REST02-03 508363-16	<50	<250	97
REST03-01 508363-17	<50	<250	92
REST03-02 508363-18	<50	<250	89
REST03-03 508363-19	<50	<250	95
REST04-01 508363-20	<50	<250	93
REST04-02 508363-21	<50	<250	91
REST04-03 508363-22	<50	<250	88
REST02-01-DUP 508363-23	<50	<250	98

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15
Date Received: 08/20/15
Project: Truck City 0714.03.01, F&BI 508363
Date Extracted: 08/20/15
Date Analyzed: 08/20/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
REST03-01-DUP 508363-24	<50	<250	95
Method Blank 05-1715 MB	<50	<250	93
Method Blank 05-1714 MB	<50	<250	103

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/20/15

Project: Truck City 0714.03.01, F&BI 508363

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508339-08 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	98	69-120
Toluene	mg/kg (ppm)	0.5	99	70-117
Ethylbenzene	mg/kg (ppm)	0.5	97	65-123
Xylenes	mg/kg (ppm)	1.5	96	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/20/15

Project: Truck City 0714.03.01, F&BI 508363

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508363-24 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	91	66-121
Toluene	mg/kg (ppm)	0.5	95	72-128
Ethylbenzene	mg/kg (ppm)	0.5	96	69-132
Xylenes	mg/kg (ppm)	1.5	97	69-131
Gasoline	mg/kg (ppm)	20	90	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/20/15

Project: Truck City 0714.03.01, F&BI 508363

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508363-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	116	107	63-146	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	107	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/20/15

Project: Truck City 0714.03.01, F&BI 508363

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508363-21 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	106	117	63-146	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	115	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

508363

SAMPLE CHAIN OF CUSTODY ME 08/20/15 09/02/15

Send Report To VEN-VY VAN

Company MW FOSTER AGENCY

Address 411 FIRST AVE S, SUITE 610

City, State, ZIP SEATTLE, WA 98104

Phone # (206) 320-5338 Fax # —

SAMPLERS (signature) Andreas Kaparos

PROJECT NAME/NO. TRUCK CITY / 0714.03.01

PO#

REMARKS

Page # 1 of 3
TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
Rush charges authorized by

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS		
RE3-B-10.0	01	8/20/15	0725	Soil	5	X	X	X					* SATURATED
RE3-SE-9.0	02		0735		1	X	X	X					
RE3-SS-9.0	03		0750		1	X	X	X					
RE3-SW-7.0	04		0805		1	X	X	X					
RE3-SN-9.0	05		0830		1	X	X	X					
RE2-B-10.0	06		0845		1	X	X	X					* SATURATED
RE2-SE-10.0	07		0905		1	X	X	X					* SATURATED
RE2-SS-9.0	08		0915		1	X	X	X					
RE2-SW-9.0	09		0930		1	X	X	X					
RE2-SN-9.0	10		0945		1	X	X	X					

Friedman & Bryva, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044
FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Andreas Kaparos</u>	ANDREAS KAPAROS	MFA	8/20/15	1240
<u>Ann Webster Bryva</u>	ANN WEBSTER BRYVA	FAB	"	"
Received by:				
Relinquished by:				
Received by:				
Relinquished by:				

Samples received at _____ °C

508363

SAMPLE CHAIN OF CUSTODY ME 08/20/15 Bay/053

Send Report To PEN-VV VAR

Company SAVES

Address _____

City, State, ZIP _____

Phone # _____ Fax # _____

SAMPLERS (signature) Doubt

PROJECT NAME/NO. TRUCK CITY / 0714, 03.01

PO# _____

REMARKS * Rush TTT for all Stackpile (ST) samples

ANALYSES REQUESTED

Page # 2 of 3
TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
Rush charges authorized by _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	
ST01-01	11E	8/20/15	1040	Soil	5	X	X	X				
ST01-02	12		1050			X	X	X				
ST01-03	13		1055			X	X	X				
ST02-01	14		1120			X	X	X				
ST02-02	15		1130			X	X	X				
ST02-03	16		1145			X	X	X				
ST03-01	17		1200			X	X	X				
ST03-02	18		1210			X	X	X				
ST03-03	19		1215			X	X	X				
ST04-01	20		1225			X	X	X				

Friedman & Bryva, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\COC.DOC

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Retinguished by: <u>[Signature]</u>	<u>[Signature]</u>	<u>Andrew Kates</u>	<u>MFB</u>	<u>9/20/15</u>	<u>1240</u>		
Received by: <u>[Signature]</u>	<u>[Signature]</u>	<u>Ann Wobber-Bryva</u>	<u>WFB</u>	<u>9/20/15</u>	<u>4</u>		
Retinguished by: _____	_____	_____	_____	_____	_____	_____	_____
Received by: _____	_____	_____	_____	_____	_____	_____	_____

Samples received at 5 0

508363

SAMPLE CHAIN OF CUSTODY

ME 08/20/15

Box / 053

Send Report To YEN-VY VAN

Company _____

Address _____

City, State, ZIP _____

Phone # _____

SPARR

Fax # _____

SAMPLERS (signature) *Julie*

PROJECT NAME/NO. TRUCK CITY

PO# _____

REMARKS

No RUSH FOR THE 2 - DUP SAMPLES

Page # 3 of 3

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by _____

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED					Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270		HFS
ST04-02	21 A-	8/20/15	1230	Soil	5	X	X	X				
ST04-03	22 A-		1235		1							
ST02-01-DUP	23 A-		1125		1	X	X	X				NOT RUSH
ST03-01-DUP	24 A-		1205		1	X	X	X				NOT RUSH OK STANDARD TNT

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

Andrew Fortner

MFA

8/20/15

1240

Received by:

Ann Webster-Bruner

Ann Webster-Bruner

FIBI

"

"

Received by:

Samples received at 5 °C

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 27, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on August 21, 2015 from the Truck City 0714.03.01, F&BI 508394 project. There are 18 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0827R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 21, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 508394 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508394 -01	PL-UST-650
508394 -02	BT-Post-2
508394 -03	RE ST05-01
508394 -04	RE ST05-02
508394 -05	RE ST05-03

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15
Date Received: 08/21/15
Project: Truck City 0714.03.01, F&BI 508394
Date Extracted: 08/21/15
Date Analyzed: 08/21/15

**RESULTS FROM THE ANALYSIS OF SOIL/PRODUCT SAMPLES
FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID
Results Reported as Not Detected (ND) or Detected (D)**

**THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE
WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION
WITH REGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT**

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 48-168)
PL-UST-650 508394-01 1/200	ND	ND	D	102
Method Blank 05-1717 MB	ND	ND	ND	93

ND - Material not detected at or above 4,000 mg/kg gas, 10,000 mg/kg diesel and 50,000 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15
Date Received: 08/21/15
Project: Truck City 0714.03.01, F&BI 508394
Date Extracted: 08/21/15
Date Analyzed: 08/22/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE ST05-01 508394-03	<0.02	<0.02	<0.02	<0.06	<2	97
RE ST05-02 508394-04	<0.02	<0.02	<0.02	<0.06	<2	95
RE ST05-03 508394-05	<0.02	<0.02	<0.02	<0.06	<2	90
Method Blank 05-1640 MB	<0.02	<0.02	<0.02	<0.06	<2	105

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15
Date Received: 08/21/15
Project: Truck City 0714.03.01, F&BI 508394
Date Extracted: 08/21/15
Date Analyzed: 08/21/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 52-124)
BT-Post-2 508394-02	<1	<1	<1	<3	<100	96
Method Blank 05-1639 MB	<1	<1	<1	<3	<100	99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15
Date Received: 08/21/15
Project: Truck City 0714.03.01, F&BI 508394
Date Extracted: 08/21/15
Date Analyzed: 08/21/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
RE ST05-01 508394-03	<50	<250	97
RE ST05-02 508394-04	<50	<250	91
RE ST05-03 508394-05	<50	<250	99
Method Blank 05-1718 MB	<50	<250	92

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15
Date Received: 08/21/15
Project: Truck City 0714.03.01, F&BI 508394
Date Extracted: 08/24/15
Date Analyzed: 08/24/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 51-134)
BT-Post-2 508394-02	<50	<250	85
Method Blank 05-1723 MB	<50	<250	87

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	PL-UST-650	Client:	Maul Foster Alongi
Date Received:	08/21/15	Project:	Truck City 0714.03.01, F&BI 508394
Date Extracted:	08/21/15	Lab ID:	508394-01 1/2000
Date Analyzed:	08/22/15	Data File:	082143.D
Matrix:	Soil/Product	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	89	113
Toluene-d8	99	64	137
4-Bromofluorobenzene	100	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<100
Chloroethane	<1,000
1,1-Dichloroethene	<100
Methylene chloride	<1,000
trans-1,2-Dichloroethene	<100
1,1-Dichloroethane	<100
cis-1,2-Dichloroethene	<100
1,2-Dichloroethane (EDC)	<100
1,1,1-Trichloroethane	<100
Trichloroethene	<40
Tetrachloroethene	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	Truck City 0714.03.01, F&BI 508394
Date Extracted:	08/21/15	Lab ID:	05-1686 mb
Date Analyzed:	08/21/15	Data File:	082117.D
Matrix:	Soil/Product	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	89	113
Toluene-d8	99	64	137
4-Bromofluorobenzene	97	81	119

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.02
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	PL-UST-650	Client:	Maul Foster Alongi
Date Received:	08/21/15	Project:	Truck City 0714.03.01, F&BI 508394
Date Extracted:	08/21/15	Lab ID:	508394-01
Date Analyzed:	08/21/15	Data File:	082121.D\ECD1A.CH
Matrix:	Product	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	91	37	158

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<2
Aroclor 1232	<2
Aroclor 1016	<2
Aroclor 1242	<2
Aroclor 1248	<2
Aroclor 1254	<2
Aroclor 1260	<2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	Truck City 0714.03.01, F&BI 508394
Date Extracted:	08/21/15	Lab ID:	05-1720 mb
Date Analyzed:	08/21/15	Data File:	082119.D\ECD1A.CH
Matrix:	Product	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	97	37	158

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<2
Aroclor 1232	<2
Aroclor 1016	<2
Aroclor 1242	<2
Aroclor 1248	<2
Aroclor 1254	<2
Aroclor 1260	<2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15

Date Received: 08/21/15

Project: Truck City 0714.03.01, F&BI 508394

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508308-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	97	69-120
Toluene	mg/kg (ppm)	0.5	100	70-117
Ethylbenzene	mg/kg (ppm)	0.5	98	65-123
Xylenes	mg/kg (ppm)	1.5	98	66-120
Gasoline	mg/kg (ppm)	20	75	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15

Date Received: 08/21/15

Project: Truck City 0714.03.01, F&BI 508394

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508392-02 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	107	72-119
Toluene	ug/L (ppb)	50	104	71-113
Ethylbenzene	ug/L (ppb)	50	101	72-114
Xylenes	ug/L (ppb)	150	89	72-113
Gasoline	ug/L (ppb)	1,000	100	70-119

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15

Date Received: 08/21/15

Project: Truck City 0714.03.01, F&BI 508394

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508389-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	57	108	102	64-133	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	115	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15

Date Received: 08/21/15

Project: Truck City 0714.03.01, F&BI 508394

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	90	100	58-134	11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15

Date Received: 08/21/15

Project: Truck City 0714.03.01, F&BI 508394

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/PRODUCT
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 508308-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	60	57	10-91	5
Chloroethane	mg/kg (ppm)	2.5	<0.5	75	71	10-101	5
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	76	74	11-103	3
Methylene chloride	mg/kg (ppm)	2.5	<0.5	91	86	14-128	6
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	86	83	13-112	4
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	89	85	23-115	5
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	90	85	25-120	6
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	87	85	22-124	2
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	88	84	27-112	5
Trichloroethene	mg/kg (ppm)	2.5	<0.02	91	86	30-112	6
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	88	83	25-114	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15

Date Received: 08/21/15

Project: Truck City 0714.03.01, F&BI 508394

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/PRODUCT
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	69	42-107
Chloroethane	mg/kg (ppm)	2.5	80	47-115
1,1-Dichloroethene	mg/kg (ppm)	2.5	85	65-110
Methylene chloride	mg/kg (ppm)	2.5	94	50-127
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	94	71-113
1,1-Dichloroethane	mg/kg (ppm)	2.5	95	74-109
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	94	73-110
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	91	73-111
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	94	72-116
Trichloroethene	mg/kg (ppm)	2.5	93	72-107
Tetrachloroethene	mg/kg (ppm)	2.5	93	73-111

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/15

Date Received: 08/21/15

Project: Truck City 0714.03.01, F&BI 508394

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF PRODUCT SAMPLES FOR
POLYCHLORINATED BIPHENYLS AS
AROCOR 1016/1260 BY EPA METHOD 8082A**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	100	92	105	60-151	13
Aroclor 1260	mg/kg (ppm)	100	97	108	53-144	11

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

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September 4, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included is the amended report from the testing of material submitted on August 21, 2015 from Truck City 0714.03.01, F&BI 508400 project. The sample IDs have been corrected.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Justin Clary
MFA0901R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
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September 1, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on August 21, 2015 from Truck City 0714.03.01, F&BI 508400 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Justin Clary
MFA0901R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 21, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 508400 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508400 -01	RE1-SW2-9.5
508400 -02	RE1-SW3-9.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15
Date Received: 08/21/15
Project: Truck City 0714.03.01, F&BI 508400
Date Extracted: 08/24/15
Date Analyzed: 08/24/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
RE1-SW2-9.5 508400-01	<0.02	<0.02	<0.02	<0.06	<2	103
RE1-SW3-9.5 508400-02	<0.02	<0.02	<0.02	<0.06	<2	102
Method Blank 05-1643 MB	<0.02	<0.02	<0.02	<0.06	<2	106

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15
Date Received: 08/21/15
Project: Truck City 0714.03.01, F&BI 508400
Date Extracted: 08/21/15
Date Analyzed: 08/21/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
RE1-SW2-9.5 508400-01	<50	<250	101
RE1-SW3-9.5 508400-02	<50	<250	106
Method Blank 05-1719 MB	<50	<250	103

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/21/15

Project: Truck City 0714.03.01, F&BI 508400

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508400-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	82	69-120
Toluene	mg/kg (ppm)	0.5	83	70-117
Ethylbenzene	mg/kg (ppm)	0.5	81	65-123
Xylenes	mg/kg (ppm)	1.5	82	66-120
Gasoline	mg/kg (ppm)	20	85	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/21/15

Project: Truck City 0714.03.01, F&BI 508400

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508388-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	115	119	73-135	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	115	74-139

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 4, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included is the amended report from the testing of material submitted on August 24, 2015 from the Truck City 0714.03.01, F&BI 508421 project. The sample IDs have been corrected.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Justin Clary
MFA0901R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

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fbi@isomedia.com
www.friedmanandbruya.com

September 1, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on August 24, 2015 from the Truck City 0714.03.01, F&BI 508421 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Justin Clary
MFA0901R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 24, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 508421 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508421 -01	RE1-SE2-9.0
508421 -02	FTS-S-SW1-6
508421 -03	FTS-S-SW2-5
508421 -04	FTS-S-SS-5
508421 -05	FTS-S-BN-6
508421 -06	FTS-S-BS-5
508421 -07	FTS-S-SE1-5
508421 -08	RE1-SE3-10.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15
 Date Received: 08/24/15
 Project: Truck City 0714.03.01, F&BI 508421
 Date Extracted: 08/24/15
 Date Analyzed: 08/25/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE1-SE2-9.0 508421-01	<0.02	0.029	<0.02	<0.06	8.3	94
FTS-S-SW1-6 508421-02	<0.02	<0.02	<0.02	<0.06	3.0	85
FTS-S-SW2-5 508421-03	<0.02	<0.02	<0.02	<0.06	<2	93
FTS-S-SS-5 508421-04	<0.02	<0.02	<0.02	<0.06	<2	92
FTS-S-BN-6 508421-05	<0.02	<0.02	<0.02	<0.06	<2	94
FTS-S-BS-5 508421-06	<0.02	<0.02	<0.02	<0.06	<2	92
FTS-S-SE1-5 508421-07	<0.02	<0.02	<0.02	<0.06	<2	94
RE1-SE3-10.0 508421-08	<0.02	<0.02	<0.02	<0.06	<2	93
Method Blank 05-1644 MB	<0.02	<0.02	<0.02	<0.06	<2	92

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15
 Date Received: 08/24/15
 Project: Truck City 0714.03.01, F&BI 508421
 Date Extracted: 08/25/15
 Date Analyzed: 08/25/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 53-144)
RE1-SE2-9.0 508421-01	<50	<250	123
FTS-S-SW1-6 508421-02	<50	<250	124
FTS-S-SW2-5 508421-03	<50	<250	116
FTS-S-SS-5 508421-04	<50	<250	112
FTS-S-BN-6 508421-05	<50	<250	120
FTS-S-BS-5 508421-06	<50	<250	117
FTS-S-SE1-5 508421-07	<50	<250	126
RE1-SE3-10.0 508421-08	<50	<250	124
Method Blank 05-1733 MB	<50	<250	118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/24/15

Project: Truck City 0714.03.01, F&BI 508421

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508421-04 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	88	66-121
Toluene	mg/kg (ppm)	0.5	88	72-128
Ethylbenzene	mg/kg (ppm)	0.5	89	69-132
Xylenes	mg/kg (ppm)	1.5	89	69-131
Gasoline	mg/kg (ppm)	20	85	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/24/15

Project: Truck City 0714.03.01, F&BI 508421

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508421-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	118	109	64-133	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	107	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

508421

SAMPLE CHAIN OF CUSTODY

ME

08/20/15

BOZ/VS2

Send Report To VEN-VY VHN

Company Maul Foster Associates

Address 411 First Ave S., Suite 610

City, State, ZIP SEATTLE, WA 98104

Phone # (253) 320-5378 Fax #

SAMPLERS (signature) <u>Andrew Stepan</u>	PO#
PROJECT NAME/NO.	
<u>Truck City / 07/14, 03, 01</u>	
REMARKS	

Page # 1 of

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	
RG1-SE2-9.0	014	9/24/15	1120	soil	5	X	X	X				
FTS-S-SW1-6	024		1220			X	X	X				
FTS-S-SW2-5	034		1230			X	X	X				
FYS-S-SS-5	044		1245			X	X	X				
FYS-S-BN-6	054		1300			X	X	X				
FYS-S-B5-5	064		1315			X	X	X				
FYS-S-SE1-5	074		1325			X	X	X				
RE1-SE3-10.6	084		1500			X	X	X				* SAMPLE SATURATED

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\COC.DOC

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Andrew Stepan</u>		<u>Andrew Stepan</u>		<u>MFA</u>		<u>9/24/15</u>	<u>1640</u>
Received by: <u> </u>		<u> </u>		<u> </u>		<u>8/20/15</u>	<u>1640</u>
Relinquished by: <u> </u>		<u> </u>		<u> </u>			
Received by: <u> </u>		<u> </u>		<u> </u>			

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

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Seattle, WA 98119-2029
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fbi@isomedia.com
www.friedmanandbruya.com

September 1, 2015

Justin Clary, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Mr. Clary:

Included are the results from the testing of material submitted on August 25, 2015 from the Truck City 0714.03.01, F&BI 508449 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Yen-Vy Van
MFA0901R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 25, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 508449 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508449 -01	RE-ST06-1
508449 -02	RE-ST06-2
508449 -03	RE-ST06-3
508449 -04	RE3-SN2-9.0
508449 -05	BT-POST-3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15
Date Received: 08/25/15
Project: Truck City 0714.03.01, F&BI 508449
Date Extracted: 08/25/15
Date Analyzed: 08/26/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
RE-ST06-1 508449-01	<0.02	<0.02	<0.02	<0.06	<2	82
RE-ST06-2 508449-02	<0.02	<0.02	<0.02	<0.06	<2	82
RE-ST06-3 508449-03	<0.02	<0.02	<0.02	<0.06	<2	74
RE3-SN2-9.0 508449-04	0.044	0.11	0.40	0.72	10	84
Method Blank 05-1646 MB	<0.02	<0.02	<0.02	<0.06	<2	96

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15
Date Received: 08/25/15
Project: Truck City 0714.03.01, F&BI 508449
Date Extracted: 08/26/15
Date Analyzed: 08/26/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
BT-POST-3 508449-05	<1	<1	<1	<3	<100	85
Method Blank 05-1648 MB	<1	<1	<1	<3	<100	95

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15
Date Received: 08/25/15
Project: Truck City 0714.03.01, F&BI 508449
Date Extracted: 08/26/15
Date Analyzed: 08/26/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
Results Reported as ug/L (ppb)

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Motor Oil Range</u>	<u>Surrogate</u>
Laboratory ID	(C ₁₀ -C ₂₅)	(C ₂₅ -C ₃₆)	(% Recovery)
			(Limit 41-152)
BT-POST-3 508449-05	<50	<250	94
Method Blank 05-1738 MB	<50	<250	99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15
Date Received: 08/25/15
Project: Truck City 0714.03.01, F&BI 508449
Date Extracted: 08/25/15
Date Analyzed: 08/25/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 56-165)
RE-ST06-1 508449-01	<50	<250	99
RE-ST06-2 508449-02	<50	<250	104
RE-ST06-3 508449-03	<50	<250	100
RE3-SN2-9.0 508449-04	<50	<250	93
Method Blank 05-1736 MB	<50	<250	96

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/25/15

Project: Truck City 0714.03.01, F&BI 508449

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508425-11 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	94	66-121
Toluene	mg/kg (ppm)	0.5	94	72-128
Ethylbenzene	mg/kg (ppm)	0.5	96	69-132
Xylenes	mg/kg (ppm)	1.5	96	69-131
Gasoline	mg/kg (ppm)	20	90	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/25/15

Project: Truck City 0714.03.01, F&BI 508449

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508449-05 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	101	65-118
Toluene	ug/L (ppb)	50	100	72-122
Ethylbenzene	ug/L (ppb)	50	101	73-126
Xylenes	ug/L (ppb)	150	101	74-118
Gasoline	ug/L (ppb)	1,000	86	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/25/15

Project: Truck City 0714.03.01, F&BI 508449

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	114	116	63-142	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/01/15

Date Received: 08/25/15

Project: Truck City 0714.03.01, F&BI 508449

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508430-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	10,000	128 b	227 b	63-146	56 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	116	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

508449

SAMPLE CHAIN OF CUSTODY ME 8/25/15 Boy/11/151

Send Report To JUSTIN CLARY

Company MAUL FOSTER ARON61

Address 1329 N. STATE ST. SUITE 301

City, State, ZIP BELLINGHAM, WA 98225

Phone # (360) 601-4517 Fax # ---

SAMPLERS (signature) <u>Justin Clary</u>	PROJECT NAME/NO. <u>Truck City / 0714.03.01</u>	PO#
REMARKS		

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED							Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS				
RE-ST06-1	01	8/25/15	1000	Soil	5	X	X	X							
RE-ST06-2	02		1010			X	X	X							
RE-ST06-3	03		1020			X	X	X							
RE3-SN2-9.0	04		1120			X	X	X							
BT-POST-3	05		1205	WATER		X	X	X							

Samples received at: 5 °C

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>Justin Clary</u>		<u>Justin Clary</u>		<u>MFA</u>		<u>8/25/15</u>	
<u>Maureen Boye</u>		<u>Maureen Boye</u>		<u>FBI</u>		<u>8/25/15</u>	<u>15:00</u>
Received by:		Received by:		Received by:			

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 3, 2015

Justin Clary, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Mr. Clary:

Included are the results from the testing of material submitted on August 26, 2015 from the Truck City PO 0714.03.01, F&BI 508469 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Yen Vy-Van
MFA0903R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 26, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City PO 0714.03.01, F&BI 508469 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508469 -01	FTS-N-SW-9.0
508469 -02	FTS-N-SN-9.0
508469 -03	FTS-N-B-10.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15
Date Received: 08/26/15
Project: Truck City, F&BI 508469
Date Extracted: 08/26/15
Date Analyzed: 08/26/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
FTS-N-SW-9.0 508469-01	<0.02	<0.02	<0.02	<0.06	<2	95
FTS-N-SN-9.0 508469-02	<0.02	<0.02	<0.02	<0.06	<2	95
FTS-N-B-10.0 508469-03	<0.02	<0.02	<0.02	<0.06	<2	94
Method Blank 05-1742 MB	<0.02	<0.02	<0.02	<0.06	<2	95

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15
Date Received: 08/26/15
Project: Truck City, F&BI 508469
Date Extracted: 08/26/15
Date Analyzed: 08/26/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 53-144)
FTS-N-SW-9.0 508469-01	<50	<250	110
FTS-N-SN-9.0 508469-02	<50	<250	113
FTS-N-B-10.0 508469-03	<50	<250	107
Method Blank 05-1739 MB	<50	<250	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15

Date Received: 08/26/15

Project: Truck City, F&BI 508469

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508469-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	82	66-121
Toluene	mg/kg (ppm)	0.5	85	72-128
Ethylbenzene	mg/kg (ppm)	0.5	86	69-132
Xylenes	mg/kg (ppm)	1.5	87	69-131
Gasoline	mg/kg (ppm)	20	90	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15

Date Received: 08/26/15

Project: Truck City, F&BI 508469

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508459-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	110	119	64-133	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	124	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 3, 2015

Justin Clary, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Mr. Clary:

Included are the results from the testing of material submitted on August 27, 2015 from the Truck City 0714.03.01, F&BI 508504 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0903R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 27, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 508504 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508504 -01	RE1-SN2-9.0
508504 -02	RE-ST07-1
508504 -03	RE-ST07-2
508504 -04	RE-ST07-3
508504 -05	RE1-SS2-10.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15
 Date Received: 08/27/15
 Project: Truck City 0714.03.01, F&BI 508504
 Date Extracted: 08/27/15
 Date Analyzed: 08/27/15 and 08/28/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE1-SN2-9.0 508504-01	<0.02	<0.02	<0.02	<0.06	<2	94
RE-ST07-1 508504-02	<0.02	<0.02	<0.02	<0.06	<2	96
RE-ST07-2 508504-03	<0.02	<0.02	<0.02	<0.06	<2	95
RE-ST07-3 508504-04	<0.02	<0.02	<0.02	<0.06	<2	95
RE1-SS2-10.0 508504-05	<0.02	<0.02	<0.02	<0.06	<2	95
Method Blank 05-1745 MB	<0.02	<0.02	<0.02	<0.06	<2	93

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15
Date Received: 08/27/15
Project: Truck City 0714.03.01, F&BI 508504
Date Extracted: 08/27/15
Date Analyzed: 08/27/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 53-144)
RE1-SN2-9.0 508504-01	<50	<250	106
RE-ST07-1 508504-02	<50	<250	106
RE-ST07-2 508504-03	<50	<250	103
RE-ST07-3 508504-04	<50	<250	109
RE1-SS2-10.0 508504-05	<50	<250	115
Method Blank 05-1761 MB	<50	<250	118

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15

Date Received: 08/27/15

Project: Truck City 0714.03.01, F&BI 508504

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508504-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	86	66-121
Toluene	mg/kg (ppm)	0.5	86	72-128
Ethylbenzene	mg/kg (ppm)	0.5	87	69-132
Xylenes	mg/kg (ppm)	1.5	88	69-131
Gasoline	mg/kg (ppm)	20	90	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15

Date Received: 08/27/15

Project: Truck City 0714.03.01, F&BI 508504

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508477-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	115	115	64-133	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	120	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

508504

SAMPLE CHAIN OF CUSTODY

ME 08-27HS

B01/VS

Send Report To Justin Clary

Company Maul Foster Affong

Address 1329 N. State Street, #430

City, State, ZIP Bellingham, WA 98225

Phone # 3605946260 Fax # _____

SAMPLERS (signature) Carolyn Wise

PROJECT NAME/NO. _____ PO# _____

Truck City/0714.0301

REMARKS

Page # _____ of _____

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH

Rush charges authorized by _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED							Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS				
REL-SM2-9.0	01A	8/27	950	S	5	X	X	X							
RE-STO7-1	02		1210	S	5	X	X	X							
RE-STO7-2	03		1215	S	5	X	X	X							
RE-STO7-3	04		1220	S	5	X	X	X							
REL-SS2-10.0	05		1422	S	5	X	X	X							

Samples analyzed at B.C.

