INTERIM REMEDIAL ACTION COMPLETION REPORT

NORTH CASCADE FORD PROPERTY
SEDRO-WOOLLEY, WASHINGTON

Prepared for
VSF PROPERTIES, LLC
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The material and data in this report were prepared under the supervision and direction of the undersigned.

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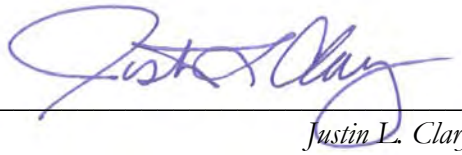

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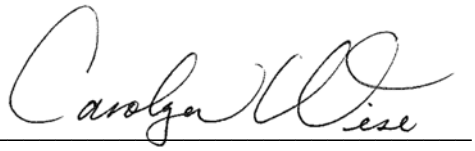

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ACRONYMS AND ABBREVIATIONS

AOC	area of concern
bgs	below ground surface
BNSF	Burlington Northern Santa Fe Railway
BTEX	benzene, toluene, ethylbenzene, and xylene
CLARC	Cleanup Levels and Risk Calculation database
COC	chemical of concern
Coulter	Coulter Properties, LLC
CUL	cleanup level
DRO	diesel-range organics
Ecology	Department of Ecology (Washington)
ESA	environmental site assessment
GAC	granular reactivated carbon
GPR	ground penetrating radar
GRO	gasoline-range organics
ISBR	in situ bioremediation
Kingworks	Kingworks Consulting Engineers, PLLC
Marvac	Marine Vacuum Service, Inc.
MFA	Maul Foster & Alongi, Inc.
MTBE	methyl-tert-butylether
MTC	Materials Testing & Consulting, Inc.
MTCA	Model Toxics Control Act
NFA	no further action
NWTPH	Northwest Total Petroleum Hydrocarbon
OnSite	OnSite Environmental, Inc.
ORC-A	Oxygen Release Compound Advanced®
ORO	heavy oil-range organics
OWTS	on-site water treatment system
PCS	petroleum contaminated soil
PID	photoionization detector
ppm	parts per million
the Property	116 West Ferry Street in Sedro-Woolley, Washington
RI	remedial investigation
RI/FS	remedial investigation and feasibility study
SIM	selective ion monitoring
the Site	North Cascade Ford Ecology cleanup site
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VCP	Voluntary Cleanup Program
VSF	VSF Properties, LLC
WAC	Washington Administrative Code
Wilson	Wilson Engineering
WWTP	Waste Water Treatment Plan (City of Sedro-Woolley)

Wyser	Wyser Construction, Inc.

1 INTRODUCTION

On behalf of VSF Properties, LLC (VSF), Maul Foster & Alongi, Inc. (MFA) has prepared this report describing an interim remedial action completed at the North Cascade Ford property, located at 116 West Ferry Street in Sedro-Woolley, Washington (the Property) (see Figure 1-1). The Property is part of the North Cascade Ford site (the Site), Washington State Department of Ecology (Ecology) Facility Site No. 58313566, Cleanup Site No. 12075.

The interim action was performed by Wyser Construction, Inc. (Wyser) with MFA oversight from September 26 through October 11, 2016. Interim action activities included decommissioning and removal of two underground storage tanks (USTs), excavation and disposal of petroleum-contaminated soil (PCS), dewatering of the excavation, placement of clean backfill amended with an in situ bioremediation (ISBR) product, and compaction and restoration of the Property to grade. The interim action was completed at the request of representatives of the insurance carriers funding the work and as part of cleanup activities being conducted in pursuit of a Property-specific no further action (NFA) determination through Ecology's Voluntary Cleanup Program (VCP).

This report meets the site assessment reporting requirements for permanent closure of the two USTs removed during the interim action. The site assessment was performed by a certified site assessor consistent with the UST regulations put forth in Washington Administrative Code (WAC) 173-360 and the Ecology's Guidance for Site Checks and Assessments for Underground Storage Tanks (Ecology, 2003).

2 BACKGROUND

The potential for closed-in-place or abandoned USTs to be present on the Property was identified in the preliminary remedial investigation (RI) report (MFA, 2015b). USTs may contribute to environmental contamination if not properly closed or decommissioned; therefore, steps were taken to further assess USTs on the Property, including conducting a ground penetrating radar (GPR) survey.

A GPR survey was performed by Materials Testing & Consulting, Inc. (MTC) of Burlington, Washington, on June 21, 2016 and included portions of areas of concern (AOCs) 1, 2, and 4 (see Figure 2-1). The GPR survey report is included as Appendix A. During the GPR survey, two or possibly three USTs were identified on the Property, to the southeast of the Auto Sales and Service building, in AOC 2. Only two USTs were encountered during the interim action, which is consistent with the Property history, as described below. MFA had proposed additional investigation to address data gaps at the Property in its data gap investigation work plan (MFA, 2015a), including further assessment of a potential UST release(s) in AOC 2 (MFA, 2015a). However, the carrier group

requested that an interim action be conducted to decommission and remove the USTs and address associated impacts in AOC 2 before conducting the data gap investigation.

This report summarizes completed action and UST site assessment activities and will be submitted to Ecology for review as part of the Property cleanup and to fulfill UST closure reporting requirements. Soil and groundwater conditions identified during the interim action, as discussed in this report, were incorporated into an amended data gap investigation work plan (MFA, 2016).

2.1 Property Location

The physical address for the Property is 116 West Ferry Street in Sedro-Woolley, Washington (see Figure 1-1). The Property covers approximately 3.5 acres, comprises nine tax parcels, and is bisected by West Ferry Street (see Figure 2-1); two of the parcels share the same parcel identification number (P109239), but are separate parcels that are divided by the West Ferry Street right-of-way. The parcels north of West Ferry Street are bordered by an active Burlington Northern Santa Fe Railway Company (BNSF) rail line and an industrial property to the north, and a gasoline station and automobile parts store to the west. The parcels south of West Ferry Street are bordered by Rita Street to the west, Woodworth Street to the south, and an electrical substation and residential properties to the west and south. Parcels north and south of West Ferry Street are bordered by an inactive rail line, Eastern Avenue, and commercial properties to the east. The Property is zoned for retail trade (automotive, marine craft, aircraft, and accessories) and is located in section 24 of township 35 north and range 4 east of the Willamette Meridian.

An automobile sales and service building ("auto sales & service") is located on the northern half of the Property (see Figure 2-1) and a small loan services building is located on the southern half of the Property.

2.2 Property History

The Property had a variety of historical uses before being converted, in the 1950s, to its current use as an automobile dealership and repair shop. Former activities include residential use, a gasoline station, a hospital, a feed mill and storage facility, a hotel, railroad depots, a veterinary office, a fuel and transfer station, and an electric plant (MFA, 2015b). A building used for battery servicing and tire vulcanizing was located on parcel number P77410 from as early as 1925 to as late as 1953 (see Figure 2-1). Coal storage sheds associated with the railroad depots were located on parcel number P109239 from approximately the early 1900s to the 1950s. The electric plant operated on parcel number P77451 as early as 1907 and was replaced by a wood shed and wood yard in the 1920s. The wood yard was replaced by the original automobile dealership in the 1950s, which in the 1970s expanded to its current size. A heating oil UST and a leaded gasoline UST associated with the automobile dealership, and formerly located to the southeast of the auto sales and service building, were closed in place in the 1960s. From 1979 through the 1990s, the remaining Property parcels were converted to parking areas supporting the automobile dealership. The loan services building on was constructed in 2007.

Phase I environmental site assessments (ESAs) were conducted on the Property as part of property transfer evaluations in 2001 (GeoEngineers, Inc., 2001) and 2011 (Whatcom Environmental Services, 2011a). Based on recognized environmental conditions identified during the Phase I ESAs, a Phase II ESA was conducted in 2011 (Whatcom Environmental Services, 2011b), an RI began in 2012 (MFA, 2015b), and the Site was entered into the VCP in 2015. The RI/feasibility study (FS), and the interim action documented in this report, are in support of an independent Property cleanup that is being conducted under the VCP.

2.3 Physical Setting

The Property is located in a relatively flat alluvial plain between the nearby Skagit River and Lyman Hill to the northeast. The Property is mostly flat, graded, and covered by buildings or pavement; the ground surface elevation is approximately 56 feet above sea level. The rail lines on the adjacent BNSF property to the north and the property to the east are built on slightly raised berms.

Brickyard Creek is approximately 2,800 feet north of the Property and flows from the northeast toward the southwest. The Skagit River is approximately 7,000 feet south of the Property and flows toward the west (see Figure 1-1).

Subsurface geology was observed during excavation activities conducted as part of the interim remedial action activities, as discussed in Section 5. The following discussion is based on those observations. Underlying an approximately 1- to 2-foot thick unit of nonnative surficial cover and fill is a geologic unit consisting of generally brown to gray sand, with varying amounts of silt, extending to approximately 10 feet below ground surface (bgs). At approximately 10 feet bgs, a layer of well-sorted, medium sand, with trace woody debris, extending down to the maximum excavation depth of 15 feet bgs was encountered. During excavation activities, groundwater was typically encountered between approximately 10 and 11 feet bgs.

Additional information on the geology, hydrogeology, and surface water of the Property and surrounding area is included in the preliminary RI/FS (MFA, 2015b). Previous soil and groundwater data collected from the Property and information regarding nearby private and public drinking water wells are included in the preliminary RI/FS (MFA, 2015b).

2.4 Environmental Conditions

Historical subsurface investigations conducted as part of the 2011 Phase II ESA (Whatcom Environmental Services, 2011b) and the preliminary RI (MFA, 2015b) identified soil and groundwater impacts on the Property and the adjoining BNSF property to the north. Impacted areas of the Property are divided into AOCs (see Figure 2-1). The interim remedial action addressed impacts in AOC 2.

A GPR survey conducted at the Property identified two, or possibly three, USTs in AOC 2. Two USTs, a heating oil UST and a leaded gasoline UST located in AOC 2, were identified in the Phase I ESAs (GeoEngineers, Inc., 2001 and Whatcom Environmental Services, 2011a).

The following chemicals of concern (COCs) were identified in soil and groundwater during previous investigations in AOC 2:

- Diesel-range organics (DRO)
- Heavy oil-range organics (ORO)
- Gasoline-range organics (GRO)

COCs in soil and groundwater in AOC 2 were attributed to a potential UST release(s) and Ecology had requested additional investigation of the leaded gasoline UST (MFA, 2016). The interim remedial action was designed to remove the USTs and associated impacted soil and also treat groundwater impacts in situ.

3 PRE-INTERIM REMEDIAL ACTION

3.1 Monitoring Well Decommissioning

A groundwater monitoring well (MW02) was located within the extent of the proposed excavation; therefore, the well was decommissioned before the interim action. Holt Services, Inc., a driller licensed in Washington State, decommissioned the well consistent with Washington State standards (WAC 173-160-381). The well decommissioning log is included as Appendix B.

3.2 Building Structural Assessment

Due to the proximity of the USTs to the auto sales and service existing building, a structural assessment of the building was conducted before the interim action to identify recommended excavation offset distances to protect the building foundation. On September 12, 2016, a Washington State–licensed structural engineer with Kingworks Consulting Engineers, PLLC (Kingworks) performed a structural assessment of the auto sales and service building and developed offset recommendations based on the findings. Kingworks' structural assessment report is included as Appendix C. Based on the construction of the building, Kingworks recommended excavating no closer than five feet from the face of the building at grade, and that the excavation be sloped down and away from the building at a minimum of 1 horizontal unit per every 1 unit of depth (i.e., 1:1 slope).

3.3 Property Survey

The interim action was conducted in support of a Property cleanup; therefore, cleanup activities were to be conducted on only the Property. The Property boundaries were surveyed before the interim action to define the limits of excavation. On September 21, 2016, Wilson Engineering (Wilson) surveyed the Property and staked the Property lines in the vicinity of the proposed excavation. The Property survey map is included as Appendix D.

3.4 Site Preparation and Layout

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

4 UNDERGROUND STORAGE TANK DECOMMISSIONING

MFA conducted a site assessment in support of the permanent closure and removal of two USTs at the Property. The former UST locations are shown in Figure 4-1. Photographs of the UST removal, soil excavation, and groundwater treatment activities are included in Appendix E. The site assessment was performed by Carolyn Wise of MFA, a certified site assessor (Site Assessor No. 8277112), consistent with the UST regulations put forth in WAC 173-360 and Ecology Guidance for Site Checks and Site Assessments for Underground Storage Tanks (Ecology, 2003). Wyser removed and decommissioned the USTs. A UST Closure and Site Assessment form, a Site Assessment Checklist, and other related UST-decommissioning documentation are included as Appendix F.

One 1,000-gallon leaded gasoline UST and one 1,000-gallon heating oil UST were decommissioned and removed from the Property on September 27, 2016. The GPR survey report had indicated that a possible third UST may have been nested between and below the two USTs, but only two USTs were encountered.

The Property, and therefore the USTs, were formerly owned by VSF, but the current landowner is Coulter Properties, LLC (Coulter). Coulter leases the Property to the current dealership owner, Dwayne Lane's Auto Family. Installation and closure dates were provided in Ecology's UST database (provided in Appendix F); however, based on discussion with Ecology during the UST removal, those dates are not reliable and the actual dates are unknown. MFA was unable to locate any records pertaining to compliance and/or performance of the USTs.

Sound Testing of Seattle, Washington inerted the USTs with carbon dioxide. Once the USTs were inerted, Sound Testing considered them safe for removal and transport. Marine Vacuum Service, Inc. (Marvac) of Seattle, Washington emptied the USTs of residual materials and triple-rinsed them. Approximately 300 gallons of emulsified fuel and water were removed from the leaded gasoline UST, and approximately 500 gallons of pea gravel were removed from the heating oil UST and transported to Marvac's facility for processing. The presence of pea gravel in the heating oil tank suggests that the tank was closed in place, which is consistent with information obtained during interviews conducted as part of the 2001 Phase I ESA (GeoEngineers, Inc., 2001). The Phase I ESA report indicates that the tanks were closed in place in the 1960s.

The two USTs were single-walled, coated steel tanks, 4 feet in diameter and 12 feet in length, with no secondary containment structures. At least three pea-size holes were visible at the base of the

removed heating oil UST, which appeared to be the result of corrosion. Underground product and ventilation piping associated with the USTs were also present and were removed as part of tank closure activities. A product line with a pipe coupling was encountered, extending from the heating oil UST north to the auto sales and service building, and was cut off at the northern limit of the excavation. The remaining section of pipe likely extends under the auto sales and service building. A supply line from the leaded gasoline UST was encountered, extending from the south end of the UST toward the south and off the Property. The pipe was cut off at the southern limit of the excavation, at the Property boundary. However, during excavation activities, the pipe was no longer present, suggesting it may have formerly been cut at a point south of the Property boundary; the remaining section of pipe may have come loose from the sidewall. A corroded steel plate was observed on the leaded gasoline tank that appeared to read "Chevron Gasoline." No identifying markings were observed on the heating oil tank. The emptied and cleaned tanks were disposed of as scrap metal at Skagit River Steel & Recycling in Burlington, Washington (see Appendix F).

It appeared that native soil was used as backfill when the USTs were installed as there was no discernible soil-backfill interface. No groundwater was encountered in the excavation during UST and equipment removal.

5 EXCAVATION OF CONTAMINATED SOIL

5.1 Excavation

During the UST removal and soil excavation, soil was continuously evaluated for impacts using field screening methods, including visual and olfactory observations and organic vapors monitoring using a photoionization detector (PID). PID measurements from soil collected within the PCS excavation ranged between 0.0 and 2,050 parts per million (ppm). Based on field observations, shallow soil above the USTs, from ground surface to approximately 5 feet bgs, did not appear to be impacted; therefore, this overburden soil was segregated and stockpiled on the Property for characterization to determine eligibility for reuse as backfill (see Section 5.1.2).