Friedman & Bryna, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE _____ PRINT NAME _____ COMPANY _____ DATE _____ TIME _____

Relinquished by: Carolyn Wise Received by: MM

Relinquished by: MM Received by: MM

Received by: _____

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 3, 2015

Justin Clary, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Mr. Clary:

Included are the results from the testing of material submitted on August 28, 2015 from the Truck City 0714.03.01, F&BI 508533 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Yen-Vy Van
MFA0903R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 28, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 508533 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508533 -01	RE1-SS3-10.0
508533 -02	RE2-B2-10.0
508533 -03	RE2-B3-10.0
508533 -04	BT-POST-4

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15
Date Received: 08/28/15
Project: Truck City 0714.03.01, F&BI 508533
Date Extracted: 08/28/15
Date Analyzed: 08/29/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 52-124)
BT-POST-4 508533-04	<1	<1	<1	<3	<100	91
Method Blank 05-1746 MB	<1	<1	<1	<3	<100	91

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15
Date Received: 08/28/15
Project: Truck City 0714.03.01, F&BI 508533
Date Extracted: 08/28/15
Date Analyzed: 08/29/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE1-SS3-10.0 508533-01	<0.02	<0.02	<0.02	<0.06	<2	91
RE2-B2-10.0 508533-02	<0.02	<0.02	<0.02	<0.06	<2	90
RE2-B3-10.0 508533-03	<0.02	<0.02	<0.02	<0.06	<2	91
Method Blank 05-1747 MB	<0.02	<0.02	<0.02	<0.06	<2	82

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15
Date Received: 08/28/15
Project: Truck City 0714.03.01, F&BI 508533
Date Extracted: 08/28/15
Date Analyzed: 08/28/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 51-134)
BT-POST-4 508533-04	<50	<250	83
Method Blank 05-1765 MB	<50	<250	95

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15
Date Received: 08/28/15
Project: Truck City 0714.03.01, F&BI 508533
Date Extracted: 08/28/15
Date Analyzed: 08/28/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
RE1-SS3-10.0 508533-01	<50	<250	84
RE2-B2-10.0 508533-02	<50	<250	94
RE2-B3-10.0 508533-03	<50	<250	95
Method Blank 05-1781 MB	<50	<250	109

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15

Date Received: 08/28/15

Project: Truck City 0714.03.01, F&BI 508533

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508485-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	95	65-118
Toluene	ug/L (ppb)	50	94	72-122
Ethylbenzene	ug/L (ppb)	50	96	73-126
Xylenes	ug/L (ppb)	150	94	74-118
Gasoline	ug/L (ppb)	1,000	94	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15

Date Received: 08/28/15

Project: Truck City 0714.03.01, F&BI 508533

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508533-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	86	66-121
Toluene	mg/kg (ppm)	0.5	88	72-128
Ethylbenzene	mg/kg (ppm)	0.5	87	69-132
Xylenes	mg/kg (ppm)	1.5	90	69-131
Gasoline	mg/kg (ppm)	20	85	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15

Date Received: 08/28/15

Project: Truck City 0714.03.01, F&BI 508533

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	107	116	58-134	8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15

Date Received: 08/28/15

Project: Truck City 0714.03.01, F&BI 508533

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508507-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	109	109	63-146	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	124	79-144

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 3, 2015

Justin Clary, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Mr. Clary:

Included are the results from the testing of material submitted on August 31, 2015 from the Truck City 0714.03.01, F&BI 508558 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Yen-Vy Van
MFA0903R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 31, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 508558 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
508558 -01	RE-ST08-1
508558 -02	RE2-SS2-8-0
508558 -03	RE-ST08-2
508558 -04	RE-ST08-3
508558 -05	RE2-SS3-9.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15
 Date Received: 08/31/15
 Project: Truck City 0714.03.01, F&BI 508558
 Date Extracted: 08/31/15
 Date Analyzed: 08/31/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE-ST08-1 508558-01	<0.02	<0.02	<0.02	<0.06	<2	91
RE2-SS2-8-0 508558-02	<0.02	<0.02	<0.02	<0.06	<2	88
RE-ST08-2 508558-03	<0.02	<0.02	<0.02	<0.06	<2	90
RE-ST08-3 508558-04	<0.02	<0.02	<0.02	<0.06	<2	89
RE2-SS3-9.0 508558-05	<0.02	<0.02	<0.02	<0.06	<2	92
Method Blank 05-1749 MB	<0.02	<0.02	<0.02	<0.06	<2	91

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15
Date Received: 08/31/15
Project: Truck City 0714.03.01, F&BI 508558
Date Extracted: 08/31/15
Date Analyzed: 08/31/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 53-144)
RE-ST08-1 508558-01	<50	<250	109
RE2-SS2-8-0 508558-02	<50	<250	107
RE-ST08-2 508558-03	<50	<250	98
RE-ST08-3 508558-04	<50	<250	98
RE2-SS3-9.0 508558-05	<50	<250	103
Method Blank 05-1791 MB	<50	<250	98

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15

Date Received: 08/31/15

Project: Truck City 0714.03.01, F&BI 508558

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 508558-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	82	66-121
Toluene	mg/kg (ppm)	0.5	85	72-128
Ethylbenzene	mg/kg (ppm)	0.5	86	69-132
Xylenes	mg/kg (ppm)	1.5	87	69-131
Gasoline	mg/kg (ppm)	20	90	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/03/15

Date Received: 08/31/15

Project: Truck City 0714.03.01, F&BI 508558

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 508557-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	1,300	116	120	64-133	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	124	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

508558

SAMPLE CHAIN OF CUSTODY

ME 08-31-15

902 / 151

Send Report To Justin Clary

Company Maui Feoster Agency

Address 1329 N. State St. Ste. 301

City, State, ZIP Bellingham, WA 98229

Phone # 3605946260 Fax # _____

SAMPLERS (signature) Carole Lee

PROJECT NAME/NO. Truck City / 0714. 03. 01

REMARKS

Page # _____ of _____

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH

Rush charges authorized by _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED							Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS				
RE-ST08-1		01/18/15	915	S	5	X	X	X							
RE-SS2-8-0	02T		930	S	5	X	X	X							
RE-STD8-2	03		945	S	5	X	X	X							
RE-STD8-3	04		1013	S	5	X	X	X							
RE-SS3-9.0	05		1045	S	5	X	X	X							

Samples received at 5 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>[Signature]</u>	<u>Carole Lee</u>	<u>MEFA</u>	<u>8/31/15</u>	<u>1322</u>
<u>[Signature]</u>	<u>Justin Clary</u>	<u>FBI</u>	<u>9/15/15</u>	<u>1322</u>
Received by:				
Relinquished by:				

Friedman & Bryna, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

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Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 10, 2015

Justin Clary, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Mr. Clary:

Included are the results from the testing of material submitted on September 2, 2015 from the Truck City 0714.03.01-03, F&BI 509054 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Yen Vy-Van
MFA0910R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 2, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01-03, F&BI 509054 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509054 -01	RE2-SN2-10.0
509054 -02	RE2-SN3-10.0
509054 -03	BT-POST-5
509054 -04	RE2-SN4-10.0
509054 -05	RE2-SS4-10.0
509054 -06	RE-ST09-1
509054 -07	RE-ST09-2
509054 -08	RE-ST09-3
509054 -09	RE2-SS5-10.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/10/15
Date Received: 09/02/15
Project: Truck City 0714.03.01-03, F&BI 509054
Date Extracted: 09/02/15
Date Analyzed: 09/02/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 52-124)
BT-POST-5 509054-03	<1	<1	<1	<3	<100	95
Method Blank 05-1751 MB	<1	<1	<1	<3	<100	95

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/10/15
 Date Received: 09/02/15
 Project: Truck City 0714.03.01-03, F&BI 509054
 Date Extracted: 09/02/15
 Date Analyzed: 09/03/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE2-SN2-10.0 509054-01	<0.02	0.36	0.46	0.42	51	97
RE2-SN3-10.0 509054-02	<0.02	0.38	0.23	0.34	71	102
RE2-SN4-10.0 509054-04	<0.02	0.51	0.65	0.33	91	100
RE2-SS4-10.0 509054-05	<0.02	0.062	0.090	0.10	53	93
RE-ST09-1 509054-06	<0.02	<0.02	<0.02	<0.06	6.5	92
RE-ST09-2 509054-07	<0.02	<0.02	<0.02	<0.06	2.2	92
RE-ST09-3 509054-08	<0.02	<0.02	<0.02	<0.06	<2	92
RE2-SS5-10.0 509054-09	<0.02	<0.02	<0.02	<0.06	<2	91
Method Blank 05-1754 MB	<0.02	<0.02	<0.02	<0.06	<2	93

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/10/15
Date Received: 09/02/15
Project: Truck City 0714.03.01-03, F&BI 509054
Date Extracted: 09/03/15
Date Analyzed: 09/03/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
Results Reported as ug/L (ppb)

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Motor Oil Range</u>	<u>Surrogate</u>
Laboratory ID	(C ₁₀ -C ₂₅)	(C ₂₅ -C ₃₆)	(% Recovery)
			(Limit 41-152)
BT-POST-5 509054-03	<50	<250	82
Method Blank 05-1801 MB	<50	<250	81

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/10/15
 Date Received: 09/02/15
 Project: Truck City 0714.03.01-03, F&BI 509054
 Date Extracted: 09/03/15
 Date Analyzed: 09/03/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 56-165)
RE2-SN2-10.0 509054-01	300	<250	102
RE2-SN3-10.0 509054-02	100	<250	95
RE2-SN4-10.0 509054-04	330	<250	98
RE2-SS4-10.0 509054-05	130	<250	91
RE-ST09-1 509054-06	<50	<250	101
RE-ST09-2 509054-07	<50	<250	90
RE-ST09-3 509054-08	<50	<250	89
RE2-SS5-10.0 509054-09	<50	<250	94
Method Blank 05-1805 MB	<50	<250	101

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/10/15

Date Received: 09/02/15

Project: Truck City 0714.03.01-03, F&BI 509054

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509019-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	95	65-118
Toluene	ug/L (ppb)	50	95	72-122
Ethylbenzene	ug/L (ppb)	50	97	73-126
Xylenes	ug/L (ppb)	150	96	74-118
Gasoline	ug/L (ppb)	1,000	96	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/10/15

Date Received: 09/02/15

Project: Truck City 0714.03.01-03, F&BI 509054

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509054-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	0.18	0.28	44 hr
Ethylbenzene	mg/kg (ppm)	0.23	0.33	36 hr
Xylenes	mg/kg (ppm)	0.21	0.35	50 hr
Gasoline	mg/kg (ppm)	26	44	51 hr

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	81	66-121
Toluene	mg/kg (ppm)	0.5	80	72-128
Ethylbenzene	mg/kg (ppm)	0.5	81	69-132
Xylenes	mg/kg (ppm)	1.5	80	69-131
Gasoline	mg/kg (ppm)	20	90	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/10/15

Date Received: 09/02/15

Project: Truck City 0714.03.01-03, F&BI 509054

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	102	101	63-142	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/10/15

Date Received: 09/02/15

Project: Truck City 0714.03.01-03, F&BI 509054

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509054-07 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	104	101	63-146	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	94	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

509054

SAMPLE CHAIN OF CUSTODY

ME 09/02/15

152/11/03

Send Report To Justin Clancy
 Company Maul Foster Alongi
 Address 1329 N. State St. Ste 301
 City, State, ZIP Bellingham, WA 98229
 Phone # 3605946260 Fax # _____

SAMPLERS (signature) [Signature]
 PROJECT NAME/NO. Truck City / 0714.03.01-03
 PO# _____
 REMARKS _____

Page # 1 of 1
 TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by _____
 SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS		
★ REZ-SN2-10.0	014	9/2/15	815	S	5	X	X	X					
★ REZ-SN3-10.0	02	9/2/15	910	S	5	X	X	X					
★ BT-POST-5	03	9/2/15	1200	N	5	X	X	X					
★ REZ-SN4-10.0	04	9/2/15	1320	S	5	X	X	X					
REZ-SS4-10.0	05	9/2/15	1340	S	5	X	X	X					
RE-ST09-1	06	9/2/15	1350	S	5	X	X	X					
RE-STD9-2	07	9/2/15	1400	S	5	X	X	X					
RE-STD9-3	08	9/2/15	1405	S	5	X	X	X					
RE2-SS5-10.0	09	9/2/15	1450	S	5	X	X	X					

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\COC.DOC

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Reinquished by: <u>[Signature]</u>		<u>Andrew Carreros</u>		<u>MFA</u>		9/2/15	1630
Received by: <u>[Signature]</u>		<u>Nhan Phan</u>		<u>FBT</u>		9/2/15	1630
Reinquished by:							
Received by:							

Samples received at 4 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 9, 2015

Justin Clary, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Mr. Clary:

Included are the results from the testing of material submitted on September 3, 2015 from the Truck City 0714.03.01, F&BI 509081 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Yen Vy-Van
MFA0909R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 3, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 509081 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509081 -01	RE-ST10-1
509081 -02	RE-ST10-2
509081 -03	RE-ST10-3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/09/15
Date Received: 09/03/15
Project: Truck City 0714.03.01, F&BI 509081
Date Extracted: 09/04/15
Date Analyzed: 09/04/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
RE-ST10-1 509081-01	<0.02	<0.02	<0.02	<0.06	<2	102
RE-ST10-2 509081-02	<0.02	<0.02	<0.02	<0.06	<2	102
RE-ST10-3 509081-03	<0.02	<0.02	<0.02	<0.06	<2	102
Method Blank 05-1756 MB2	<0.02	<0.02	<0.02	<0.06	<2	98

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/09/15
Date Received: 09/03/15
Project: Truck City 0714.03.01, F&BI 509081
Date Extracted: 09/04/15
Date Analyzed: 09/04/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 48-168)
RE-ST10-1 509081-01	<50	<250	88
RE-ST10-2 509081-02	<50	<250	83
RE-ST10-3 509081-03	<50	<250	89
Method Blank 05-1811 MB	<50	<250	80

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/09/15

Date Received: 09/03/15

Project: Truck City 0714.03.01, F&BI 509081

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509080-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	92	66-121
Toluene	mg/kg (ppm)	0.5	90	72-128
Ethylbenzene	mg/kg (ppm)	0.5	92	69-132
Xylenes	mg/kg (ppm)	1.5	93	69-131
Gasoline	mg/kg (ppm)	20	90	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/09/15

Date Received: 09/03/15

Project: Truck City 0714.03.01, F&BI 509081

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509081-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	105	103	73-135	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	101	74-139

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

509081

SAMPLE CHAIN OF CUSTODY

ME

9/3/15

US1 / 001

Send Report To Justin Casey

Company Matt Foster Assoc

Address 1329 N. STATE ST, SUITE 301

City, State, ZIP BELLINGHAM, WA 98

Phone # (360)601-4547 Fax #

SAMPLERS (signature) Andrew Skopros

PROJECT NAME/NO. TRACK CITY / 0714.03.d1 PO#

REMARKS

Page # 1 of 1

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	
RE-ST10-1	02	9/3/15	0750	Soil	5	X	Y	X				
RE-ST10-2	02		0755			X	X	X				
RE-ST10-3	02		0800			X	X	X				

Friedman & Bryna, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

SIGNATURE		PRINT NAME		COMPANY	DATE	TIME
Relinquished by:	<u>Andrew Skopros</u>	Andrew Skopros		MFA	9/3/15	1630
Received by:	<u>Eric Jensen</u>	Eric Jensen		TAR	9/3/15	1630
Relinquished by:						
Received by:						

Samples received at 3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 15, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on September 4, 2015 from the Truck City 0714.03.01, F&BI 509116 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0915R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 4, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 509116 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509116 -01	RE2-SS6-9.0
509116 -02	RE2-B4-10.0
509116 -03	RE2-SN5-9.0
509116 -04	RE2-B5-10.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15
Date Received: 09/04/15
Project: Truck City 0714.03.01, F&BI 509116
Date Extracted: 09/08/15
Date Analyzed: 09/08/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE2-SS6-9.0 509116-01	<0.02	<0.02	<0.02	<0.06	<2	96
RE2-B4-10.0 509116-02	<0.02	<0.02	<0.02	<0.06	<2	94
RE2-SN5-9.0 509116-03	<0.02	<0.02	<0.02	<0.06	<2	96
RE2-B5-10.0 509116-04	<0.02	<0.02	<0.02	<0.06	<2	94
Method Blank 05-1821 MB	<0.02	<0.02	<0.02	<0.06	<2	92

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15
Date Received: 09/04/15
Project: Truck City 0714.03.01, F&BI 509116
Date Extracted: 09/08/15
Date Analyzed: 09/08/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 56-165)
RE2-SS6-9.0 509116-01	<50	<250	87
RE2-B4-10.0 509116-02	<50	<250	87
RE2-SN5-9.0 509116-03	<50	<250	84
RE2-B5-10.0 509116-04	<50	<250	89
Method Blank 05-1818 MB	<50	<250	90

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15

Date Received: 09/04/15

Project: Truck City 0714.03.01, F&BI 509116

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509116-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	93	66-121
Toluene	mg/kg (ppm)	0.5	94	72-128
Ethylbenzene	mg/kg (ppm)	0.5	98	69-132
Xylenes	mg/kg (ppm)	1.5	98	69-131
Gasoline	mg/kg (ppm)	20	95	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15
Date Received: 09/04/15
Project: Truck City 0714.03.01, F&BI 509116

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509116-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	93	98	63-146	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	95	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 15, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on September 9, 2015 from the Truck City 0714.03.01, F&BI 509148 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0915R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 9, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 509148 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509148 -01	RE-ST11-1
509148 -02	RE-ST11-2
509148 -03	RE-ST11-3
509148 -04	RE-ST11-4
509148 -05	BT-POST-6

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15
Date Received: 09/09/15
Project: Truck City 0714.03.01, F&BI 509148
Date Extracted: 09/09/15
Date Analyzed: 09/09/15 and 09/10/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE-ST11-1 509148-01	<0.02	<0.02	<0.02	<0.06	<2	97
RE-ST11-2 509148-02	<0.02	<0.02	<0.02	<0.06	<2	93
RE-ST11-3 509148-03	<0.02	<0.02	<0.02	<0.06	<2	93
RE-ST11-4 509148-04	<0.02	<0.02	<0.02	<0.06	<2	94
Method Blank 05-1824 MB	<0.02	<0.02	<0.02	<0.06	<2	95

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15
Date Received: 09/09/15
Project: Truck City 0714.03.01, F&BI 509148
Date Extracted: 09/09/15
Date Analyzed: 09/09/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 52-124)
BT-POST-6 509148-05	<1	<1	<1	<3	<100	95
Method Blank 05-1822 MB2	<1	<1	<1	<3	<100	98

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15
Date Received: 09/09/15
Project: Truck City 0714.03.01, F&BI 509148
Date Extracted: 09/09/15
Date Analyzed: 09/10/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 47-140)
BT-POST-6 509148-05	<50	<250	113
Method Blank 05-1832 MB2	<50	<250	101

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15
Date Received: 09/09/15
Project: Truck City 0714.03.01, F&BI 509148
Date Extracted: 09/09/15
Date Analyzed: 09/09/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 56-165)
RE-ST11-1 509148-01	<50	<250	133
RE-ST11-2 509148-02	<50	<250	107
RE-ST11-3 509148-03	<50	<250	127
RE-ST11-4 509148-04	<50	<250	117
Method Blank 05-1839 MB	<50	<250	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15

Date Received: 09/09/15

Project: Truck City 0714.03.01, F&BI 509148

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509064-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	94	66-121
Toluene	mg/kg (ppm)	0.5	93	72-128
Ethylbenzene	mg/kg (ppm)	0.5	98	69-132
Xylenes	mg/kg (ppm)	1.5	95	69-131
Gasoline	mg/kg (ppm)	20	90	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15

Date Received: 09/09/15

Project: Truck City 0714.03.01, F&BI 509148

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509109-07 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	85	72-119
Toluene	ug/L (ppb)	50	88	71-113
Ethylbenzene	ug/L (ppb)	50	88	72-114
Xylenes	ug/L (ppb)	150	77	72-113
Gasoline	ug/L (ppb)	1,000	89	70-119

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15

Date Received: 09/09/15

Project: Truck City 0714.03.01, F&BI 509148

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	97	99	61-133	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15

Date Received: 09/09/15

Project: Truck City 0714.03.01, F&BI 509148

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509076-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	4,100	159 b	125 b	63-146	24 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	105	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

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fbi@isomedia.com
www.friedmanandbruya.com

September 15, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on September 10, 2015 from the Truck City 0714.03.01, F&BI 509177 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0915R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 10, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 509177 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509177 -01	RE2-SE2-9.5
509177 -02	RE2-SE3-9.5
509177 -03	RE2-B6-10.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15
Date Received: 09/10/15
Project: Truck City 0714.03.01, F&BI 509177
Date Extracted: 09/11/15
Date Analyzed: 09/11/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
RE2-SE2-9.5 509177-01	<0.02	<0.02	<0.02	0.12	<2	111
RE2-SE3-9.5 509177-02	0.063	<0.02	<0.02	0.099	3.2	113
RE2-B6-10.0 509177-03	0.10	<0.02	<0.02	0.092	<2	113
Method Blank 05-1826 MB	<0.02	<0.02	<0.02	<0.06	<2	109

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15
Date Received: 09/10/15
Project: Truck City 0714.03.01, F&BI 509177
Date Extracted: 09/11/15
Date Analyzed: 09/11/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 48-168)
RE2-SE2-9.5 509177-01	<50	<250	82
RE2-SE3-9.5 509177-02	<50	<250	88
RE2-B6-10.0 509177-03	<50	<250	84
Method Blank 05-1857 MB2	<50	<250	90

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15

Date Received: 09/10/15

Project: Truck City 0714.03.01, F&BI 509177

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509178-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	83	69-120
Toluene	mg/kg (ppm)	0.5	93	70-117
Ethylbenzene	mg/kg (ppm)	0.5	94	65-123
Xylenes	mg/kg (ppm)	1.5	91	66-120
Gasoline	mg/kg (ppm)	20	105	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/15/15

Date Received: 09/10/15

Project: Truck City 0714.03.01, F&BI 509177

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509126-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	108	98	63-146	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	106	79-144

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
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Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 17, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on September 14, 2015 from the Truck City 0714.03.01, F&BI 509215 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0917R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 14, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 509215 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509215 -01	RE2-SE4-9.5
509215 -02	RE2-SE5-9.5
509215 -03	RE2-B7-11.0
509215 -04	RE3-B2-9.5
509215 -05	RE3-SE2-9.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/15
 Date Received: 09/14/15
 Project: Truck City 0714.03.01, F&BI 509215
 Date Extracted: 09/14/15 and 09/15/15
 Date Analyzed: 09/14/15 and 09/15/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE2-SE4-9.5 509215-01	0.049	<0.02	0.060	0.33	4.1	104
RE2-SE5-9.5 509215-02	<0.02	<0.02	<0.02	<0.06	<2	90
RE2-B7-11.0 509215-03	<0.02	<0.02	<0.02	<0.06	<2	90
RE3-B2-9.5 509215-04	<0.02	<0.02	<0.02	<0.06	<2	87
RE3-SE2-9.0 509215-05	<0.02	<0.02	<0.02	<0.06	<2	91
Method Blank 05-1828 MB	<0.02	<0.02	<0.02	<0.06	<2	91
Method Blank 05-1828 MB2	<0.02	<0.02	<0.02	<0.06	<2	99

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/15
Date Received: 09/14/15
Project: Truck City 0714.03.01, F&BI 509215
Date Extracted: 09/15/15
Date Analyzed: 09/15/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 53-144)
RE2-SE4-9.5 509215-01	<50	<250	123
RE2-SE5-9.5 509215-02	<50	<250	102
RE2-B7-11.0 509215-03	<50	<250	116
RE3-B2-9.5 509215-04	<50	<250	107
RE3-SE2-9.0 509215-05	<50	<250	101
Method Blank 05-1865 MB2	<50	<250	109

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/15

Date Received: 09/14/15

Project: Truck City 0714.03.01, F&BI 509215

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509208-03 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	84	66-121
Toluene	mg/kg (ppm)	0.5	83	72-128
Ethylbenzene	mg/kg (ppm)	0.5	88	69-132
Xylenes	mg/kg (ppm)	1.5	84	69-131
Gasoline	mg/kg (ppm)	20	95	61-153

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/15

Date Received: 09/14/15

Project: Truck City 0714.03.01, F&BI 509215

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509211-15 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	107	112	64-133	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	100	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 17, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on September 15, 2015 from the Truck City 0714.03.01, F&BI 509240 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0917R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 15, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 509240 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509240 -01	RE3-SE3-3.0
509240 -02	RE3-SE4-3.0
509240 -03	RE3-B3-3.5
509240 -04	RE2-SE6-10.0
509240 -05	RE3-SE5-3.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/15
 Date Received: 09/15/15
 Project: Truck City 0714.03.01, F&BI 509240
 Date Extracted: 09/15/15
 Date Analyzed: 09/15/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
RE3-SE3-3.0 509240-01	<0.02	<0.02	<0.02	<0.06	<2	108
RE3-SE4-3.0 509240-02	<0.02	<0.02	<0.02	<0.06	<2	109
RE3-B3-3.5 509240-03	<0.02	<0.02	<0.02	<0.06	<2	109
RE2-SE6-10.0 509240-04	<0.02	<0.02	<0.02	<0.06	<2	110
RE3-SE5-3.0 509240-05	<0.02	<0.02	<0.02	<0.06	<2	110
Method Blank 05-1830 MB	<0.02	<0.02	<0.02	<0.06	<2	107

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/15
Date Received: 09/15/15
Project: Truck City 0714.03.01, F&BI 509240
Date Extracted: 09/15/15
Date Analyzed: 09/15/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 48-168)
RE3-SE3-3.0 509240-01	<50	<250	81
RE3-SE4-3.0 509240-02	<50	<250	85
RE3-B3-3.5 509240-03	<50	<250	80
RE2-SE6-10.0 509240-04	<50	<250	86
RE3-SE5-3.0 509240-05	<50	<250	86
Method Blank 05-1875 MB	<50	<250	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/15

Date Received: 09/15/15

Project: Truck City 0714.03.01, F&BI 509240

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509228-03 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	93	69-120
Toluene	mg/kg (ppm)	0.5	92	70-117
Ethylbenzene	mg/kg (ppm)	0.5	91	65-123
Xylenes	mg/kg (ppm)	1.5	89	66-120
Gasoline	mg/kg (ppm)	20	110	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/17/15

Date Received: 09/15/15

Project: Truck City 0714.03.01, F&BI 509240

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509228-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	113	113	63-146	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	107	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

509240

SAMPLE CHAIN OF CUSTODY

ME 9/15/15

VS/cor

Send Report To Yen-Vy Van

Company Maul Feeders Alongi

Address 411 First Aves. Ste. 610

City, State, ZIP Seattle, WA 98104

Phone # 2533205378 Fax # _____

SAMPLERS (signature) Carolyn Wise

PROJECT NAME/NO. Track City / 0714.03.01

PO# _____

REMARKS

Page # 1 of 1

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by _____

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS			
RE3-SE3-3.0	01AE	9/15	1110	S	5	X	X	X						
RE3-SE4-3.0	02T	9/15	1120	S	5	X	X	X						
RE3-B3-3.5	03	9/15	1130	S	5	X	X	X						
RE2-SE6-10.0	04	9/15	1200	S	5	X	X	X						Saturated
RE3-SE5-3.0	05	9/15	1315	S	5	X	X	X						

Friedman & Bruya, Inc.

3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Carolyn Wise</u>	<u>Carolyn Wise</u>	<u>MFA</u>	<u>9/15/15</u>	<u>2:07 pm</u>
<u>Yen-Vy Van</u>	<u>Yen-Vy Van</u>	<u>FBI</u>	<u>9/15/15</u>	<u>2:07 pm</u>
Received by:		Samples received at	<u>3</u>	<u>6</u>

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 21, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on September 16, 2015 from the Truck City 0714.03.01, F&BI 509269 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0921R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 16, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 509269 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509269 -01	BT-POST-7
509269 -02	RE2-SN6-10.5
509269 -03	RE2-SN7-10.5
509269 -04	RE-ST12-1
509269 -05	RE-ST12-2
509269 -06	RE-ST12-3
509269 -07	RE2-SN8-11.0
509269 -08	RE1-SN3-11.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/15
 Date Received: 09/16/15
 Project: Truck City 0714.03.01, F&BI 509269
 Date Extracted: 09/16/15
 Date Analyzed: 09/16/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE2-SN6-10.5 509269-02	<0.02	<0.02	<0.02	<0.06	<2	90
RE2-SN7-10.5 509269-03	<0.02	<0.02	<0.02	<0.06	3.6	90
RE-ST12-1 509269-04	<0.02	<0.02	<0.02	<0.06	<2	80
RE-ST12-2 509269-05	<0.02	<0.02	<0.02	<0.06	<2	91
RE-ST12-3 509269-06	<0.02	0.021	<0.02	<0.06	<2	90
RE2-SN8-11.0 509269-07	<0.02	<0.02	<0.02	<0.06	<2	91
RE1-SN3-11.0 509269-08	<0.02	<0.02	<0.02	<0.06	<2	91
Method Blank 05-1878 MB	<0.02	<0.02	<0.02	<0.06	<2	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/15
Date Received: 09/16/15
Project: Truck City 0714.03.01, F&BI 509269
Date Extracted: 09/17/15
Date Analyzed: 09/17/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
BT-POST-7 509269-01	<1	<1	<1	<3	<100	120
Method Blank 05-1879 MB	<1	<1	<1	<3	<100	119

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/15
 Date Received: 09/16/15
 Project: Truck City 0714.03.01, F&BI 509269
 Date Extracted: 09/16/15
 Date Analyzed: 09/16/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 48-168)
RE2-SN6-10.5 509269-02	<50	<250	86
RE2-SN7-10.5 509269-03	<50	<250	94
RE-ST12-1 509269-04	<50	<250	93
RE-ST12-2 509269-05	<50	<250	91
RE-ST12-3 509269-06	<50	<250	92
RE2-SN8-11.0 509269-07	<50	<250	89
RE1-SN3-11.0 509269-08	200	<250	92
Method Blank 05-1892 MB	<50	<250	81

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/15
Date Received: 09/16/15
Project: Truck City 0714.03.01, F&BI 509269
Date Extracted: 09/17/15
Date Analyzed: 09/17/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND RESIDUAL RANGE
USING METHOD NWTPH-Dx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Residual Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 51-134)
BT-POST-7 509269-01	<50	<250	93
Method Blank 05-1891 MB2	<50	<250	88

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/15

Date Received: 09/16/15

Project: Truck City 0714.03.01, F&BI 509269

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509200-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	78	69-120
Toluene	mg/kg (ppm)	0.5	85	70-117
Ethylbenzene	mg/kg (ppm)	0.5	87	65-123
Xylenes	mg/kg (ppm)	1.5	85	66-120
Gasoline	mg/kg (ppm)	20	110	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/15

Date Received: 09/16/15

Project: Truck City 0714.03.01, F&BI 509269

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509282-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	90	72-119
Toluene	ug/L (ppb)	50	90	71-113
Ethylbenzene	ug/L (ppb)	50	89	72-114
Xylenes	ug/L (ppb)	150	80	72-113
Gasoline	ug/L (ppb)	1,000	100	70-119

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/15

Date Received: 09/16/15

Project: Truck City 0714.03.01, F&BI 509269

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509263-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	115	102	73-135	12

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	109	74-139

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/21/15

Date Received: 09/16/15

Project: Truck City 0714.03.01, F&BI 509269

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	106	108	58-134	2

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

509269

SAMPLE CHAIN OF CUSTODY ME 9/16/15 11/103

Send Report To Yen-Vy Tran

Company Maul Foster Alonzi

Address 411 First Avenue S, Ste. 610

City, State, ZIP Seattle, WA 98104

Phone # 2533205378 Fax # _____

SAMPLERS (signature) Carolyn Deise

PO#

PROJECT NAME/NO. Truck City / 0714.03.01

REMARKS

TURNAROUND TIME

Standard (2 Weeks)
 RUSH 24 hr / 72 hours
Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS		
BT-POST-7		01/16/15	850	W	5	X	X	X					*72 hr turn
RE2-SN6-10.5	02		1200	S	5	X	X	X					Saturated
RE2-SN7-10.5	03		1210	S	5	X	X	X					Saturated
RE-ST12-1	04		1215	S	5	X	X	X					
RE-ST12-2	05		1230	S	5	X	X	X					
RE-ST12-3	06		1240	S	5	X	X	X					
RE2-SN8-11.0	07		1305	S	5	X	X	X					Saturated
RE1-SN3-11.0	08		1315	S	5	X	X	X					Saturated

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044
FORMS/COC/COC.DOC

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>[Signature]</u>	<u>[Signature]</u>	<u>Carolyn Deise</u>	<u>Carolyn Deise</u>	<u>MFA</u>	<u>MFA</u>	<u>9/16/15</u>	<u>1420</u>
<u>[Signature]</u>	<u>[Signature]</u>	<u>Elizabeth W. Bruya</u>	<u>Elizabeth W. Bruya</u>	<u>FBI</u>	<u>FBI</u>	<u>9/16/15</u>	<u>1420</u>
Received by:							

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 24, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on September 17, 2015 from the Truck City 0714.03.01, F&BI 509310 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0924R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 17, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 509310 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509310 -01	RE3-B4-7.0
509310 -02	RE3-B5-10.0
509310 -03	RE3-SE5-8.0
509310 -04	RE3-SE6-7.0
509310 -05	RE3-SE7-8.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/15
 Date Received: 09/17/15
 Project: Truck City 0714.03.01, F&BI 509310
 Date Extracted: 09/18/15
 Date Analyzed: 09/18/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
RE3-B4-7.0 509310-01	<0.02	<0.02	<0.02	<0.06	<2	104
RE3-B5-10.0 509310-02	<0.02	<0.02	<0.02	<0.06	<2	106
RE3-SE5-8.0 509310-03	<0.02	<0.02	<0.02	<0.06	<2	105
RE3-SE6-7.0 509310-04	<0.02	<0.02	<0.02	<0.06	<2	105
RE3-SE7-8.0 509310-05	<0.02	<0.02	<0.02	<0.06	<2	105
Method Blank 05-1883 MB2	<0.02	<0.02	<0.02	<0.06	<2	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/15
Date Received: 09/17/15
Project: Truck City 0714.03.01, F&BI 509310
Date Extracted: 09/18/15
Date Analyzed: 09/18/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 53-144)
RE3-B4-7.0 509310-01	<50	<250	105
RE3-B5-10.0 509310-02	<50	<250	117
RE3-SE5-8.0 509310-03	<50	<250	119
RE3-SE6-7.0 509310-04	<50	<250	109
RE3-SE7-8.0 509310-05	<50	<250	120
Method Blank 05-1916 MB	<50	<250	111

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/15

Date Received: 09/17/15

Project: Truck City 0714.03.01, F&BI 509310

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509293-06 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	0.19	0.48	86 hr
Ethylbenzene	mg/kg (ppm)	0.02	0.056	95 hr
Xylenes	mg/kg (ppm)	0.09	0.25	94 hr
Gasoline	mg/kg (ppm)	11	30	93 hr

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	77	69-120
Toluene	mg/kg (ppm)	0.5	81	70-117
Ethylbenzene	mg/kg (ppm)	0.5	82	65-123
Xylenes	mg/kg (ppm)	1.5	80	66-120
Gasoline	mg/kg (ppm)	20	85	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/15

Date Received: 09/17/15

Project: Truck City 0714.03.01, F&BI 509310

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509310-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	109	107	64-133	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	119	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

September 24, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on September 18, 2015 from the Truck City 0714.03.01, F&BI 509330 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0924R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 18, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 509330 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509330 -01	RE3-SE8-9.0
509330 -02	RE3-SE9-3.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/15
Date Received: 09/18/15
Project: Truck City 0714.03.01, F&BI 509330
Date Extracted: 09/21/15
Date Analyzed: 09/21/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE3-SE8-9.0 509330-01	<0.02	<0.02	<0.02	<0.06	<2	84
RE3-SE9-3.5 509330-02	<0.02	<0.02	<0.02	<0.06	<2	90
Method Blank 05-1885 MB	<0.02	<0.02	<0.02	<0.06	<2	102

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/15
Date Received: 09/18/15
Project: Truck City 0714.03.01, F&BI 509330
Date Extracted: 09/21/15
Date Analyzed: 09/21/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
RE3-SE8-9.0 509330-01	<50	<250	90
RE3-SE9-3.5 509330-02	110 x	300	88
Method Blank 05-1935 MB	<50	<250	88

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/15

Date Received: 09/18/15

Project: Truck City 0714.03.01, F&BI 509330

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509336-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	81	69-120
Toluene	mg/kg (ppm)	0.5	87	70-117
Ethylbenzene	mg/kg (ppm)	0.5	88	65-123
Xylenes	mg/kg (ppm)	1.5	85	66-120
Gasoline	mg/kg (ppm)	20	110	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/15

Date Received: 09/18/15

Project: Truck City 0714.03.01, F&BI 509330

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509330-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	105	116	63-146	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	108	79-144

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
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fbi@isomedia.com
www.friedmanandbruya.com

September 24, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on September 21, 2015 from the Truck City 0714-03-07, F&BI 509363 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA0924R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 21, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714-03-07, F&BI 509363 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509363 -01	RE2-SN9-9.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/15
Date Received: 09/21/15
Project: Truck City 0714-03-07, F&BI 509363
Date Extracted: 09/21/15
Date Analyzed: 09/21/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
RE2-SN9-9.0 509363-01	<0.02	<0.02	<0.02	<0.06	<2	102
Method Blank 05-1923 MB	<0.02	<0.02	<0.02	<0.06	<2	102

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/15
Date Received: 09/21/15
Project: Truck City 0714-03-07, F&BI 509363
Date Extracted: 09/22/15
Date Analyzed: 09/22/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 53-144)
RE2-SN9-9.0 509363-01	<50	<250	102
Method Blank 05-1939 MB	<50	<250	94

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/15

Date Received: 09/21/15

Project: Truck City 0714-03-07, F&BI 509363

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509363-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	77	69-120
Toluene	mg/kg (ppm)	0.5	87	70-117
Ethylbenzene	mg/kg (ppm)	0.5	88	65-123
Xylenes	mg/kg (ppm)	1.5	86	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/15

Date Received: 09/21/15

Project: Truck City 0714-03-07, F&BI 509363

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509363-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	119	123	64-133	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	119	58-147

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The compound is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 504475 CLIENT UFA INITIALS/DATE: [Signature] 9/20/12

If custody seals are present on cooler, are they intact? NA YES NO

Cooler/Sample temperature 4 °C

Were samples received on ice/cold packs? YES NO

Number of days samples have been sitting prior to receipt at laboratory 0 days

Is there a Chain-of-Custody* (COC)? YES NO
*or other representative documents, letters, and/or shipping memos

Are the samples clearly identified? (explain "no" answer below) YES NO

Is the following information provided on the COC* ? (explain "no" answer below)

Sample ID's	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	# of Containers	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Date Sampled	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Relinquished	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Time Sampled	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Requested analysis	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) YES NO

Were appropriate sample containers used? (explain "no" answer below) YES NO

If custody seals are present on samples, are they intact? NA YES NO

Are samples requiring no headspace, headspace free? NA YES NO

Explain "no" items from above (use the back if needed)

Are samples for PCB testing? YES NO

Did samples originate out of the country? (if yes, put in APHIS refrigerator) YES NO

Was client notified of sample receipt? Over the Counter Picked up by F&BI
 YES NO (explain)

If Yes, name of person contacted _____ Left Message

Special Instructions from Client _____

509495

SAMPLE CHAIN OF CUSTODY

ME 09-28-15

DD4/V53

Send Report To VEN-VY VAN

Company Matt Foster Avenue 1

Address 411 First Ave S, #610

City, State, ZIP SEATTLE, WA 98104

Phone # 253-320-5372 Fax # ---

SAMPLERS (signature) Andrew S. Karpas

PROJECT NAME/NO. TRUCK CITY 0714.03.01

PO#

REMARKS

TRUCK CITY 0714.03.01

Page # 1 of 2

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH

Rush charges authorized by

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS		
RE3-SN3-8.0	014E	9/28/15	0845	501C	5	X	X	X					
RE3-SN4-7.5	02		1035			X	X	X					
RE3-B6-10.0	03		1120			X	X	X					*SAMPLE SATURATED
RE3-SN5-8.0	04		1325			X	X	X					
RE3-B7-3.0	05		1335			X	X	X					
RE3-B8-10.0	06		1400			X	X	X					*SAMPLE SATURATED
RE3-B9-4.0	07		1415			X	X	X					
RE3-610-10.0	08		1420			X	X	X					*SAMPLE SATURATED
RE3-SN6-7.0	09		1435			X	X	X					
RE3-SN7-6.0	10		1445			X	X	X					

Friedman & Bryna, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS/COC/COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>Andrew S. Karpas</u>	ANDREW S. KARPAS	MFA	9/28/15	1640
<u>Eric Ozu</u>	ERIC OZU	FOP	9/28/15	1610
Received by:				

Temp stored in secondary container
 6°C @ 9/28/15
 *SAMPLE SATURATED

509495

SAMPLE CHAIN OF CUSTODY

ME 09-28-15

DOY / V53

Send Report To Gen. VY VAN

Company MARU FOSTER AROVERI

Address _____

City, State, ZIP _____

Phone # _____ Fax # _____

SAMPLERS (signature) [Signature]

PROJECT NAME/NO. _____

PO# _____

TRUCK C/M 0714.03.01

REMARKS

Page # 2 of 2

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by _____

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED							Notes		
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS				
RE3-SN8-2.5	11AE	9/28/15	1450	Soil	5	X	X	X							
RE3-SN9-2.0	12	↓	1500	↓	↓	X	X	X							
RE3-SN10-2.0	13	↓	1510	↓	↓	X	X	X							

Samples received at 6:00 on 9/28/15

* Temp. on lined immediately prior to transfer from _____

SIGNATURE

Relinquished by: [Signature]

PRINT NAME

Ames S. Parra

COMPANY

MFA

DATE

9/28/15

TIME

1640

Received by: [Signature]

[Signature]

[Signature]

4/28/15

1600

Relinquished by: _____

Received by: _____

Friedman & Bryva, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 1, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on September 28, 2015 from the Truck City 0714.03.01, F&BI 509495 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA1001R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 28, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City Truck City 0714.03.01, F&BI 509495 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509495 -01	RE3-SN3-8.0
509495 -02	RE3-SN4-7.5
509495 -03	RE3-B6-10.0
509495 -04	RE3-SN5-8.0
509495 -05	RE3-B7-3.0
509495 -06	RE3-B8-10.0
509495 -07	RE3-B9-4.0
509495 -08	RE3-B10-10.0
509495 -09	RE3-SN6-7.0
509495 -10	RE3-SN7-6.0
509495 -11	RE3-SN8-2.5
509495 -12	RE3-SN9-2.0
509495 -13	RE3-SN10-2.0

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/01/15
 Date Received: 09/28/15
 Project: Truck City 0714.03.01, F&BI 509495
 Date Extracted: 09/28/15
 Date Analyzed: 09/28/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND TPH AS GASOLINE
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE3-SN3-8.0 509495-01	<0.02	<0.02	<0.02	<0.06	4.4	92
RE3-SN4-7.5 509495-02	<0.02	<0.02	<0.02	<0.06	<2	91
RE3-B6-10.0 509495-03	<0.02	<0.02	<0.02	<0.06	<2	86
RE3-SN5-8.0 509495-04	<0.02	<0.02	<0.02	<0.06	<2	89
RE3-B7-3.0 509495-05	<0.02	<0.02	<0.02	<0.06	<2	89
RE3-B8-10.0 509495-06	<0.02	<0.02	<0.02	<0.06	<2	91
RE3-B9-4.0 509495-07	<0.02	<0.02	<0.02	<0.06	<2	90
RE3-B10-10.0 509495-08	<0.02	<0.02	<0.02	<0.06	<2	91
RE3-SN6-7.0 509495-09	<0.02	<0.02	<0.02	<0.06	<2	90
RE3-SN7-6.0 509495-10	<0.02	<0.02	<0.02	<0.06	<2	90

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/01/15
Date Received: 09/28/15
Project: Truck City 0714.03.01, F&BI 509495
Date Extracted: 09/28/15
Date Analyzed: 09/28/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE3-SN8-2.5 509495-11	<0.02	<0.02	<0.02	<0.06	<2	91
RE3-SN9-2.0 509495-12	<0.02	<0.02	<0.02	<0.06	<2	90
RE3-SN10-2.0 509495-13	<0.02	<0.02	<0.02	<0.06	<2	89
Method Blank 05-1977 MB	<0.02	<0.02	<0.02	<0.06	<2	91

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/01/15
 Date Received: 09/28/15
 Project: Truck City 0714.03.01, F&BI 509495
 Date Extracted: 09/29/15
 Date Analyzed: 09/29/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
 FOR TOTAL PETROLEUM HYDROCARBONS AS
 DIESEL AND MOTOR OIL
 USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
 Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 48-168)
RE3-SN3-8.0 509495-01	<50	<250	83
RE3-SN4-7.5 509495-02	<50	<250	84
RE3-B6-10.0 509495-03	<50	<250	88
RE3-SN5-8.0 509495-04	<50	<250	89
RE3-B7-3.0 509495-05	<50	<250	88
RE3-B8-10.0 509495-06	<50	<250	82
RE3-B9-4.0 509495-07	<50	<250	86
RE3-B10-10.0 509495-08	<50	<250	79
RE3-SN6-7.0 509495-09	<50	<250	85
RE3-SN7-6.0 509495-10	<50	<250	97

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/01/15
Date Received: 09/28/15
Project: Truck City 0714.03.01, F&BI 509495
Date Extracted: 09/29/15
Date Analyzed: 09/29/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 48-168)
RE3-SN8-2.5 509495-11	<50	<250	98
RE3-SN9-2.0 509495-12	<50	<250	91
RE3-SN10-2.0 509495-13	<50	<250	97
Method Blank 05-1996 MB2	<50	<250	86

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/01/15

Date Received: 09/28/15

Project: Truck City 0714.03.01, F&BI 509495

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	mg/kg (ppm)	0.5	78	77	66-121	1
Toluene	mg/kg (ppm)	0.5	90	89	72-128	1
Ethylbenzene	mg/kg (ppm)	0.5	91	90	69-132	1
Xylenes	mg/kg (ppm)	1.5	91	91	69-131	0
Gasoline	mg/kg (ppm)	20	105	100	61-153	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/01/15

Date Received: 09/28/15

Project: Truck City 0714.03.01, F&BI 509495

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509491-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	104	94	63-146	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	101	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

509495

SAMPLE CHAIN OF CUSTODY

ME 09-28-15

DDY / V53

Send Report To VEN-VY VAN

Company MARL FOSTER AVONEL

Address 411 FIRST AVE S, #610

City, State, ZIP SEATTLE, WA 98104

Phone # 253-320-5372

Fax #

SAMPLERS (signature) Andrew S. Karpas

PROJECT NAME/NO. TRUCK CITY 0714.03.01

PO#

REMARKS

Page # 1 of 2

TURNAROUND TIME

Standard (2 weeks)

RUSH

Rush charges authorized by

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED						Notes	
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS		
RE3-SN3-8.0	01	9/28/15	0845	501c	5	X	X	X					
RE3-SN4-7.5	02		1035			X	X	X					*SAMPLE SATURATED
RE3-B6-10.0	03		1120			X	X	X					*SAMPLE SATURATED
RE3-SN5-8.0	04		1325			X	X	X					
RE3-B7-3.0	05		1335			X	X	X					
RE3-B8-10.0	06		1400			X	X	X					*SAMPLE SATURATED
RE3-B9-4.0	07		1415			X	X	X					
RE3-610-10.0	08		1420			X	X	X					*SAMPLE SATURATED
RE3-SN6-7.0	09		1435			X	X	X					
RE3-SN7-6.0	10		1445			X	X	X					

Friedman & Bryna, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS/COC/COC.DOC

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by:	<u>Andrew S. Karpas</u>	Andrew S. Karpas		MFA		9/28/15	1640
Received by:	<u> </u>	<u>Eric Quinn</u>		ERP		9/29/15	1610
Relinquished by:							
Received by:							

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Arina Podnozova, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 6, 2015

Yen-Vy Van, Project Manager
Maul Foster Alongi
411 1st Ave S, Suite 610
Seattle, WA 98104

Dear Ms. Van:

Included are the results from the testing of material submitted on September 30, 2015 from the Truck City 0714.03.01, F&BI 509549 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
MFA1006R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 30, 2015 by Friedman & Bruya, Inc. from the Maul Foster Alongi Truck City 0714.03.01, F&BI 509549 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
509549 -01	BT-POST-8
509549 -02	RE2-SS7-9.5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/15
Date Received: 09/30/15
Project: Truck City 0714.03.01, F&BI 509549
Date Extracted: 10/01/15
Date Analyzed: 10/01/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 52-124)
BT-POST-8 509549-01	<1	<1	<1	<3	<100	90
Method Blank 05-1983 MB	<1	<1	<1	<3	<100	88

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/15
Date Received: 09/30/15
Project: Truck City 0714.03.01, F&BI 509549
Date Extracted: 09/30/15
Date Analyzed: 09/30/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-132)
RE2-SS7-9.5 509549-02	<0.02	<0.02	<0.02	<0.06	<2	84
Method Blank 05-1981 MB	<0.02	<0.02	<0.02	<0.06	<2	94

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/15
Date Received: 09/30/15
Project: Truck City 0714.03.01, F&BI 509549
Date Extracted: 10/01/15
Date Analyzed: 10/01/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
Results Reported as ug/L (ppb)

<u>Sample ID</u>	<u>Diesel Range</u>	<u>Motor Oil Range</u>	<u>Surrogate</u>
Laboratory ID	(C ₁₀ -C ₂₅)	(C ₂₅ -C ₃₆)	(% Recovery)
			(Limit 41-152)
BT-POST-8 509549-01	<50	<250	99
Method Blank 05-2012 MB	<50	<250	100

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/15
Date Received: 09/30/15
Project: Truck City 0714.03.01, F&BI 509549
Date Extracted: 09/30/15
Date Analyzed: 09/30/15

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 56-165)
RE2-SS7-9.5 509549-02	<50	<250	87
Method Blank 05-2007 MB	<50	<250	97

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/15

Date Received: 09/30/15

Project: Truck City 0714.03.01, F&BI 509549

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509549-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	91	65-118
Toluene	ug/L (ppb)	50	90	72-122
Ethylbenzene	ug/L (ppb)	50	90	73-126
Xylenes	ug/L (ppb)	150	89	74-118
Gasoline	ug/L (ppb)	1,000	96	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/15

Date Received: 09/30/15

Project: Truck City 0714.03.01, F&BI 509549

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 509539-21 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	72	69-120
Toluene	mg/kg (ppm)	0.5	81	70-117
Ethylbenzene	mg/kg (ppm)	0.5	82	65-123
Xylenes	mg/kg (ppm)	1.5	81	66-120
Gasoline	mg/kg (ppm)	20	110	71-131

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/15

Date Received: 09/30/15

Project: Truck City 0714.03.01, F&BI 509549

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	92	95	63-142	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/06/15

Date Received: 09/30/15

Project: Truck City 0714.03.01, F&BI 509549

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: 509524-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	94	89	63-146	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	95	79-144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

APPENDIX H

DATA VALIDATION MEMORANDA



DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0714.03.01 | SEPTEMBER 3, 2015 | SKAGIT COUNTY

This report reviews the analytical results for treatment system water samples and soil samples collected by the Maul Foster & Alongi, Inc. (MFA) project team on the Truck City property in Mount Vernon, Washington. The samples were collected on August 12 and 18, 2015.

Friedman and Bruya, Inc. (FBI) performed the analyses. FBI reports Truck City FBI 508194 (508194) and Truck City FBI 508306 (508306-1), and MFA Truck City 0714030 508306 additional (508306-2) were reviewed. The analyses performed, samples analyzed, and samples submitted on hold are listed below.

Analysis	Reference
BTEX	USEPA 8021B
Diesel and Motor Oil	NWTPH-Dx
Gasoline	NWTPH-Gx

BTEX = benzene, toluene, ethylbenzene, xylenes.
 NWTPH = Northwest Total Petroleum Hydrocarbons.
 USEPA = U.S. Environmental Protection Agency.

Samples Analyzed		
Report 508194	Report 508306-1	Report 508306-2
P1-S2-3.5	P1-S2-B1-10.0	P1-S2-B1-10.0
P2-S1-3.5 (hold)	P1-S2-SN-9.0	-
D3-8.0 (hold)	D1-B-9.5	-
D1-4.0	D2-B-10.0	-
D2-4.0	D4-B-10.0	-
P1-S1-3.5	BT-PRE-1	-
D4-4.0	BT-POST-1	-
P1-S3-3.5 (hold)	-	-
D5-4.0	-	-

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2014) and appropriate laboratory and method-specific guidelines (FBI, 2015; USEPA, 1986).

In report 508194, NWTPH-Dx diesel-range results for sample P1-S2-3.5 and motor-oil-range results for sample D4-4.0 were flagged by FBI because of chromatographic patterns that did not resemble the pattern of the standard used for quantitation. In report 508306-1, NWTPH-Dx diesel-range and motor-oil-range results for sample BT-PRE-1 were also flagged by FBI because of chromatographic patterns not matching the pattern of standards. Results were

quantified against diesel and motor-oil calibration standards and have not been qualified by the reviewer.

Sample P1-S2-B1-10.0 from report 508306-1 was reextracted and reanalyzed, with the results included in report 508306-2. Results from both sets of analyses were consistent. No qualification was necessary.

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch. All laboratory method blanks were non-detect at method reporting limits.

Trip Blanks

Trip blanks were not required for this sampling event.

Equipment Rinse Blanks

Equipment rinse blanks were not required for this sampling event.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance on individual samples. All surrogate results were within percent recovery acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. All MS/MSD samples were extracted and analyzed at the required frequency. All MS/MSD results were within acceptance limits for percent recovery and relative percent differences (RPDs).

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. All duplicate samples were extracted and analyzed at the required frequency. All laboratory duplicate RPDs were within acceptance limits.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) is spiked with target analytes to provide information on laboratory precision and accuracy. All LCS/LCSD analytes were within acceptance limits for percent recovery and RPD.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. Field duplicate samples were not submitted for analysis.

REPORTING LIMITS

FBI used routine reporting limits for non-detect results, except for samples requiring dilutions because of high analyte concentrations and/or matrix interferences.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. None were found.

REFERENCES

- FBI. 2015. Quality assurance manual. Friedman & Bruya, Inc., Seattle, Washington. January 19.
- USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846 Update V. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 1, July 2014).
- USEPA. 2014. USEPA contract laboratory program, national functional guidelines for Superfund organic methods data review. EPA 540/R-014/002. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. August.

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0714.03.01 | OCTOBER 7, 2015 | SKAGIT COUNTY

This report reviews the analytical results for treatment system water samples and soil samples collected by the Maul Foster & Alongi, Inc. (MFA) project team on the Truck City property in Mount Vernon, Washington. The samples were collected in August and September 2015.

Friedman and Bruya, Inc. (FBI) performed the analyses. The following FBI reports were reviewed:

- MFA Truck City 07140301 508337 (508337)
- MFA 508363 (508363)
- MFA Truck City 07140301 508394 (508394)
- MFA Truck City 0714.03.01 508400 amended (508400)
- MFA Truck City 07140301 508421 amended (508421)
- MFA Truck City 07140301 508449 (508449)
- MFA Truck City PO 07140301 (508469)
- MFA Truck City 07140301 508504 (508504)
- MFA Truck City 07140301 508533 (508533)
- MFA Truck City 07140301 508558 (508558)
- MFA Truck City 07140301-03 509054 (509054)
- MFA Truck City 07140301 509081 (509081)
- MFA Truck City 07140301 509116 (509116)
- MFA Truck City 07140301 509148 (509148)
- MFA Truck City 07140301 509177 (509177)
- MFA Truck City 07140301 509215 (509215)
- MFA Truck City 07140301 509240 (509240)
- MFA Truck City 07140301 509269 (509269)
- MFA Truck City 07140301 509310 (509310)
- MFA Truck City 07140301 509330 (509330)
- MFA Truck City 0714-03-07 509363 (509363)
- MFA Truck City 07140301 509495, 509495 coc0002, and 509495 checklist (509495)
- MFA Truck City 07140301 509549 (509549)

The analyses performed and samples analyzed are listed below.

Analysis	Reference
BTEX	USEPA 8021B
Diesel and Motor Oil	NWTPH-Dx
Gasoline	NWTPH-Gx
Hydrocarbon Identification	NWTPH-HCID

Analysis	Reference
Polychlorinated Biphenyls	USEPA 8082A
Volatile Organic Compounds	USEPA 8260C

BTEX = benzene, toluene, ethylbenzene, xylenes.
 NWTPH = Northwest Total Petroleum Hydrocarbons.
 USEPA = U.S. Environmental Protection Agency.

Samples Analyzed					
Report 508337	Report 508363		Report 508394	Report 508400	Report 508421
RE4-B-10.0	RE3-B-10.0	REST02-01	PL-UST-650	REI-SW2-9.5	REI-SE2-9.0
RE4-SW-9.0	RE3-SE-9.0	REST02-02	BT-Post-2	REI-SW3-9.5	FTS-S-SW1-6
RE4-SS-9.0	RE3-SS-9.0	REST02-03	RE ST05-01	-	FTS-S-SW2-5
RE4-SE-8.0	RE3-SW-9.0	REST03-01	RE ST05-02	-	FTS-S-SS-5
RE4-SN-8.5	RE3-SN-9.0	REST03-02	RE ST05-03	-	FTS-S-BN-6
RE1-BN-10.0	RE2-B-10.0	REST03-03	-	-	FTS-S-BS-5
RE1-BS-10.0	RE2-SE-10.0	REST04-01	-	-	FTS-S-SE1-5
RE1-SN-9.0	RE2-SS-9.0	REST04-02	-	-	REI-SE3-10.0
RE1-SE-9.0	RE2-SW-9.0	REST04-03	-	-	-
RE1-SS-8.5	RE2-SN-9.0	REST02-01-DUP	-	-	-
RE1-SW-9.0	REST01-01	REST03-01-DUP	-	-	-
-	REST01-02	REST03-03	-	-	-
-	REST01-03	REST04-01	-	-	-
Report 508449	Report 508469	Report 508504	Report 508533	Report 508558	Report 509054
RE-ST06-1	FTS-N-SW-9.0	RE1-SN2-9.0	RE1-SS3-10.0	RE-ST08-1	RE2-SN2-10.0
RE-ST06-2	FTS-N-SN-9.0	RE-ST07-1	RE2-B2-10.0	RE2-SS2-8-0	RE2-SN3-10.0
RE-ST06-3	FTS-N-B-10.0	RE-ST07-2	RE2-B3-10.0	RE-ST08-2	BT-POST-5
RE3-SN2-9.0	-	RE-ST07-3	BT-POST-4	RE-ST08-3	RE2-SN4-10.0
BT-POST-3	-	RE1-SS2-10.0	-	RE2-SS3-9.0	RE2-SS4-10.0
-	-	-	-	-	RE-ST09-1
-	-	-	-	-	RE-ST09-2
-	-	-	-	-	RE-ST09-3
-	-	-	-	-	RE2-SS5-10.0
Report 509081	Report 509116	Report 509148	Report 509177	Report 509215	Report 509240
RE-ST10-1	RE2-SS6-9.0	RE-ST11-1	RE2-SE2-9.5	RE2-SE4-9.5	RE3-SE3-3.0
RE-ST10-2	RE2-B4-10.0	RE-ST11-2	RE2-SE3-9.5	RE2-SE5-9.5	RE3-SE4-3.0
RE-ST10-3	RE2-SN5-9.0	RE-ST11-3	RE2-B6-10.0	RE2-B7-11.0	RE3-B3-3.5
-	RE2-B5-10.0	RE-ST11-4	-	RE3-B2-9.5	RE2-SE6-10.0
-	-	BT-POST-6	-	RE3-SE2-9.0	RE3-SE5-3.0
Report 509269	Report 509310	Report 509330	Report 509363	Report 509495	Report 509549
BT-POST-7	RE3-B4-7.0	RE3-SE8-9.0	RE2-SN9-9.0	RE3-SN3-8.0	BT-POST-8
RE2-SN6-10.5	RE3-B5-10.0	RE3-SE9-3.5	-	RE3-SN4-7.5	RE2-SS7-9.5

Samples Analyzed					
RE2-SN7-10.5	RE3-SE5-8.0	-	-	RE3-B6-10.0	-
RE-ST12-1	RE3-SE6-7.0	-	-	RE3-SN5-8.0	-
RE-ST12-2	RE3-SE7-8.0	-	-	RE3-B7-3.0	-
RE-ST12-3	-	-	-	RE3-B8-10.0	-
RE2-SN8-11.0	-	-	-	RE3-B9-4.0	-
RE1-SN3-11.0	-	-	-	RE3-B10-10.0	-
-	-	-	-	RE3-SN6-7.0	-
-	-	-	-	RE3-SN7-6.0	-
-	-	-	-	RE3-SN8-2.5	-
-	-	-	-	RE3-SN9-2.0	-
-	-	-	-	RE3-SN10-2.0	-

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2014) and appropriate laboratory and method-specific guidelines (FBI, 2015; USEPA, 1986).

In report 508337, the NWTPH-Dx motor-oil-range result for sample RE1-SN-9.0 was flagged by FBI because of chromatographic patterns that did not resemble the pattern of the standard used for quantitation. Results were quantified against motor oil calibration standards and have not been qualified by the reviewer.

In report 509330, the NWTPH-Dx diesel-range result for sample RE3-SE9-3.5 was flagged by FBI because of chromatographic patterns that did not resemble the pattern of the standard used for quantitation. Results were quantified against diesel calibration standards and have not been qualified by the reviewer.

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

Temperature on receipt was not indicated on the chain of custody for reports 508337 and 508421. The reviewer confirmed with FBI that samples were received at temperatures within acceptance criteria.

In report 509495, temperature on receipt recorded on the chain of custody was 21 degrees Celsius (°C). The reviewer confirmed with FBI that the temperature on receipt was 6°C and

was recorded incorrectly on the chain of custody. FBI issued a revised chain of custody (509495 coc0002) and the sample receipt checklist (509495 coc0002). The samples met temperature storage criteria of 2 to 6°C; thus, no qualification was required.

The remaining samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch. Where an analyte was detected in a sample and in the associated method blank, the sample result was qualified if the concentration was less than five times the method blank concentration for USEPA Method 8021B results and less than ten times the method blank concentration for remaining results.

All laboratory method blanks were non-detect at method reporting limits (MRLs).

Trip Blanks

Trip blanks were not required for this sampling event.

Equipment Rinse Blanks

Equipment rinse blanks were not required for this sampling event.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance on individual samples. All surrogate recoveries were within percent recovery acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. All MS/MSD samples were extracted and analyzed at the required frequency.

In reports 508449 and 509148, the NWTPH-Dx soil matrix MS/MSDs exceeded percent recovery acceptance limits. The MS/MSD spike concentrations could not be accurately quantified because of high concentrations of analyte present in the samples. Remaining batch quality control met acceptance criteria; thus, no results were qualified.

All remaining MS/MSD results were within acceptance limits for percent recovery and relative percent differences (RPDs).

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. All duplicate samples were extracted and analyzed at the required frequency.

In report 509054, the USEPA Method 8021B and NWTPH-Gx laboratory duplicate exceeded RPD control limits for toluene, ethylbenzene, xylenes, and gasoline, ranging from 36 to 51 percent. FBI analyzed a second aliquot of the same sample and laboratory duplicate with similar results. The sample matrix is assumed to be nonhomogenous. Remaining batch quality control met acceptance criteria. In the following table, detected results in sample RE2-SN2-10.0, which was used to prepare the laboratory duplicate, have been qualified by the reviewer as estimated (J). Non-detect results were not qualified.

Report	Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
509054	RE2-SN2-10.0	Toluene	0.36	0.36 J
509054	RE2-SN2-10.0	Ethylbenzene	0.46	0.46 J
509054	RE2-SN2-10.0	Xylenes	0.42	0.42 J
509054	RE2-SN2-10.0	Gasoline	51	51 J

mg/kg = milligrams per kilogram.

In report 509310, the USEPA Method 8021B and NWTPH-Gx laboratory duplicate exceeded RPD control limits for toluene, ethylbenzene, xylenes, and gasoline, ranging from 86 to 95 percent. FBI analyzed a second aliquot of the same sample and laboratory duplicate with similar results. The sample matrix is assumed to be nonhomogenous. The sample used to prepare the laboratory duplicate was presented in report number 509293, which is unrelated to the Truck City project. The soil samples submitted for the Truck City reports are assumed to have different matrices; thus, no results were qualified.

All remaining laboratory duplicate RPDs were within acceptance limits.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) is spiked with target analytes to provide information on laboratory precision and accuracy. All LCS/LCSD analytes were within acceptance limits for percent recovery and RPD.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. Two field duplicate samples were submitted for analysis with report 508363 (REST02-01/REST02-01-DUP) and (REST03-01/REST03-01-DUP). MFA uses acceptance criteria of 100 percent RPD for results that are less than five times the MRL, or 50 percent RPD for results that are greater than five times the MRL. Non-detect data are not used in the evaluation of field duplicate results. All analytes were within the acceptance criteria.

REPORTING LIMITS

FBI used routine reporting limits for non-detect results, except for samples requiring dilutions because of high analyte concentrations and/or matrix interferences. FBI reported some USEPA Method 8021B results below MRLs. The results were qualified by FBI with “J” as estimated. No additional qualification was required.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. None were found.

REFERENCES

- FBI. 2015. Quality assurance manual. Friedman & Bruya, Inc., Seattle, Washington. January 19.
- USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846 Update V. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 1, July 2014).
- USEPA. 2014. USEPA contract laboratory program, national functional guidelines for Superfund organic methods data review. EPA 540/R-014/002. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. August.

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0714.03.01 | SEPTEMBER 2, 2015 | SKAGIT COUNTY

This report reviews the analytical results for soil samples collected by the Maul Foster & Alongi, Inc., project team on the Truck City property in Mount Vernon, Washington. The samples were collected on August 6 and 7, 2015.

Friedman and Bruya, Inc. (FBI) performed the analyses. FBI reports MFA Truck City 071402 508100 amended (508100) and FBI Truck City UST decom part II 508128 (508128) were reviewed. The analyses performed and samples analyzed are listed below.