During excavation activities, PCS was observed beneath the pipe coupling on the product line extending from the heating oil UST north to the auto sales and service building. Stained soil with strong odors was observed beneath the coupling from approximately 6 feet to 15 feet bgs. The location of impacts relative to the coupling suggests that heating oil was released from the coupling during the tank's operation. A slight odor and discoloration were also observed in the soil immediately beneath the heating oil UST, below the holes that were observed in the bottom of the tank, as discussed above. These observations suggest fuel had been present in the tank at some point after the holes were present, resulting in a release from the bottom of the tank. No soil impacts were observed beneath the leaded gasoline UST or its supply line.

PCS observed in the tank excavation was removed—to the extent feasible, given the physical constraints present—including the Property boundary limitation, utilities, and the auto sales and service building. The UST excavation was expanded to remove PCS from below and adjacent to the

heating oil UST and along and outward from the heating oil tank supply line from between approximately 5 and 15 feet bgs. Excavated PCS was temporarily stored on the Property until it could be loaded into trucks and transported off-site for disposal (See Section 5.1.3).

PCS was identified along the west and north sidewalls of the final excavation extents (see Figure 4-1) from approximately 7 to 15 feet bgs; PID measurements recorded along the west and north sidewalls were 900.8 and 358.8 ppm, respectively. PCS was left in place in the west and north sidewalls because it was not feasible to excavate any closer to the building in that depth range. The excavation was offset a minimum of 15 feet away from the building foundation, with a vertical sidewall slope. Based on the building structural assessment (see Section 3.2), Kingworks recommended excavating no closer than five feet to the building, with a 1:1 sidewall slope to protect the structural integrity of the building. It may have been feasible to excavate shallower material closer to the building (up to five feet away), but it was not feasible to excavate at the depth PCS was observed. In addition, significant sloughing was observed along the sidewalls of the excavation due to the type of soils present in the excavation and the depth of groundwater (see Photos No. 6 through No. 8 in Appendix E).

No groundwater was encountered in the excavation during UST and equipment removal, but groundwater was encountered during PCS excavation at approximately 10 to 11 feet bgs. A sheen was initially observed in the excavation, but decreased during dewatering efforts and as the excavation footprint expanded. Groundwater management, treatment, and sampling activities are discussed in Section 5.2.

5.1.1 Soil Confirmation Sampling

During the UST removal and decommissioning, soil confirmation sampling was conducted consistent with UST regulations put forth in WAC 173-360, Ecology UST site assessor guidance (Ecology, 2003), and Ecology's Guidance for Remediation of Petroleum Contaminated Sites (Ecology, 2016).

Confirmation samples were collected from the initial UST excavation in the following locations and analyzed as discussed below (see Figure 4-1):

- Beneath underground product piping extending south from the leaded gasoline UST (SSW01-S-3.0).
- Each of the four sidewalls (ESW01-S-6.0, SSW02-S-6.0, WSW01-S-6.0, NWS01-S-6.0).
- Below the leaded gasoline UST, at the base of the excavation in that area (BASE02-S-10.0).
- Beneath the heating oil UST (BASE01-S-10.0), although this sample was not analyzed due to visible evidence of contamination, including staining and strong odors in soil and an elevated PID reading of 110.3 ppm, suggesting a release had occurred.

As discussed in the previous section, excavation was extended to remove PCS associated with the heating oil tank and piping, as identified by field screening. Confirmation samples were collected from the base (BASE03-S-15.0) and sidewalls (ESW02-S-7.5, NSW02-S-7.5, WSW02-S-7.5, and SSW03-S-7.5) of the extended excavation. Sidewall samples were collected within the capillary zone and in areas with the darkest soil staining and strongest odors, at approximately 7.5 feet bgs. A base sample was collected at approximately 15 feet bgs in the excavation, the maximum excavation depth and standard point of compliance for soil.

A backhoe was used to obtain soil from the excavation at desired locations and depths for sample collection. Soil samples were collected from the middle of the backhoe bucket, away from the surface and metal sides to avoid cross-contamination, using a stainless-steel spoon or a U.S. Environmental Protection Agency (USEPA) Method 5035 sampling kit. The stainless-steel spoon was decontaminated between sample locations. Soil was placed in laboratory-supplied containers appropriate for the selected analyses. A PID was used to measure organic vapor concentrations for each soil sample.

Soil samples were analyzed by OnSite Environmental, Inc. (OnSite), located in Redmond, Washington. A rush 24-hour laboratory turnaround time was requested for the confirmation samples to evaluate whether over-excavation of PCS was required.

Confirmation samples were analyzed consistent with the required testing for petroleum releases put forth in Model Toxics Control Act (MTCA) (WAC 173-340) Table 830-1 for releases of DRO and GRO, as follows:

- GRO by the Northwest Total Petroleum Hydrocarbon (NWTPH)-Gx Method
- DRO and ORO by the NWTPH-Dx Method
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by USEPA Method 8260B
- n-Hexane by USEPA Method 8015M
- Methyl t-Butyl Ether (MTBE) by USEPA Method 8260C
- Ethylene dichloride (EDC) by USEPA Method 8260C
- Ethylene dibromide by USEPA Method 8260C
- Napthalenes (including naphthalene, 1-methylnapthalene and 2-methylnapthalene) by USEPA Method 8270 selective ion monitoring (SIM)
- Total Lead by USEPA Method 6010C

Laboratory reports are included as Appendix G. Analytical results for the soil confirmation samples are summarized in Table 5-1. 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, 2014a, 2014b). A memorandum summarizing data validation procedures, data usability, and deviations from specific field and/or laboratory methods is presented as Appendix H. All analytical results were deemed

usable for their intended use with the assigned qualifiers. Analytical results will be uploaded to Ecology's Environmental Information Management database following completion of the RI.

Confirmation sample results were compared to MTCA Method A cleanup levels (CULs) for unrestricted land use and default soil concentrations protective of groundwater (WAC 173-340-747), as provided in Ecology's Cleanup Levels and Risk Calculation (CLARC) database. Separate soil protective of groundwater screening levels were used for soil collected from the vadose and saturated zones, as provided in CLARC. Where no Method A CULs were available, the Method B standard table values for soil direct contact were used.

All constituents analyzed in the soil confirmation samples were either not detected or were detected at concentrations below MTCA Method A CULs, with the exception of two sidewall samples: WSW02-S-7.5 and NSW02-S-7.5, which were collected from the final west and north sidewalls of the excavation, respectively. In these two samples, DRO was detected above the MTCA Method A CUL, and naphthalenes were detected above the MTCA Method A CUL and the soil concentrations protective of groundwater. As discussed in the previous section, it was not feasible to excavate further to remove PCS in those locations.

5.1.2 Soil Stockpile Sampling

Overburden soil from the initial tank excavation (Stockpile 1) and from the expanded PCS removal excavation (Stockpile 2) were segregated and stockpiled for characterization for potential reuse as backfill consistent with Ecology's Guidance for Remediation of Petroleum Contaminated Sites (Ecology, 2016). The soil stockpiles were stored securely on the Property and covered with plastic sheeting when not being handled or tested. The volume of soil in the stockpiles was estimated to be approximately 40 cubic yards in Stockpile 1 and 150 cubic yards in Stockpile 2. Discrete soil samples were collected from the stockpiles at the frequency required under Ecology's UST regulations based on the stockpile volumes (Ecology, 2003). Three samples were collected from Stockpile 1 (ST01-1 to ST01-3) and five samples were collected from Stockpile 2 (ST02-1 to ST02-5).

Soil samples were analyzed by OnSite. A rush two-day laboratory turnaround time was requested to evaluate the soil for reuse or off-site disposal within the project timeline.

Stockpile samples were analyzed for the following:

- GRO by the NWTPH-Gx Method
- DRO and ORO by the NWTPH-Dx Method
- BTEX by USEPA Method 8260B
- Polychlorinated biphenyls by USEPA Method 8082A
- MTBE by USEPA Method 8021B
- Napthalenes by USEPA Method 8270 SIM
- Carcinogenic polycyclic aromatic hydrocarbons by USEPA Method 8270 SIM
- Total Lead by USEPA Method 6010C

Laboratory reports are included as Appendix G. Analytical results for the soil stockpile samples are summarized in Table 5-2. 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, 2014a, 2014b). A memorandum summarizing data validation procedures, data usability, and deviations from specific field and/or laboratory methods is presented as Appendix H. All analytical results were deemed usable for their intended use with the assigned qualifiers.

Stockpile sample results were compared to Category 1 and 2 criteria for reuse anywhere the use is allowed under other regulations, or for use as backfill above the water table, respectively (Ecology, 2016). Both stockpiles had detections of at least one constituent above Category 1 and Category 2 reuse criteria, primarily DRO. Therefore, the stockpiled soil was deemed unusable for use as backfill on the Property. Stockpiled soil was disposed of off-Property, as described in the next section.

5.1.3 PCS Disposal

PCS was loaded into haul trucks and transported to CEMEX in Everett, Washington. Loose soil was brushed off truck trailers before the vehicles left the Property to prevent soil from falling off the truck during transit. A total of 601.21 tons of PCS were excavated and disposed of offsite. A summary ticket for all trucks and associated tonnages of PCS is provided in Appendix I.

5.2 Excavation Dewatering

During excavation and before backfilling, groundwater accumulating in the excavation was removed using pumps and treated using an on-site water treatment system (OWTS) provided by Wyser. The treated groundwater was tested for compliance with discharge quality maximum concentration levels, and then discharged to the sanitary sewer consistent with a project-specific special waste discharge agreement with the City of Sedro-Woolley's Wastewater Treatment Plant (WWTP). All groundwater removed from the excavation was treated and tested prior to discharge.

5.2.1 On-Site Water Treatment System

The OWTS was a multi-unit system, including two storage tanks (one 21,000-gallon tank and one 18,000-gallon tank), particulate filter units, and granular activated carbon (GAC) vessels connected in series. The groundwater was first pumped into the 18,000-gallon storage tank, which was temporarily located in the southeast corner of the Property. The water was then pumped through a sediment filter and through two GAC vessels (connected in series) and into a 21,000-gallon storage tank to be sampled prior to discharge to the sanitary sewer.

The storage 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 filter unit was comprised of one bag filter and two cartridge filters capable of removing particulates as small as 5 microns: fine suspended solids that could clog the GAC vessels in the water

treatment process. 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.

The two in-line GAC vessels provided for removal of dissolved-phase chemicals. The vessels were configured with two sets of 2,000-pound GAC units 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.

MFA collected a post-treatment water sample from the 21,000-gallon storage tank (BTPOST-WS-901) and submitted the sample to OnSite to be analyzed for the chemicals specified in the special waste discharge agreement with WWTP. A rush same-day laboratory turnaround time was requested to evaluate the water for discharge within the project timeline.

Laboratory reports are included as Appendix G. Analytical results for the post-treatment water sample are summarized in Table 5-3. 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, 2014a, 2014b). A memorandum summarizing data validation procedures, data usability, and deviations from specific field and/or laboratory methods is presented as Appendix H. All analytical results were deemed usable for their intended use with the assigned qualifiers.

Lead was the only constituent detected in the water sample. All chemical concentrations were reviewed for compliance with the discharge quality maximum concentration levels specified in the WWTP discharge agreement and submitted to WWTP for approval to discharge.

5.2.2 Sanitary Sewer Discharge

Following WWTP approval, groundwater was discharged to the sanitary sewer consistent with the WWTP special waste discharge agreement. All groundwater extracted during the interim action was discharged to the sanitary sewer on October 10, 2016; the total volume discharged was 18,218 gallons (see Appendix J).

5.3 Backfill

After completion of excavation activities, the excavation was backfilled using clean import materials obtained from Skagit Aggregates State Pit No. M272. A total of 61.03 tons of 2 ½-inch by ¾-inch gravel, 607.19 tons of pit run, and 61.79 tons of 1 ¼-inch rock were used to backfill the excavation. A summary of materials imported and exported during the interim action with associated tonnages and backfill material testing results are provided in Appendix K.

The bottom 1 to 2 feet of the excavation footprint was backfilled with the clean, imported ¾- to 2-inch gravel. A temporary well point was installed in the excavation to extract water from the excavation during backfilling activities. The extracted water was pumped into the OWTS.

Backfilling above the ¾- to 2-inch gravel layer was completed as 1- to 2-foot lifts of clean pit run material mixed with an ISBR product (Oxygen Release Compound Advanced® [ORC-A]). The ORC-A product and application details are provided in detail below in Section 6. Amended backfill mixed with ORC-A was placed in lifts up to the maximum water table height, based on historical observations (i.e., approximately 6 feet bgs).

On top of the amended backfill, the excavation footprint was backfilled with clean import pit run and compacted. Approximately 61.79 tons of crushed surfacing base course were placed across the top of the pit run prior to asphalting. The final grade was completed with asphalt to match the surrounding grade.

Compaction tests were performed by MTC to ensure that a compaction of at least 95 percent was met throughout the excavation. The compaction reports are included as Appendix L.

5.4 As-Built

The final limits of the excavation were surveyed by Wilson before the excavation was backfilled. The excavation survey is included in Appendix D.

6 IN SITU BIOREMEDIATION

ORC-A, an ISBR product, was used as a backfill amendment in the excavation to treat remaining total petroleum hydrocarbons in the vadose zone and in groundwater. ORC-A product specifications are included in Appendix M. ORC-A accelerates the naturally occurring microbial degradation of petroleum hydrocarbons in saturated soil and groundwater by enhancing aerobic biodegradation processes. ORC-A provides a controlled-release supplemental source of oxygen, which enables the indigenous microorganisms to expedite the biodegradation process. The ORC-A 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 aerobic contaminant biodegradation in groundwater and saturated soils.

ORC-A was received from the manufacturer in the form of dry pellets, which were mixed directly with clean overburden and placed in 1- to 2-foot lifts from approximately 6 to 15 feet bgs, from the bottom of the excavation, throughout the saturated zone, and into the vadose zone. This application depth will allow the product to be in contact with groundwater throughout the saturated zone and in the capillary zone as water levels fluctuate.

7 FINAL INSPECTION

A final inspection of the excavation work was completed on October 28, 2016. The paved asphalt cover was observed to be slightly uneven with minor pooling of water. MFA confirmed that Wyser will repair the asphalt to even out the grade. Striping of the asphalt may be required after it is repaired. No other unresolved issues or work items remained at that time.