Analysis	Reference
BTEX	USEPA 8021B
Diesel and Motor Oil	NWTPH-Dx
Gasoline	NWTPH-Gx
Hydrocarbon Identification	NWTPH-HCID
Total Lead	USEPA 200.8

BTEX = benzene, toluene, ethylbenzene, xylenes.
 NWTPH = Northwest Total Petroleum Hydrocarbons.
 USEPA = U.S. Environmental Protection Agency.

Samples Analyzed	
Report 508100	Report 508128
S-W1-8.0	ST-4
S-S1-8.0	B1-T4-14.0
B-T1-12.0	ST-5
B-T2-12.0	B2-T4-14.0
S-N1-8.0	S-N2-10.0
S-E1-8.0	B-T3-12.0
ST-1	-
ST-2	-
ST-3	-

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2014a,b) and appropriate laboratory and method-specific guidelines (FBI, 2015; USEPA, 1986).

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch. All laboratory method blanks were non-detect at method reporting limits.

Trip Blanks

Trip blanks were not required for this sampling event.

Equipment Rinse Blanks

Equipment rinse blanks were not required for this sampling event.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance on individual samples. All surrogate results were within percent recovery acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. All MS/MSD samples were extracted and analyzed at the required frequency. All MS/MSD results were within acceptance limits for percent recovery and relative percent differences (RPDs).

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. All duplicate samples were extracted and analyzed at the required frequency. All laboratory duplicate RPDs were within acceptance limits.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) is spiked with target analytes to provide information on laboratory precision and accuracy. All LCS/LCSD analytes were within acceptance limits for percent recovery and RPD.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. Field duplicates were not submitted for analysis.

REPORTING LIMITS

FBI used routine reporting limits for non-detect results, except for samples requiring dilutions because of high analyte concentrations and/or matrix interferences. Reporting limits were also raised because results were reported on a dry-weight basis.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies.

In report 508128, NWTPH-Dx, NWTPH-Gx, USEPA Method 8021B, and USEPA Method 200.8 total lead analyses for sample S-N2-10.0 were canceled and the sample was placed on hold after receipt by FBI. Analysis by NWTPH-HCID, USEPA Method 8270D SIM, and USEPA Method 8260C were requested by the project manager.

No additional issues were found.

REFERENCES

- FBI. 2015. Quality assurance manual. Friedman & Bruya, Inc., Seattle, Washington. January 19.
- USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846 Update V. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 1, July 2014).
- USEPA. 2014a. USEPA contract laboratory program, national functional guidelines for inorganic Superfund data review. EPA 540/R-013/001. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. August.
- USEPA. 2014b. USEPA contract laboratory program, national functional guidelines for Superfund organic methods data review. EPA 540/R-014/002. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. August.

APPENDIX I

AS-BUILT SURVEY



AS-BUILT SURVEY

SW 1/4, NW 1/4, SEC 32, TWP 34 N, RGE 4 E WM
SKAGIT COUNTY, WASHINGTON

P29543
Linton Et Al

P29541
Skagit RSPE, LLC

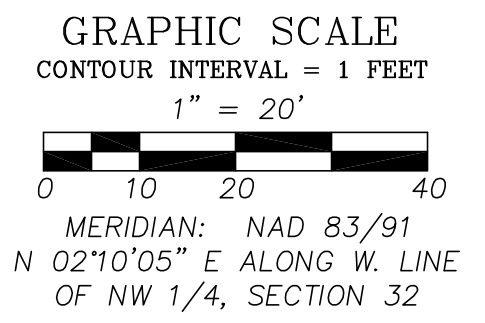
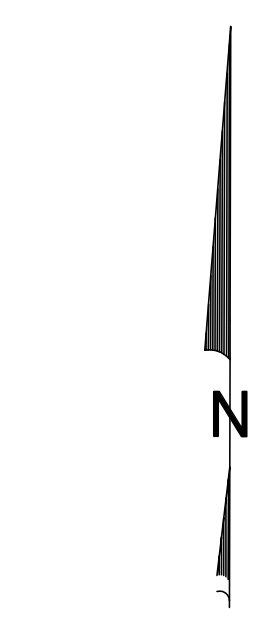
P29548
Navidad Clarita Carboto

P29548
Old 99, LLC

- LEGEND**
- X TK NAIL IN LEAD
 - FOUND MONUMENT IN CASE
 - FOUND IRON PIPE AS NOTED
 - FOUND REBAR AS NOTED
 - △ CONTROL POINT
 - ▢ CATCH BASIN
 - ⊕ WATER VALVE
 - ## FINISHED FLOOR ELEVATION
 - ⊕ GAS METER
 - ⊕ HAND HOLE
 - ⊕ LUMINAIRE
 - ⊕ YARD POLE
 - ⊕ MONITORING WELL
 - ⊕ GATE POST
 - ⊕ TRANSFORMER PAD
 - ⊕ POWER VAULT
 - ⊕ STORM DRAIN MANHOLE
 - ⊕ MAILBOX
 - ⊕ SIGN POST
 - ⊕ SPRINKLER HEAD
 - ⊕ SANITARY SEWER CLEANOUT
 - ⊕ SEWER MANHOLE
 - ⊕ SUPPORT COLUMN
 - ⊕ ALDER TREE
 - ⊕ DECIDUOUS TREE (AS DESCRIBED)
 - ⊕ FIR TREE
 - ⊕ TELEPHONE PEDESTAL
 - ⊕ TELEPHONE VAULT
 - ⊕ MANHOLE (UNKNOWN)
 - ⊕ POWER POLE W/ U.G. FEED
 - ⊕ POWER POLE
 - ⊕ GUY ANCHOR
 - ⊕ BLOWOFF
 - ⊕ FIRE STD PIPE
 - ⊕ FIRE HYDRANT
 - ⊕ WATER FAUCET
 - ⊕ WATER METER
 - ⊕ YARD DRAIN
 - ⊕ TANK

- PROPERTY LINE
- - - PLAT LINE
- - - RIGHT-OF-WAY
- - - CENTERLINE OF R/W
- - - ADJOINING PROPERTY LINE

- ▭ PAVEMENT
- ▭ CONCRETE



VERTICAL DATUM:
THE VERTICAL DATUM FOR THIS SURVEY IS NAVD 88, BASED ON PUBLISHED ELEVATIONS FOR WSDOT MONUMENT 2927 (DESIGNATION GP29005-88) AND NGS MONUMENT "G331" POINT ID TRO099.
MONUMENT 2927 ELEVATION: 45.522 FEET
MONUMENT TRO099 ELEVATION: 14.930 FEET

SURVEYORS NOTES:

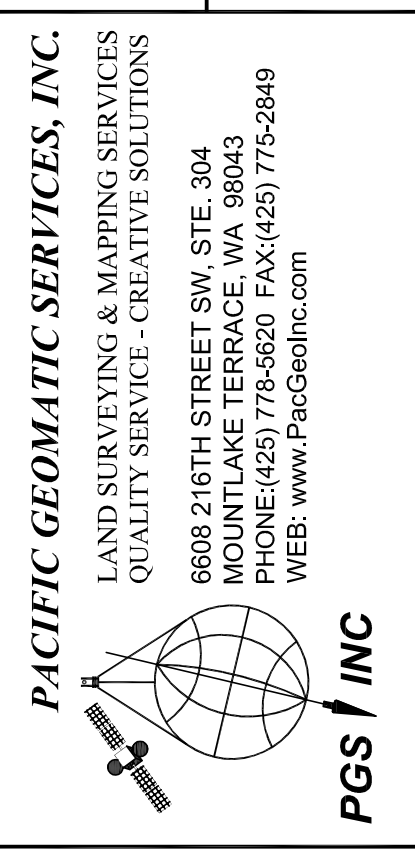
1. THE PURPOSE OF THIS SURVEY IS TO SHOW THE EXCAVATION LIMITS AND STOCK PILE LOCATIONS FOR AS-BUILT PURPOSES. ALL OTHER MAPPING, UTILITIES, ETC. SHOWN WAS PERFORMED BY HARMSEN AND ASSOCIATES ON JULY 31ST, 2014 AND IS SHOWN FOR INFORMATION PURPOSES ONLY.
2. PAVEMENT WAS RESTORED TO PRE-EXCAVATION CONDITIONS. CONTOURS ARE ASSUMED TO HAVE NOT CHANGED.
3. BOUNDARY AND RIGHT OF WAY LINES SHOWN PER HARMSEN AND ASSOCIATES SURVEY.

CHECKED BY: JNM	DRAWING NAME:	1502201_AS.BUILT.DWG	SHEET:
DRAWN BY: CMH	SCALE: 1" = 20'	DATE: 10/09/2015	JOB NUMBER:
			15-022-01

TRUCK CITY AS-BUILT SURVEY	WYSSER CONSTRUCTION CO. SNOHOMISH, WASHINGTON
---------------------------------------	--

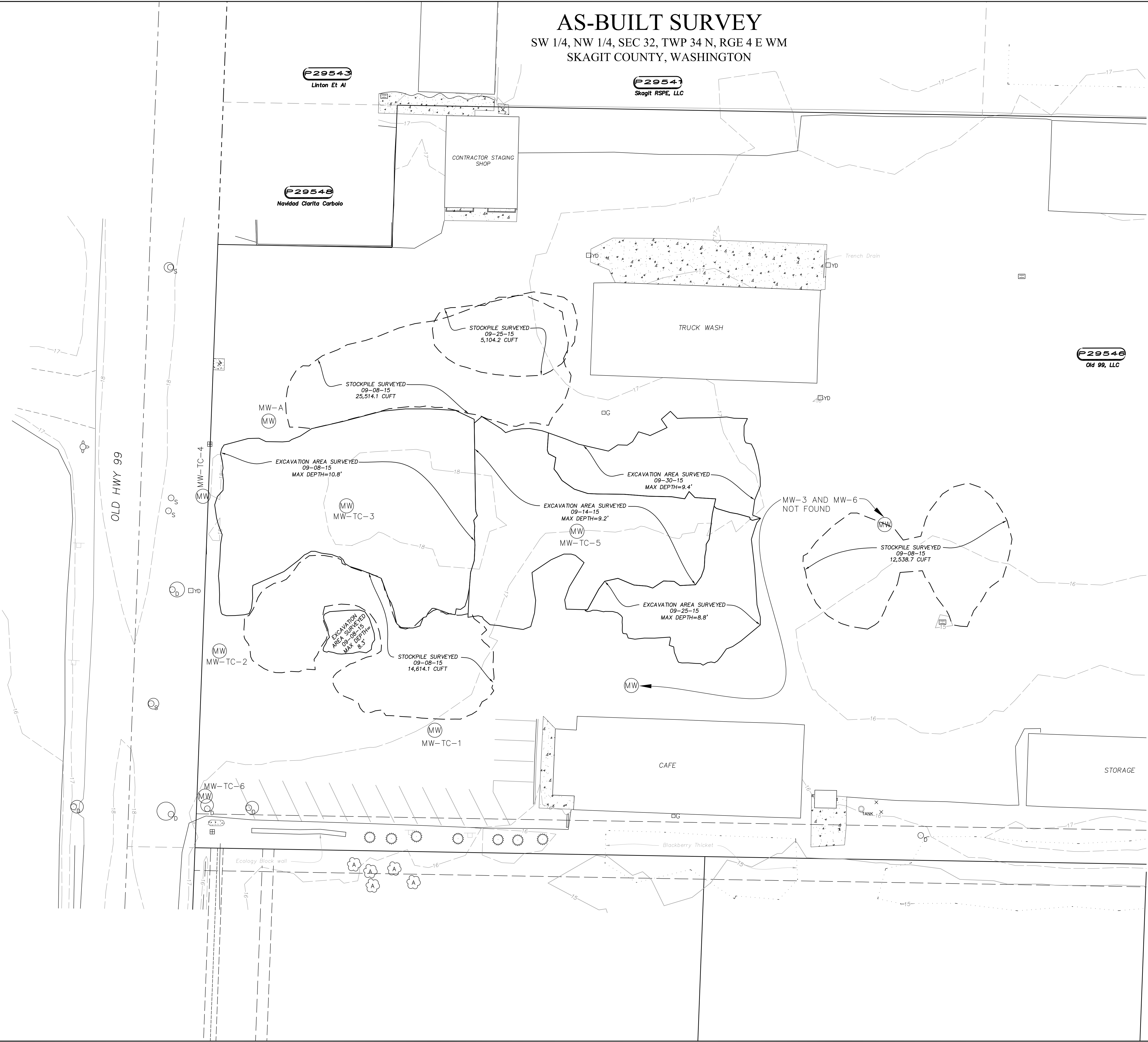
PACIFIC GEOMATIC SERVICES, INC.
LAND SURVEYING & MAPPING SERVICES
QUALITY SERVICE - CREATIVE SOLUTIONS
6608 216TH STREET SW, STE. 304
MOUNTLAKE TERRACE, WA 98043
PHONE: (206) 835-8888 FAX: (206) 775-2849
WEB: www.pacgeom.com

PGS / INC



REV.	DESCRIPTION	BY	DATE

REV.	DESCRIPTION	BY	DATE



APPENDIX J

CEMEX LANDFILL CERTIFICATE OF PETROLEUM-
CONTAMINATED-SOIL DISPOSAL





Ticket List By Customer\Order\Product



Date From 08/01/2015 **To** 10/07/2015
Location(s) 1876
Order: 41032119

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	S h i p	C a s h	V o i d
Scale Tickets										
WYSER CONSTRUCTION INC										
41032119										
1183951										
8/31/15	1876082771	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	15:10:00	7.75	H			
8/31/15	1876082773	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	15:12:00	7.50	H			
8/31/15	1876082776	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	15:43:00	8.25	H			
9/1/15	1876082821	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	14:29:00	6.75	H			
9/1/15	1876082829	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	15:19:00	8.25	H			
9/1/15	1876082830	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	15:46:00	9.50	H			
9/2/15	1876082915	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	14:52:00	8.75	H			
9/2/15	1876082918	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	15:15:00	8.00	H			
9/10/15	1876083187	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	13:50:00	6.25	H			
9/11/15	1876083207	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	8:13:00	10.50	H			
9/11/15	1876083273	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	14:40:00	7.50	H			
9/11/15	1876083276	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	15:29:00	9.25	H			
9/14/15	1876083342	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	14:38:00	8.00	H			
9/14/15	1876083349	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	15:10:00	8.00	H			
9/15/15	1876083448	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	14:33:00	8.50	H			
9/15/15	1876083452	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	14:53:00	8.50	H			
9/15/15	1876083454	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	15:39:00	0.50	H			
Product Totals	17					Qty	131.75	H		
1192508										
8/31/15	1876082718	D:76: TRUCK CITY	C7-7TF,SPRINGBROOK NURSERY	0:00:00	8:47:00	29.06	TON			

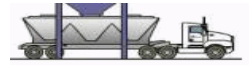
Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	Sh ip	C a s h	V o i d
8/31/15	1876082719	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	8:57:00	29.99	TON			
8/31/15	1876082720	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	9:00:00	32.39	TON	R		
8/31/15	1876082734	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	10:35:00	27.34	TON			
8/31/15	1876082739	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	11:06:00	32.52	TON	R		
8/31/15	1876082740	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	11:10:00	32.57	TON	R		
8/31/15	1876082754	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	12:41:00	28.93	TON			
8/31/15	1876082759	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	13:09:00	31.14	TON			
8/31/15	1876082762	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	13:40:00	28.81	TON			
8/31/15	1876082768	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	14:51:00	30.75	TON	R		
8/31/15	1876082772	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	15:11:00	31.74	TON			
9/1/15	1876082779	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	8:18:00	27.88	TON			
9/1/15	1876082785	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	8:45:00	29.02	TON			
9/1/15	1876082786	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	8:47:00	26.62	TON			
9/1/15	1876082792	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	10:15:00	28.18	TON			
9/1/15	1876082796	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	10:55:00	30.49	TON			
9/1/15	1876082802	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	12:05:00	27.29	TON			
9/1/15	1876082807	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	12:38:00	25.84	TON			
9/1/15	1876082810	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	12:48:00	28.28	TON			
9/1/15	1876082819	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	14:06:00	29.35	TON			
9/1/15	1876082825	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	14:52:00	29.89	TON			
9/1/15	1876082828	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	15:01:00	27.60	TON			
9/2/15	1876082833	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	8:14:00	32.84	TON	R		
9/2/15	1876082834	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	8:22:00	33.46	TON	R		
9/2/15	1876082887	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	10:19:00	30.05	TON			
9/2/15	1876082889	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	10:35:00	30.77	TON			
9/2/15	1876082894	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	12:20:00	28.83	TON			

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	Sh ip	C a s h	V o i d
9/2/15	1876082896	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	12:43:00	32.61	TON	R		
9/2/15	1876082913	D:76: TRUCK CITY	C7-14T,SPRINGBROOK NURSERY	0:00:00	14:27:00	29.66	TON			
9/2/15	1876082914	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	14:51:00	33.01	TON	R		
9/10/15	1876083140	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	8:08:00	31.32	TON			
9/10/15	1876083141	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	8:16:00	30.29	TON			
9/10/15	1876083144	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	10:06:00	30.91	TON			
9/10/15	1876083147	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	10:24:00	27.65	TON			
9/10/15	1876083169	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	12:27:00	31.15	TON			
9/10/15	1876083174	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	12:43:00	30.40	TON			
9/11/15	1876083204	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	7:58:00	31.85	TON			
9/11/15	1876083206	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	8:11:00	30.48	TON			
9/11/15	1876083214	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	10:10:00	33.99	TON	R		
9/11/15	1876083219	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	10:22:00	33.76	TON	R		
9/11/15	1876083244	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	12:13:00	31.53	TON			
9/11/15	1876083248	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	12:34:00	31.21	TON	R		
9/11/15	1876083268	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	14:24:00	30.73	TON			
9/11/15	1876083274	D:76: TRUCK CITY	C7-11T,SPRINGBROOK NURSERY	0:00:00	14:51:00	29.72	TON			
9/14/15	1876083277	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	8:03:00	30.83	TON			
9/14/15	1876083280	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	9:07:00	27.53	TON			
9/14/15	1876083282	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	9:55:00	30.47	TON			
9/14/15	1876083304	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	11:01:00	29.83	TON	R		
9/14/15	1876083319	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	12:07:00	33.18	TON	R		
9/14/15	1876083327	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	13:04:00	30.67	TON	R		
9/14/15	1876083339	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	14:21:00	33.06	TON	R		
9/14/15	1876083348	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	15:09:00	31.32	TON	R		
9/15/15	1876083362	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	8:25:00	29.78	TON			

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	S h i p	C a s h	V o i d
9/15/15	1876083363	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	8:28:00	30.25	TON	R		
9/15/15	1876083378	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	10:17:00	33.72	TON	R		
9/15/15	1876083387	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	10:30:00	30.55	TON	R		
9/15/15	1876083414	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	12:23:00	30.26	TON			
9/15/15	1876083417	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	12:28:00	28.86	TON			
9/15/15	1876083447	D:76: TRUCK CITY	C7-24T,SPRINGBROOK NURSERY	0:00:00	14:32:00	30.57	TON	R		
9/15/15	1876083450	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	14:37:00	31.64	TON			
9/16/15	1876083456	D:76: TRUCK CITY	C7-26T,SPRINGBROOK NURSERY	0:00:00	8:06:00	0.00	TON	R		V
Product Totals	61					Qty	1,824.42	TON		
Order Totals	78					Qty	1,956.17	TON		
Customer Totals	78					Qty	1,956.17	TON		
Grand Total		78				Qty	1,956.17	TON		



Ticket List By Customer\Order\Product



Date From 08/01/2015 To 10/07/2015
 Location(s) 1876
 Order: 41027925

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	S h i p	C a s h	V o i d
Scale Tickets										
WYSER CONSTRUCTION INC										
41027925										
1192508										
8/14/15	1876082148	P: TRUCK CITY	Z&S7,Z&S TRUCKING	7:40:00	7:58:00	27.53	TON	R		
8/14/15	1876082151	P: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	7:53:00	8:07:00	30.36	TON	R		
8/17/15	1876082164	P: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	7:46:00	31.11	TON			
8/17/15	1876082165	P: TRUCK CITY	1875-1,EVERETT GENERIC	0:00:00	8:23:00	34.03	TON	R		
8/20/15	1876082281	P: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	7:34:00	30.87	TON			
8/20/15	1876082283	P: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	7:56:00	31.78	TON			
8/21/15	1876082354	P: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	7:31:00	29.15	TON			
8/21/15	1876082363	P: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	7:42:00	7:56:00	30.04	TON	R		
8/21/15	1876082367	P: TRUCK CITY	1876-3,EVERETT SOIL GENERIC	7:55:00	8:13:00	32.14	TON	R		
8/21/15	1876082398	P: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	9:35:00	32.50	TON			
8/21/15	1876082399	P: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	9:45:00	31.59	TON			
8/21/15	1876082400	P: TRUCK CITY	1876-3,EVERETT SOIL GENERIC	0:00:00	9:54:00	33.98	TON	R		
8/21/15	1876082422	P: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	11:40:00	29.44	TON			
8/21/15	1876082423	P: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	11:47:00	29.07	TON			
8/21/15	1876082424	P: TRUCK CITY	1876-3,EVERETT SOIL GENERIC	0:00:00	11:56:00	30.59	TON			
8/21/15	1876082432	P: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	13:48:00	31.22	TON			
8/21/15	1876082435	P: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	13:55:00	29.80	TON			
8/21/15	1876082436	P: TRUCK CITY	1876-3,EVERETT SOIL GENERIC	0:00:00	14:04:00	29.93	TON			
8/24/15	1876082438	P: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	7:29:00	7:39:00	29.99	TON	R		

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	S h i p	C a s h	V o i d
8/24/15	1876082440	P: TRUCK CITY	WC30T,WYSER CONSTRUCTION	0:00:00	7:49:00	30.57	TON			
8/24/15	1876082459	P: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	9:32:00	31.18	TON			
8/24/15	1876082464	P: TRUCK CITY	WC30T,WYSER CONSTRUCTION	0:00:00	9:58:00	32.75	TON	R		
8/24/15	1876082485	P: TRUCK CITY	1876-2,EVERETT SOIL GENERIC	10:57:00	11:15:00	31.56	TON	R		
8/24/15	1876082489	P: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	11:33:00	31.98	TON			
8/24/15	1876082491	P: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	11:47:00	31.22	TON			
8/24/15	1876082509	P: TRUCK CITY	1876-2,EVERETT SOIL GENERIC	0:00:00	13:00:00	32.72	TON	R		
8/24/15	1876082516	P: TRUCK CITY	WC30T,WYSER CONSTRUCTION	0:00:00	13:29:00	30.44	TON			
8/24/15	1876082520	P: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	13:44:00	31.97	TON			
8/24/15	1876082526	P: TRUCK CITY	1876-2,EVERETT SOIL GENERIC	10:57:00	15:14:00	25.51	TON			
8/25/15	1876082529	P: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	7:07:00	31.07	TON			
8/25/15	1876082530	P: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	7:09:00	28.74	TON			
8/25/15	1876082531	P: TRUCK CITY	1876-2,EVERETT SOIL GENERIC	0:00:00	7:19:00	30.93	TON			
8/25/15	1876082532	P: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	7:33:00	30.22	TON			
8/26/15	1876082561	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	7:24:00	30.07	TON			
8/26/15	1876082562	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	7:37:00	31.08	TON			
8/26/15	1876082564	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	7:49:00	32.71	TON			
8/26/15	1876082569	P:76: TRUCK CITY	1876-3,EVERETT SOIL GENERIC	0:00:00	8:04:00	30.70	TON			
8/27/15	1876082655	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	7:28:00	30.85	TON			
8/27/15	1876082657	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	7:40:00	31.03	TON			
8/27/15	1876082659	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	7:52:00	35.09	TON	R		
8/27/15	1876082663	P:76: TRUCK CITY	1876-3,EVERETT SOIL GENERIC	0:00:00	8:19:00	32.90	TON	R		
8/28/15	1876082678	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	7:34:00	32.64	TON			
8/28/15	1876082679	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	7:46:00	32.40	TON			
8/28/15	1876082681	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	7:56:00	36.37	TON	R		
8/28/15	1876082683	P:76: TRUCK CITY	1876-3,EVERETT SOIL GENERIC	0:00:00	8:07:00	33.43	TON	R		

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	Sh ip	C a s h	V o i d
8/28/15	1876082688	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	10:02:00	32.06	TON			
8/28/15	1876082693	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	12:17:00	12:18:00	30.87	TON			
8/31/15	1876082701	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	7:27:00	32.71	TON			
8/31/15	1876082702	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	7:37:00	34.25	TON	R		
8/31/15	1876082706	P:76: TRUCK CITY	1876-2,EVERETT SOIL GENERIC	0:00:00	7:48:00	33.19	TON	R		
8/31/15	1876082729	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	9:51:00	32.40	TON			
9/1/15	1876082777	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	7:40:00	29.08	TON			
9/1/15	1876082778	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	7:47:00	28.62	TON			
9/2/15	1876082831	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	7:53:00	32.16	TON			
9/2/15	1876082832	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	8:06:00	33.92	TON			
9/8/15	1876083021	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	7:30:00	33.41	TON			
9/8/15	1876083022	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	7:40:00	39.25	TON	R		
9/8/15	1876083024	P:76: TRUCK CITY	1876-2,EVERETT SOIL GENERIC	0:00:00	7:48:00	31.96	TON			
9/8/15	1876083025	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	8:06:00	35.95	TON	R		
9/9/15	1876083075	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	7:04:00	32.97	TON	R		
9/9/15	1876083076	P:76: TRUCK CITY	1876-2,EVERETT SOIL GENERIC	0:00:00	7:05:00	29.13	TON			
9/9/15	1876083077	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	7:15:00	31.60	TON			
9/9/15	1876083078	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	7:28:00	31.91	TON			
9/17/15	1876083537	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	7:50:00	29.91	TON			
9/17/15	1876083543	P:76: TRUCK CITY	1876-3,EVERETT SOIL GENERIC	0:00:00	8:04:00	28.56	TON			
9/17/15	1876083546	P:76: TRUCK CITY	1876-5,EVERETT SOIL GENERIC	0:00:00	8:12:00	24.78	TON			
9/17/15	1876083556	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	9:51:00	30.34	TON			
9/17/15	1876083558	P:76: TRUCK CITY	1876-3,EVERETT SOIL GENERIC	0:00:00	10:02:00	37.94	TON	R		
9/17/15	1876083562	P:76: TRUCK CITY	1876-5,EVERETT SOIL GENERIC	0:00:00	10:12:00	29.08	TON			
9/17/15	1876083580	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	11:54:00	32.66	TON			
9/17/15	1876083582	P:76: TRUCK CITY	1876-3,EVERETT SOIL GENERIC	0:00:00	12:04:00	34.74	TON	R		

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	S h i p	C a s h	V o i d
9/17/15	1876083585	P:76: TRUCK CITY	1876-5,EVERETT SOIL GENERIC	0:00:00	12:11:00	30.96	TON			
9/17/15	1876083606	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	14:09:00	28.48	TON			
9/17/15	1876083609	P:76: TRUCK CITY	1876-3,EVERETT SOIL GENERIC	0:00:00	14:14:00	32.70	TON			
9/17/15	1876083614	P:76: TRUCK CITY	1876-5,EVERETT SOIL GENERIC	0:00:00	14:20:00	29.70	TON			
9/18/15	1876083624	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	8:01:00	30.20	TON			
9/18/15	1876083625	P:76: TRUCK CITY	1876-2,EVERETT SOIL GENERIC	0:00:00	8:09:00	31.73	TON			
9/18/15	1876083627	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	8:18:00	29.30	TON			
9/18/15	1876083628	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	8:30:00	31.68	TON			
9/18/15	1876083636	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	9:57:00	31.01	TON			
9/18/15	1876083641	P:76: TRUCK CITY	1876-2,EVERETT SOIL GENERIC	0:00:00	10:10:00	31.29	TON			
9/18/15	1876083645	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	10:26:00	29.11	TON			
9/18/15	1876083656	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	10:50:00	30.39	TON			
9/18/15	1876083668	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	11:55:00	28.11	TON			
9/18/15	1876083672	P:76: TRUCK CITY	1876-2,EVERETT SOIL GENERIC	0:00:00	12:10:00	30.97	TON			
9/18/15	1876083679	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	12:31:00	31.69	TON			
9/18/15	1876083685	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	12:48:00	30.36	TON			
9/18/15	1876083692	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	14:02:00	28.64	TON			
9/18/15	1876083695	P:76: TRUCK CITY	1876-2,EVERETT SOIL GENERIC	0:00:00	14:15:00	33.89	TON	R		
9/18/15	1876083701	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	15:07:00	28.83	TON			
9/21/15	1876083710	P:76: TRUCK CITY	1876-3,EVERETT SOIL GENERIC	0:00:00	8:05:00	24.51	TON			
9/21/15	1876083712	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	8:16:00	27.37	TON			
9/21/15	1876083716	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	8:28:00	28.40	TON			
9/21/15	1876083739	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	10:31:00	31.68	TON			
9/21/15	1876083742	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	10:38:00	29.49	TON			
9/21/15	1876083767	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	12:32:00	30.46	TON			
9/21/15	1876083770	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	12:42:00	29.75	TON			

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	S h i p	C a s h	V o i d
9/21/15	1876083785	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	14:45:00	30.35	TON			
9/22/15	1876083792	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	7:57:00	27.93	TON			
9/22/15	1876083794	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	8:11:00	30.77	TON			
9/22/15	1876083795	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	8:17:00	28.51	TON			
9/22/15	1876083797	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	10:13:00	26.16	TON			
9/22/15	1876083798	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	10:18:00	30.20	TON			
9/22/15	1876083799	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	10:34:00	30.43	TON			
9/22/15	1876083826	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	12:08:00	28.51	TON			
9/22/15	1876083827	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	12:21:00	29.19	TON			
9/22/15	1876083828	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	12:31:00	29.00	TON			
9/22/15	1876083840	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	14:16:00	28.44	TON			
9/22/15	1876083841	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	14:29:00	30.34	TON			
9/23/15	1876083844	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	7:58:00	29.97	TON			
9/23/15	1876083845	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	9:57:00	31.07	TON			
9/23/15	1876083857	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	11:53:00	30.24	TON			
9/23/15	1876083870	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	13:57:00	27.00	TON			
9/30/15	1876084048	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	8:19:00	25.42	TON			
9/30/15	1876084049	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	8:26:00	27.82	TON			
9/30/15	1876084051	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	9:08:00	27.90	TON			
9/30/15	1876084054	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	10:18:00	26.61	TON			
9/30/15	1876084055	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	10:33:00	31.81	TON			
9/30/15	1876084060	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	11:07:00	31.57	TON			
9/30/15	1876084071	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	12:24:00	27.43	TON			
9/30/15	1876084077	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	13:01:00	31.26	TON			
9/30/15	1876084083	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	13:48:00	29.88	TON			
9/30/15	1876084091	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	14:27:00	31.44	TON			

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	S h i p	C a s h	V o i d
9/30/15	1876084103	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	15:09:00	31.52	TON			
10/1/15	1876084106	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	8:17:00	29.79	TON			
10/1/15	1876084107	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	8:27:00	30.25	TON			
10/1/15	1876084108	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	8:37:00	28.77	TON			
10/1/15	1876084116	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	10:21:00	29.68	TON			
10/1/15	1876084119	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	10:30:00	29.75	TON			
10/1/15	1876084120	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	10:37:00	30.82	TON			
10/1/15	1876084137	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	12:31:00	31.46	TON			
10/1/15	1876084138	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	12:39:00	30.33	TON			
10/1/15	1876084139	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	12:52:00	30.58	TON			
10/1/15	1876084149	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	14:39:00	30.03	TON			
10/1/15	1876084150	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	14:50:00	29.81	TON			
10/1/15	1876084152	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	15:11:00	30.82	TON			
10/2/15	1876084153	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	8:10:00	25.29	TON			
10/2/15	1876084156	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	10:16:00	26.78	TON			
10/2/15	1876084163	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	12:30:00	28.80	TON			
10/2/15	1876084172	P:76: TRUCK CITY	1876-1,EVERETT SOIL GENERIC	0:00:00	14:35:00	26.25	TON			
10/2/15	1876084173	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	15:00:00	29.69	TON			
10/5/15	1876084174	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	8:17:00	32.60	TON			
10/5/15	1876084175	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	8:35:00	30.58	TON			
10/5/15	1876084176	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	10:17:00	29.99	TON			
10/5/15	1876084177	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	10:42:00	30.48	TON			
10/5/15	1876084178	P:76: TRUCK CITY	LL4T,L&L TRANSPORT	0:00:00	12:21:00	31.17	TON			
10/5/15	1876084180	P:76: TRUCK CITY	Z&S7,Z&S TRUCKING	0:00:00	12:53:00	28.73	TON			
Product Totals	147					Qty	4,492.62	TON		
Order Totals	147					Qty	4,492.62	TON		
Customer Totals	147					Qty	4,492.62	TON		

APPENDIX K

BACKFILL SOURCE EVALUATION AND CLEAN SOIL
STATEMENT
SUMMARY OF IMPORTED MATERIALS



Oct 12, 15
10: 56: 33

BIG ROCK PIT
Customer = WYSER
Weight shown in TN
Outbound Loads Only
Both Sales & Purchases
From Date Jun 01, 15 to Oct 12, 15

Material	Loads	Weight Out	Pcs Out	Sales of Materials	Sales of Cartage
WYSER	WYSER CONSTRUCTION CO., INC				
DF2- asphalt/concrete	30	843.6	30		0.00
DF3- concrete with rebar	4	106.7	4		0.00
GBASE2- import	4	121.8	4		0.00
PI TRUN -import	230	7063.0	230		
SubTotal :	268	8135.0	268		
TOTAL:	268	8135.0	268		



SUBMITTAL No. 5

TO Maul Foster Alongi
 ATTN **Yen Vy Van**
 PHONE 206.858.7618

DATE 8/6/15
 PROJECT Truck City
 PROJECT NO SKG-15-1427
 NUMBER OF PAGES 6

FAX
 FROM **Darren Ness**
 CC
 SEND VIA Electronic Mail

QTY	DESCRIPTION	ORIGINAL	COPY	FOR APPROVAL	INFORMATION & USE	COMMENT & REVIEW	REQUEST FOR SERVICE	PER YOUR REQUEST
1	Skagit Aggregates – Notarized Letter			X				
1	Skagit Aggregates – Analytical Report			X				

NOTES

Enclosed are the notarized letter and analytical report for structural fill at Skagit Aggregates.

Document1

The documents accompanying this telecopy transmission contain confidential information belonging to the sender, which is legally privileged. The information is intended only for the use of the individual(s) or entity named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this telecopied information is strictly prohibited. If you have received this telecopy in error, please immediately notify us by telephone at the number listed below to arrange for return of the original documents to us. Thank you.

July 31, 2015

Skagit Aggregates, LLC owns and operates a pit located at 14107 SR 9, formerly known as the Tennyson Pit.

The land we are currently mining on was farmland converted to a gravel pit in the mid 2000's.

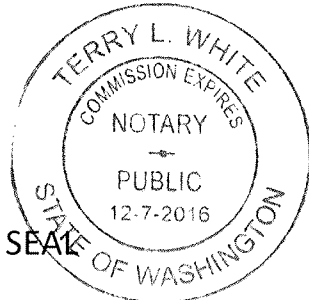
The material is native ground and has never had any contamination.

Signature *SDM* Date 7/31/2015
General Manager

State of Washington
County of Skagit

Subscribed and sworn to (or Affirmed) before me on this 31st day of

July, 2015, by Steven D. Dahl. Proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.



Signature *Terry L. White*



August 5, 2015

Mr. Darren Ness
Wyser Construction
19015 109th Ave SE,
Snohomish, WA 98296

Dear Mr. Ness,

On July 31st, 1 sample was received by our laboratory and assigned our laboratory project number EV15070162. The project was identified as your Truck City. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director



CERTIFICATE OF ANALYSIS

CLIENT:	Wyser Construction 19015 109th Ave SE, Snohomish, WA 98296	DATE:	8/5/2015
CLIENT CONTACT:	Darren Ness	ALS JOB#:	EV15070162
CLIENT PROJECT:	Truck City	ALS SAMPLE#:	EV15070162-01
CLIENT SAMPLE ID	Skagit AGG	DATE RECEIVED:	07/31/2015
		COLLECTION DATE:	7/28/2015 12:00:00 PM
		WDOE ACCREDITATION:	C601

SAMPLE DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	08/01/2015	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	08/01/2015	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	08/01/2015	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	08/01/2015	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	08/01/2015	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	07/31/2015	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	07/31/2015	EBS
Arsenic	EPA-6020	8.5	1.0	5	MG/KG	08/05/2015	RAL
Lead	EPA-6020	8.1	0.50	5	MG/KG	08/05/2015	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	114	08/01/2015	PAB
TFT	EPA-8021	100	08/01/2015	PAB
C25	NWTPH-DX	108	07/31/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Wyser Construction
 19015 109th Ave SE,
 Snohomish, WA 98296

CLIENT CONTACT: Darren Ness
 CLIENT PROJECT: Truck City

DATE: 8/5/2015
 ALS SDG#: EV15070162
 WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MBG-073015S - Batch 95793 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U		MG/KG	3.0	07/30/2015	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

MB-073015S - Batch 95793 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U		MG/KG	0.030	07/30/2015	DLC
Toluene	EPA-8021	U		MG/KG	0.050	07/30/2015	DLC
Ethylbenzene	EPA-8021	U		MG/KG	0.050	07/30/2015	DLC
Xylenes	EPA-8021	U		MG/KG	0.20	07/30/2015	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

MB-073015S - Batch 95837 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U		MG/KG	25	07/30/2015	EBS
TPH-Oil Range	NWTPH-DX	U		MG/KG	50	07/30/2015	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

MB-080515S - Batch 95908 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	QUAL	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U		MG/KG	0.20	08/05/2015	RAL
Lead	EPA-6020	U		MG/KG	0.10	08/05/2015	RAL

U - Analyte analyzed for but not detected at level above reporting limit.



CERTIFICATE OF ANALYSIS

CLIENT: Wyser Construction
 19015 109th Ave SE,
 Snohomish, WA 98296

DATE: 8/5/2015
 ALS SDG#: EV15070162
 WDOE ACCREDITATION: C601

CLIENT CONTACT: Darren Ness
 CLIENT PROJECT: Truck City

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 95793 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	86.9			07/30/2015	DLC
TPH-Volatile Range - BSD	NWTPH-GX	85.3	2		07/30/2015	DLC

ALS Test Batch ID: 95793 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	84.0			07/30/2015	DLC
Benzene - BSD	EPA-8021	84.0	0		07/30/2015	DLC
Toluene - BS	EPA-8021	85.6			07/30/2015	DLC
Toluene - BSD	EPA-8021	85.6	0		07/30/2015	DLC
Ethylbenzene - BS	EPA-8021	86.3			07/30/2015	DLC
Ethylbenzene - BSD	EPA-8021	86.7	0		07/30/2015	DLC
Xylenes - BS	EPA-8021	88.0			07/30/2015	DLC
Xylenes - BSD	EPA-8021	89.1	1		07/30/2015	DLC

ALS Test Batch ID: 95837 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	102			07/30/2015	EBS
TPH-Diesel Range - BSD	NWTPH-DX	102	0		07/30/2015	EBS

ALS Test Batch ID: 95908 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	98.0			08/05/2015	RAL
Arsenic - BSD	EPA-6020	105	7		08/05/2015	RAL
Lead - BS	EPA-6020	98.9			08/05/2015	RAL
Lead - BSD	EPA-6020	106	7		08/05/2015	RAL

APPROVED BY

Laboratory Director

APPENDIX L

COMPACTION TESTING REPORTS





FIELD DENSITY/MOISTURE REPORT

Nuclear Gauge * ASTM D6938

PROJECT:	Truck City Site Remedial Action	JOB #:	15-0509
ADDRESS:	3216 Old Highway 99 South, Mount Vernon, WA	REPORT #:	FD003
PERMIT #:		DATE:	9/10/2015
CLIENT:	Skagit County Engineering & Public Works	PAGE #:	1 of 1
CONTRACTOR:	Wyser Construction Co.	INSPECTOR:	Zach Click

Compaction Of: Backfill in Truck Scale Area

Field Data:

Test #	Location	Depth/Elev (ft)	DT/BS (in)	Wet Density (pcf)	Field Moisture (%)	Dry Density (pcf)	Lab #	Compaction %		Pass/Fail
								Attained	Required	
1	North End of Truck Scale	-8	DT/12	119.2	4.5	114.1	1	85	85	P
2	South End of Truck Scale	-8	DT/12	122.0	5.0	116.2	1	87	85	P

Lab Sample #	Soil Type	Source	Max. Dry Density (pcf)	Optimum Moisture (%)	Retained On #4 (%)	Test Method
1-2207A	PGS w/ Gravel	Skagit Big Rock Pit	133.8	6.9	21	ASTM D1557/D4718
2-			0.0			None
3-			0.0			None

Gauge Make/Model/Serial#: Troxler/3440P/60559 M/D Standard Count: 659/2781

Comments: GeoTest was on site as requested by the client to perform compaction testing for the above locations.

While GeoTest was on site the contractor was placing approximately 2' loose lifts of fill and mixing with ORC pellets. The contractor bucket packed and drove over the area with a loaded bulldozer as a compactive method.

All tests attained the required compaction.

COPIES: Wyser Construction Co. Skagit County Engineering & Public Works Estvold, Marc L. AIA Howard Consulting, LLC


 Reviewed by



FIELD DENSITY/MOISTURE REPORT

Nuclear Gauge * ASTM D6938

PROJECT:	Truck City Site Remedial Action	JOB #:	15-0509
ADDRESS:	3216 Old Highway 99 South, Mount Vernon, WA	REPORT #:	FD004
PERMIT #:		DATE:	9/11/2015
CLIENT:	Skagit County Engineering & Public Works	PAGE #:	1 of 1
CONTRACTOR:	Wyser Construction Co.	INSPECTOR:	Sean Rogerson

Compaction Of: Structural Fill at Remediation Excavation

Field Data:

Test #	Location	Depth/Elev (ft)	DT/BS (in)	Wet Density (pcf)	Field Moisture (%)	Dry Density (pcf)	Lab #	Compaction %		Pass/Fail
								Attained	Required	
1	100' SE of NW Corner of Excavation	-8	DT/12	131.4	7.5	122.2	1	91	85	P
2	80' E of NW Corner of Excavation	-8	DT/12	132.7	6.2	124.9	1	93	85	P
3	45' SE of NW Corner of Excavation	-6	DT/12	131.6	5.3	125.0	1	93	85	P
4	18' SE of NW Corner of Excavation	-6	DT/12	123.3	5.3	117.1	1	88	85	P
5	30' E of NW Corner of Excavation (Scale Area)	TOG	DT/12	119.9	4.8	114.4	1	86	85	P

Lab Sample #	Soil Type	Source	Max. Dry Density (pcf)	Optimum Moisture (%)	Retained On #4 (%)	Test Method
1-2207A	PGS w/Gravel	Skagit Big Rock Pit	133.8	6.9	21	ASTM D1557/D4718
2-			0.0			None
3-			0.0			None

Gauge Make/Model/Serial#: Troxler 3440P / 60560 M/D Standard Count: 677 / 2545

Comments: TOG - Top of Grade

GeoTest was on site as requested by the client to perform compaction testing for the above locations.

While GeoTest was on site the contractor was placing approximately 2' loose lifts of fill and mixing with ORC pellets. The contractor drove over the area with a loaded excavator as a compaction method.

All tests attained the required compaction.

COPIES: Wyser Construction Co. Skagit County Engineering & Public Works Estvold, Marc L. AIA Howard Consulting, LLC


 Reviewed by



FIELD DENSITY/MOISTURE REPORT

Nuclear Gauge * ASTM D6938

PROJECT:	Truck City Site Remedial Action	JOB #:	15-0509
ADDRESS:	3216 Old Highway 99 South, Mount Vernon, WA	REPORT #:	FD005
PERMIT #:		DATE:	9/29/2015
CLIENT:	Skagit County Engineering & Public Works	PAGE #:	1 of 1
CONTRACTOR:	Wyser Construction Co.	INSPECTOR:	Justin Symonds

Compaction Of: Structural Fill at Remediation Excavation

Field Data:

Test #	Location	Depth/Elev (ft)	DT/BS (in)	Wet Density (pcf)	Field Moisture (%)	Dry Density (pcf)	Lab #	Compaction %		Pass/Fail
								Attained	Required	
1	East Section of Excavation	-6.5	DT/12	126.6	5.5	120.0	1	90	85	P
2	Northwest Section of Excavation	-7.0	DT/12	131.5	4.9	125.4	1	94	85	P

Lab Sample #	Soil Type	Source	Max. Dry Density (pcf)	Optimum Moisture (%)	Retained On #4 (%)	Test Method
1-2207A	PGS w/gravel	Skagit Big Rock Pit	133.8	6.9	21	ASTM D1557/D4718
2-			0.0			None
3-			0.0			None

Gauge Make/Model/Serial#: Troxler/3440/22281 M/D Standard Count: 592/2007

Comments: GeoTest was on site as requested by the client to perform compaction testing. The contractor was placing approximately 2' loose lifts of fill and mixing with ORC pellets. The contractor drove over the area with a loaded excavator as a compaction method.

All tests attained the required compaction. The contractor was notified of GeoTest's results before leaving the site.

COPIES: Wyser Construction Co. Skagit County Engineering & Public Works Estvold, Marc L. AIA Howard Consulting, LLC

Reviewed by



FIELD DENSITY/MOISTURE REPORT

Nuclear Gauge * ASTM D6938

PROJECT:	Truck City Site Remedial Action	JOB #:	15-0509
ADDRESS:	3216 Old Highway 99 South, Mount Vernon, WA	REPORT #:	FD006
PERMIT #:		DATE:	9/30/2015
CLIENT:	Skagit County Engineering & Public Works	PAGE #:	1 of 2
CONTRACTOR:	Wyser Construction Co.	INSPECTOR:	Ben Fox

Compaction Of: Structural Fill for Remediation Excavation

Field Data:

Test #	Location	Depth/ Elev (ft)	DT/ BS (in)	Wet Density (pcf)	Field Moisture (%)	Dry Density (pcf)	Lab #	Compaction %		Pass/ Fail
								Attained	Required	
1	52' W and 38' N of SE corner of excavation	-7	DT/12	132.2	5.1	125.8	1	94	85	P
2	65' W and 37' N of SE corner of excavation	-7	DT/12	131.1	5.1	124.7	1	93	85	P
3	69' E and 12' S of NW corner of excavation	-5	DT/12	132.8	4.7	126.8	2	85	85	P
4	24' E and 14' S of NW corner of excavation	-4	DT/12	135.4	5.2	128.8	2	86	85	P

Lab Sample #	Soil Type	Source	Max. Dry Density (pcf)	Optimum Moisture (%)	Retained On #4 (%)	Test Method
1-2207A	PGS w/Gravel	Skagit Agg. - Big Rock Pit	133.8	6.9	21	ASTM D1557/D4718
2-2246A	Structural Fill	On-Site Crushed	150.0	4.6	57	ASTM D1557/D4718
3-			0.0			None

Gauge Make/Model/Serial#: Troxler 3440 / 29778 M/D Standard Count: 673 / 1952

Comments: GeoTest was on-site as requested to perform density material on the structural fill at the above referenced locations. All tests attained the required compaction. Elevations and locations are approximate.

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Reviewed by

FIELD DENSITY/MOISTURE REPORT

Nuclear Gauge * ASTM D6938

PROJECT:	Truck City Site Remedial Action	JOB #:	15-0509
CLIENT:	Skagit County Engineering & Public Works	REPORT #:	FD006
CONTRACTOR:	Wyser Construction Co.	PAGE #:	2 of 2

While on-site, GeoTest observed the wheel rolling of both the imported fill from the Big Rock Pit (middle to east areas of excavation) and the on-site crushed material (west area of excavation) using a loaded Case 621E loader. Imported fill was being placed near the middle of the excavation in approximate one to two foot lifts.

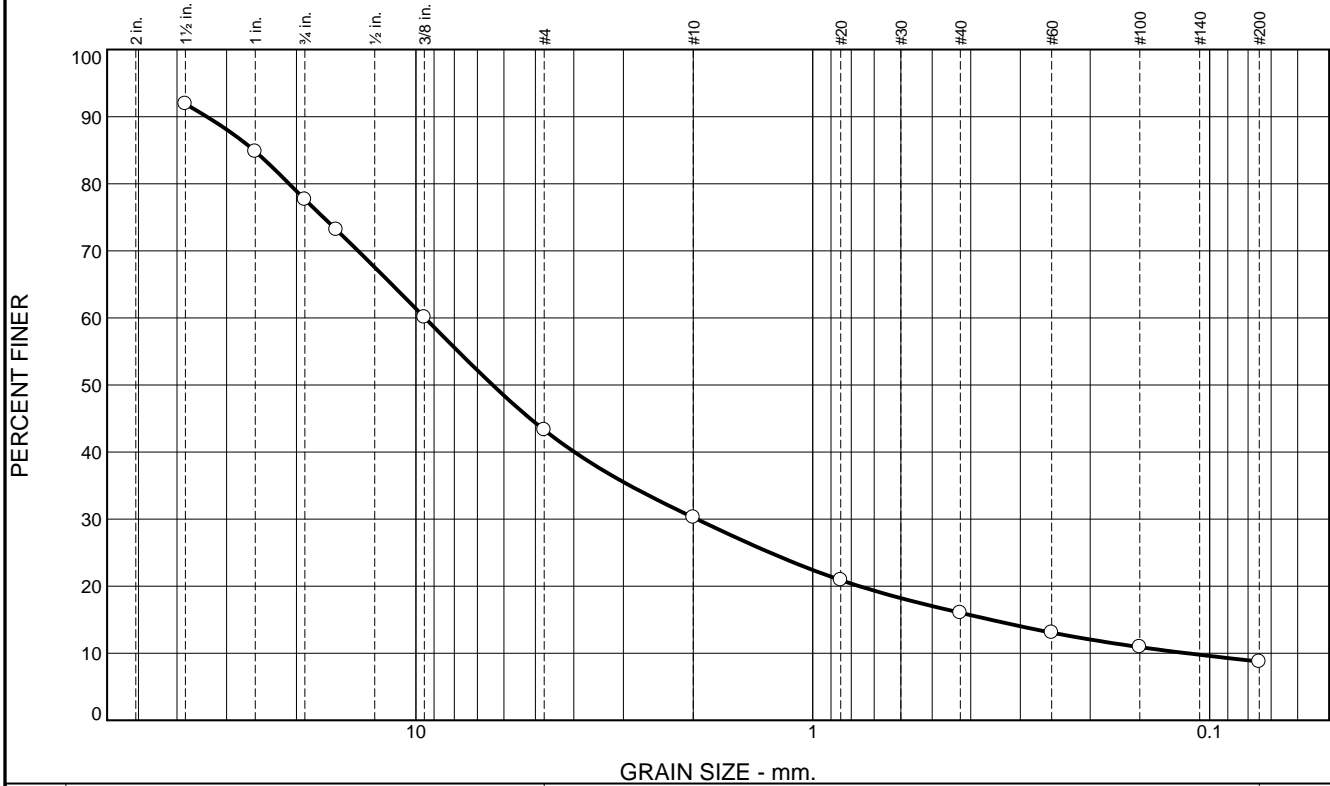
A photo of the middle and east areas of the excavation, with imported fill from the Big Rock Pit, after wheel rolling.



A photo of the west area of excavation, with on-site crushed being used as Structural Fill, during wheel rolling.



Sieve Analysis Test Report - C136/C117



% +3"	% Gravel		% Sand			% Fines
	Coarse	Fine	Coarse	Medium	Fine	Silt
		35	13	14	7	9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1-1/2"	92		
1"	85		
3/4"	78		
5/8"	73		
3/8"	60		
#4	43		
#10	30		
#20	21		
#40	16		
#60	13		
#100	11		
#200	8.8		

Material Description

Structural Fill

PL= **Atterberg Limits** PI=

LL= **Coefficients** **D₆₀**= 9.4907

D₉₀= 33.6454 D₈₅= 25.6144 D₁₅= 0.3566

D₅₀= 6.4085 D₃₀= 1.9597 C_c= 3.55

D₁₀= 0.1140 C_u= 83.25

USCS= **Classification** AASHTO=

Remarks

Specification: Section 02 61 13 - 2.1 Backfill A-2
(Clean overburden soil and/or sotckpiled soil)

* (no specification provided)

Location: Existing On-Site Crushed - sampled from site stockpile
Sample Number: 2246A

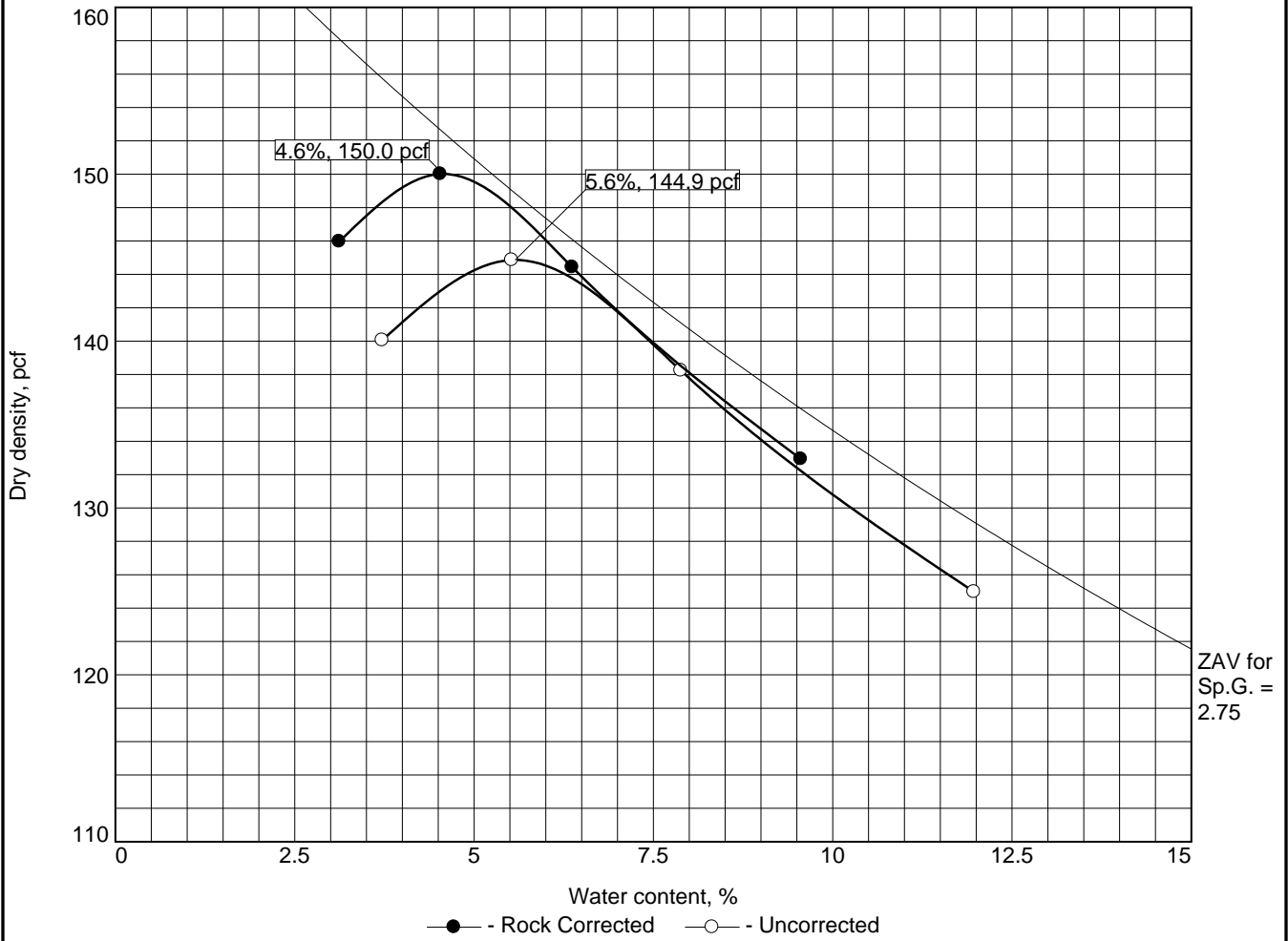
Date: 9/4/15



Client: Skagit County
Project: Truck City
3216 Old Highway 99 South Mount Vernon, Wa 98273
Project No: 15-0509 **Figure** SP002

Tested By: MC **Checked By:** DL

Moisture-Density (Proctor) Test Report



Test specification: ASTM D 1557-12 Method C Modified
 ASTM D 4718-87 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
							22	8.8

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 150.0 pcf	144.9 pcf	Structural Fill
Optimum moisture = 4.6 %	5.6 %	

Project No. 15-0509 Project: Truck City 3216 Old Highway 99 South Mount Vernon, Wa 98273 ○ Loc.: Existing On-Site Crushed - sampled from site stockpile	Client: Skagit County Date: 9-4-15 Sample No.: 2246A	Remarks: SPG: assumed
---	---	---------------------------------



Figure SP002

Tested By: MC _____ **Checked By:** DL _____



FIELD DENSITY/MOISTURE REPORT

Nuclear Gauge * ASTM D6938

PROJECT:	Truck City Site Remedial Action	JOB #:	15-0509
ADDRESS:	3216 Old Highway 99 South, Mount Vernon, WA	REPORT #:	FD009
PERMIT #:		DATE:	10/9/2015
CLIENT:	Skagit County Engineering & Public Works	PAGE #:	1 of 1
CONTRACTOR:	Wyser Construction Co.	INSPECTOR:	Zach Click

Compaction Of: Structural Fill for Remediation Excavation

Field Data:

Test #	Location	Depth/Elev (ft)	DT/BS (in)	Wet Density (pcf)	Field Moisture (%)	Dry Density (pcf)	Lab #	Compaction %		Pass/Fail
								Attained	Required	
1	25' S. of Old Truck Wash Building	-2	DT/12	131.3	5.0	125.1	1	93	85	P
2	45' S. of Old Truck Wash Building	-1	DT/12	131.0	4.9	124.9	1	93	85	P
3	35' S. of Old Truck Wash Building	TOG	DT/12	132.0	4.7	126.1	1	94	85	P

Lab Sample #	Soil Type	Source	Max. Dry Density (pcf)	Optimum Moisture (%)	Retained On #4 (%)	Test Method
1-2207A	PGS w/ Gravel	Skagit Big Rock Pit	133.8	6.9	21	ASTM D1557/D4718
2-			0.0			None
3-			0.0			None

Gauge Make/Model/Serial#: Troxler/3440P/62856	M/D Standard Count: 661/2415
---	------------------------------

Comments: TOG - Top of Grade

GeoTest was onsite as requested by the client to perform compaction testing for the above locations.

All locations and elevations were approximate and all tests attained the required compaction. The contractor was notified of GeoTest's results on site.

COPIES: Wyser Construction Co. Skagit County Engineering & Public Works Estvold, Marc L. AIA Howard Consulting, LLC

Kevin Richardson
Reviewed by

APPENDIX M

BIOREMEDIATION PRODUCT DOCUMENTATION



ORC Advanced® Pellets Technical Specification

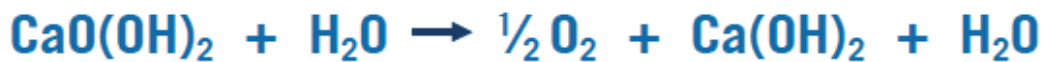
ORC Advanced Pellets are a dust-minimizing, dry application, pelletized form of the widely-used ORC Advanced controlled-release oxygen compound.

They are designed specifically for the treatment of dissolved-phase petroleum hydrocarbons through direct application into excavations, petroleum storage tank pits, trenches and backfill.

Oxygen is released from ORC Advanced for a period of 9 to 12 months *in situ*.



Example of ORC Advanced Pellets



ORC Advanced is a formulation of calcium oxyhydroxide which, upon hydration, releases oxygen and forms simple calcium hydroxide and water.

For a list of treatable contaminants with the use of ORC Advanced, view the [Range of Treatable Contaminants Guide](#).

Chemical Composition

- Calcium Oxyhydroxide
- Calcium Hydroxide
- Monopotassium Phosphate
- Ammonium Phosphate Dibasic

Properties

- Pellet size: 3-10 mm
- Contains micro-nutrients such as nitrogen, phosphorous, and potassium (N,P,K) which can be beneficial to aerobic biodegradation processes

ORC Advanced® Pellets Technical Specification

Storage and Handling Guidelines

Storage

Store in a cool, dry place out of direct sunlight

Store in original tightly closed container

Store in a well-ventilated place

Do not store near combustible materials

Store away from incompatible materials

Provide appropriate exhaust ventilation in places where dust is formed

Handling

Minimize dust generation and accumulation

Keep away from heat

Routine housekeeping should be instituted to ensure that dust does not accumulate on surfaces

Observe good industrial hygiene practices

Take precaution to avoid mixing with combustibles

Keep away from clothing and other combustible materials

Avoid contact with water and moisture

Avoid contact with eyes, skin, and clothing

Avoid prolonged exposure

Wear appropriate personal protective equipment

Applications

- *In situ* or *ex situ* out of the bag
- Direct application into open excavations, petroleum storage tank pits and trenches
- Direct application to contaminated backfill or contaminated soils
- *Ex situ* biopile applications (requires a source of hydration)

Health and Safety

Wash thoroughly after handling. Wear protective gloves, eye protection, and face protection.

Please review the Material Safety Data Sheet for additional storage, usage, and handling requirements here: [ORC Advanced SDS](#).



APPENDIX N

GROUNDWATER COMPLIANCE MONITORING PLAN



GROUNDWATER MONITORING PLAN

FORMER TRUCK CITY SITE
3216 OLD HIGHWAY 99 SOUTH
MOUNT VERNON, WASHINGTON



Prepared for
SKAGIT COUNTY
MOUNT VERNON, WASHINGTON
March 30, 2016
Project No. 0714.03.01

Prepared by
Maul Foster & Alongi, Inc.
1329 N State Street, Suite 301, Bellingham, WA 98225

GROUNDWATER MONITORING PLAN

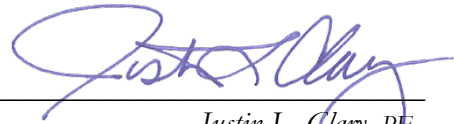
FORMER TRUCK CITY SITE
3216 OLD HIGHWAY 99 SOUTH
MOUNT VERNON, WASHINGTON

*The material and data in this plan were prepared
under the supervision and direction of the undersigned.*

MAUL FOSTER & ALONGI, INC.