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
Soil Confirmation Sample Analytical Results
North Cascade Ford
VSF Properties, LLC
Sedro-Woolley, Washington

			Location:	BASE02	ESW01	NSW01	SSW01	SSW02	WSW01	BASE03	ESW02	NSW02	SSW03	WSW02
			Collection Date:	9/27/2016	9/27/2016	9/27/2016	9/27/2016	9/27/2016	9/27/2016	9/29/2016	9/30/2016	9/29/2016	9/29/2016	9/29/2016
			Collection Depth (ft bgs):	10	6	6	3	6	6	15	7.5	7.5	7.5	7.5
	MTCA A/B	MTCA Protective of Groundwater, Saturated[b]	MTCA Protective of Groundwater, Vadose at 13°C[b]											
Metals (mg/kg)														
Lead	250	150	3000	6.6 U	6.6 U	6.1 U	**6.8**	**13**	6.1 U	7.9 U	6.7 U	7.1 U	5.6 U	6.8 U
VOCs (mg/kg)														
1,2-Dibromoethane	0.005	NV	NV	0.0015 U	0.0014 U	0.0013 U	0.0017 U	0.0013 U	0.0012 U	0.0023 U	0.0015 U	0.093 U	0.0017 U	0.081 U
1,2-Dichloroethane	11	0.00156	0.0231	0.0015 U	0.0014 U	0.0013 U	0.0017 U	0.0013 U	0.0012 U	0.0023 U	0.0015 U	0.0016 U	0.0017 U	0.0017 U
Benzene	0.03	0.00174	0.0274	0.0015 U	0.0014 U	0.0013 U	0.0017 U	0.0013 U	0.0012 U	0.0023 U	0.0015 U	0.0016 U	0.0017 U	0.0017 U
Ethylbenzene	6	0.343	NV	0.0015 U	0.0014 U	0.0013 U	0.0017 U	0.0013 U	0.0012 U	0.0023 U	0.0015 U	**0.41**	0.0017 U	**0.22**
m,p-Xylene	9	0.831	NV	0.003 U	0.0028 U	0.0026 U	0.0035 U	0.0027 U	0.0023 U	0.0046 U	0.003 U	**0.92**	0.0033 U	**0.35**
Methyl tert-butyl ether	0.1	0.00723	0.103	0.0015 U	0.0014 U	0.0013 U	0.0017 U	0.0013 U	0.0012 U	0.0023 U	0.0015 U	0.0016 U	0.0017 U	0.0017 U
n-Hexane	4800	1.77	68.9	0.083 U	0.088 U	0.079 U	0.095 U	0.075 U	0.077 U	0.11 U	0.082 U	0.95 U	0.066 U	0.84 U
o-Xylene	16000	0.844	14.4	0.0015 U	0.0014 U	0.0013 U	0.0017 U	0.0013 U	0.0012 U	0.0023 U	0.0015 U	0.093 U	0.0017 U	0.081 U
Toluene	7	0.273	4.52	0.0076 U	0.007 U	0.0064 U	0.0087 U	0.0067 U	0.0058 U	0.011 U	0.0074 U	0.46 U	0.0083 U	0.4 U
SVOCs (mg/kg)														
1-Methylnaphthalene	34.5	NV	NV	0.0088 U	0.0088 U	**0.1**	**0.027**	0.0074 U	0.0081 U	**0.017**	**0.075**	**18**	0.0075 U	**10**
2-Methylnaphthalene	320	NV	NV	0.0088 U	0.0088 U	**0.16**	**0.0094**	0.0074 U	0.0081 U	**0.02**	**0.016**	**27**	0.0075 U	**15**
Naphthalene	5	0.236	4.45	0.0088 U	0.0088 U	**0.13**	**0.0084**	0.0074 U	0.0081 U	0.011 U	**0.047**	**8.2**	0.0075 U	**2.4**
Calculated Total Napthalenes	5	0.236	4.45	0.0264 U	0.0264 U	**0.39**	**0.0448**	0.0222 U	0.0243 U	**0.048**	**0.138**	**53.2**	0.0225 U	**27.4**
TPH (mg/kg)														
Gasoline Range Hydrocarbons	100[a]	NV	NV	8.3 U	8.8 U	7.9 U	9.5 U	7.5 U	7.7 U	11 U	8.2 U	95 U	6.6 U	84 U
Diesel Range Hydrocarbons	2000	NV	NV	33 U	33 U	31 U	28 U	**820**	30 U	40 U	**270**	**14,000**	28 U	**9,600**
Lube Oil Range Hydrocarbons	2000	NV	NV	66 U	66 U	61 U	56 U	400 U	61 U	79 U	68 U	430 U	56 U	370 U

NOTES:
Result values in **bold** font indicate a detection. Only detected concentrations are compared to CULs.
Detections that exceed a MTCA A/B CUL are shaded gray.
Detections that exceed both a MTCA A/B CUL and soil concentrations protective of groundwater are shaded green.
°C = degrees Celsius.
CUL = cleanup level.
ft bgs = feet below ground surface.
J = Result is an estimated value.
mg/kg = milligrams per kilogram.
MTCA = Model Toxics Control Act (Washington Administrative Code 173-340).
MTCA A/B = MTCA Method A CUL for unrestricted land use applied when available; when a Method A CUL is not available, a MTCA Method B standard table value for soil direct contact is applied.
NV = no value.
SVOC = semivolatile organic compound.
TPH = total petroleum hydrocarbon.
U = result is not detected at or above the method reporting limit.
VOC = volatile organic compound.
[a]CUL is for gasoline range hydrocarbons with no detectable benzene.
[b]The following samples were collected from the saturated zone and compared to "MTCA Protective of Groundwater, Saturated" values : BASE02 and BASE03. All other soil samples were collected from the vadose zone and are compared to "MTCA Protective of Groundwater, Vadose at 13 °C" values.

Table 5-2
Soil Stockpile Sample Analytical Results
North Cascade Ford
VSF Properties, LLC
Sedro-Woolley, Washington

			Location:	STOCKPILE-01			STOCKPILE-02				
			Sample Name:	ST01-1	ST01-2	ST01-3	ST02-1	ST02-2	ST02-3	ST02-4	ST02-5
			Collection Date:	9/27/2016	9/27/2016	9/27/2016	9/30/2016	9/30/2016	9/30/2016	9/30/2016	9/30/2016
	Soil Category 1 Reuse Criteria, No detectable Petroleum Components	Soil Category 2 Reuse Criteria, Commercial Fill Above Water Table									
Metals (mg/kg)											
Lead	<17	17 - 50		**15**	5.6 U	**18**	**38**	5.4 U	**14**	**11**	**16**
PCB Aroclors (mg/kg)											
Aroclor 1016	NV	NV		0.054 U	0.056 U	0.055 U	0.057 U	0.054 U	0.06 U	0.058 U	0.056 U
Aroclor 1221	NV	NV		0.054 U	0.056 U	0.055 U	0.057 U	0.054 U	0.06 U	0.058 U	0.056 U
Aroclor 1232	NV	NV		0.054 U	0.056 U	0.055 U	0.057 U	0.054 U	0.06 U	0.058 U	0.056 U
Aroclor 1242	NV	NV		0.054 U	0.056 U	0.055 U	0.057 U	0.054 U	0.06 U	0.058 U	0.056 U
Aroclor 1248	NV	NV		0.054 U	0.056 U	0.055 U	0.057 U	0.054 U	0.06 U	0.058 U	0.056 U
Aroclor 1254	NV	NV		0.054 U	0.056 U	0.055 U	0.057 U	0.054 U	0.06 U	0.058 U	0.056 U
Aroclor 1260	NV	NV		0.054 U	0.056 U	0.055 U	0.057 U	0.054 U	0.06 U	0.058 U	0.056 U
Total Aroclors	<0.04	<0.04		0.054 U	0.056 U	0.055 U	0.057 U	0.054 U	0.06 U	0.058 U	0.056 U
VOCs (mg/kg)											
Benzene	<0.005	0.005 - 0.03		0.02 U	0.02 U	**0.026**	0.02 U	0.096 U	0.02 U	0.02 U	0.1 U
Ethylbenzene	<0.005	0.005 - 6		0.046 U	0.059 U	**0.056**	0.069 U	0.48 U	0.08 U	0.074 U	0.52 U
Methyl tert-butyl ether	<0.005	0.005 - 0.1		0.046 U	0.059 U	0.055 U	0.069 U	0.48 U	0.08 U	0.074 U	0.52 U
m,p-Xylene	NV	NV		**0.051**	0.059 U	**0.18**	0.069 U	0.48 U	0.08 U	0.074 U	**0.79**
o-Xylene	NV	NV		0.046 U	0.059 U	**0.086**	0.069 U	0.48 U	0.08 U	0.074 U	0.52 U
Toluene	<0.005	0.005 - 7		0.046 U	0.059 U	0.055 U	0.069 U	0.48 U	0.08 U	0.074 U	0.52 U
Total Xylenes	<0.015	0.015 - 9		**0.074**	0.059 U	**0.266**	0.069 U	0.48 U	0.08 U	0.074 U	**1.05**
SVOCs (mg/kg)											
1-Methylnaphthalene	NV	NV		**0.017**	0.0074 U	**0.024**	**0.058**	**0.5**	**0.1**	**0.042**	**0.22**
2-Methylnaphthalene	NV	NV		**0.016**	0.0074 U	**0.026**	**0.06**	**0.37**	**0.1**	**0.045**	**0.24**
Benzo(a)anthracene	NV	NV		**0.0079**	0.0074 U	**0.03**	**0.053**	**0.014**	**0.032**	**0.026**	**0.039**
Benzo(a)pyrene	NV	NV		**0.0092**	0.0074 U	**0.039**	**0.075**	**0.016**	**0.032**	**0.028**	**0.049**
Benzo(b)fluoranthene	NV	NV		**0.014**	0.0074 U	**0.044**	**0.09**	**0.023**	**0.037**	**0.033**	**0.063**
Benzo(j+k)fluoranthene	NV	NV		0.0072 U	0.0074 U	**0.016**	0.038 U	**0.0073**	**0.0099**	**0.0092**	0.038 U
Chrysene	NV	NV		**0.012**	0.0074 U	**0.037**	**0.073**	**0.057**	**0.039**	**0.037**	**0.19**
Dibenzo(a,h)anthracene	NV	NV		0.0072 U	0.0074 U	0.0073 U	0.038 U	0.0072 U	0.008 U	0.0077 U	0.038 U
Indeno(1,2,3-cd)pyrene	NV	NV		**0.0078**	0.0074 U	**0.025**	**0.045**	**0.012**	**0.016**	**0.017**	**0.041**
Naphthalene	NV	NV		**0.012**	0.0074 U	**0.021**	**0.046**	**0.11**	**0.057**	**0.032**	**0.24**
Total Naphthalenes	<0.05	0.05 - 5		**0.045**	0.0074 U	**0.071**	**0.164**	**0.98**	**0.257**	**0.119**	**0.7**
cPAH TEQ	<0.05	0.05 - 0.1		**0.013**	0.0074 U	**0.051**	**0.098**	**0.023**	**0.042**	**0.037**	**0.069**
TPH (mg/kg)											
Gasoline Range Hydrocarbons	<5	5 - 30		4.6 U	5.9 U	5.5 U	6.9 U	48 U	8 U	7.4 U	52 U
Diesel Range Hydrocarbons	<25	25 - 200		27 U	28 U	43 U	**560**	**9800**	**210**	**880**	**32000**
Lube Oil Range Hydrocarbons	<100	100 - 200		**120**	56 U	**320**	**160**	580 U	60 U	**150**	1400 U

Table 5-2
Soil Stockpile Sample Analytical Results
North Cascade Ford
VSF Properties, LLC
Sedro-Woolley, Washington

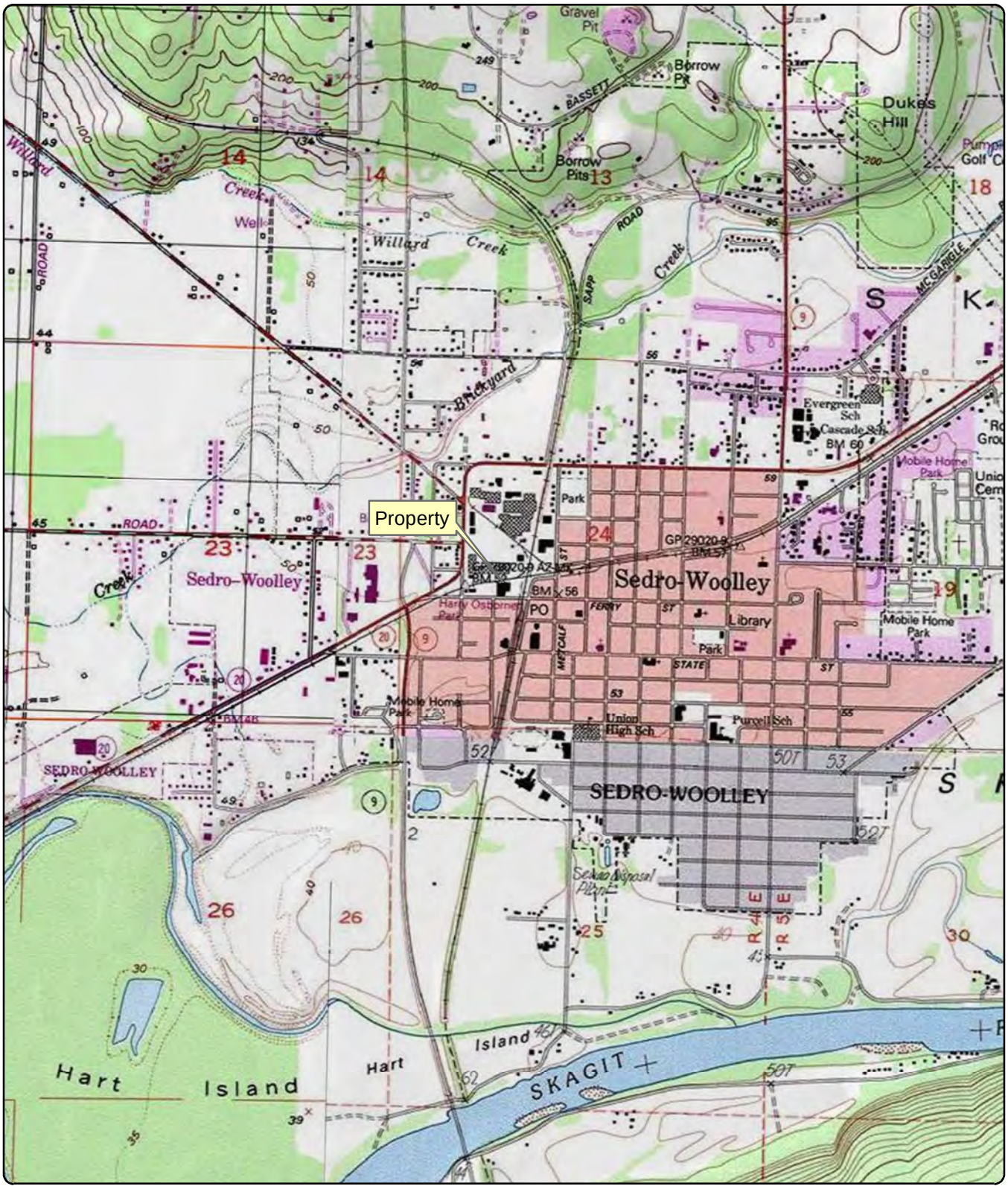
NOTES:
Result values in bold font indicate a detection.
Detections that exceed soil reuse criteria are shaded. Non-detect results are not evaluated against reuse criteria.
Soil reuse criteria were obtained from Ecology's Guidance for Remediation of Petroleum Contaminated Sites, Publication No. 10-09-057, Table 12.1.
mg/kg = milligrams per kilogram.
NV = no value.
PCB = polychlorinated biphenyls.
SVOC = semivolatile organic compound.
Total Aroclors = sum of all PCB Aroclors.
Total Naphthalenes = sum of 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene.
Total Xylenes = sum of m,p-xylene and o-xylene.
TPH = total petroleum hydrocarbon.
U = Result is not detected at or above method reporting limit.
VOC = volatile organic compound.

Table 5-3
Post-Treatment Water Sample Analytical Results
North Cascade Ford
VSF Properties, LLC
Sedro-Woolley, Washington

Location:	BAKER TANK
Sample Name:	BTPOST-WS-01
Collection Date:	10/5/2016
Total Metals (ug/L)	
Lead	**1.1**
VOCs (ug/L)	
Benzene	1 U
Ethylbenzene	1 U
o-Xylene	1 U
Toluene	1 U
Xylene, m-,p-	1 U
TPH (mg/L)	
Diesel Range Organics	0.26 U
Residual Oil Range Organics	0.41 U
Gasoline Range Organics	100 U
Chemical Parameters (s.u.)	
pH	**9.6**

NOTES:
Result values in bold font indicate a detection.
mg/L = milligrams per liter.
s.u. = standard pH units.
TPH = total petroleum hydrocarbon.
U = Result is not detected at or above method reporting limit.
ug/L = micrograms per liter.
VOC = volatile organic compound.