*Yen-Vy Van, LHG
Senior Hydrogeologist*



*Justin L. Clary, PE
Principal Engineer*

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2.2 SITE HISTORY AND OPERATIONS	2
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FOLLOWING PLAN:

TABLE SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

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- 2-2 PRE-REMEDIAL ACTION SITE FEATURES AND LOCATIONS OF MFA INVESTIGATIONS
- 2-3 SITE OVERVIEW—REMEDIAL ACTION
- 3-1 ESTIMATED EXTENT OF GROUNDWATER PLUME
- 4-1 PROPOSED REPLACEMENT MONITORING WELLS LOCATIONS

ACRONYMS AND ABBREVIATIONS

AGI	Applied Geotechnology, Inc.
bgs	below ground surface
the County	Skagit County, Washington
GMP	groundwater monitoring plan
COI	chemical of interest
CUL	cleanup level
Ecology	Washington State Department of Ecology
ESA	environmental site assessment
IHS	indicator hazardous substance
LNAPL	light nonaqueous-phase liquid
MFA	Maul Foster & Alongi, Inc.
MTC	Materials Testing & Consulting, Inc.
MTCA	Model Toxics Control Act
PCS	petroleum-contaminated soil
Plan	remedial action plan and engineering design report
POC	point of compliance
RA	remedial action
RI/FS	remedial investigation and feasibility study
the Site	3216 Old Highway 99 S, Mount Vernon, Washington, Ecology Facility Site No. 2673, Cleanup Site No. 5176, Agreed Order 15 2 00056 2
TPH	total petroleum hydrocarbons
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound
WAC	Washington Administrative Code

1 INTRODUCTION

On behalf of Skagit County (the County), Maul Foster & Alongi, Inc. (MFA) has prepared this groundwater monitoring plan (GMP) to direct groundwater monitoring activities at the former Truck City Truck Stop facility, located at 3216 Old Highway 99 South, Mount Vernon, Skagit County, Washington, Washington State Department of Ecology (Ecology) Facility Site No. 2673, Cleanup Site ID: 5176, Agreed Order 15 2 00056 2 (Site) (see Figure 1-1). Prior to remedial action (RA) activities, the Site contained six buildings associated with the former commercial operations of the Truck City Truck Stop gas station, truck stop and truck wash, restaurant, and retail store. Five of the buildings—the contractor’s staging shop, office space, truck wash building, retail store, and restaurant/café—were constructed in 1978. All buildings associated with the former Truck City Truck Stop operation were demolished and removed. Construction activities associated with the proposed Skagit County Jail and associated features are currently being conducted at the Site.

This GMP has been prepared to meet the groundwater monitoring requirements specified in the Ecology-approved Remedial Action Plan and Engineering Design Report (the Plan) (MFA, 2015) for cleanup actions at the Site. This GMP was developed in accordance with the monitoring requirements put forth in the Washington State Model Toxics Control Act (MTCA) (Washington Administrative Code [WAC] 173-340-410).

1.1 Purpose of Groundwater Monitoring Plan

The RA was completed in October 2015, and groundwater monitoring will be conducted at the Site. Post-RA actions, as described in the Plan, include groundwater compliance monitoring.

This GMP:

- Identifies existing wells in the monitoring network.
- Identifies sentry wells beyond the leading edge of the dissolved-phase contaminant plume to allow for monitoring of potential migration of contamination beyond the currently confirmed extent.
- Describes the cleanup levels (CULs) against which cleanup attainment will be measured.
- Provides guidelines and criteria for each stage of monitoring, including criteria for assessing compliance with CULs and monitoring frequency.
- Provides decision process diagrams identifying contingent actions to be implemented in response to noncompliance with CULs within the network of monitoring wells and the criteria for triggering these actions.
- Provides criteria for decommissioning monitoring wells.
- Defines requirements for terminating the monitoring program.

2 BACKGROUND

2.1 Site Description

The Site is located in section 32, township 34 north, range 4 east, of the Willamette Meridian (see Figure 1-1). The Site, an 8.01-acre tax parcel (parcel number P29546), is accessed from Old Highway 99 South, adjacent to the west property boundary (see Figure 2-1). Its surface topography is generally flat.

2.2 Site History and Operations

The Site was operated as the Truck City Truck Stop facility, which contained gas and diesel pump islands, fueling facilities, a truck wash, and a truck scale (weigh station). All commercial operations ceased in 2014.

The Site was developed by 1953 and operated as a truck stop and restaurant until the truck stop burned in 1976. The parcel was redeveloped to its current configuration in 1978, and operations did not significantly change until they ceased in or about January 2015. Several subsurface investigations were conducted at the Site between 1989 and 2014. Ecology completed an interim soil remedial cleanup action in 1993.

Investigations have been conducted on the Site since 1989 to assess potential petroleum hydrocarbon impacts related to the operation of the retail gasoline station. Applied Geotechnology, Inc. (AGI) conducted a hydrocarbon assessment of the Site in 1989. AGI advanced eight borings, to approximately 15 to 20 feet below ground surface (bgs), adjacent to the northern, southern, and eastern underground storage tank (UST) nests; gasoline and diesel pump islands; and truck wash area (see Figure 2-1). Six of the borings were completed as 2-inch-diameter monitoring wells. AGI concluded that soil and groundwater gasoline and diesel petroleum hydrocarbon contamination was present around the northern and southern UST nests, and the potential exists for off-site migration of these chemicals of interest (COIs). Detected concentrations of gasoline- and diesel-range total petroleum hydrocarbons (TPH) and associated petroleum fuel volatile organic compounds (VOCs), specifically benzene, toluene, and total xylenes, were above Ecology's current MTCA Method A CULs. Groundwater flow direction at the Site was assessed to be west to southwesterly (AGI, 1989).

Ecology conducted an interim action cleanup in 1993 (see Figure 2-1). Seven USTs, 5,000 gallons in capacity each and located in the northern and southern UST nests, were decommissioned and removed along with associated product lines. Two 500-gallon-capacity USTs, as well as a septic tank full of waste oil, encountered during the contaminated-soil-excavation activities were also removed. Ecology reported that, because the septic system had been used for waste-oil disposal and was connected to the parcel's storm drain system, the septic tank may be one of the contaminant sources at this parcel (Ecology, 1993). The interim action removed 6,244 cubic yards of contaminated soil and 89,991 gallons of contaminated water. Final confirmation samples from the stockpiled soil showed

detections of gasoline-range TPH below CULs, with residual diesel-range TPH concentrations above CULs.

In 2005, an unknown volume of diesel was spilled at the Site when a truck driver filling a rig allowed an unattended fueling nozzle to fall out of the tank during fueling activities. The spill spread to a ditch (known as Maddox Creek), which is located adjacent to and west of the Site and flows south parallel to Old Highway 99 South to Hickox Road (approximately 0.68 mile south of the Site). This spill went unreported until an Ecology Spills Team traced the source back to the Truck City parcel (Ecology, Environmental Report Tracking System No. 546209, 2005). Sheen was observed in Maddox Creek. Ecology retained NRC Environmental Services to clean up the spill. Absorbent booms and pads were placed in Maddox Creek. Subsequently, Materials Testing & Consulting, Inc. (MTC) conducted sediment sampling in Maddox Creek, in the vicinity of the Site, to assess whether residual contamination remained in Maddox Creek. Based on current data, sediments in Maddox Creek no longer appears to be impacted by releases at the Site.

MTC conducted an initial Phase II environmental site assessment (ESA) in February 2014 and a supplemental ESA in March 2014. Eleven borings were advanced, via a direct-push-probe drilling rig, to a maximum depth of 15 feet bgs. The borings were located in and outside the former excavation remediation area (see Figure 2-1). MTC concluded that impacted soil at concentrations above MTCA CULs for gasoline- and diesel-range TPH existed adjacent to the truck scale (MTC, 2014).

MFA conducted a remedial investigation and feasibility study (RI/FS) in August 2014 that focused on further characterization of the residual impacted areas at the Site, potential off-site migration of contaminants, and addressing data gaps (see Figure 2-2). The site investigation results and risk screening indicate that only TPH and selected VOCs are indicator hazardous substances (IHSs) in soil and groundwater. Exceedances of applicable CULs for these IHSs are localized in soil (depth and areal extent) as well as in groundwater (localized dissolved phase). Human exposure pathways were deemed complete for the identified IHSs in groundwater, while ecological exposure pathways were deemed incomplete.

Findings from MFA's collective previous investigations and recent subsurface investigations and from Ecology's interim soil RA indicate that historical operations related to the former USTs and gasoline pump islands were the sources of TPH and selected VOC soil and groundwater contamination beneath the Site. MFA also concluded that the lateral and vertical extent of the dissolved-phase TPH plume had been characterized as the result of the RI/FS (MFA, 2014). Monitoring wells installed adjacent west of the truck scale and downgradient of former USTs/former gasoline pump islands (along the western site boundary of the Truck City parcel) and near the south and southwestern areas of this parcel may serve as sentinel wells to the IHSs exhibited in the dissolved phase in groundwater.

The County and Ecology finalized the Prospective Purchaser Consent Decree in January 2015. The County became the formal owner of the Truck City parcel in February 2015.

As presented in the Plan, MFA proposed an RA involving soil excavation to remove residual petroleum-contaminated soil (PCS) and in situ bioremediation to address residual impacted saturated soil and contaminated groundwater (i.e., dissolved-phase petroleum hydrocarbons in groundwater).

2.3 Remedial Action

An RA was completed at the Site in October 2015. The primary elements of the RA were:

- Decommissioning the Site's four fuel-containing USTs and conducting a UST site assessment.
- Removal of the former truck scale.
- Removal of former fuel pump islands and associated product piping, in addition to the demolition of two free-standing canopies.
- Demolition of the former convenience store.
- Decommissioning of groundwater monitoring wells TC-3, TC-4, and TC-5.
- Completion of an asbestos-containing-materials abatement at the former convenience store, the contractor staging shop, the lodge/café, the truck wash, and the office building.
- Excavation and off-site disposal of tons of PCS.
- Construction dewatering to control groundwater inflow and prevent standing water in the bottom of the excavation.
- Construction dewatering fluids were treated using an on-site water treatment system, which included a 10,000-gallon Baker Tank, particulate filter units, and granular reactivated carbon vessels connected in series.
- Application of in situ treatment compounds Regenesis Oxygen Release Compound Advanced® activator during backfill of the excavation.
- Backfill of the excavation with clean import fill and overburden from the excavation that was deemed appropriate for reuse by laboratory analysis.

Further information associated with the RA is provided in the As Built Construction Complete Report (MFA, 2016). Figure 2-3 illustrates the extent of soil excavation and in situ bioremediation work as well as the wells that were decommissioned.

3 SITE CONDITIONS

Geology, hydrogeology, and environmental conditions of the Site are summarized below.

3.1 Geology and Hydrogeology

The Site and vicinity have been mapped as recent alluvium and artificial fill. Alluvium deposits encountered at the Site, at locations of investigation, consist of floodplain sequences ranging from fluvial silty sand and well-sorted sand, to silt with intervening clay. Fill, comprising sandy gravel to

gravelly silty sand, was generally present to approximately 3 to 5 feet bgs at the Site, except in the former UST nests, where soil remedial cleanup action by Ecology in 1993 overexcavated this area to approximately 9.5 feet bgs.

The matrix of the unconfined shallow aquifer appears to be silty sand. Depth to groundwater, encountered during subsurface exploration activities, was variable throughout the Site, ranging approximately from 3.5 to 9.5 feet bgs. The static water level at monitoring wells installed by MFA in July 2014, TC-1 through TC-6, ranged approximately from 5.80 to 6.45 feet bgs during the groundwater monitoring event conducted on July 18, 2014. The direction of groundwater migration at the Site during the July 2014 groundwater event, based on professionally surveyed elevations at monitoring wells TC-1 through TC-6, is generally to the south-southeast, with tangent to the west.

AGI reported a west-to-southwesterly groundwater flow direction at the Site during their investigation in October 1989, based on water levels measured from installed monitoring wells. Seasonal groundwater flow direction fluctuations are expected at the Site and vicinity because of the shallow depth to groundwater in the floodplain area. The local and regional discharge points in the area appear to be to the west-southwest, toward Britt Slough and the Skagit River. At their closest points, Britt Slough and the Skagit River are located approximately 0.5 mile and 1.5 miles, respectively, west of the Site. Maddox Creek, located west of the Site, flows south parallel to Old Highway 99 South, intersects at Hickox Road, and flows west from this intersection.

3.2 Residual Contamination

Residual contamination remained after completion of the interim RA; although the bulk of PCS was removed, saturated impacted groundwater remained below the excavation depth and laterally beyond the former excavation boundaries completed in 1993.

3.2.1 Indicator Hazardous Substances

Historical subsurface investigations and RIs conducted between 1989 and 2014 identified the following COIs in soil and groundwater at the Site: gasoline-, diesel-, and lube-oil-range TPH; petroleum-hydrocarbon-associated VOCs; arsenic; and lead; Some of these COIs are also confirmed as IHSs, which are defined as chemicals exceeding a CUL at one or more locations.

Soil and groundwater IHSs confirmed at the Site include:

- Gasoline-range TPH
- Diesel-range TPH
- Benzene
- Ethylbenzene
- Toluene
- Xylenes

3.2.2 Distribution of Indicator Hazardous Substances in Groundwater

Groundwater monitoring data from 1989 to 2014 were evaluated for each IHS to assess groundwater CUL exceedances at the Site. The MTCA Method A CULs for groundwater were established as the applicable CULs for the Site. The attached table presents a summary of groundwater analytical results based on MFA's groundwater monitoring event conducted in July 2014. Figure 3-1 shows the estimated extent of the dissolved-phase petroleum hydrocarbon plume at the Site.

Currently, IHS concentrations in groundwater outside the dissolved-phase plume boundary depicted in Figure 3-1 do not exceed CULs.

4 MONITORING PROGRAM

This section defines the groundwater monitoring program, including identification of the monitoring network, stages of monitoring, the sampling and analysis program, and a decision matrix for continuation or cessation of monitoring in each well or the need for implementation of additional RA(s).

4.1 Monitoring Objectives

The primary objectives of groundwater monitoring are to:

- Assess the effectiveness of the 2015 RA.
- Evaluate ongoing groundwater quality conditions.
- Evaluate compliance with MTCA Method A CULs.
- Evaluate the IHS concentration trends of the dissolved-phase plume (i.e., whether concentrations are declining, stable, or increasing) and whether the lateral extent has stabilized or has continued to migrate.

4.2 Point of Compliance

The point of compliance (POC) at the Site includes all monitoring wells designated within the monitoring network (see the table). To demonstrate that CULs are being met at the POC, sentry wells will be monitored. Sentry wells are designated for monitoring beyond the leading edge of the dissolved-phase plume. Detection of elevated concentrations of COIs in a sentry monitoring well may indicate that the dissolved-phase plume is migrating beyond the known extent of the plume and that additional actions may be warranted.

4.3 Groundwater Monitoring Network

To meet the groundwater monitoring requirements stipulated in WAC 173-340-410, quarterly groundwater monitoring activities will be conducted at the following types of wells: (1) a monitoring well located upgradient of the known dissolved-phase plume; (2) monitoring wells in the confirmed dissolved-phase plume; and (3) sentry monitoring wells located beyond the leading edge of the dissolved-phase plume (see Figure 3-1). Groundwater monitoring will be conducted at the following site-specific wells:

- **Background well:** TC-7
- **Dissolved-phase-plume monitoring wells:** TC-2R, TC-3R, TC-4R, and TC-5R
- **Sentry wells:** TC-1R and TC-6

Six replacement groundwater monitoring wells (TC-1R, TC-2R, TC-3R, TC-4R, TC-5R, and TC-7) are proposed for installation in and adjacent to the footprint of the PCS excavation and bioremediation, at inferred downgradient and upgradient locales, to evaluate the effectiveness of the RA and monitor the groundwater quality of this area.

The Ecology site manager authorized the locations of the proposed replacement monitoring wells on December 22, 2015 (Ecology, 2015). Figure 4-1 presents the locations of proposed wells with respect to the site features of the proposed Skagit County Jail. Replacement of the original wells is necessary, as some of them would interfere with the proposed retention pond and/or are projected to be in the pathway of a maintenance road to be constructed in the area.

Construction logs for monitoring wells TC-1 through TC-6, completed during the RI in July 2014, are included in Appendix A.

4.4 Sampling and Analysis

Groundwater monitoring will include measuring the presence and thickness of light nonaqueous-phase liquid (LNAPL), water levels, and water quality parameters (e.g., dissolved oxygen, pH, temperature, specific conductance, and oxygen reduction potential); and collection and analysis of groundwater samples, which will be conducted in accordance with the methods and protocol outlined in the Sampling and Analysis Plan (see Appendix B).

Groundwater samples will be analyzed for IHSs, using the following analytical methods, or other comparable analytical methods deemed to be suitable alternatives and as approved for use by Ecology:

- Gasoline-range organics by Northwest Method NWTPH-Gx.
- Diesel-range organics by Northwest Method NWTPH-Dx.
- Petroleum-associated VOCs, specifically benzene, toluene, ethylbenzene, and xylenes, by U.S. Environmental Protection Agency (USEPA) Method 8260 or 8021.

To evaluate the biodegradation process at the Site, groundwater samples from two selected monitoring wells within the network will also be analyzed on a semiannual basis for the following geochemical parameters to prescreen for the presence of electron acceptors:

- Nitrate by USEPA 353.2
- Manganese by USEPA 6020A
- Ferrous iron by USEPA ApplEnvMic7-87-1536
- Sulfate by ASTM D516-02
- Methane by RSK 175

The following activities will be conducted during each groundwater monitoring event:

- Groundwater sample collection and analysis from each applicable monitoring well for evaluating compliance with CULs
- Water level measurements in each applicable monitoring well for evaluating hydraulic gradient trends
- Analysis of IHS concentration trends relative to associated CULs, and geochemical parameter monitoring to assess the efficacy of in situ bioremediation and evaluate the trend of biodegradation of IHSs

4.5 Quarterly Reporting

Quarterly groundwater monitoring reports will be prepared in accordance with Ecology reporting requirements (WAC 173-340-840(5)) and submitted within 60 days of receipt of final laboratory analytical results. Quarterly reports will provide a description of sampling methodologies and activities (including sampling frequency, laboratory containers/preservations, and field equipment), analytical data and analytical laboratory data reports and associated chains of custody, field measurements of groundwater quality parameters and groundwater levels, a discussion of analytical data trends, a comparison of analytical results to MTCA CULs, and data validation reports. Deviations from this GMP, if applicable, will be described and explained. All final, validated data will also be uploaded to Ecology's Environmental Information Management database within 30 days of receipt of validated data.

The reports will also include a description of the monitoring well network, including a table presenting the specifications of each well and a map showing the network of wells.

The data validation reports will provide a review of all raw data to verify that the laboratory has supplied the required quality assurance and quality control deliverables. The data will be validated against USEPA, Washington State, and laboratory-specific criteria for completeness and usability.

5 PROGRAM NOTIFICATION REQUIREMENTS

Ecology will be notified 30 days before installation or replacement of groundwater monitoring wells and within 30 days of receipt of laboratory analyses indicating an IHS CUL exceedance or measurement of LNAPL in a sentry or background well.

6 SCHEDULE

The groundwater monitoring activities outlined in this GMP will begin six months following completion of the RA (initiation of groundwater monitoring anticipated in April 2016) and continue for four to eight consecutive quarters. This GMP will be reevaluated after completion of four quarterly events.

LIMITATIONS

The services undertaken in completing this plan were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This plan is solely for the use and information of our client unless otherwise noted. Any reliance on this plan by a third party is at such party's sole risk.

Opinions and recommendations contained in this plan apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this plan.

REFERENCES

- AGI. 1989. Hydrocarbon contamination assessment, Truck City Truck Stop, 1731 Old Highway 99 South, Mount Vernon, Washington. Applied Geotechnology, Inc. November 13.
- Ecology. 1993. Interim action cleanup report, Truck City Truck Stop, 1731 Old Highway 99 South, Mount Vernon, Washington. Washington State Department of Ecology. January 8.
- Ecology. 2015. Formal notification of a minor change to the cleanup action plan (CAP) and prospective purchaser consent decree (PPCD). Truck City Truck Stop, 3216 Old Highway 99 S., Mount Vernon, WA 98273. Facility/Site ID: 2673, Cleanup Site ID: 5176. Agreed Order No. 15 2 00056 2. Washington State Department of Ecology. December 22.
- MFA. 2014. Public review remedial investigation and feasibility study report, Truck City site, Mount Vernon, Washington. Maul Foster & Alongi, Inc. November 11.
- MFA. 2015. Remedial action plan and engineering design report, Truck City site, Mount Vernon, Washington. Maul Foster & Alongi, Inc. May 13.
- MFA. 2016. As-built construction complete report, former Truck City site, Mount Vernon, Washington. Maul Foster & Alongi, Inc., Bellingham, Washington. January.
- MTC. 2014. Phase II environmental site assessment, Truck City site, 3228 Old Highway 99 South, Mount Vernon, WA 98273. Materials Testing & Consulting, Inc. March 17.

TABLE



Table
Summary of Groundwater Analytical Results
Truck City Site Property
Mount Vernon, Washington

		Location:	TC-1	TC-1	TC-2	TC-3	TC-4	TC-5	TC-6
		Sample Name:	TC1-W-10.0	TCDup-W-10.0	TC2-W-10.0	TC3-W-10.0	TC4-W-10.0	TC5-W-10.0	TC6-W-10.0
		Collection Date:	07/17/2014	07/17/2014	07/18/2014	07/17/2014	07/18/2014	07/17/2014	07/18/2014
		Collection Depth (ft bgs):	10	10	10	10	10	10	10
cas_number	MTC A Method A								
TPH (ug/L)									
Gasoline-Range Hydrocarbons	86290-81-5	800	100 U	100 U	100 U	380	100 U	800	100 U
Diesel-Range Hydrocarbons	68334-30-5	500	120 J	--	50 U	--	50 U	360 J	89 J
Motor-Oil-Range Hydrocarbons	64742-65-0	500	250 U	--	250 U	--	250 U	250 U	250 U
TPH Identification									
Gasoline-Range Hydrocarbons		NV	--	--	--	--	--	--	--
Diesel-Range Hydrocarbons		NV	--	--	--	--	--	--	--
Motor-Oil-Range Hydrocarbons		NV	--	--	--	--	--	--	--
VOCs (ug/L)									
1,1,1,2-Tetrachloroethane	630-20-6	NV	1 U	--	--	1 U	--	--	--
1,1,1-Trichloroethane	71-55-6	200	1 U	--	--	1 U	--	--	--
1,1,2,2-Tetrachloroethane	79-34-5	NV	1 U	--	--	1 U	--	--	--
1,1,2-Trichloroethane	79-00-5	NV	1 U	--	--	1 U	--	--	--
1,1-Dichloroethane	75-34-3	NV	1 U	--	--	1 U	--	--	--
1,1-Dichloroethene	75-35-4	NV	1 U	--	--	1 U	--	--	--
1,1-Dichloropropene	563-58-6	NV	1 U	--	--	1 U	--	--	--
1,2,3-Trichlorobenzene	87-61-6	NV	1 U	--	--	1 U	--	--	--
1,2,3-Trichloropropane	96-18-4	NV	1 U	--	--	1 U	--	--	--
1,2,4-Trichlorobenzene	120-82-1	NV	1 U	--	--	1 U	--	--	--
1,2,4-Trimethylbenzene	95-63-6	NV	1 U	--	--	23	--	--	--
1,2-Dibromo-3-chloropropane	96-12-8	NV	10 U	--	--	10 U	--	--	--
1,2-Dibromoethane	106-93-4	0.01	0.01 U	--	--	0.01 U	--	--	--
1,2-Dichlorobenzene	95-50-1	NV	1 U	--	--	1 U	--	--	--
1,2-Dichloroethane	107-06-2	NV	1 U	--	--	1 U	--	--	--
1,2-Dichloropropane	78-87-5	NV	1 U	--	--	1 U	--	--	--
1,3,5-Trimethylbenzene	108-67-8	NV	1 U	--	--	6.2	--	--	--
1,3-Dichlorobenzene	541-73-1	NV	1 U	--	--	1 U	--	--	--
1,3-Dichloropropane	142-28-9	NV	1 U	--	--	1 U	--	--	--
1,4-Dichlorobenzene	106-46-7	NV	1 U	--	--	1 U	--	--	--
2,2-Dichloropropane	594-20-7	NV	1 U	--	--	1 U	--	--	--
2-Butanone	78-93-3	NV	10 U	--	--	10 U	--	--	--
2-Chlorotoluene	95-49-8	NV	1 U	--	--	1 U	--	--	--
2-Hexanone	591-78-6	NV	10 U	--	--	10 U	--	--	--
4-Chlorotoluene	106-43-4	NV	1 U	--	--	1 U	--	--	--
4-Isopropyltoluene	99-87-6	NV	1 U	--	--	1 U	--	--	--
4-Methyl-2-pentanone	108-10-1	NV	10 U	--	--	10 U	--	--	--
Acetone	67-64-1	NV	10 U			10 U			

Table
Summary of Groundwater Analytical Results
Truck City Site Property
Mount Vernon, Washington

	Location: Sample Name: Collection Date: Collection Depth (ft bgs):		TC-1 TC1-W-10.0 07/17/2014 10	TC-1 TCDup-W-10.0 07/17/2014 10	TC-2 TC2-W-10.0 07/18/2014 10	TC-3 TC3-W-10.0 07/17/2014 10	TC-4 TC4-W-10.0 07/18/2014 10	TC-5 TC5-W-10.0 07/17/2014 10	TC-6 TC6-W-10.0 07/18/2014 10
	cas_number	MTC A Method A							
Benzene	71-43-2	5	0.35 U	1 U	1 U	1.2	1 U	22	1 U
Bromobenzene	108-86-1	NV	1 U	--	--	1 U	--	--	--
Bromodichloromethane	75-27-4	NV	1 U	--	--	1 U	--	--	--
Bromoform	75-25-2	NV	1 U	--	--	1 U	--	--	--
Bromomethane	74-83-9	NV	1 U	--	--	1 U	--	--	--
Carbon tetrachloride	56-23-5	NV	1 U	--	--	1 U	--	--	--
Chlorobenzene	108-90-7	NV	1 U	--	--	1 U	--	--	--
Chloroethane	75-00-3	NV	1 U	--	--	1 U	--	--	--
Chloroform	67-66-3	NV	1 U	--	--	1 U	--	--	--
Chloromethane	74-87-3	NV	10 U	--	--	10 U	--	--	--
cis-1,2-Dichloroethene	156-59-2	NV	1 U	--	--	1 U	--	--	--
cis-1,3-Dichloropropene	10061-01-5	NV	1 U	--	--	1 U	--	--	--
Dibromochloromethane	124-48-1	NV	1 U	--	--	1 U	--	--	--
Dibromomethane	74-95-3	NV	1 U	--	--	1 U	--	--	--
Dichlorodifluoromethane	75-71-8	NV	1 UJ	--	--	1 UJ	--	--	--
Ethylbenzene	100-41-4	700	1 U	1 U	1 U	8.1	1 U	25	1 U
Hexachlorobutadiene	87-68-3	NV	1 U	--	--	1 U	--	--	--
Isopropylbenzene	98-82-8	NV	1 U	--	--	1 U	--	--	--
m,p-Xylene		NV	2 U	--	--	27	--	--	--
Methyl tert-butyl ether	1634-04-4	20	1 U	--	--	1 U	--	--	--
Methylene chloride	75-09-2	5	5 U	--	--	5 U	--	--	--
Naphthalene	91-20-3	160	1 U	--	--	5.2	--	--	--
n-Hexane	110-54-3	NV	1 U	--	--	12	--	--	--
n-Propylbenzene	103-65-1	NV	1 U	--	--	2.8	--	--	--
o-Xylene	95-47-6	NV	1 U	--	--	5.6	--	--	--
sec-Butylbenzene	135-98-8	NV	1 U	--	--	1 U	--	--	--
Styrene	100-42-5	NV	1 U	--	--	1 U	--	--	--
tert-Butylbenzene	98-06-6	NV	1 U	--	--	1 U	--	--	--
Tetrachloroethene	127-18-4	5	1 U	--	--	1 U	--	--	--
Toluene	108-88-3	1000	1 U	1 U	1 U	1 U	1 U	1.7	1 U
trans-1,2-dichloroethene	156-60-5	NV	1 U	--	--	1 U	--	--	--
trans-1,3-Dichloropropene	10061-02-6	NV	1 U	--	--	1 U	--	--	--
Trichloroethene	79-01-6	5	1 U	--	--	1 U	--	--	--
Trichlorofluoromethane	75-69-4	NV	1 U	--	--	1 U	--	--	--
Vinyl chloride	75-01-4	0.2	0.2 U	--	--	0.2 U	--	--	--
Xylenes, Total		1000	--	3 U	3 U	--	3 U	130	3 U

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Truck City Site Property
Mount Vernon, Washington

		Location:	TC-1	TC-1	TC-2	TC-3	TC-4	TC-5	TC-6
		Sample Name:	TC1-W-10.0	TCDup-W-10.0	TC2-W-10.0	TC3-W-10.0	TC4-W-10.0	TC5-W-10.0	TC6-W-10.0
		Collection Date:	07/17/2014	07/17/2014	07/18/2014	07/17/2014	07/18/2014	07/17/2014	07/18/2014
		Collection Depth (ft bgs):	10	10	10	10	10	10	10
cas_number	MTC A Method A								
PAHs (ug/L)									
1-Methylnaphthalene	90-12-0	NV	0.1 U	--	--	0.28	--	0.77	--
2-Methylnaphthalene	91-57-6	NV	0.1 U	--	--	0.34	--	0.48	--
Acenaphthene	83-32-9	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Acenaphthylene	208-96-8	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Anthracene	120-12-7	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Benzo(a)anthracene	56-55-3	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Benzo(a)pyrene	50-32-8	0.1	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Benzo(b)fluoranthene	205-99-2	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Benzo(ghi)perylene	191-24-2	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Benzo(k)fluoranthene	207-08-9	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Chrysene	218-01-9	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Dibenzo(a,h)anthracene	53-70-3	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Fluoranthene	206-44-0	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Fluorene	86-73-7	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Indeno(1,2,3-cd)pyrene	193-39-5	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Naphthalene	91-20-3	160	0.1 U	--	--	0.83	0.1 U	8.6	--
Phenanthrene	85-01-8	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Pyrene	129-00-0	NV	0.1 U	--	--	0.1 U	0.1 U	0.1 U	--
Total Metals (ug/L)									
Arsenic	7440-38-2	5	--	--	7.1 J	1.29	--	--	--
Barium	7440-39-3	NV	--	--	125 J	85.3	--	--	--
Cadmium	7440-43-9	NV	--	--	1 UJ	1 U	--	--	--
Chromium	7440-47-3	NV	--	--	1.02 J	2.29	--	--	--
Lead	7439-92-1	15	--	--	1 UJ	1 U	--	--	--
Manganese	7439-96-5	NV	--	1300 J	--	708	--	--	--
Mercury	7439-97-6	2	--	--	0.25 U	0.1 U	--	--	--
Selenium	7782-49-2	NV	--	--	1 UJ	1 U	--	--	--
Silver	7440-22-4	NV	--	--	1 UJ	1 U	--	--	--
Dissolved Metals (ug/L)									
Arsenic	7440-38-2	5	--	--	1.37	--	--	--	--
Barium	7440-39-3	NV	--	--	79.8	--	--	--	--
Cadmium	7440-43-9	NV	--	--	1 U	--	--	--	--
Chromium	7440-47-3	NV	--	--	1 U	--	--	--	--
Lead	7439-92-1	15	--	--	1 U	--	--	--	--
Manganese	7439-96-5	NV	1200	--	--	--	--	--	--

Table
Summary of Groundwater Analytical Results
Truck City Site Property
Mount Vernon, Washington

	Location: Sample Name: Collection Date: Collection Depth (ft bgs):		TC-1 TC1-W-10.0 07/17/2014 10	TC-1 TCDup-W-10.0 07/17/2014 10	TC-2 TC2-W-10.0 07/18/2014 10	TC-3 TC3-W-10.0 07/17/2014 10	TC-4 TC4-W-10.0 07/18/2014 10	TC-5 TC5-W-10.0 07/17/2014 10	TC-6 TC6-W-10.0 07/18/2014 10
	cas_number	MCA Method A							
Mercury	7439-97-6	2	--	--	0.1 U	--	--	--	--
Selenium	7782-49-2	NV	--	--	1 U	--	--	--	--
Silver	7440-22-4	NV	--	--	1 U	--	--	--	--
Dissolved Gases (ug/L)									
Methane	74-82-8	NV	7.1	--	--	48	--	--	--
Anions (mg/L)									
Nitrate		NV	0.329 J	--	--	1.47	--	--	--
Sulfate		NV	198	--	--	126	--	--	--
Ferrous Iron (mg/L)									
Ferrous Iron		NV	16.4	--	--	5.4	--	--	--
EPH (ug/L)									
C8-C10 Aliphatic Hydrocarbons		NV	80 U	--	--	--	--	213 U	--
C10-C12 Aliphatic Hydrocarbons		NV	80 U	--	--	--	--	213 U	--
C12-C16 Aliphatic Hydrocarbons		NV	80 U	--	--	--	--	213 U	--
C16-C21 Aliphatic Hydrocarbons		NV	80 U	--	--	--	--	213 U	--
C21-C34 Aliphatic Hydrocarbons		NV	162	--	--	--	--	271	--
C8-C10 Aromatic Hydrocarbons		NV	89.9 J	--	--	--	--	213 UJ	--
C10-C12 Aromatic Hydrocarbons		NV	80 UJ	--	--	--	--	213 UJ	--
C12-C16 Aromatic Hydrocarbons		NV	80 U	--	--	--	--	213 U	--
C16-C21 Aromatic Hydrocarbons		NV	86	--	--	--	--	676	--
C21-C34 Aromatic Hydrocarbons		NV	14500	--	--	--	--	49000	--
VPH (ug/L)									
C5-C6 Aliphatic Hydrocarbons		NV	10 U	--	--	214	--	--	--
C6-C8 Aliphatic Hydrocarbons		NV	10 U	--	--	80.7	--	--	--
C8-C10 Aliphatic Hydrocarbons		NV	10 U	--	--	44.3	--	--	--
C10-C12 Aliphatic Hydrocarbons		NV	10 U	--	--	99.2	--	--	--
C8-C10 Aromatic Hydrocarbons		NV	10 U	--	--	82.6	--	--	--
C10-C12 Aromatic Hydrocarbons		NV	10 U	--	--	117	--	--	--
C12-C13 Aromatic Hydrocarbons		NV	10 U	--	--	10 U	--	--	--
Benzene	5		5 U	--	--	5 U	--	--	--
Ethylbenzene	700		5 U	--	--	6.93	--	--	--
m,p-Xylene		NV	5 U	--	--	22.9	--	--	--
o-Xylene		NV	5 U	--	--	5 U	--	--	--
Methyl tert-butyl ether		20	5 U	--	--	5 U	--	--	--
Naphthalene		160	5 U	--	--	5 U	--	--	--
Toluene		1000	5 U	--	--	5 U	--	--	--

Table
Summary of Groundwater Analytical Results
Truck City Site Property
Mount Vernon, Washington

NOTES:

Result values in **bold** font indicate exceedance of MTCA Method A cleanup level. Non-detect results are not evaluated against MTCA cleanup levels.

Analytes and sample names with exceedances are also in **bold** font.

-- = not analyzed.

cas_number = Chemical Abstracts Service number

EPH = extractable petroleum hydrocarbons.

ft bgs = feet below ground surface.

J = Result is an estimated value.

mg/L = milligrams per liter.

MTCA Method A = Model Toxics Control Act Method A.

NV = no value.

PAH = polycyclic aromatic hydrocarbon.

TPH = total petroleum hydrocarbons.

U = Result is non-detect.

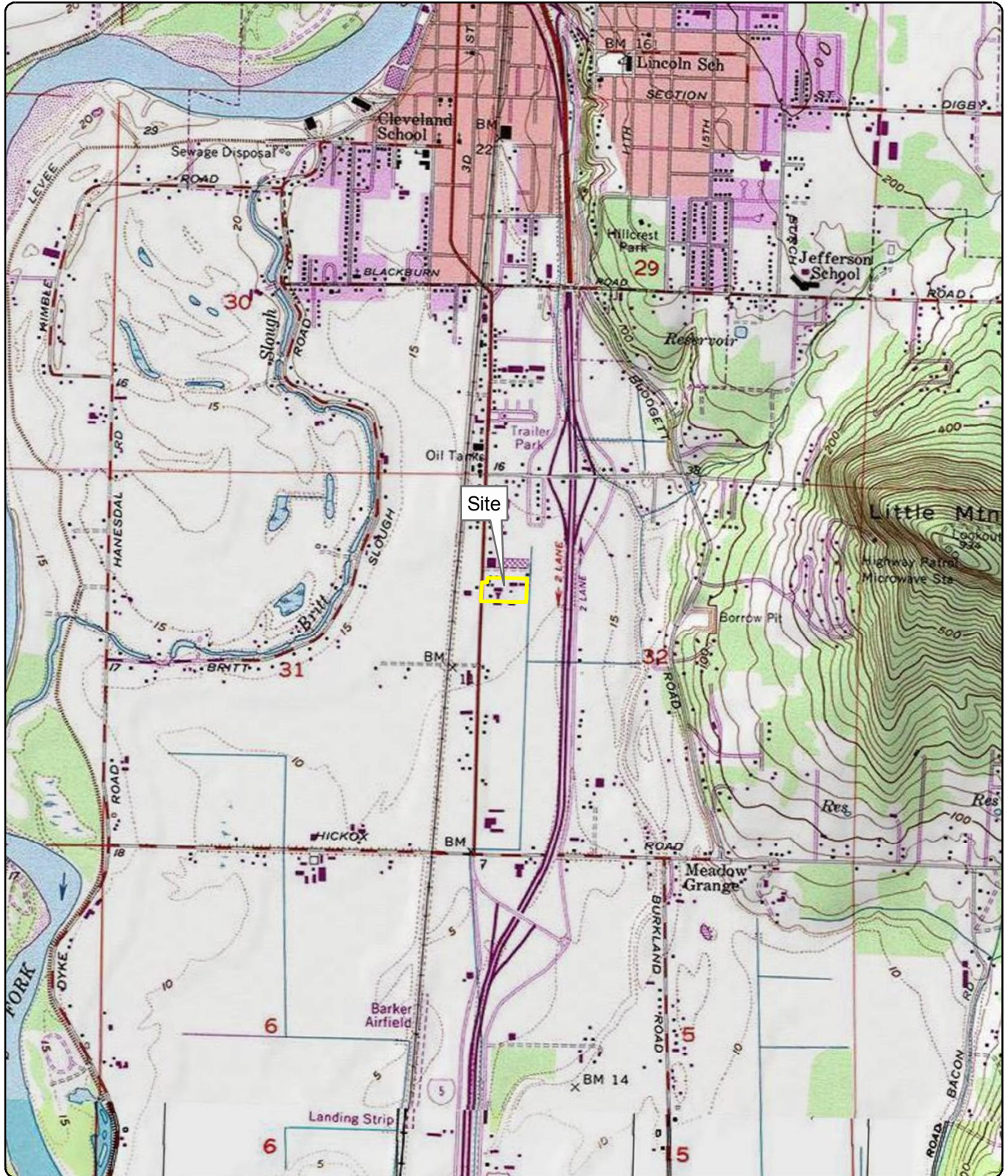
ug/L = micrograms per liter.

VOC = volatile organic compound.

VPH = volatile petroleum hydrocarbon.

FIGURES





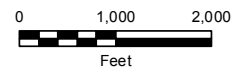
Source: US Geological Survey (1990) 7.5-minute topographic quadrangle: Mount Vernon Section 32, Township 34 North, Range 4 East

**Figure 1-1
Site Location**

Former Truck City Site
Mount Vernon, Washington



This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.



Project: 0714.02 Produced By: jmiller Approved By: Print Date: 01/25/2016 Path: X:\0714.03.01 Truck City Engineering Design Report\Projects\Remediation Action Report\Fig_2-1 Site Features and Previous Environmental Investigations.mxd



Figure 2-1
Pre-Remedial Action Site
Features and Previous
Environmental Investigations

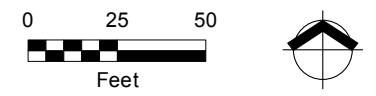
Former Truck City Site
Mount Vernon, Washington

Previous Investigation

- Hand Auger - Surface Sediment Sample
- Soil Borings
- Active Monitoring Well
- Decommissioned - No Steel Monument
- Decommissioned - Steel Monument
- Former Soil Excavation Area
- UST
- Septic System
- Parcel Boundary
- Catch Basin

Aerial Imagery Date: 2010

- Notes:
1. Site features were digitized from figures prepared by Materials Testing & Consulting, Inc., Associated Environmental Group, LLC, and Applied Geotechnology, Inc.
 2. The locations of all features are approximate.



Source: Aerial photograph obtained from Esri ArcGIS Online; parcels obtained from Skagit County



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Path: X:\0714.03.01 Truck City Engineering Design Report\Projects\Remediation Action Report\Fig. 2-2 Site Features and Locations of MFA Investigation.mxd
 Approved By: Yen-Vy Van Print Date: 01/25/2016
 Produced By: jmlter Project: 0714.02

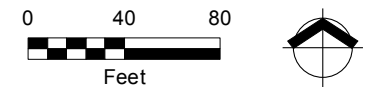


Figure 2-2
Pre-Remedial Action Site
Features and Locations
of MFA Investigation
 Former Truck City Site
 Mount Vernon, Washington

- MFA Investigation**
- Monitoring Well
- Previous Investigation**
- Existing Monitoring Well
 - Former Soil Excavation Extent, 1993
 - Decommissioned/Removed Monitoring Well
 - Catch Basin
- Underground Utilities**
- Communications
 - Electric
 - Gas
 - Water
 - UST
 - Septic System
 - Site Boundary
 - Parcel Boundary

Aerial Imagery Date: 2010

- Notes:**
1. Site features were digitized from figures prepared by Materials Testing & Consulting, Inc., Associated Environmental Group, LLC, and Applied Geotechnology, Inc. Utilities and well positions imported from survey by Pacific Geomatic Services in July 2014.
 2. The locations of digitized features are approximate.
 3. UST = underground storage tank



Source: Aerial photograph obtained from Esri ArcGIS Online; parcels obtained from Skagit County; well and utility positions from Pacific Geomatic Services, July 2014.



This product is for informational purposes and may not have been prepared for, or be suitable for, legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Project: 0714.02 Produced By: jmlr Approved By: yvan Print Date: 01/04/2016 Path: X:\0714.03.01 Truck City Engineering Design Report\Projects\Remediation Action Report\Fig. 5-1 Site Overview.mxd

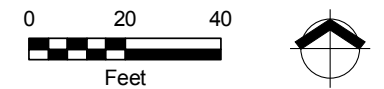


**Figure 2-3
Site Overview -
Remedial Action**
Former Truck City Site
Mount Vernon, Washington

MFA Investigation

- Monitoring Well
- ⊗ Decommissioned/ Removed Monitoring Well
- Historical Monitoring Well
- ⋯ Estimated Remedial Action Extent, 2015
- UST
- ▭ Parcel Boundary
- Catch Basin

Notes:
1. Site features were digitized from figures prepared by Materials Testing & Consulting, Inc., Associated Environmental Group, LLC, and Applied Geotechnology, Inc.
2. The locations of all features are approximate.



Source: Aerial photograph (2010) obtained from Esri ArcGIS Online; parcels obtained from Skagit County.

Project: 0714.02 Produced By: jmlr Approved By: ywan Print Date: 01/04/2016 Path: X:\0714.03.01 Truck City Engineering Design Report\Projects Remediation Action Report\Fig_10-1 Estimated Extent of Groundwater Plume wRA Extent.mxd

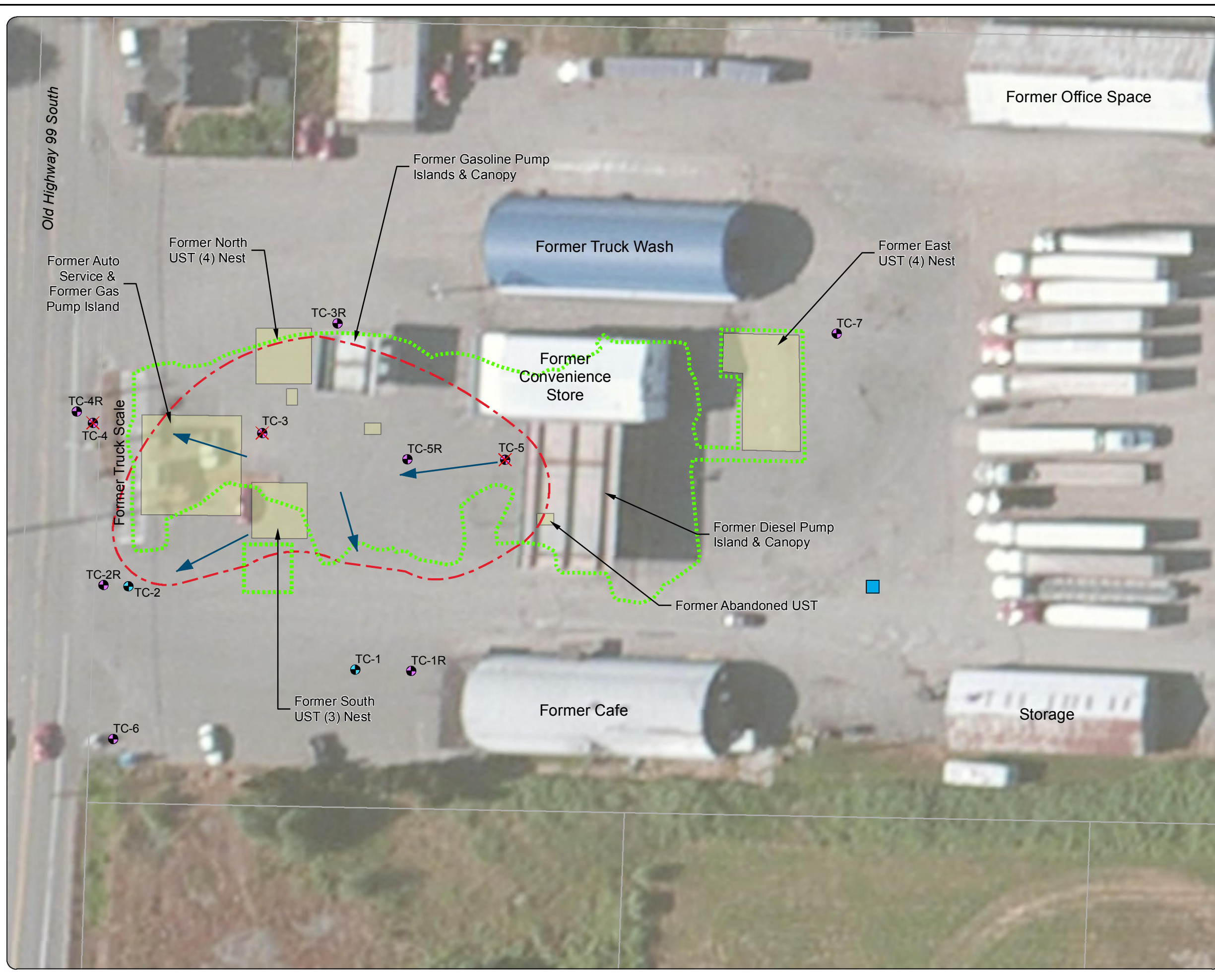
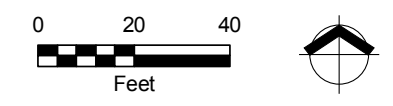


Figure 3-1
Estimated Extent of
Groundwater Plume
 Former Truck City Site
 Mount Vernon, Washington

- MFA Investigation**
- Monitoring Well
 - ⊗ Decommissioned/ Removed Monitoring Well
 - Proposed To Be Decommissioned By Removal
 - ➔ Seasonal Groundwater Flow Directions
 - ⬡ Estimated Remedial Action Extent, 2015
 - ⬡ Estimated Extent Of Groundwater Contamination
 - ▭ UST
 - ▭ Parcel Boundary
 - ▭ Catch Basin

Notes:

1. Site features were digitized from figures prepared by Materials Testing & Consulting, Inc., Associated Environmental Group, LLC, and Applied Geotechnology, Inc.
2. The locations of all features are approximate.



Source: Aerial photograph (2010) obtained from Esri ArcGIS Online; parcels obtained from Skagit County.

This product is for informational purposes and may not have been prepared for, or be suitable for, legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Project: 0714.02 Produced By: jmlr Approved By: Print Date: 01/04/2016 Path: X:\0714.03\01 Truck City Engineering Design Report\Projects Remediation Action Report\Fig. 11-1 Proposed Mont Wells Locations.mxd

**Figure 4-1
Proposed Replacement
Monitoring Wells Locations**

Former Truck City Site
Mount Vernon, Washington

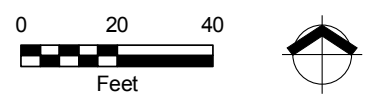


- Proposed Jail Building Footprint
- Proposed Retention Pond
- Estimated Remedial Action Extent, 2015

MFA Investigation

- + Existing Monitoring Well
- X Decommissioned/ Removed Monitoring Well
- + Proposed Replacement Monitoring Well

Notes:
 1. Site features were digitized from figures prepared by Materials Testing & Consulting, Inc., Associated Environmental Group, LLC, and Applied Geotechnology, Inc.
 2. The locations of all features are approximate.



Source: Aerial photograph (2010) obtained from Esri ArcGIS Online; parcels obtained from Skagit County.



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APPENDIX A

GROUNDWATER MONITORING WELL NETWORK CONSTRUCTION LOGS



Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number
0714.02.02

Well Number
TC-1

Sheet
1 of 1

Project Name **Truck City Site**
 Project Location **Mount Vernon, WA**
 Start/End Date **7/15/2014 to 7/17/2014**
 Driller/Equipment **Holt Services, Inc./Geoprobe 7822DT**
 Geologist/Engineer **Yen-Vy Van**
 Sample Method **Geoprobe**

TOC Elevation (feet)
 Surface Elevation (feet)
 Northing
 Easting
 Hole Depth **15.0-feet**
 Outer Hole Diam **3.5-inch**

Depth (feet, BGS)	Well Details	Interval	Percent Recovery	Collection Method	Sample Data			Blows/6"	Lithologic Column	Soil Description
					Number	Name (Type)				
0.0 to 0.4									0.0 to 0.4 feet: ASPHALT.	
0.4 to 1.0									0.4 to 1.0 feet: BASE GRAVEL (GP); gray; 100% gravel. (FILL)	
1.0 to 5.0									1.0 to 5.0 feet: SILTY SAND with GRAVEL (SM); medium brown; 20% fines; 65% sand; 15% gravel; medium dense; moist.	
5.0 to 10.0			10	GP		TC1-S1-5.0 PID = 0.0 ppm			5.0 to 10.0 feet: SANDY SILT (ML); gray; 55% fines; 45% sand, fine grained; soft to medium stiff; moist to wet @ 8.5 feet.	
10.0 to 15.0			100	GP		TC1-S2-8.5 PID = 0.0 ppm			10.0 to 15.0 feet: POORLY GRADED SAND (SP); gray; 5% fines; 95% sand, well sorted, fine grained from 10.0 to 13.5 feet, medium grained from 13.5 to 15.0 feet; loose to medium dense; saturated.	
15.0						TC1-S3-15.0				

GBLWC: W:\GINT\GINT\PROJECTS\0714.02.02\TRUCK CITY TC1-TCBH4.GPJ 1/21/16

NOTES: Ecology Well ID #BIP 878. Boring completed as pre-packed 2" well.
 PID = photoionization detector.
 ppm = parts per million.

▽ Water level observed at time of drilling. ▼ Water level observed after well development.

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number
0714.02.02

Well Number
TC-2

Sheet
1 of 1

Project Name **Truck City Site**
 Project Location **Mount Vernon, WA**
 Start/End Date **7/17/2014 to 7/17/2014**
 Driller/Equipment **Holt Services, Inc./Geoprobe 7822DT**
 Geologist/Engineer **Yen-Vy Van**
 Sample Method **Geoprobe**

TOC Elevation (feet)
 Surface Elevation (feet)
 Northing
 Easting
 Hole Depth **15.0-feet**
 Outer Hole Diam **3.5-inch**

Depth (feet, BGS)	Well Details	Sample Data			Blows/6"	Lithologic Column	Soil Description
		Interval	Percent Recovery	Collection Method			
1							0.0 to 0.4 feet: ASPHALT.
2							0.4 to 5.0 feet: SANDY GRAVEL (GW); tan brown; 5% fines; 35% sand, fine to coarse; 60% gravel, fine to medium, subangular; medium dense; dry. (FILL)
3							
4							
5		100		GP			5.0 to 6.5 feet: SILTY SAND (SM); grayish brown; 35% fines; 65% sand; medium dense; moist to wet @ 6.5 feet.
6							
7							6.5 to 10.0 feet: SILT (ML); medium to dark gray; 100% fines; soft; intermittent pockets of silty clay; saturated from 7.0 to 8.0 feet, moist to wet @ 9.0 feet.
8							
9							
10		100		GP			10.0 to 14.5 feet: POORLY GRADED SAND (SP); gray; 5% fines; 95% sand, medium, well sorted; medium dense; saturated @ 11.0-14.5 feet.
11							
12							
13							
14							
15							14.5 to 15.0 feet: CLAY (CL); gray; 100% fines, high plasticity; soft; local wood chips; moist to wet.

NOTES: Ecology Well ID #BIP 879. Boring completed as pre-packed 2" well.
 PID = photoionization detector.
 ppm = parts per million.



Water level observed at time of drilling.



Water level observed after well development.

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number
0714.02.02

Well Number
TC-3

Sheet
1 of 1

Project Name **Truck City Site**
 Project Location **Mount Vernon, WA**
 Start/End Date **7/17/2014 to 7/17/2014**
 Driller/Equipment **Holt Services, Inc./Geoprobe 7822DT**
 Geologist/Engineer **Yen-Vy Van**
 Sample Method **Geoprobe**

TOC Elevation (feet)
 Surface Elevation (feet)
 Northing
 Easting
 Hole Depth **15.0-feet**
 Outer Hole Diam **3.5-inch**

Depth (feet, BGS)	Well Details	Interval	Percent Recovery	Collection Method	Sample Data			Blows/6"	Lithologic Column	Soil Description
					Number	Name (Type)				
1										0.0 to 0.4 feet: ASPHALT.
2										0.4 to 8.5 feet: SANDY GRAVEL (GW); tan brown; 5% fines; 35% sand, fine to coarse; 60% gravel, fine to medium, subangular; medium dense; dry. (FILL)
3										
4										
5										
6		100								
7										
8										
9						TC3-S-8.5 PID = 712 ppm				8.5 to 9.0 feet: SILTY SAND (SM); gray; 35% fines; 65% sand; medium dense; strong fuel odor; moist.
10		100				TC3-S-9.7 PID = 712 ppm				9.0 to 14.0 feet: POORLY GRADED SAND (SP); dark gray; 5% fines; 90% sand, medium, well sorted; 5% gravel; local fine subangular gravel; strong fuel odor; moist to wet, saturated @ 10.0 to 11.5 feet.
11										
12										
13										
14										
15						TC3-S-15.0 PID = 0.3 ppm				14.0 to 15.0 feet: SILTY SAND (SM); gray; 35% fines; 65% sand; medium dense; moist to wet.

GBLWC WA\GINTGINTWPROJECTS\0714.02.02\TRUCK CITY TC1-TCBH4.GPJ 1/21/16

NOTES: Ecology Well ID #BIP 877. Boring completed as pre-packed 2" well. Impacted from approximately 8.5 to 15.0 feet.
 PID = photoionization detector.
 ppm = parts per million.



Water level observed at time of drilling.



Water level observed after well development.

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number
0714.02.02

Well Number
TC-4

Sheet
1 of 1

Project Name **Truck City Site**
 Project Location **Mount Vernon, WA**
 Start/End Date **7/16/2014 to 7/16/2014**
 Driller/Equipment **Holt Services, Inc./Geoprobe 7822DT**
 Geologist/Engineer **Yen-Vy Van**
 Sample Method **Geoprobe**

TOC Elevation (feet)
 Surface Elevation (feet)
 Northing
 Easting
 Hole Depth **15.0-feet**
 Outer Hole Diam **3.5-inch**

Depth (feet, BGS)	Well Details	Interval	Percent Recovery	Collection Method	Sample Data			Blows/6"	Lithologic Column	Soil Description
					Number	Name (Type)				
0.0 to 0.4									0.0 to 0.4 feet: ASPHALT.	
0.4 to 2.5									0.4 to 2.5 feet: BASE GRAVEL / SILTY SAND (GW); dark brown and gray; 10% fines; 30% sand; 60% gravel; medium dense to dense; dry. (FILL)	
2.5 to 7.0									2.5 to 7.0 feet: SILTY SAND (SM); light to medium brown; 35% fines; 65% sand; local fine subangular gravel; local iron oxidation staining; dry.	
7.0 to 9.0									7.0 to 9.0 feet: SILT (ML); gray; 100% fines; medium stiff; layered silt; moist to wet @ 7.0 feet, saturated @ 7.5 to 9.0 feet.	
9.0 to 15.0									9.0 to 15.0 feet: POORLY GRADED SAND (SP); gray; 5% fines; 95% sand, well sorted, medium grained; saturated @ 9.0 to 14.0 feet, moist to wet @ 15.0 feet.	
100				GP						
100				GP		TC4-S-2.0				
100				GP		TC4-S-5.0 PID = 0.0 ppm				
100				GP		TC4-S-7.0 PID = 0.0 ppm				
100				GP		TC4-S-15.0 PID = 1.3 ppm				

GBLWC: W:\GINT\GINT\PROJECTS\0714.02.02\TRUCK CITY TC1-TCBH4.GPJ 1/21/16

NOTES: Ecology Well ID #BIP 875. Boring completed as pre-packed 2" well.
 PID = photoionization detector.
 ppm = parts per million.



Water level observed at time of drilling.



Water level observed after well development.

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number
0714.02.02

Well Number
TC-5

Sheet
1 of 1

Project Name **Truck City Site**
 Project Location **Mount Vernon, WA**
 Start/End Date **7/17/2014 to 7/17/2014**
 Driller/Equipment **Holt Services, Inc./Geoprobe 7822DT**
 Geologist/Engineer **Yen-Vy Van**
 Sample Method **Geoprobe**

TOC Elevation (feet)
 Surface Elevation (feet)
 Northing
 Easting
 Hole Depth **15.0-feet**
 Outer Hole Diam **3.5-inch**

Depth (feet, BGS)	Well Details	Interval	Percent Recovery	Collection Method	Sample Data			Blows/6"	Lithologic Column	Soil Description
					Number	Name (Type)				
0.0 to 0.4									ASPHALT.	
0.4 to 4.0									SANDY GRAVEL (GW); tan brown; 10% fines; 25% sand; 65% gravel, fine to coarse, subangular; medium dense; dry. (FILL)	
4.0 to 5.0									GRAVELLY SAND (SW); grayish brown; 15% fines; 60% sand, fine to coarse; 25% gravel; medium dense; moist.	
5.0 to 6.5		20							SILTY CLAY (CL); medium brown; 100% fines, low plasticity; soft; moist.	
6.5 to 13.0									SILTY SAND (SM); grayish brown; 35% fines; 65% sand; loose; moist to saturated @ 10.0 feet.	
10.0		100							TC5-S-9.5 PID = 0.0 ppm	
13.0 to 14.0									SANDY SILT (ML); gray; 75% fines; 25% sand; slight sheen; saturated.	
14.0 to 15.0									TC5-S-13.0 TC5-S-15.0 PID = 1.8 ppm	
									POORLY GRADED SAND (SP); dark gray; 5% fines; 95% sand, well sorted, medium; medium dense; strong diesel-like fuel odor; moist to wet.	

GBLWC WA\GINTGINTWPROJECTS\0714.02.02\TRUCK CITY TC1-TCBH4.GPJ 1/21/16

NOTES: Ecology Well ID #BIP 876. Boring completed as pre-packed 2" well. Fuel impacted from approximately 10.0 to 15.0 feet.
 PID = photoionization detector.
 ppm = parts per million.

 **Water level observed at time of drilling.**

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number
0714.02.02

Well Number
TC-6

Sheet
1 of 1

Project Name **Truck City Site**
 Project Location **Mount Vernon, WA**
 Start/End Date **7/17/2014 to 7/17/2014**
 Driller/Equipment **Holt Services, Inc./Geoprobe 7822DT**
 Geologist/Engineer **Yen-Vy Van**
 Sample Method **Geoprobe**

TOC Elevation (feet)
 Surface Elevation (feet)
 Northing
 Easting
 Hole Depth **15.0-feet**
 Outer Hole Diam **3.5-inch**

Depth (feet, BGS)	Well Details	Interval	Percent Recovery	Collection Method	Sample Data			Lithologic Column	Soil Description
					Number	Name (Type)	Blows/6"		
0.0 to 0.4								0.0 to 0.4 feet: ASPHALT.	
0.4 to 3.0								0.4 to 3.0 feet: SAND with GRAVEL (SW); black brown; 10% fines; 75% sand; 15% gravel; loose; moist.	
3.0 to 7.0					TC6-S-3.0 PID = 0.0 ppm			3.0 to 7.0 feet: SILTY SANDY CLAY (CL); light brown; 75% fines, moderate plasticity; 25% sand; medium stiff; abundant iron oxidation staining; moist to wet @ 7.0 feet.	
7.0 to 9.0					TC6-S-7.0 PID = 1.3 ppm			7.0 to 9.0 feet: SILTY CLAY (CL); gray; 100% fines, low plasticity; soft; saturated.	
9.0 to 12.5								9.0 to 12.5 feet: SILTY SAND (SM); gray; 35% fines; 65% sand; medium dense; saturated.	
12.5 to 13.5					TC6-S-12.5			12.5 to 13.5 feet: POORLY GRADED SAND (SP); 10% fines; 90% sand, well sorted, medium; medium dense; saturated.	
13.5 to 15.0					TC6-S-13.5			13.5 to 15.0 feet: SILTY SAND (SM); gray; 35% fines; 65% sand; medium dense; moist to wet.	
15.0					TC6-S-15.0 PID = 28.5 ppm				

GBLWC: W:\GINT\GINT\PROJECTS\0714.02.02\TRUCK CITY TC1-TCBH4.GPJ 1/21/16

NOTES: Ecology Well ID #BIP 880. Boring completed as pre-packed 2" well.
 PID = photoionization detector.
 ppm = parts per million.



Water level observed at time of drilling.



Water level observed after well development.

APPENDIX B

SAMPLING AND ANALYSIS PLAN



SAMPLING AND ANALYSIS PLAN

FORMER TRUCK CITY SITE
3216 OLD HIGHWAY 99 SOUTH
MOUNT VERNON, WASHINGTON

Prepared for
SKAGIT COUNTY
MOUNT VERNON, WASHINGTON
March 30, 2016

Project No. 0714.03.01

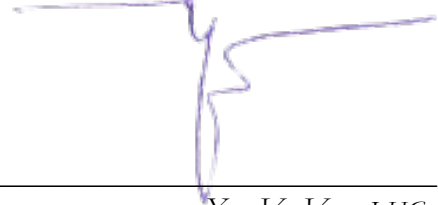
Prepared by
Maul Foster & Alongi, Inc.
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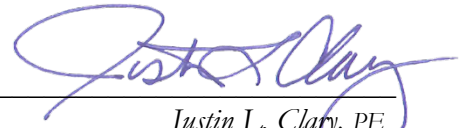
SAMPLING AND ANALYSIS PLAN
GROUNDWATER MONITORING PLAN
FORMER TRUCK CITY SITE
3216 OLD HIGHWAY 99 SOUTH
MOUNT VERNON, WASHINGTON

*The material and data in this plan were prepared
under the supervision and direction of the undersigned.*

MAUL FOSTER & ALONGI, INC.