FIGURES



Site Address: 116 W Ferry Street, Sedro-Woolley, Washington
Source: US Geological Survey (1990) 7.5-minute topographic quadrangle: Sedro-Woolley North
Section 24, Township 35 North, Range 4 East

Figure 1-1
Property Location

North Cascade Ford Property
Sedro-Woolley, Washington

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0 750 1,500
Feet

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Approved By: H. Good
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Project: 0747.01.05

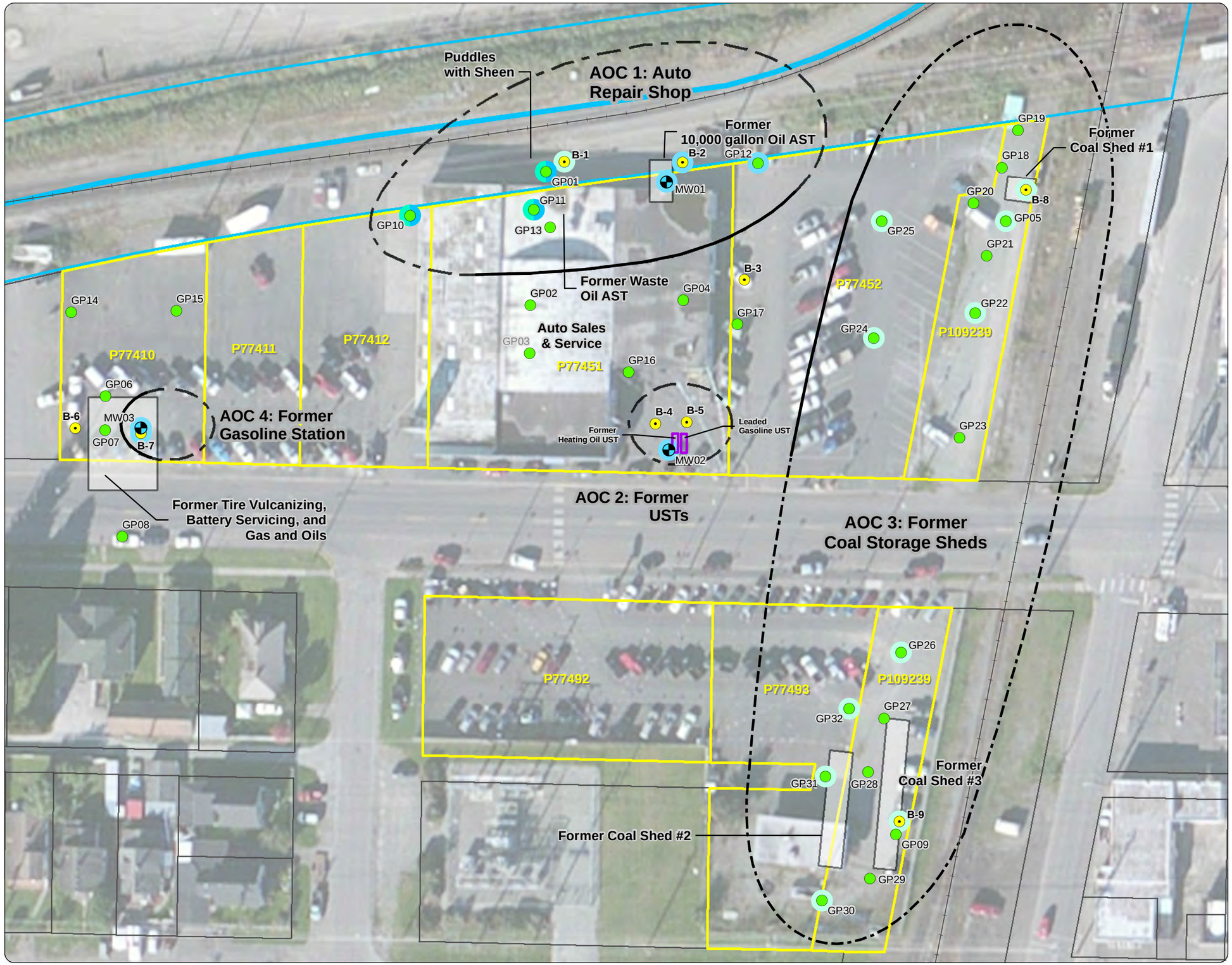

Figure 2-1
Site Features and Areas of Concern

North Cascade Ford Property
Sedro-Woolley, Washington

Legend

- Boring Location
- Monitoring Well
- Phase II ESA Boring Location
- Soil Exceedance*
- Groundwater Exceedance*
- Soil and Groundwater Exceedance*
- AOC Boundary (dashed where inferred)
- Former USTs
- Property Parcel and Parcel Number
- BNSF-owned Parcels
- Skagit County Parcels

Notes:
1. All historical feature locations are approximate and shown for relative location reference only.
2. Chemical detections in soil samples that were collected below the water table during the 2011 Phase II ESA were not compared to soil cleanup levels.
3. AOC = area of concern.
4. AST = aboveground storage tank.
5. BNSF = Burlington Northern Santa Fe Railway Company.
6. ESA = environmental site assessment.
7. UST = underground storage tank.

*Model Toxics Control Act Method A cleanup level exceedance detected.

0 30 60
Feet

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

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Project: 0747.01.05 Produced By: estrandhagen Approved By: H. Good Print Date: 11/8/2016

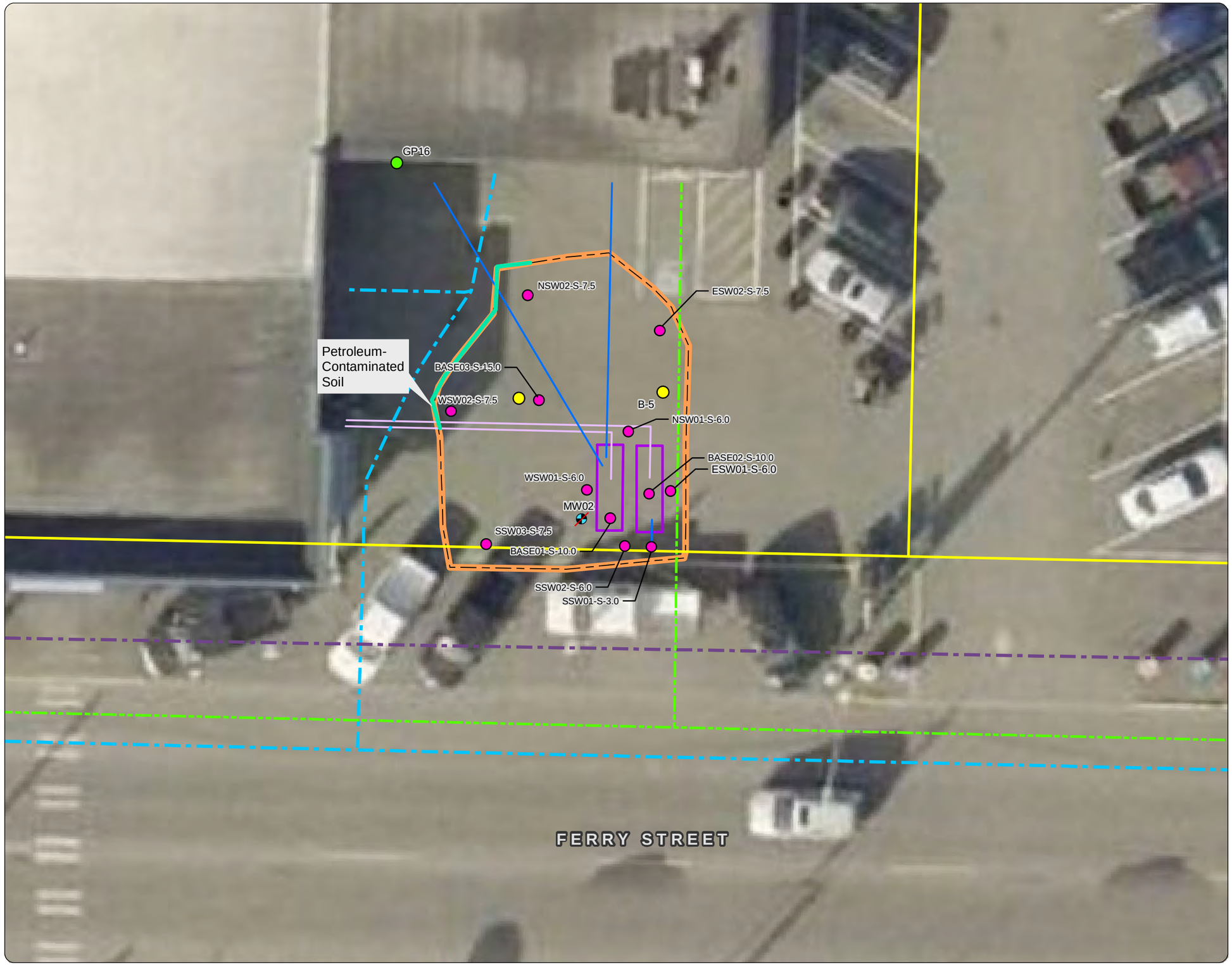

Figure 4-1
Interim Remedial Action Excavation and Sample Locations

North Cascade Ford Property
Sedro-Woolley, Washington

Legend

- Confirmation Sample Location
- Monitoring Well Location (Decommissioned)
- MFA Boring Location (Historical)
- Phase II ESA Boring Location
- Former Vent Line
- Former Product Line
- Sewer Line
- Gas Line
- Water Line
- Former USTs
- Excavation Extent
- Property Parcel

Notes:
1. ESA = environmental site assessment.
2. UST = underground storage tank.
3. MFA = Maul Foster & Alongi, Inc.
4. Location of remaining petroluem-contaminated soil along sidewalls as observed during excavation.

0 5 10
Feet

Source: Aerial photograph (2015) obtained from Skagit County iMap. Parcels obtained from survey.

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Print Date: 11/8/2016
Approved By: C. Wise
Produced By: astrandhagen
Project: 0747.01.06

APPENDIX A

GPR SURVEY REPORT

Materials Testing & Consulting, Inc.

Geotechnical Engineering & Consulting • Special Inspection • Materials Testing • Environmental Consulting

June 22, 2016

Heather Good, L.H.G.
Maul Foster & Alongi, Inc.
1329 North State Street, Suite 301
Bellingham, WA 98225

Subject: **Ground Penetrating Radar Underground Storage Tank Survey**
North Cascades Ford Dealership – 116 West Ferry Street
Sedro Woolley, Washington

MTC Project No.: **16B119**

Dear Heather:

At your request, Materials Testing & Consulting, Inc. (MTC) has completed a limited-scope non-destructive subsurface survey at the address listed above.

MTC understands this exploration is requested by the client with the goal of identifying and mapping underground storage tanks and other observable utilities within the three predetermined locations at the property located at 116 West Ferry Street, Sedro Woolley, WA. The three predetermined locations specified by the client resided in three separate parcels labeled as P77410, P109239 and P77451 which are referred to herein as Location 1, Location 2, and Location 3 respectively.

P77452

Site Investigation Methodology:

On June 21, 2016, an MTC Senior GPR Technician and Staff Geologist visited the site to establish a surveying grid and perform nondestructive subsurface imaging. All locations of interest were observed to be graded and asphalt paved parking areas with the exception of the east side of Location 2 which was a graded gravel lot abutting an existing low concrete wall. A representative of the client met with MTC on site to assist in establishing perimeters for each survey location. A non-permanent 'hub' marker was placed in the southeast corner of each survey location as a reference point for located items and for grid layout. The markers consist of yellow ribbon flagging nailed into the existing asphalt (see photo 1.) Locations of identified possible UST's were recorded in reference to gridlines set by MTC in the field and to the markers in the southeast corner of each location as well.

Gridlines were established in each location on a 10.0' by 10.0' grid. Subsurface imaging was performed using a 400hz frequency Ground Penetrating Radar (GPR) antenna with images taken at depths of 16.0' as full cross sections of each location along each established gridline. Representative signals of scans containing anomalies analogous with typical utility lines and USTs were marked with non-permanent marking in the field on the asphalt and on an aerial map of each location with gridlines overlain as seen below.

Site Observations and Interpretations:

Location 1:

At Location 1, the total area scanned stretched 105.0' north to south and 115.0' east to west. Subsurface conditions at Location 1 were observed to be significantly variable in comparison to Location 2 and Location 3, resulting in rendering images with significant irregular anomalies at varying depths and locations (Image C). The anomalies were generally observed to be non-continuous and are interpreted to be attributed to a heterogeneous mixture of subsurface materials.

One utility line was observed to reside in the vicinity of grids C.2/1-11, stretching continuously from south to north for the extent of the area scanned. The utility was interpreted to be approximately 24" below the existing grade.

Signals indicative of a similar unknown utility were sporadically observed along grid line D running parallel with the observed line at grid C.2 (Image A). However, these signals could not be found to be continuous and may be attributed to the existing concrete curb which extends along grid line C.8 across the entire length of the scanned area Location 1.

Anomalies of a relatively variable nature interpreted as likely buried concrete or debris were commonly observed in an roughly 200 sq.-ft. area located in the vicinity of gridlines F.5-G.5/6-8. The objects represented by these signals were observed to be at a depth range of 18" to 40" below the existing grade (Image B).

Location 2:

At Location 2, the total area scanned stretched 230.0' north to south and approximately 85.0' east to west, increasing to approximately 150.0' east to west for the northernmost 60.0' of Location 2. Signals of underground features where observed were generally interpreted as various existing utility lines (electrical and storm – active or abandoned).

At Location 2, three separate continuous signals were observed and interpreted as active electric lines each at a depth of approximately 24.0" below the existing grade. One line was interpreted to extend from gridline E.2/1 to gridline B.8/21.5. This was the longest observed utility line on site and was observed to run parallel, offset several feet to the west, of the row of existing light posts in Location 2 (Image E).

Signals interpreted as a second electric utility line were observed to extend along gridlines E-G/2 from the base of the southernmost light post in Location 2 extending beyond the Location 2 west boundary (Image F). Signals interpreted as the third electric utility line observed in Location 2 were found to begin on the west face of the

existing sheds at gridlines E/19 extending beyond the Location 2 west boundary past grid lines M/19.2 (Image D).

At Location 2, two separate continuous signals were observed and interpreted as 6" to 8" diameter storm sewer lines at a depth of approximately 18" below existing grade. Both continuous signals were chased through the perimeters of location 2 to the site west and south. Both signals terminated within location 2 at a catch basin which was observed in the vicinity of grid lines F/17. Signals interpreted as one storm sewer line were found to begin in the vicinity of G.5/1 (Image H). Signals interpreted as a second storm sewer line were found to begin in the vicinity of gridlines M/20 (Image G).

Within Location 2, in the vicinity of gridlines A-B.5/8.7-10 (noted on grid map), a strong discontinuous signal was observed at a depth of around 24" to 30". The signal was associated with a zone of disturbance, but was relatively confined and was interpreted as an approximately 24-inch diameter metal pipe or other similar obstruction (Image I).

At grid lines D-E/20.5-22 of Location 2, irregular signals or anomalies were observed. The inconsistent shape and disruptive pattern indicates the signal is unlikely to be an intact pipe or body such as a tank. Interpreted to represent debris and/or abandoned disrupted utility lines.

Location 3:

At Location 3, the total area scanned stretched 75.0' north to south and approximately 75.0' east to west.

Two nested signals were observed and interpreted as likely USTs in the vicinity of gridlines D.8-F/2.8-4 (Image M). The tanks were interpreted to be oriented north-south at a depth of approximately 28.0" below existing grade. Signals indicate that a third possible tank may exist at an approximate depth of 4.0' positioned between the two tanks at a more shallow level.

At Location 3, one continuous signal was observed and interpreted as an approximately 1.0" diameter waterline. The signal was followed from the existing water meter as shown on the map in Appendix 3 from gridline H-F/2.3-8 (Image N).

At Location 3, two unknown utility lines were mapped from gridline H/4.5 to the western border of the UST area. These utility lines are visible on the eastern wall of the existing building and are continuous from the building to the tank area where signals terminated and were not observed on the eastern side of the mapped UST area (Image K). A third signal interpreted as a possible unknown utility line was observed in the vicinity of F/6 and oriented along grid line F, toward the interpreted UST area (Image L).

At Location 3, one continuous signal interpreted to be an approximately 6" storm sewer line was observed to run parallel with gridline A offset several feet to the east of the gridline (Image J).

Conclusions:

MTC has completed a subsurface scan of the pre-selected areas at the subject site in accordance with the approved project scope for the primary purpose of identifying likely underground storage tanks (USTs), and secondary purpose of noting other observed anomalies commonly associated with active and abandoned utilities, buried objects or debris. Significant signals interpreted as a likely UST nest were encountered at Location 3, grid lines D.8-F/2.8-4. No other locations encountered on site during our grid scanning expressed signals similar to that of the interpreted tank nest of Location 3. At Location 1 and 2, several areas were noted as displaying discontinuous signals not clearly associated with utilities. However, the signals at these spots were relatively disrupted and irregular in shape, and therefore interpreted as unlikely to represent a buried UST. These locations appeared to contain buried uncontrolled fill, concrete bodies or debris, or disrupted abandoned utility remnants.

Upon acceptance and use of this report and its interpretations, the client and users of this report shall understand that, due to the nature of subsurface scanning as a non-destructive and non-invasive procedure, the statements and conclusions presented herein are interpretive in nature. The findings herein are not intended to represent a definitive answer or guarantee of actual conditions, which can only be assured from direct exploration or observation.

Ms. Good, we trust this report presents the information you require. If you have questions, please do not hesitate to call.

Respectfully Submitted;
MATERIALS TESTING & CONSULTING, INC.

Michael Vaughan
Senior GPR Technician

Attached: *Appendix A. GPR Images of Mapped Objects*
Appendix B. Site Photos of Existing Conditions
Appendix C. Location Maps and Gridlines

Appendix A. GPR Images of Mapped Objects

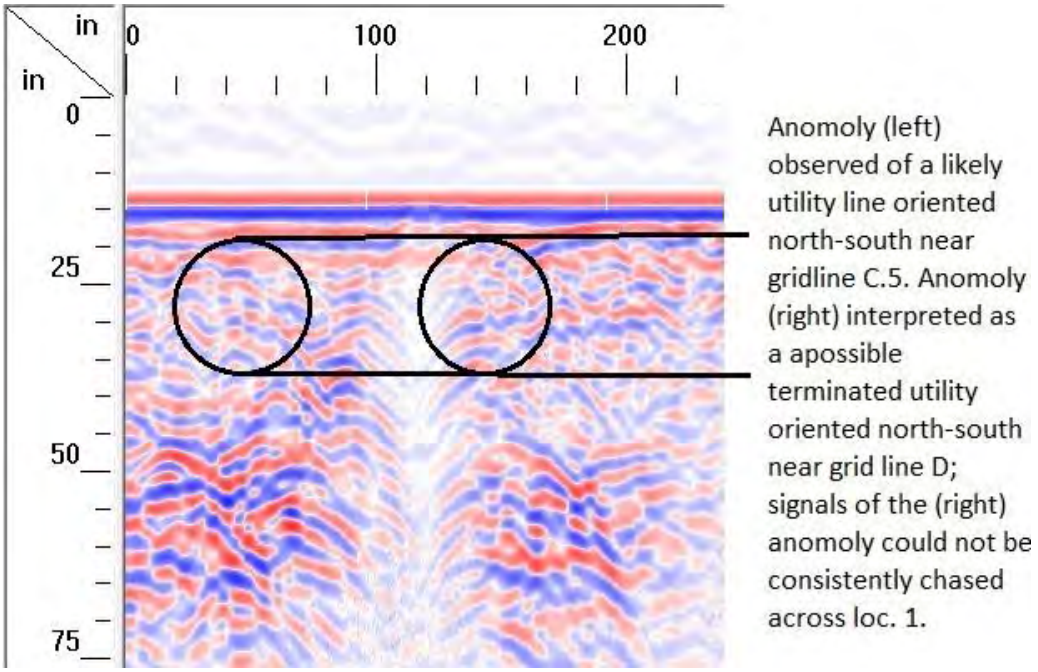


Image A: GPR scans from Location 1

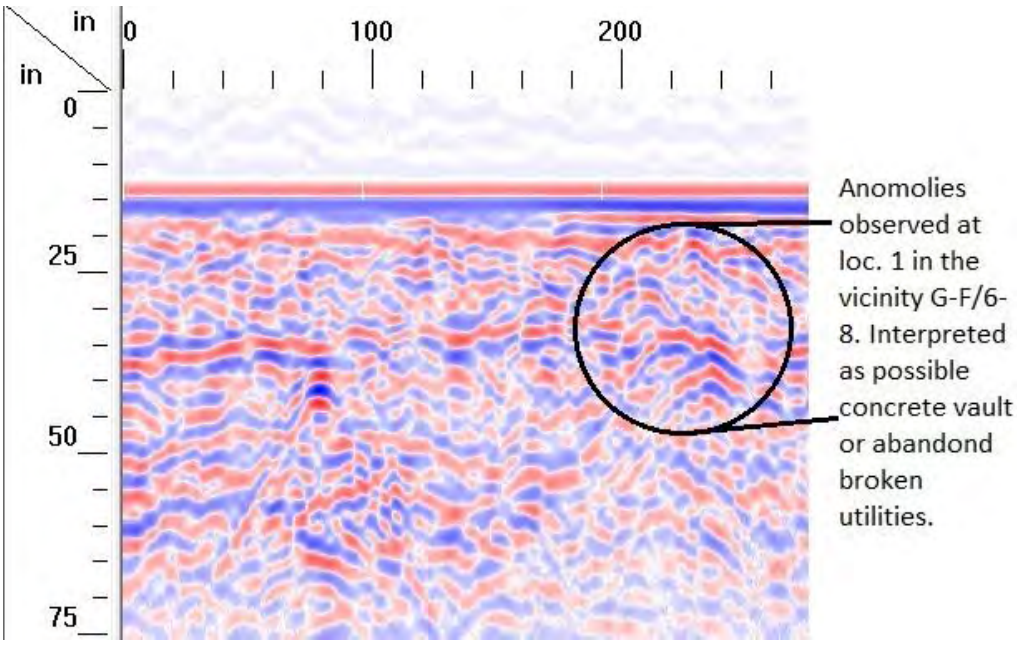


Image B: GPR scans from Location 1

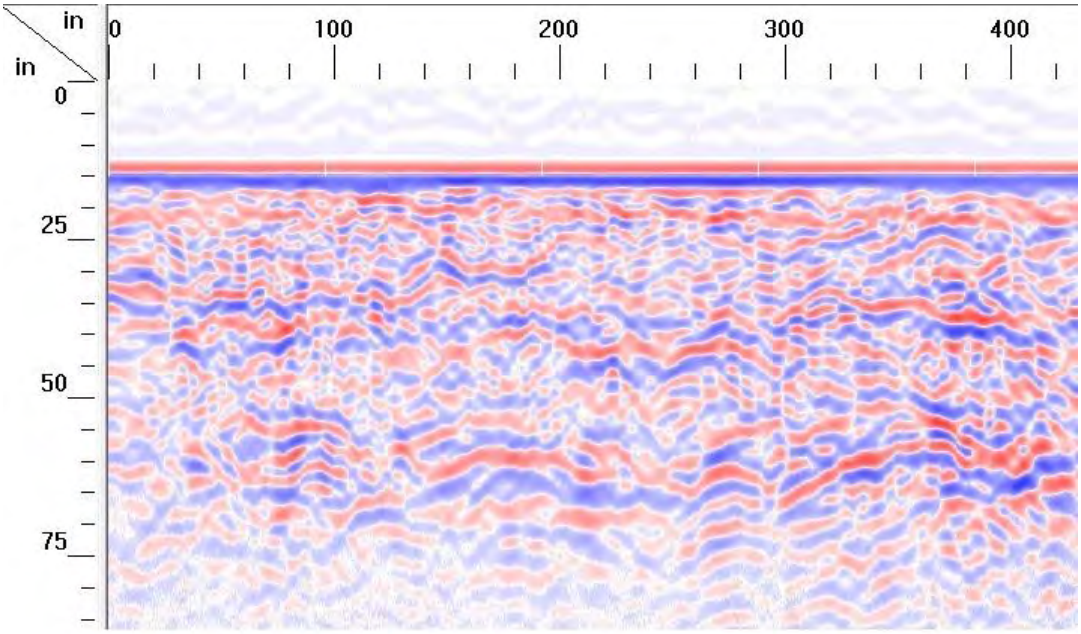


Image C: GPR scans from Location 1

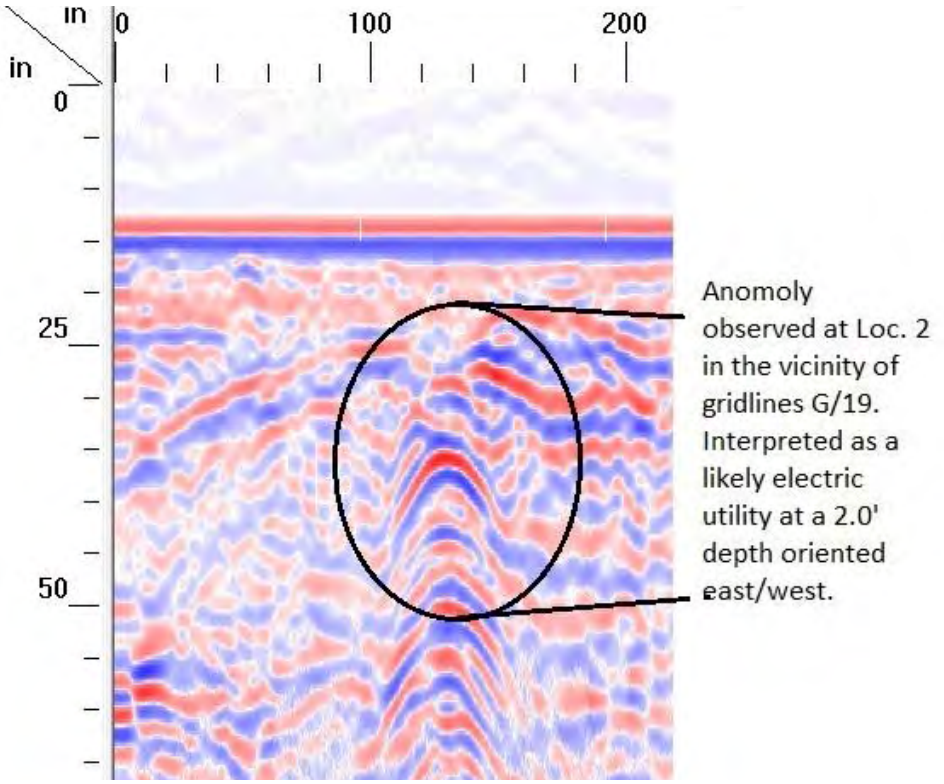


Image D: GPR scans from Location 2

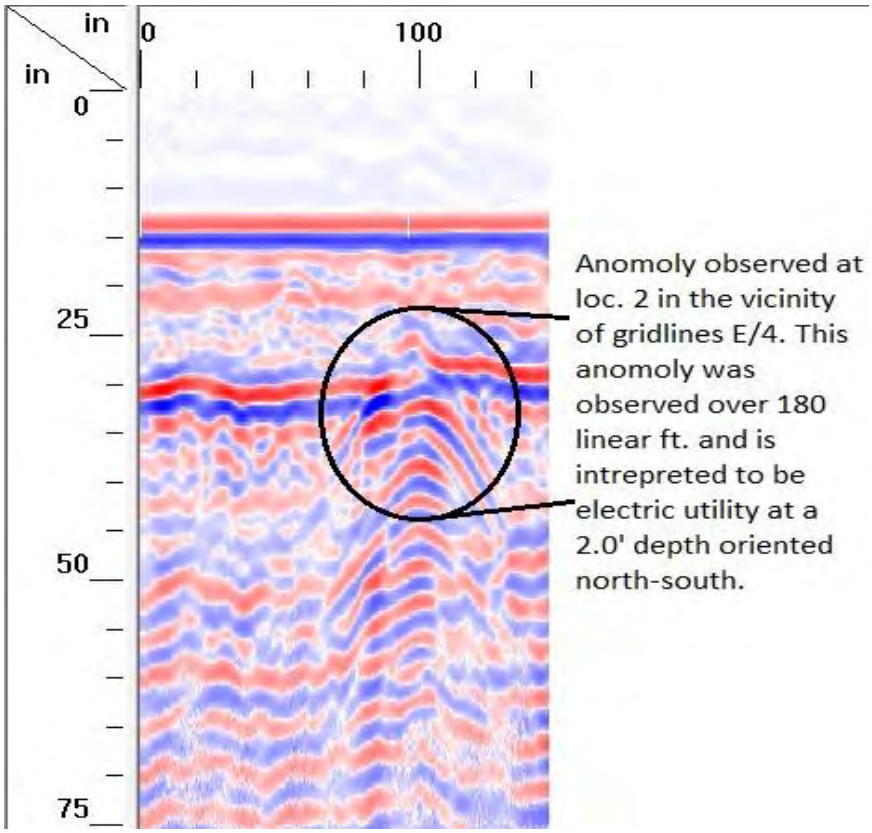


Image E: GPR scans from Location 2

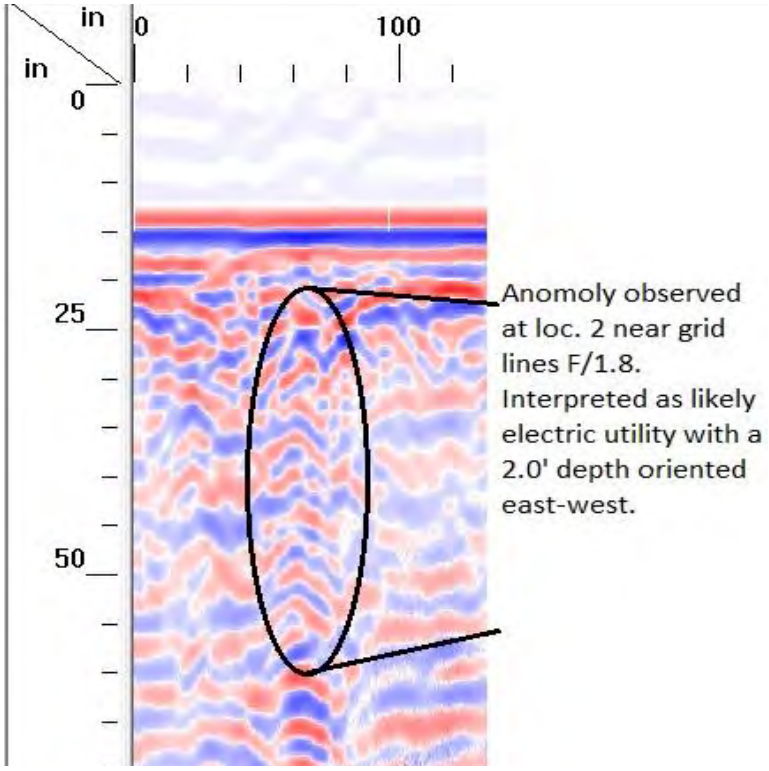
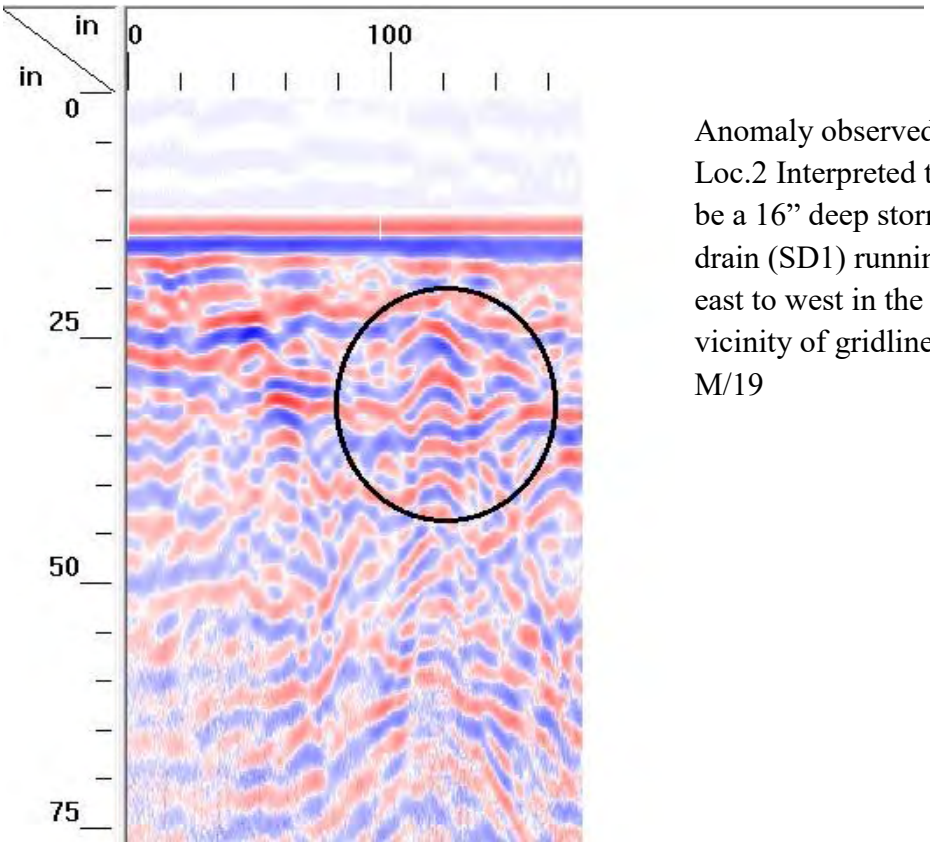