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FOLLOWING PLAN:

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GROUNDWATER SAMPLE HANDLING SUMMARY

ACRONYMS AND ABBREVIATIONS

the County	Skagit County, Washington
COC	chain of custody
COI	chemical of interest
CUL	cleanup level
Ecology	Washington State Department of Ecology
GMP	groundwater monitoring plan
IDW	investigation-derived waste
IHS	indicator hazardous substance
LCS	laboratory control sample
LDS	laboratory duplicate sample
MFA	Maul Foster & Alongi, Inc.
MS/MSD	matrix spike and matrix spike duplicate
QA	quality assurance
QC	quality control
SAP	sampling and analysis plan
Site	former Truck City, 3216 Old Highway 99 South, Mount Vernon, Washington
USEPA	U.S. Environmental Protection Agency
WAC	Washington Administrative Code

1 INTRODUCTION

Maul Foster and Alongi, Inc. (MFA) has prepared this sampling and analysis plan (SAP), including quality assurance project plan elements, consistent with the requirements of Washington Administrative Code (WAC) 173-340-820, on behalf of Skagit County (the County) for the former Truck City Truck Stop facility located at 3216 Old Highway 99 South, Mount Vernon, Skagit County, Washington, Washington State Department of Ecology (Ecology) Facility Site No. 2673, Cleanup Site ID: 5176, Agreed Order 15 2 00056 2 (Site) (see Figure 1-1), to guide the collection of groundwater samples during groundwater compliance monitoring events.

This SAP has been prepared consistent with the requirements in Ecology's Guidance on Sampling and Data Analysis Methods (Ecology, 1995), Guidance for Preparing Quality Assurance Project Plans for Environmental Studies (Ecology, 2004), and the Model Toxics Control Act (WAC Chapter 173-340).

1.1 Investigation Objectives

The primary objective of this SAP is to establish procedures for the collection of data of sufficient quality to evaluate the nature and extent of impacted groundwater at the Site. The groundwater compliance monitoring plan (CMP) references the relevant procedures and protocols from this SAP and the locations, frequency, and types of field or laboratory analyses that will be conducted. This SAP is meant to ensure that reliable data are obtained to support consideration of additional remedial actions at the Site, if such actions are necessary, for the protection of human health and the environment, and ultimate demonstration of Site compliance with associated cleanup levels (CULs). It provides a consistent set of procedures that will be used throughout implementation of the CMP.

If a phase of work or an otherwise unforeseen change in methodology requires modification to this SAP, an addendum will be prepared that describes the specific revision(s) or the alternative procedure(s). Procedures are provided that will be used to direct the monitoring process so that the following conditions are met:

- Data collected are of high quality, representative, and verifiable.
- Use of resources is cost-effective.
- Data can be used by the County and by Ecology to support compliance monitoring for the selected Site remedy.

This SAP provides guidance on procedures for groundwater sampling, monitoring well installation and decommissioning (as applicable), and management of investigation-derived waste (IDW). It also includes procedures for collecting, analyzing, evaluating, and reporting useful data. The document includes quality assurance (QA) procedures for field activities, sampling QA and quality control (QC) procedures, and data validation. The goal of the procedures outlined in this SAP is to obtain reliable

data about physical, environmental, and chemical conditions at the Site in order to support the goals and objectives of the CMP.

2 ACCESS AND SITE PREPARATION

2.1 Access

MFA personnel will be on the Site during compliance monitoring activities. Access to the Site is allowed at all reasonable times for the purpose of performing work, as stipulated in the Agreed Order. Work activities resulting in loud noises will generally be confined to the hours between 7 a.m. and 7 p.m. MFA will notify the County and Ecology before beginning work at the Site.

2.2 Site Preparation

As applicable, before any subsurface field activities (e.g., monitoring well installation) begin at the Site, public and private utility-locating services will be used to check for underground utilities and pipelines near each proposed well or boring location. MFA will coordinate fieldwork with the County to define the locations of possible on-site utilities, piping, and other subsurface obstructions. Ecology will be notified a minimum of 48 hours before activities begin at the Site.

3 GROUNDWATER ASSESSMENT

Procedures for installing monitoring wells are provided below, as future replacement monitoring well installation activities will be necessary, as presented in MFA's As-Built Construction Complete Report (MFA, 2016).

3.1 Monitoring Well Installation

Monitoring wells will be constructed according to the Washington well construction standards (Chapter 173-160 WAC) and as described below.

- Monitoring wells will be constructed with 2-inch-diameter polyvinyl chloride or stainless-steel riser pipe and screened sections consisting of 0.010-inch machine slots. The monitoring wells may be constructed with prepacked well screen with 10 x 20 washed silica sand or by placing materials downhole, consistent with the WAC regulation listed above.
- Additional filter pack may be placed around the prepacked screen (if used). The additional filter pack will consist of graded 10 x 20 washed silica sand and will extend a maximum of 1 foot below the bottom of the screen and 3 feet above the top of the screen. A

weighted line will be used to monitor the level of the filter pack during installation. The filter pack may be surged during installation.

- Bentonite grout or hydrated chips (e.g., 0.75-inch minus) will be used to seal the annulus above the filter pack. Potable water will be used. A weighted line will be used to measure the top of the bentonite chips as they are poured into place.
- After installation, the well will be mechanically developed by surging, bailing, or pumping to remove sediment that may have accumulated during installation and to improve the hydraulic connection with the water-bearing zone.
- Water-quality field parameters such as specific conductance, pH, temperature, and turbidity will be measured during well-purging activities. The wells will be purged until the turbidity measurements are 10 nephelometric turbidity units or fewer, or until there is no noticeable decrease in turbidity. To the extent practical, water-quality field parameters will be considered stable when the specific conductance is within 10 percent of the previous reading, pH is within 0.1 standard unit of the previous reading, and temperature is within 0.1 degree Celsius of the previous reading.

During well installation, a log of the soil will be prepared by a geologist or hydrogeologist licensed by the State of Washington, or a person working under the direct supervision of a geologist or hydrogeologist licensed by the State of Washington. Site characterization of the extent of the dissolved phase plume is considered complete based on findings from MFA's remedial investigation (MFA, 2014) and prior groundwater sampling completed at the Site. Therefore, soil samples associated with any future borings are not anticipated to be collected for chemical analysis. Soil logs will include information such as the project name and location, the name of the drilling contractor, the drilling method, the sampling method, sample depths, blow counts (if applicable), a description of soil encountered, and screened intervals. Soils will be described using American Society for Testing and Materials D2488-00, as well as Standard Practice for Description and Identification of Soils (Visual-Manual Procedures). The information will be recorded on an MFA boring log form, as shown in Appendix A, or in field notes.

3.2 Groundwater Elevations

Depth of light non-aqueous phase liquid (LNAPL) or free-product and water-level measurements will be recorded, to the nearest 0.01 foot, using an Interface probe and/or an electronic water-level indicator. If LNAPL is present, a measurement of its thickness will be recorded. Groundwater elevations at wells with LNAPL present will be corrected to compensate for the effect of differing densities of the LNAPL and water. If the total well or boring depth is not known, the total depth will also be measured. Water depth will be measured from the designated measuring point (typically the top of the casing on the north side, which is typically a polyvinyl-chloride riser pipe). The measuring point will be marked so that readings are measured from the same reference point during each monitoring event, and the measuring-point elevation will be surveyed. During monitoring events, the well condition (including the condition of the lock, monument integrity, and legibility of well labels) will be recorded for each location. The water-level indicator will be decontaminated between wells in accordance with the procedures outlined in Section 3.5.

3.3 Surveying

The installation locations for proposed wells, as applicable, and other features of interest will be surveyed using a global positioning unit (e.g., Trimble™) capable of submeter accuracy. The location and measuring-point elevation for newly installed monitoring wells will be surveyed by a licensed surveyor.

The Trimble global positioning unit will tie in to published survey control, establish onsite control, and survey horizontal positions of monitoring wells. The published accuracy of the Trimble system, which is calibrated annually by a Trimble Certified Service Center, is as follows:

Network RTK Positioning Performance
Horizontal 8 mm + 0.5 ppm RMS
Vertical. 15 mm + 0.5 ppm RMS

If there is not an established Washington State Department of Transportation benchmark onsite, the surveyors will use a differential level loop from the established onsite control, through all of the monitoring wells, to survey their elevations. Differential level loops are only accepted if the data are within 0.02 feet. The survey would be re-run if accuracy is not within this range. The referenced survey datum for the Site is NAVD88 datum in the State Plane South Projection.

3.4 Equipment Cleaning and Decontamination

3.4.1 Drilling Equipment

The working area of the drill rig and downhole drilling equipment will be steam-cleaned or pressure-washed after arrival on the Site and after use in each borehole or monitoring well. Decontamination fluids will be transferred to drums approved by the Washington State Department of Transportation, and will be managed according to the procedures outlined in Section 3.6.

3.4.2 Sampling Equipment

Nondisposable sampling equipment and reusable materials that contact soil or water will be decontaminated onsite and before and after use for each sample and sampling location. Decontamination will consist of the following:

- Tap-water rinse (may consist of an equivalent high-pressure or hot-water rinse); visible soil to be removed by scrubbing
- Nonphosphate detergent wash, consisting of a dilute mixture of Liqui-Nox® (or equivalent) and tap water
- Distilled-water rinse
- Methanol solution rinse (1:1 solution of methanol with distilled water)

Decontamination fluids will be transferred to drums for management.

3.5 Management of Investigation-Derived Waste

IDW may include items such as soil cuttings, purged groundwater, decontamination fluids, sampling debris, and personal protective equipment. The IDW will be segregated into solids, liquids, and sampling debris (e.g., personal protective equipment, tubing, bailers). IDW will be stored in a designated area on the Site in Washington State Department of Transportation approved drums.

Drums will be labeled with their contents, the approximate volume of material, the date of collection, and the origin of the material. The drums will be sealed, secured, and transferred to a designated area on the Site, pending characterization. Analytical data from groundwater-sampling activities previously described may be used to characterize the soil cuttings, drilling fluids, purge water, and decontamination fluids generated during drilling and monitoring well sampling. A plan for IDW management, specific to future field tasks, will be developed prior to conducting the associated fieldwork.

4 GROUNDWATER SAMPLING

Groundwater samples will be collected from monitoring wells following the procedures outlined below.

4.1 Monitoring Well Groundwater Sampling

If a peristaltic pump is used, standard low-flow sampling techniques will be used to collect groundwater samples from monitoring wells, per Ecology Standard Operating Procedure and Sampling Monitoring Wells (Ecology, 2015). If possible, groundwater samples should be collected from the middle of the screened interval or, if the water level is below the top of the screen, from the middle of the water column. New and disposable teflon-lined polyethylene tubing will be used at each monitoring location.

Before collection of groundwater samples, the water level will be measured, and the well will be purged. If a peristaltic pump is used, the well should be purged at a low flow rate (e.g., 0.1 to 0.5 liter per minute). A minimum of three well volumes will be purged before sample collection, or until selected water-quality field parameters (e.g., temperature, specific conductance, oxidation-reduction potential, pH, turbidity) have stabilized. If the well goes dry during purging, a sample can be collected once the well recharges enough water; field observations regarding the length of time for a well to recharge will be recorded. During purging, flow rates, water levels, and water quality parameters will be recorded on an appropriate field form or in field notes. Groundwater will be transferred directly into laboratory-supplied containers specific to the analysis required.

4.2 Nomenclature

Groundwater samples will be labeled with a prefix to describe the sampling location identification number. A “W” will indicate a water-sample matrix, and the midpoint of the screened or open area sample depth will be recorded in feet. For example, a groundwater sample collected from monitoring well TC1, with a screen from 5 to 15 feet below ground surface, will have the sample nomenclature of TC1-W-10.0.

Duplicate groundwater samples will replace the location number with “DUP,” and the sample will have the same sample time as the primary sample. To avoid confusion, collection of more than one duplicate sample from the same depth, at the same date and time, should be avoided. A duplicate sample of the abovementioned sample would appear as TCDUP-W-10.0.

Relevant sample information will be documented on the exploratory boring log (see Appendix A) or a field-sampling data sheet (see Appendix B); documentation may include items such as the screened interval or open space, equipment used, water-quality field parameters, and the amount of water purged before sampling. The screened interval or open borehole will be recorded on the boring log.

5 ANALYTICAL METHODS

5.1 Chemicals of Interest

All compliance monitoring-network wells defined in the CMP will be analyzed for the following chemicals, which have been identified as indicator hazardous substances (IHS) for Site groundwater:

- Gasoline-range total petroleum hydrocarbons
- Diesel-range total petroleum hydrocarbons
- Benzene
- Ethylbenzene
- Toluene
- Xylenes

Groundwater samples from two monitoring wells within the network will also be analyzed on a semiannual basis for the following geochemical parameters to prescreen for the presence of electron acceptors and evaluate the biodegradation process at the Site:

- Nitrate
- Manganese
- Ferrous iron
- Sulfate
- Methane

All samples will be analyzed using standard analytical laboratory turnaround time. Analytical methods and sample handling procedures for these IHS are included in the attached table.

5.2 Laboratory Test Methods and Reporting Limits

5.2.1 Groundwater

In accordance with the QA/QC requirements set forth in this SAP, a Washington State–accredited laboratory will perform the following analyses. Laboratory methods are summarized below and in the attached table:

- Gasoline-range total petroleum hydrocarbons by Northwest Method NWTPH-Gx
- Diesel-range total petroleum hydrocarbons by Northwest Method NWTPH-Dx
- Petroleum-associated VOC, specifically benzene, toluene, ethylbenzene, and xylenes by United States Environmental Protection Agency (USEPA) Method 8260 or 8021

5.3 QA/QC Samples Generated in Field

To ensure that field samples and quantitative field measurements are representative of the media collected and conditions being measured, sample collection and measurement methods will follow procedures documented in Section 4.1. QC samples collected in the field include field equipment rinsate blanks, trip blanks, and field duplicates. Field QC samples will be identified on field-data sampling sheets. Field and trip-blank results may indicate possible contamination introduced by field or laboratory procedures; field duplicates indicate precision in both field and laboratory procedures.

5.4 Laboratory Operations

In the laboratory, QC samples may include matrix spike and matrix spike duplicate (MS/MSD) samples, laboratory control samples (LCSs), surrogate spike samples, and method blanks, as well as other QC samples and procedures, as required by the individual methods.

5.5 Sample Containers, Preservation, and Handling

5.5.1 Preservation

Water samples will be collected in laboratory-supplied containers with preservatives, as applicable, as summarized in the table.

All samples will be stored in iced coolers at approximately 4 degrees Celsius. Sample containers will be supplied by the laboratory.

5.5.2 Sample Packaging and Shipping

All samples will be stored in shipping containers with ice or a refrigerator designated for samples, and be transported to the analytical laboratory. All samples will be submitted to the analytical laboratory within the timeframes needed to allow for analysis within the applicable holding time (see table).

5.6 Sample Custody

Sample custody will be tracked from point of origin through analysis and disposal, using a chain-of-custody (COC) form, which will be filled out with the appropriate sample and analytical information after samples are collected.

The following items will be recorded on the COC form:

- Project name
- Project number
- MFA project manager
- Sampler name(s)
- Sample number, date and time collected, media, number of bottles submitted
- Requested analyses for each sample
- Type of data package required
- Turnaround requirements
- Signature, printed name, and organization name of persons having custody of samples, and date and time of transfer
- Additional instructions or considerations that would affect analysis (nonaqueous layers, archiving, etc.)

Persons in possession of the samples will be required to sign and date the COC form whenever samples are transferred between individuals or organizations. The COC will be included in the shipping containers. The laboratory will implement its in-house custody procedures, which begin when sample custody is transferred to laboratory personnel.

If samples are shipped via air or ground transportation (by a third party), the following custody procedures will be followed. The COC will be signed and custody will be relinquished to the carrier. The signed COC(s) will be packed in shipping containers with the samples, and a custody seal will be placed on the container. The shipping documentation will be used by the carrier to document custody of the package while it is in transit to the laboratory.

At the analytical laboratory, a designated sample custodian will accept custody of the samples and will verify that the COC form matches the samples received. The shipping container or set of containers

is given a laboratory identification number, and each sample is assigned a unique sequential identification number.

5.7 Instrumentation

5.7.1 Field Instrumentation

Field instruments will be used during the investigations. The following field equipment may require calibration before use and periodically during sampling activities:

- pH meter
- Conductivity meter
- Dissolved-oxygen meter
- Oxygen/reduction potential meter
- Turbidity meter
- Thermometer
- Photoionization detector
- Electronic water-level probe

Field-instrument calibration and preventive maintenance will adhere to manufacturers' guidelines. Any deviations from the established guidelines will be documented.

5.7.1.1 Field Calibration

Generally, field instruments should be calibrated daily, before work begins. Field personnel may decide to calibrate more than once a day if inconsistent or unusual readings occur, or if conditions warrant more frequent calibration. Calibration activities should be recorded in logbooks or field notebooks. To ensure that field instruments are properly calibrated and remain operable, at least the following procedures will be used:

- Operation, maintenance, and calibration will be performed in accordance with the manufacturers' instrument specifications.
- Standards used to calibrate field instruments will meet the minimum requirements for source and purity recommended in the equipment operation manual. Standards will be checked for expiration dates that may be printed on the bottle. Standards that have expired should not be used.
- Acceptable criteria for calibration will be based on the limits delineated in the operations manual.
- Users of the equipment will be trained in the proper calibration and operation of the instrument.
- Operation and maintenance manuals for each field instrument will be available to persons using the equipment.

- Field instruments will be inspected before they are taken to the Site.
- Field instruments will be calibrated at the start of each workday. Meters will be recalibrated, as necessary, during the work period.
- Calibration procedures (including items such as time, standards used, and calibration results) will be recorded in a field notebook. The information should be available if problems are encountered.

5.7.1.2 Preventive Maintenance

Preventive maintenance of field instruments and equipment will follow operation manuals. A schedule of preventive-maintenance activities should be followed to minimize downtime and ensure the accuracy of measurement systems. Maintenance will be documented in the relevant field notebook.

5.7.2 Laboratory Instrumentation

Specific laboratory-instrument calibration procedures, frequency of calibration, and preparation of calibration standards will be followed according to the method requirements as developed by the USEPA, consistent with procedures presented in SW-846 (USEPA, 1986).

5.7.2.1 Laboratory Calibration and Preventive Maintenance

The laboratory calibration ranges specified in SW-846 (USEPA, 1986) will be followed.

Preventive maintenance of laboratory equipment will be the responsibility of the laboratory personnel and analysts. This maintenance includes routine care and cleaning of instruments and inspection and monitoring of carrier gases, solvents, and glassware used in analyses. The preventive-maintenance approach for specific equipment should follow manufacturers' specifications, good laboratory practices, and industry-standard techniques.

Precision and accuracy data will be examined for trends and excursions beyond control limits to determine evidence of instrument malfunction. Maintenance should be performed when an instrument begins to change, as indicated by degradation of peak resolution, shift in calibration curves, decrease in sensitivity, or failure to meet any of the QC criteria.

5.8 Laboratory QA/QC Samples

The laboratory QC samples will be used to assess the accuracy and precision of the laboratory analysis. Each category of laboratory QA/QC will be performed by the laboratory as required by method-specific guidelines. The acceptance criteria presented in the guidelines will be adhered to, and samples that do not meet the criteria will be reanalyzed or qualified, as appropriate.

5.8.1 Calibration Verification

Instruments will initially be calibrated at the start of the project or sample run, as required, and when ongoing calibration does not meet control criteria. The number of points used in the initial calibration is defined in the analytical method. Calibration will be continued as specified in the analytical method to track instrument performance. If a continuing calibration does not meet control limits, analysis of project samples will be suspended until the source of the control failure is either eliminated or reduced to within control specifications.

5.8.2 Matrix Spike/Matrix Spike Duplicate

MS samples are analyzed to assess matrix effects on the accuracy of analytical measurements. MS/MSD samples will be prepared by spiking investigative samples with known amounts of analytes before extraction and preparation and analysis. The recoveries for the MS/MSD samples will be used to assess the accuracy and precision of the analytical method by measuring how well the analytical method recovers the target compounds in the investigative matrices. For each matrix type, at least one set of MS/MSD samples will be analyzed for each batch of samples (consisting of 20 or fewer samples) received.

5.8.3 Method Blanks

Method blanks are prepared using analyte-free (reagent) water and are processed with the same methodology (e.g., extraction, digestion) as the associated investigative samples. Method blanks are used to document contamination resulting in the laboratory from the analytical process. In every analytical batch, a method blank shall be prepared and analyzed. The method-blank results are used to verify that reagents and preparation do not impart unacceptable bias to the investigative sample results. The presence of analytes in the method-blank sample will be evaluated against method-specific thresholds. If analytes are present in the method blank above the method-specific threshold, corrective action will be taken to eliminate the source of contamination before proceeding with analysis. Investigative samples of an analytical batch associated with method-blank results outside of acceptance limits will be appropriately qualified by the data-validation contractor.

5.8.4 Laboratory Control Samples

LCSs are prepared by spiking laboratory-certified, reagent-grade water with the analytes of interest or a certified reference material that has been prepared and analyzed. The result for percent recovery of the LCS is a data-quality indicator of the accuracy of the analytical method and laboratory performance.

5.8.5 Laboratory Duplicate Samples

Laboratory duplicate samples (LDSs) are prepared by the laboratory by splitting an investigative sample into two separate aliquots and performing separate sample preparation and analysis on each aliquot. The results for relative percent difference of the primary investigative sample and the

respective LDSs are used to measure precision in the analytical method and laboratory performance. For nonaqueous matrices, sample heterogeneity may affect the measured precision for the LDSs.

5.9 Field QC

The following samples will be prepared by the sampling personnel in the field and submitted to the laboratory:

- **Equipment Rinsate Blanks**—To ensure that decontamination procedures are sufficient, an equipment rinsate blank will be collected when nondedicated, nondisposable equipment is used. At least one equipment rinsate blank will be collected for every 20 samples collected. If more than 20 samples are collected with the same equipment, or if high concentrations of contaminants are encountered, additional equipment rinsate blanks may be collected. Equipment rinsate blanks will be collected by passing laboratory-deionized/distilled water through or over nondisposable sampling equipment.
- **Trip Blanks**—A trip blank monitors the potential for sample contamination during sample collection and transport. A trip blank consists of reagent-grade water in a new sample container, which is prepared at the same time as the sample containers. The trip blank will accompany the samples throughout collection, shipment, and storage. At least one trip blank should be included with each cooler in which samples for volatile organic compound analyses are stored.
- **Field Duplicates**—Field duplicates are collected to measure sampling and laboratory precision. At least one duplicate sample will be collected for every 20 samples.

5.10 Data Reduction, Validation, and Reporting

The analytical laboratory will submit analytical data packages that include laboratory QA/QC results to permit independent and conclusive determination of data quality. Data quality will be determined by MFA, using the data-evaluation procedures described in this section. The results of the MFA evaluation will be used to determine if the project-data quality objectives are being met.

5.10.1 Field Data Reduction

Daily internal QC checks will be performed for field activities. Checks will consist of reviewing field notes and field activity memoranda to confirm that the specified measurements, calibrations, and procedures are being followed. The need for corrective action will be assessed on an ongoing basis, in consultation with the project manager.

5.10.2 Laboratory Evaluation

Initial data reduction, evaluation, and reporting at the analytical laboratory will be, as appropriate, carried out as described in USEPA SW-846 manuals for analyses (USEPA, 1986). Additional laboratory data qualifiers may be defined and reported to further explain the laboratory's QC concerns

about a particular sample result. Additional data qualifiers will be defined in the laboratory's case-narrative reports.

5.10.3 Data Deliverables

Laboratory data deliverables are listed below. Electronic deliverables will contain the same data that are presented in the hard-copy report.

- Transmittal cover letter
- Case narrative
- Analytical results
- COC
- Surrogate recoveries
- Method-blank results
- MS/MSD results
- Laboratory duplicate results
- Laboratory data qualifiers and associated definitions

5.10.4 MFA Evaluation

5.10.4.1 Data QA/QC Review

MFA will evaluate the laboratory data for precision, completeness, accuracy, and compliance with the analytical method. MFA will review data according to applicable sections of USEPA organic and inorganic procedures (USEPA, 2008, 2010), as well as appropriate laboratory method-specific guidelines (USEPA, 1986).

Data qualifiers, as defined by the USEPA, are used to classify sample data according to their conformance to QC requirements. Common qualifiers are listed below:

- J—Estimate, qualitatively correct but quantitatively suspect.
- R—Reject, data not suitable for any purpose.
- U—Not detected at a specified reporting limit.

Poor surrogate recovery, blank contamination, or calibration problems, among other issues, can require qualification of the sample data. When sample data are qualified, the reasons for the qualification should be stated in the data evaluation report.

QC criteria not defined in the guidelines for evaluating analytical data are adopted, where appropriate, from the analytical method.

The following information will be reviewed during data evaluation, as applicable:

- Sampling locations and blind sample numbers
- Sampling dates
- Requested analysis
- COC documentation
- Sample preservation
- Holding times
- Method blanks (if analyzed)
- Surrogate recoveries
- MS/MSD results
- Laboratory duplicates (if analyzed)
- Field duplicates
- Field blanks (if analyzed)
- LCSs
- Method-reporting limits above requested levels
- Additional comments or difficulties reported by the laboratory
- Overall assessment

The results of the data-evaluation review will be summarized for each data package. Data qualifiers will be assigned to sample results on the basis of USEPA guidelines, as applicable.

5.10.4.2 Data Management and Reduction

MFA uses the database EQuIS™ to manage laboratory data. The laboratory will provide the analytical results in electronic, EQuIS-compatible format. After data evaluation, data qualifiers will be entered into the database. Following validation, complete data packages will be uploaded to Ecology's Environmental Information Management database.

Data may be reduced to summarize particular data sets and to aid interpretation of the results. Statistical analyses may also be applied to results. Data-reduction QC checks will be performed on hand-entered data, calculations, and graphically displayed data. Data may be further reduced and managed using one or more of the following computer-software applications:

- Microsoft Excel® (spreadsheet)
- EQuIS™ (database)
- Microsoft Access® (database)
- AutoCad and/or Arc GIS (graphics)
- USEPA ProUCL (statistical software)

6 REPORTING

After the data are received, MFA will generate a data report in accordance with Ecology reporting requirements [WAC 173-340-840(5)], which will summarize and screen the data against the applicable criteria.

LIMITATIONS

The services undertaken in completing this plan were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This plan is solely for the use and information of our client unless otherwise noted. Any reliance on this plan by a third party is at such party's sole risk.

Opinions and recommendations contained in this plan apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this plan.

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TABLE



**Table
Groundwater Sample Handling Summary
Former Truck City Site
Mt. Vernon, Washington**

Analyte	Method	Suggested Volume	Container	Number of Containers	Preservative	Storage Temperature	Holding Time from Collection
Gasoline-range organics	NWTPH-Gx	40 milliliters	VOA	3	HCL pH < 2	4°C	14 days
Diesel-range organics	NWTPH-Dx	500 milliliters	Amber Glass	2	HCL pH < 2	4°C	14 days
BTEX	USEPA 8021B/8260	40 milliliters	VOA	3	HCL pH < 2	4°C	14 days
Nitrate	USEPA 353.2	500 milliliters	poly	1	unpreserved	4°C	14 days
Manganese	USEPA 6020A	500 milliliters	poly	1	HNO3	4°C	14 days
Ferrous Iron	USEPA ApplEnvMic7-87-1536	500 milliliters	Amber Glass	1	HCL pH < 2	4°C	14 days
Sulfate	ASTM D516-02	500 milliliters	poly	1	unpreserved	4°C	14 days
Methane	RSK 175	40 milliliters	VOA	2	HCL pH < 2	4°C	14 days

NOTES:

°C = degrees Celsius.

BTEX = benzene, toluene, ethylbenzene, xylenes.

HCL = hydrochloric acid.

HNO3 = nitric acid.

NWTPH = Northwest Total Petroleum Hydrocarbons.

USEPA = U.S. Environmental Protection Agency.

VOA = volatile organic analysis vial.

APPENDIX A

BORING LOG FORM





Boring/Well No.:

Boring Log Form

Site:

Location:

Project #:

Drill Rig		MFA Staff:		Hole Dia:		Total Depth:	
Drilling Co.:				Water Level:		WLE Note:	
Start Date:		End Date:		Water Level:		WLE Note:	

Completion	Sample			Lithology			
	Top:	Time:	Depth:	Soil Type:	Color:		
Length:			Top:	Fines:			Moisture:
Type:	Sample ID		Bottom:	Sand:			PID:
% Recov:			Soil Class:	Gravel:			Line Type:
			Trace:	Impacts:			
			Notes:				
Top:	Time:	Depth:	Soil Type:	Color:			
Length:			Top:	Fines:			Moisture:
Type:	Sample ID		Bottom:	Sand:			PID:
% Recov:			Soil Class:	Gravel:			Line Type:
			Trace:	Impacts:			
			Notes:				
Top:	Time:	Depth:	Soil Type:	Color:			
Length:			Top:	Fines:			Moisture:
Type:	Sample ID		Bottom:	Sand:			PID:
% Recov:			Soil Class:	Gravel:			Line Type:
			Trace:	Impacts:			
			Notes:				
Top:	Time:	Depth:	Soil Type:	Color:			
Length:			Top:	Fines:			Moisture:
Type:	Sample ID		Bottom:	Sand:			PID:
% Recov:			Soil Class:	Gravel:			Line Type:
			Trace:	Impacts:			
			Notes:				
Top:	Time:	Depth:	Soil Type:	Color:			
Length:			Top:	Fines:			Moisture:
Type:	Sample ID		Bottom:	Sand:			PID:
% Recov:			Soil Class:	Gravel:			Line Type:
			Trace:	Impacts:			
			Notes:				

Borehole Notes:

APPENDIX B

FIELD SAMPLING DATA SHEET FORM



Maul Foster & Alongi, Inc.

7223 NE Hazel Dell Avenue, Suite B, Vancouver, WA 98665 (360) 694-2691 Fax. (360) 906-1958

Soil Field Sampling Data Sheet

Client Name		Sample Location					
Project Number		Sampler					
Project Name		Sampling Date					
Sampling Event		Sample Name					
Sub Area		Sample Depth					
FSDS QA:		Easting		Northing		TOC	

Sample Information

Sampling Method	Sample Type	Sample Category	PID/FID	Sampling Time	Container Code	#
(1) Backhoe	Liquid	Composite			2 oz. soil	
					4 oz. soil	
					8 oz. soil	
					Other	
					Total Containers	0

Sample Description:

General Sampling Comments

Sampling Method Code:

(1) Backhoe, (2) Hand Auger, (3) Drill Bit Cutting Head, (4) Geoprobe, (5) Split Spoon, (6) Shelby Tube, (7) Grab, (8) Other (Specify)

Signature _____

Maul Foster & Alongi, Inc.

7223 NE Hazel Dell Avenue, Suite B, Vancouver, WA 98665 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name		Sample Location	
Project #		Sampler	
Project Name		Sampling Date	
Sampling Event		Sample Name	
Sub Area		Sample Depth	
FSDS QA:		Easting	Northing
			TOC

Hydrology/Level Measurements

Date	Time	DT-Bottom	DT-Product	DT-Water	(Product Thickness) DTP-DTW	(Water Column) DTB-DTW	(Gallons/ft x Water Column) Pore Volume

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pH	Temp (C)	E Cond (uS/cm)	DO (mg/L)	EH	Turbidity
Final Field Parameters									

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
	Groundwater		VOA-Glass		
			Amber Glass		
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	0	

General Sampling Comments

Signature _____