Image F: GPR scans from Location 2



Anomaly observed at Loc.2 Interpreted to be a 16” deep storm drain (SD1) running east to west in the vicinity of gridlines M/19

Image G: GPR scans from Location 2

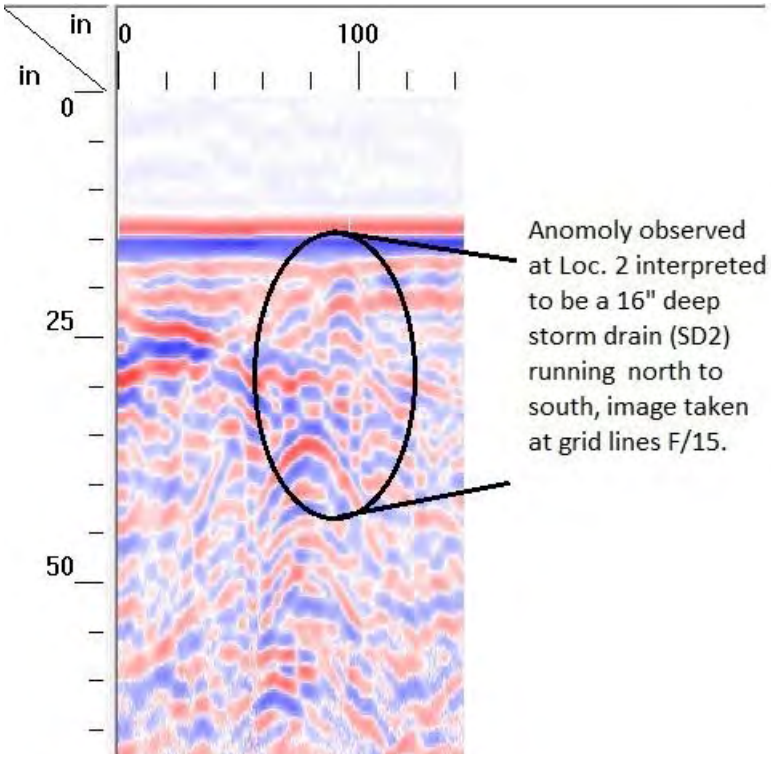


Image H: GPR scans from Location 2

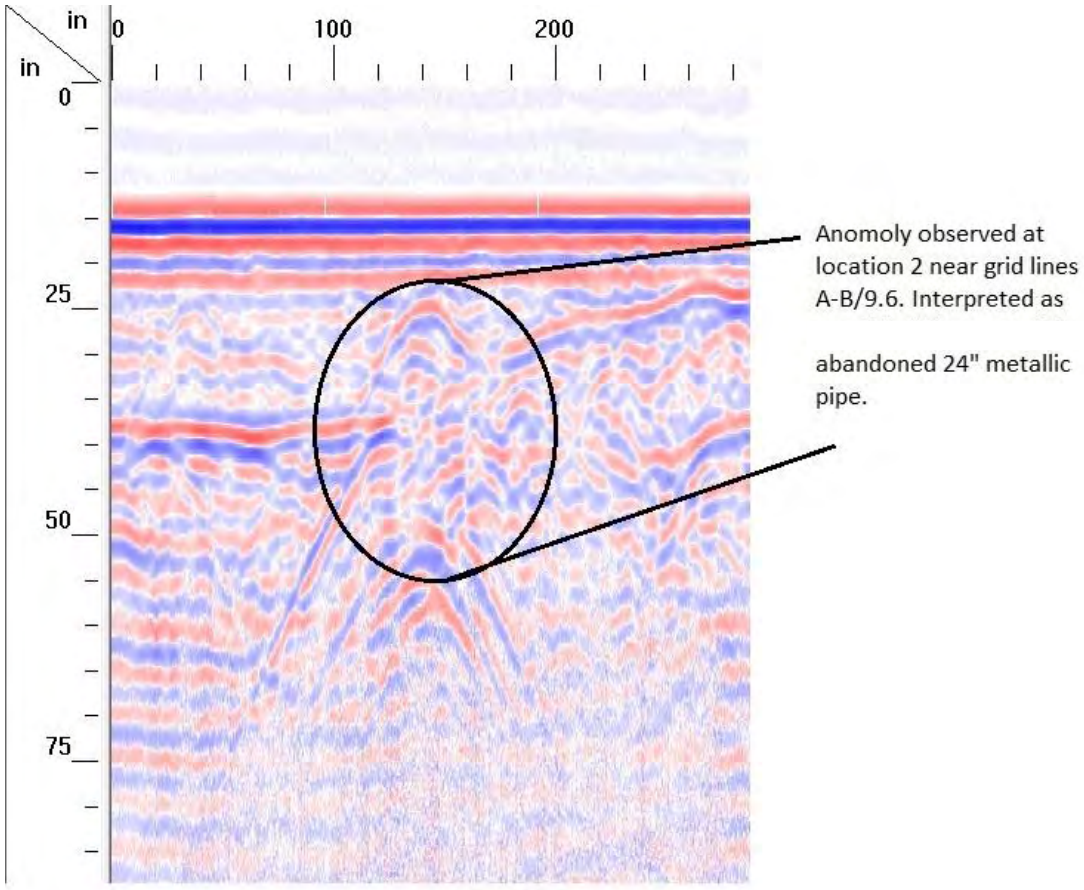


Image I: GPR scans from Location 2

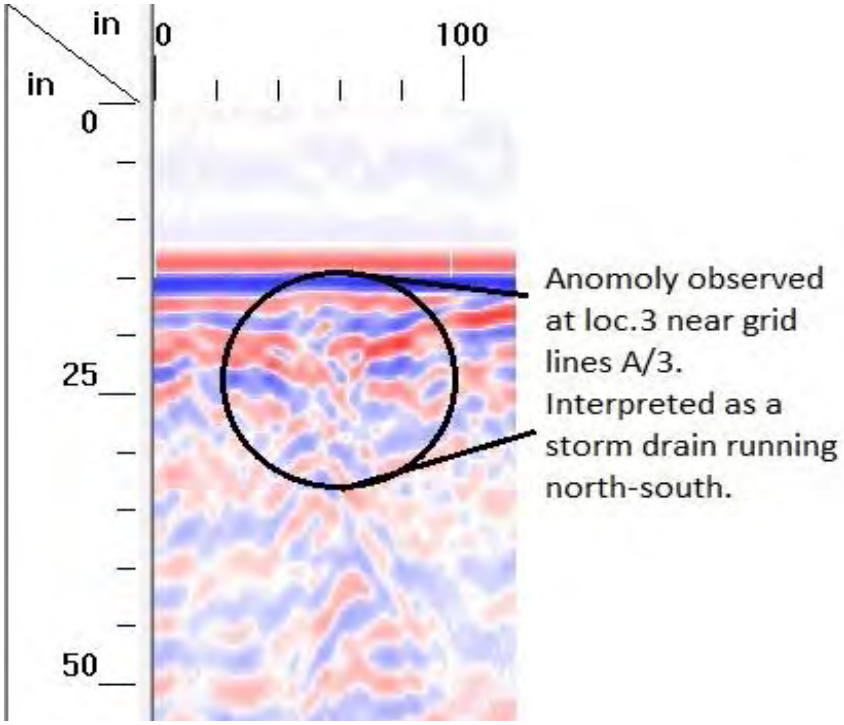


Image J: GPR scans from Location 3

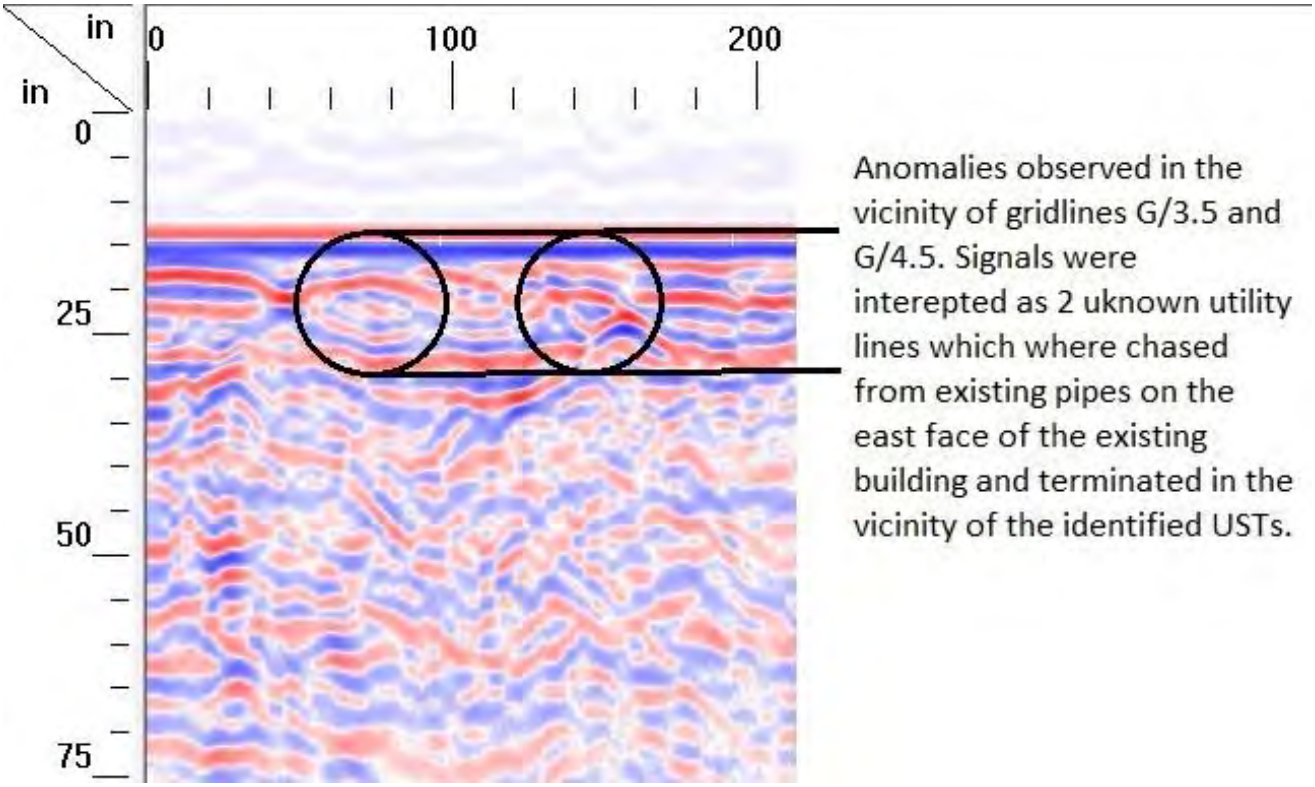


Image K: GPR scans from Location 3

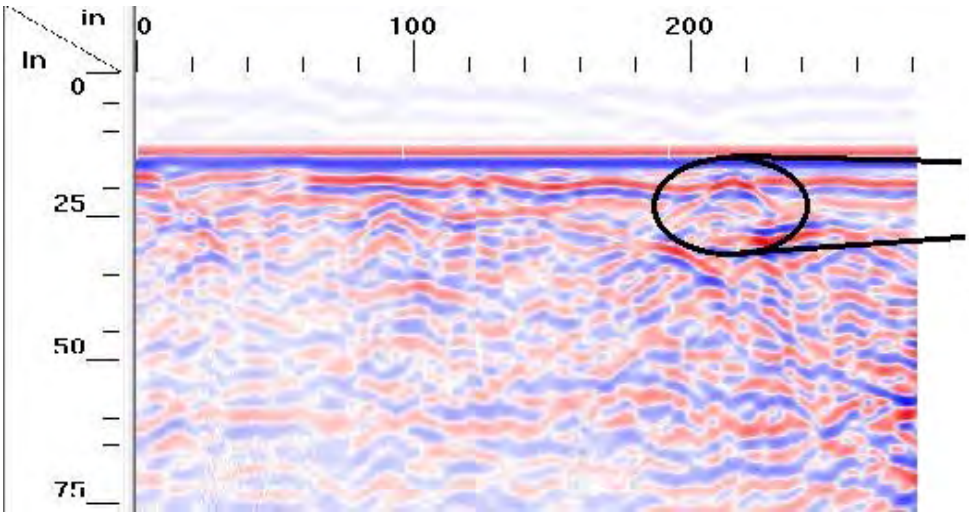


Image L: GPR scans from Location 3

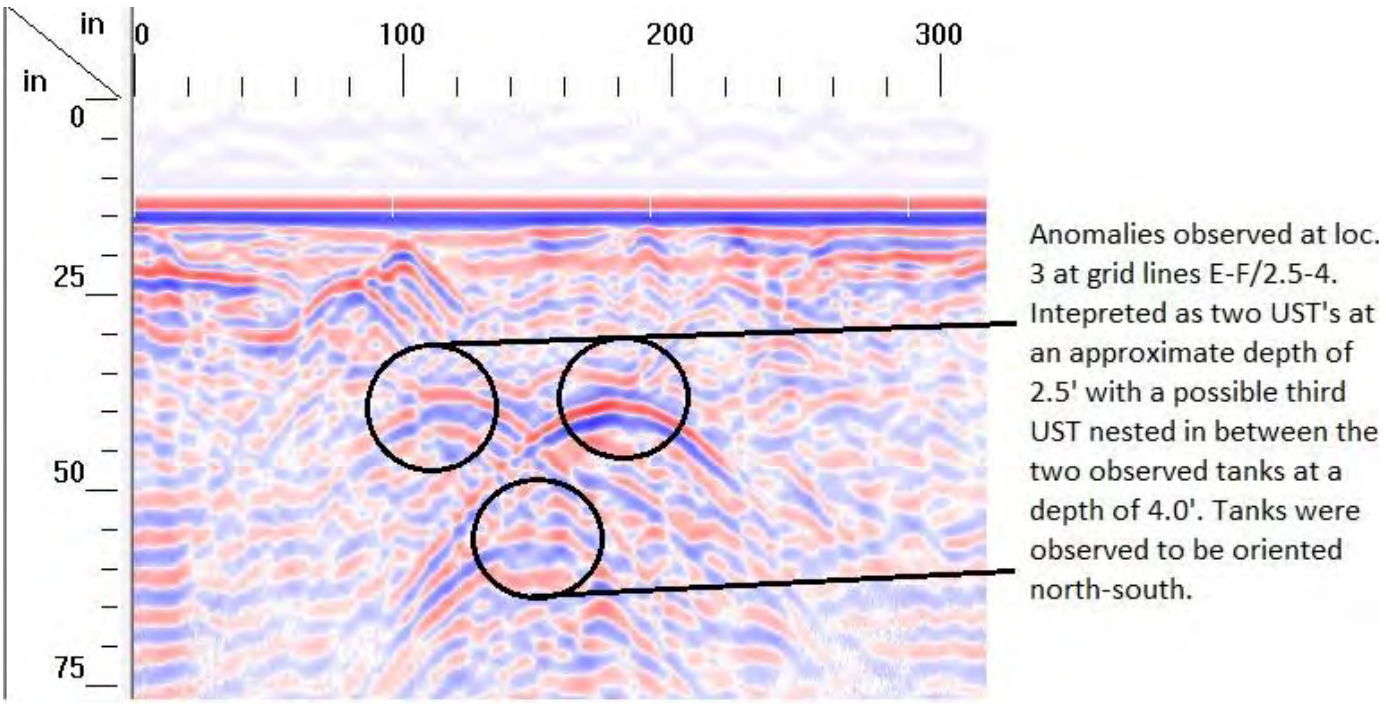


Image M: GPR scans from Location 3

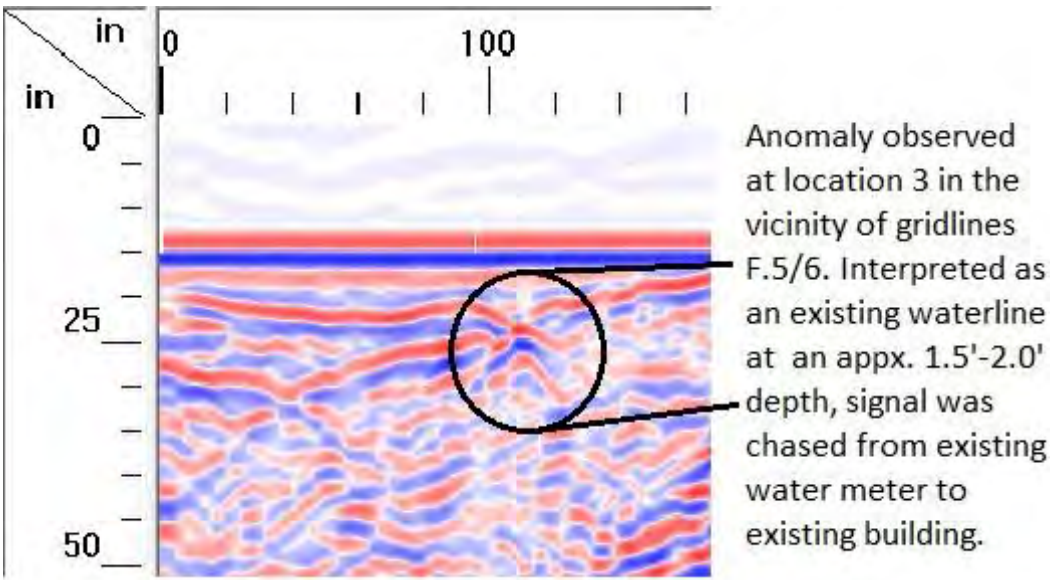


Image N: GPR scans from Location 3

Appendix B. Site Photos of Existing Conditions

Photo A: Location 1 from Northwest corner

Photo B: Location 1 looking east toward area of marked possible border concrete debris

Photo C: Location 1 Southeast corner

Photo D: Location 1 looking north along mapped utility line

Photo F: Location 2 looking north from area of anomaly at A-B/9-10.

Photo G: Location 2 looking south from middle of area.

Photo H: Location 2 looking west from middle of area.

Photo I: Location 2 looking southeast from north end

Photo J: Location 3 from southeast looking west

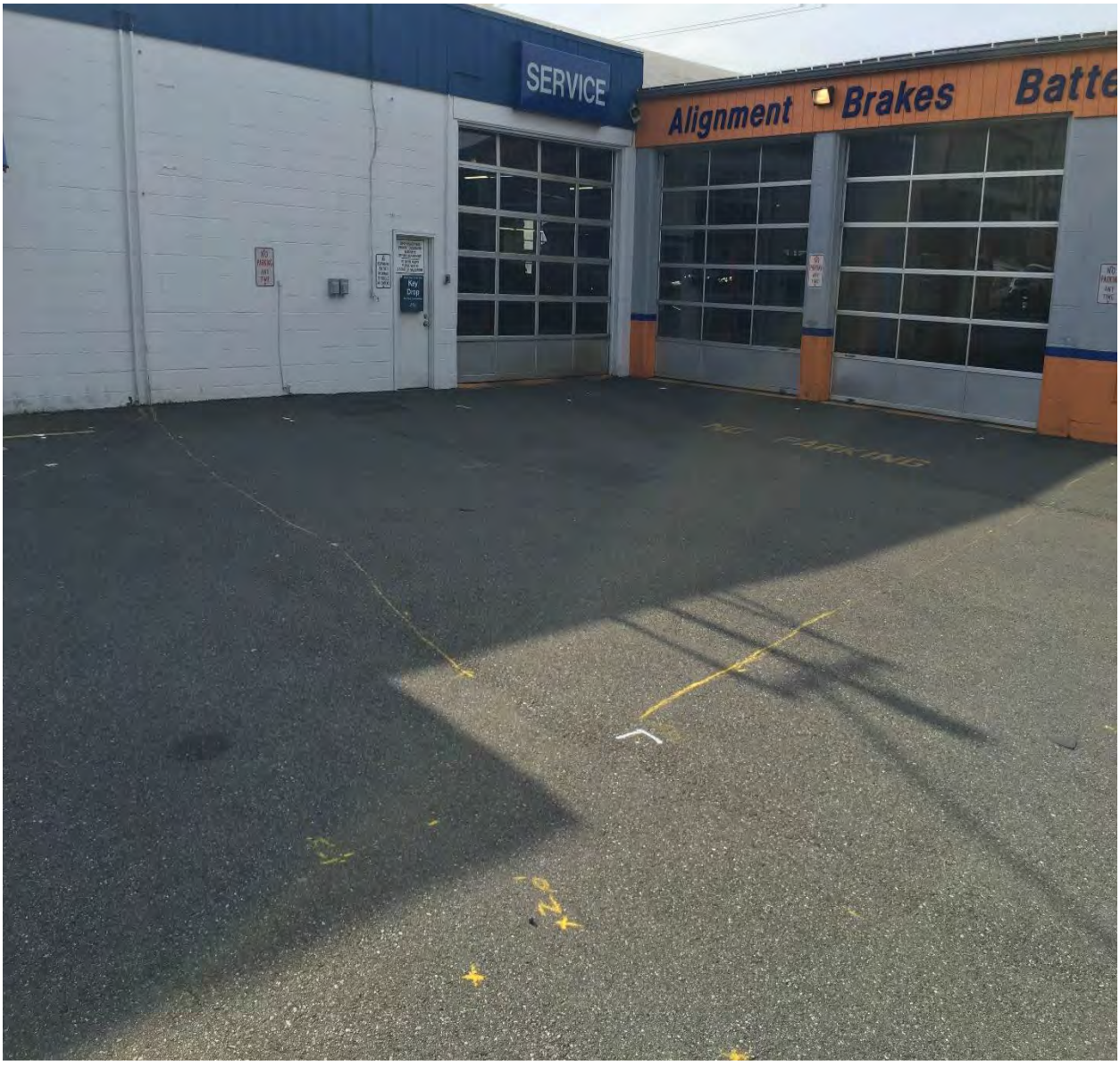


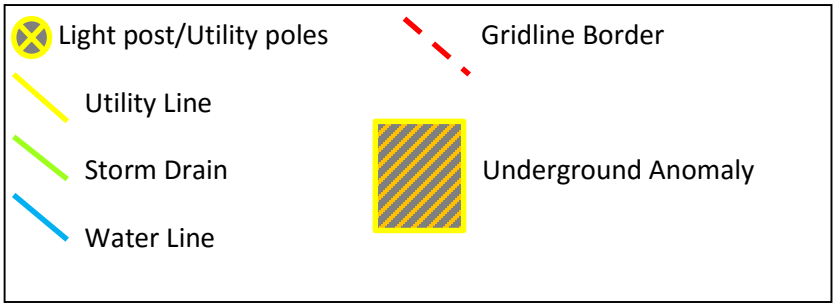
Photo K: Location 3 mapped utility lines

Photo L: Location 3 looking south at the area of mapped USTs

Photo M: Example of markers nailed in asphalt to mark the southeast corner of each location scanned, markers were set 5.0’ south and 5.0’ east of gridlines A/1 at each location.

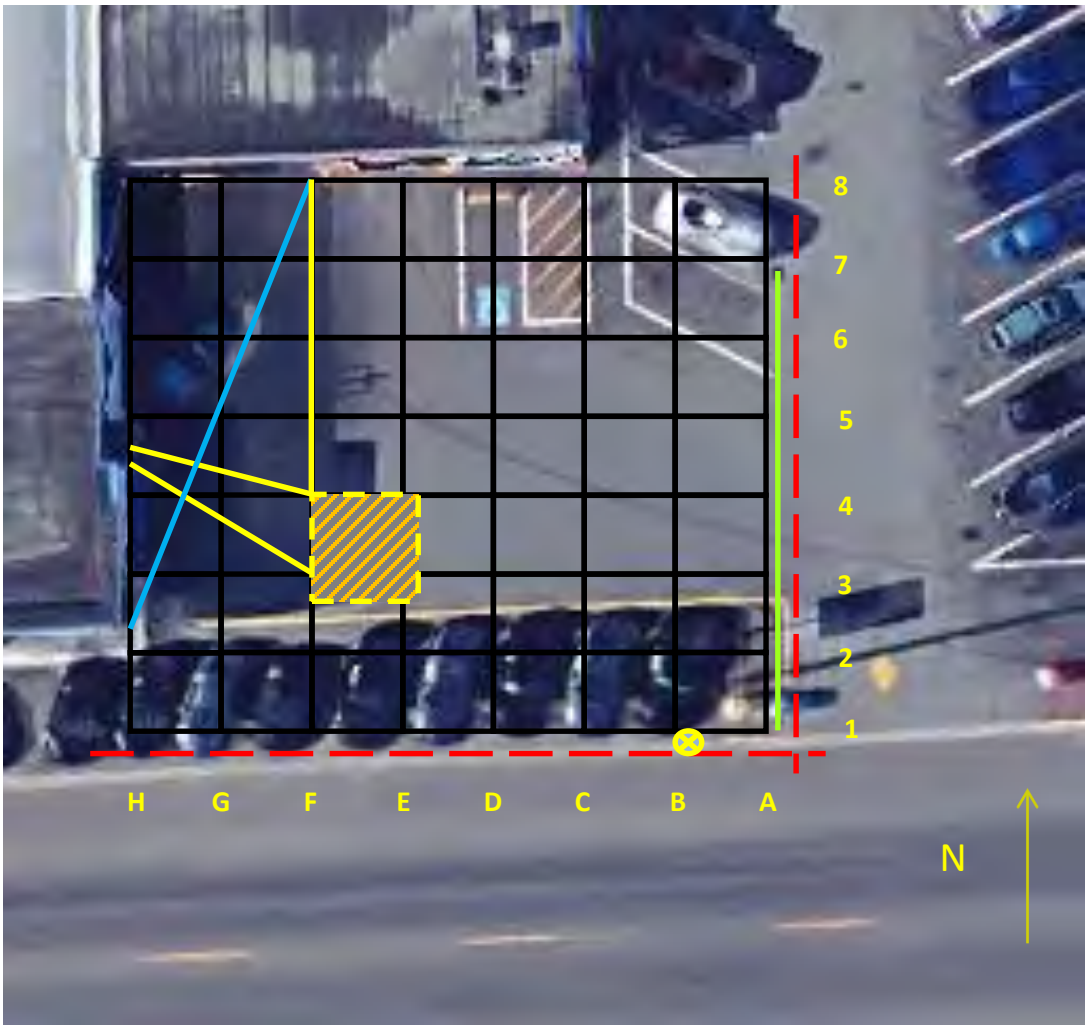
Appendix C. Location Maps and Gridlines

Location 1: West side of existing building. Yellow box is unknown anomaly, possible uncontrolled fill with buried debris. Interpreted as not likely a UST. Center of box located at 68' N, 56' W of intersecting red border lines. Box dimensions are 17' N-S, 4' E-W. In the field, a temporary marker was placed with nail and flagging in asphalt, located roughly at intersection of red border lines.



Materials Testing & Consulting, Inc.

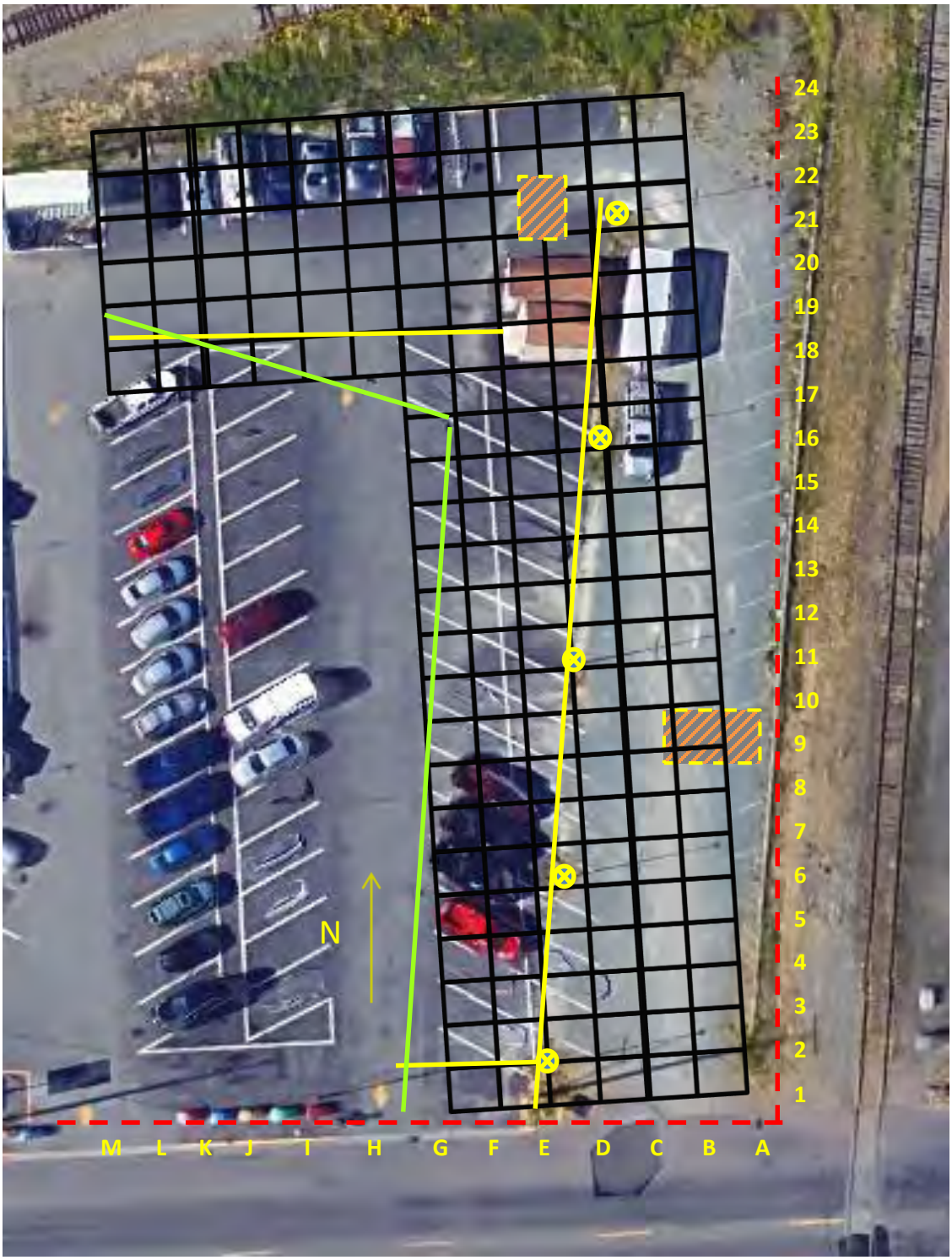
Geotechnical Engineering & Consulting ● Special Inspection ● Materials Testing ● Environmental Consulting



Location 3: East side of existing building. Yellow box is two tanks with possible third tank in between. Center of boxed area located 30’ N, 45’ W of intersecting red border lines. Dimensions of tank area are 8’ E-W by 16’ N-S. In the field, a temporary marker was placed with nail and flagging in asphalt, located roughly at intersection of red border lines. In-field marker located 11’ E, 6’ S of utility pole (yellow x-circle).

Materials Testing & Consulting, Inc.

Geotechnical Engineering & Consulting ● Special Inspection ● Materials Testing ● Environmental Consulting



Location 2: East side of lot. Yellow boxes are two areas of unidentified anomalies. Center of south box located at 91.5’ N, 8’ W of intersecting red border lines. Center of north box located at 205’ N, 48’ W of intersecting red border lines. Dimensions of north box are 6’ (S) x 11’ (E) x 9’ (N) x 12’ (W). In the field, a temporary marker was placed with nail and flagging in asphalt, located roughly at intersection of red border lines. In-field marker located 43’ E, 14’ S of southern-most light post (yellow x-circle).

APPENDIX B

DECOMMISSIONED WELL LOG

Please print, sign and return by mail to Department of Ecology

RESOURCE PROTECTION WELL REPORT

CURRENT Notice of Intent No. AE39269

(SUBMIT ONE WELL REPORT PER WELL INSTALLED)

Construction/Decommission *(select one)*

☐ Construction

☒ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* RE07052

Consulting Firm Maul Foster Alongi

Unique Ecology Well ID Tag No. MW-02 BHL 191

Type of Well *(select one)*

☒ Resource Protection

☐ Geotech Soil Boring

Property Owner NORTH CASCADE FORD Dealership

Site Address 116 W. Ferry St.

City Sedro Woolley County Skagit

Location NE 1/4-1/4 SW 1/4 Sec 24 Twn 39N 4E Select One ☒ BWM ☐ WWM

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

Tax Parcel No. _____

Cased or Uncased Diameter 2" Static Level 5'

Work/Decommission Start Date 9-9-16

Work/Decommission Completed Date 9-9-16

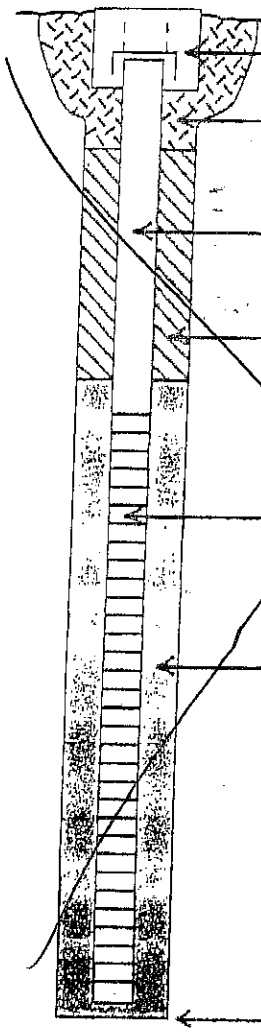
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee Name (Print): Abe Cardenas

Driller/Engineer/Trainee Signature Abe Cardenas

Driller or Trainee License No. 2861

If trainee, licensed driller's Signature and License No. _____

Construction/Design	Well Data	Formation Description
	MONUMENT TYPE: _____ CONCRETE SURFACE SEAL _____ ft. PVC BLANK 2 "x _____ ' BACKFILL _____ ft. TYPE: _____ PVC SCREEN _____ "x _____ ' SLOT SIZE: _____ TYPE: _____ GRAVEL PACK _____ ft. MATERIAL: _____ WELL DEPTH 14.5 "	0 - _____ ft. _____ - _____ ft. _____ - _____ ft. _____ - _____ ft. _____ - _____ ft.

REMARKS

CHIP IN PLACE / FILL CASING WITH 3/8" Bentonite chips.

APPENDIX C

STRUCTURAL BUILDING ASSESSMENT

kingworks
CONSULTING ENGINEERS

Memorandum

PROJECT	**N Cascade Ford UST Removal Structural Assessment**
ADDRESS	116 W Ferry St, Sedro-Woolley WA
KW PROJECT #	16094
DATE	September 14, 2016
CLIENT	Maul Foster & Alongi, Inc 1329 North State Street, Suite 301 Bellingham, WA 98225
CLIENT CONTACT	Carolyn Wise
FROM	John R (Jack) King, SE Kingworks Consulting Engineers, PLLC 600 Dupont St * Suite B Bellingham, WA 98225

Per your request, this memo is intended to comment on the observed construction and condition of the existing building adjacent to the site of an underground storage tank (UST) that is planned to be removed, and to recommend excavation limits appropriate for protection of the building. The approximate UST location is shown on Exhibit 1. Our observations were mostly focused on the building elements closest to this area.

Based on this scope description, neither exhaustive condition survey, nor structural analysis has been undertaken at this time. During a site visit on 9/12/16, from approximately 8:30 AM to 9:45 AM, the engineer walked the site, interior and exterior of the building structure, and made visual observations. Key structural elements, all of the exterior walls, and some cracks of the floor slabs in the vicinity of the anticipated excavation were photographed.

This report includes:

- This memo with the building structure description and condition, and stating recommendations for excavations limits
- A plan sketch keying the different building areas and the photographs (Exhibit 1)
- An aerial photo showing the approximate building plan dimensions (Exhibit 2)
- Exterior photos of the perimeter of the building (Exhibits 3 - 7)
- Photos of slab cracking in the vicinity of the excavation (Exhibits 8 - 9)
- A sketch showing the recommended excavation limits adjacent to the building (SSK-1)

Building Description

The subject building is approximately 28,000 square feet. It is a single story structure with wood framed roof framing members, some wood and steel columns, and concrete masonry interior and exterior bearing walls. The footings are assumed to be conventional, spread foundations constructed with concrete. The floor is a concrete slab supported on grade. The building was constructed in approximately the mid 1900's. At least one area ('Quick Lane' waiting room and about 1/3 of the adjacent shop area) appears to have been constructed as a later addition, based on joints in the slab and changes in masonry style. Based on the era of construction the masonry walls and foundations may be unreinforced or only lightly reinforced (when compared to modern masonry practice).

The following descriptions are provided by area. Refer to Exhibit 1 for the lettered area locations.

A) Showroom: The roof structure is concealed by finishes but is assumed to be wood framed rafters running n/s with supporting beam lines along the south exterior wall and one interior column line. The interior columns are wrapped with brick, but this may be non-structural wrap around wood or steel columns. The floor is covered with an adhered aggregate finish which would likely conceal cracks if any are present.
B) Service Bay: The roof structure consists of rafters running n/s over timber bow string trusses spaced approximately 15 feet on center and running e/w.
C) Quick Service Bay: The roof structure is concealed by finished but is assumed to be wood rafters running n/s
D) 'Quick Lane' Waiting Room: A continuation of the C. The floor is concealed with tile so cracks are likely concealed if any are present.
E) Body Shop Bay: The roof structure is concealed by finished but is assumed to be wood rafters
F) Truck Service Bay: The roof area was not observed because it is distant from the UST removal area but it is assumed to consist of wood rafters over beam/column lines

Observations

The masonry walls appear to be in good condition, with only limited minor cracking visible. . A finish material covers the top portion of the wall. Also, there appeared to be multiple coats of paint. So it is possible that more cracking is present than can be seen. Many close-up photographs were taken along the walls closest to the UST. These will be kept on file for comparison if needed.

The floor slab in the areas B and C had some visible cracking in the vicinity of the UST removal. Photos were taken, with the most descriptive are included in exhibits 8 and 9.

The concrete stem below the windows along the south wall of the building has multiple vertical cracks visible along its length. These cracks have at least one coat of paint over them. The cracks are probably a result stresses from thermal expansion and contraction.

Recommendations

Because the walls are masonry, and likely only lightly reinforced or unreinforced, we recommend that the excavation for the UST and soil removal be kept a minimum of 5 feet from the face of the building at grade and that the excavation be sloped down and away from the building a minimum of 1 horizontal unit per every 1 unit of depth. The attached detail (SSK-1) graphically shows these recommended limits.

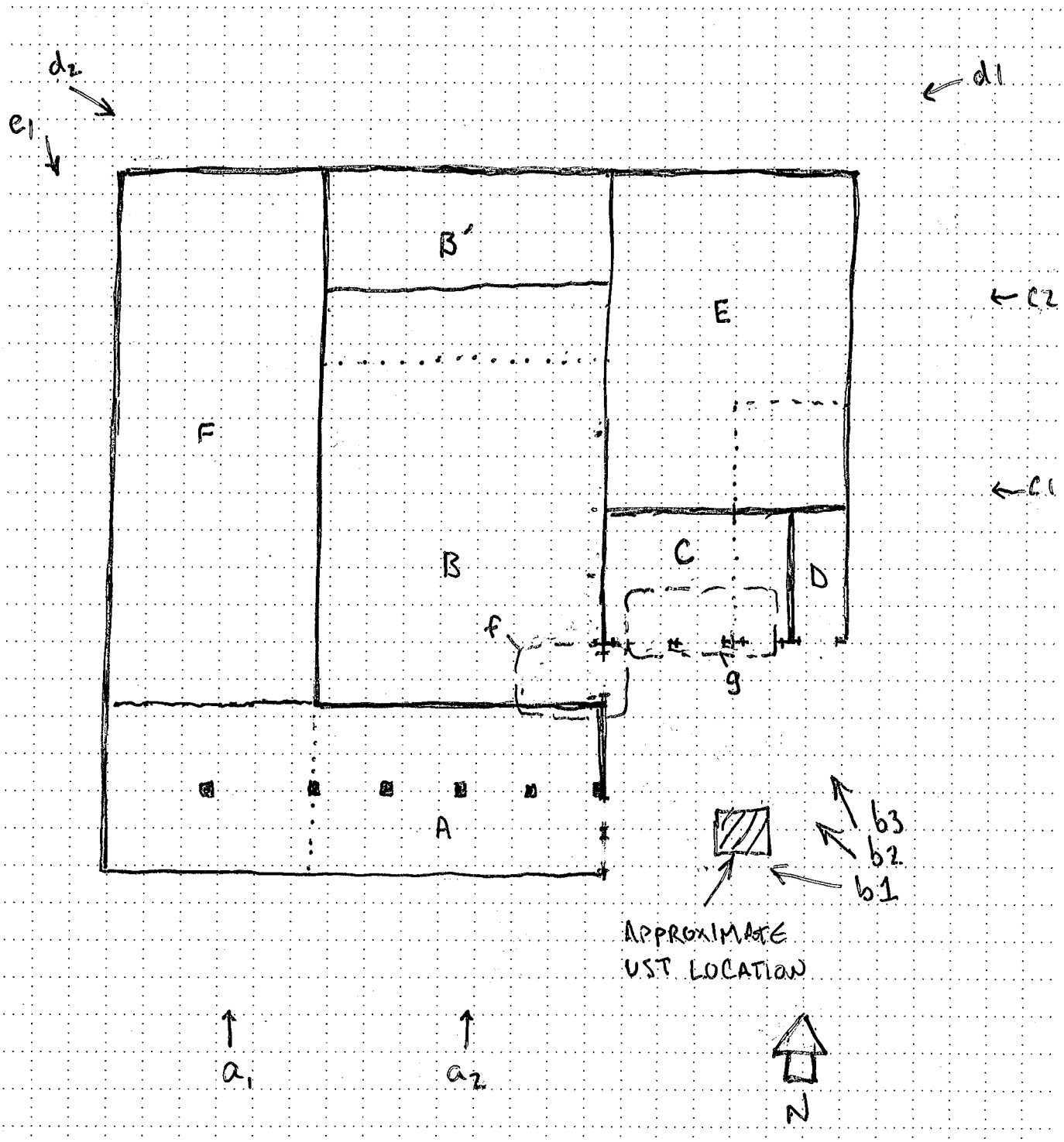
Feel free to contact us if you have any questions or other concerns.

Sincerely

John R King, SE
Principal

Attachments:
Exhibits 1 through 9
SSK-1

EXHIBIT 1 BUILDING KEY PLAN



kingworks CONSULTING ENGINEERS, PLLC 600 DUPONT STREET, SUITE B BELLINGHAM, WA 98225 360-714-8260 www.king-works.com	BUILDING KEY PLAN SHOWING PHOTO & AREA KEY		
	MSA N CASCADE FORD UST REMOVAL ASSESSMENT		
		Project number 16094	EXHIBIT 1
		Date 9/13/16	
		Drawn by J KING	
		Checked by J KING	Scale NTS

EXHIBIT 2 APPROXIMATE BUILDING DIMENSIONS

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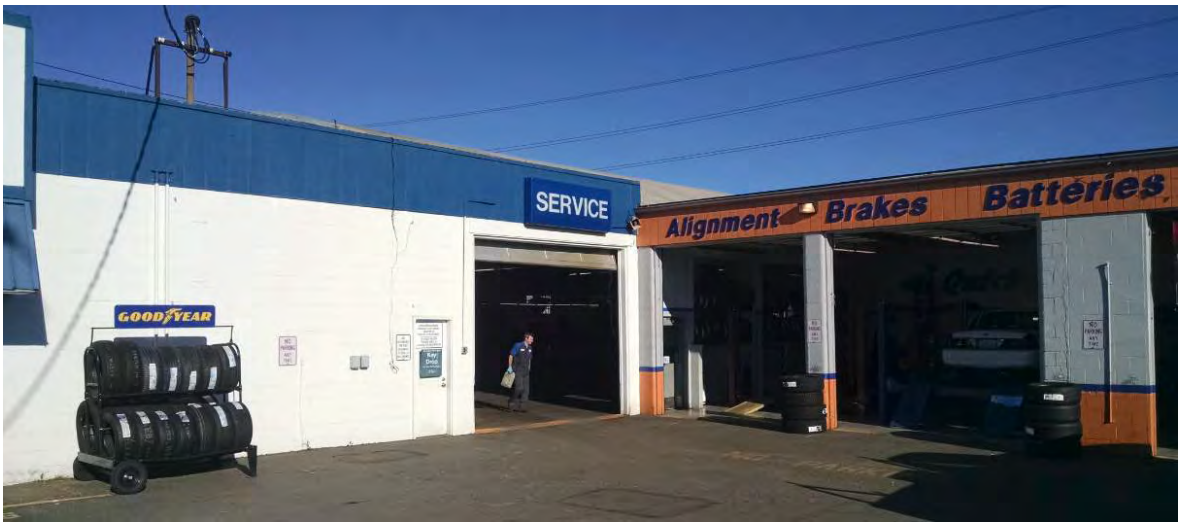
EXHIBIT 3 SOUTH ELEVATION PHOTOS

a1

a2

EXHIBIT 4 SOUTH AND EAST ELEVATION PHOTOS AT REENTRANT CORNER

b1



b2

b3

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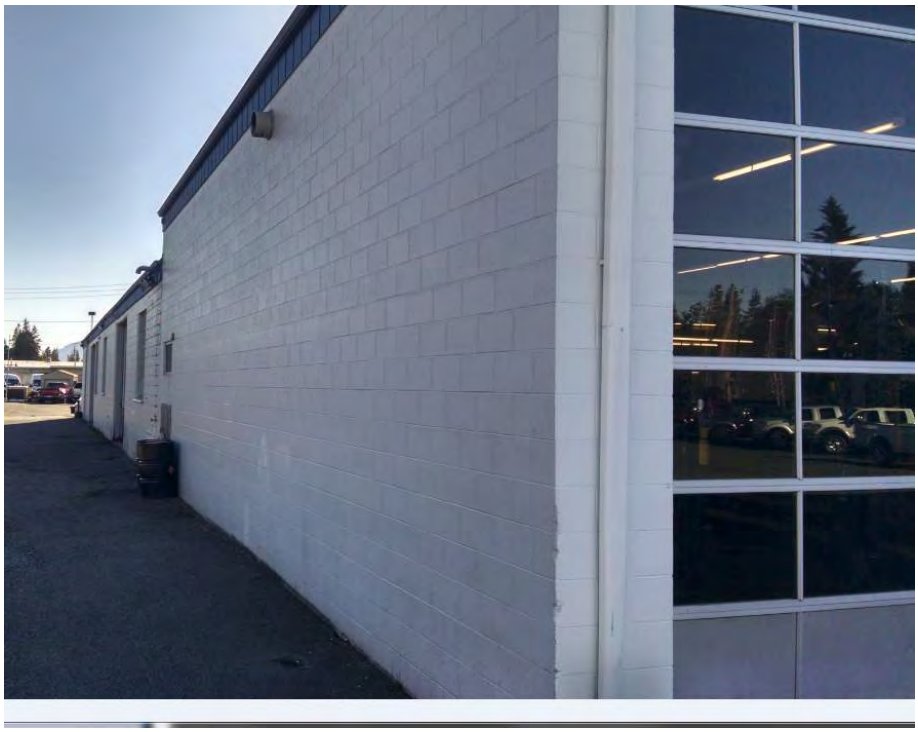
EXHIBIT 5 EAST ELEVATION PHOTOS

c1

c2

EXHIBIT 6 NORTH ELEVATION PHOTOS

d1



d2

EXHIBIT 7 WEST ELEVATION PHOTO

e1

EXHIBIT 8 AREA f FLOOR SLAB CRACKS

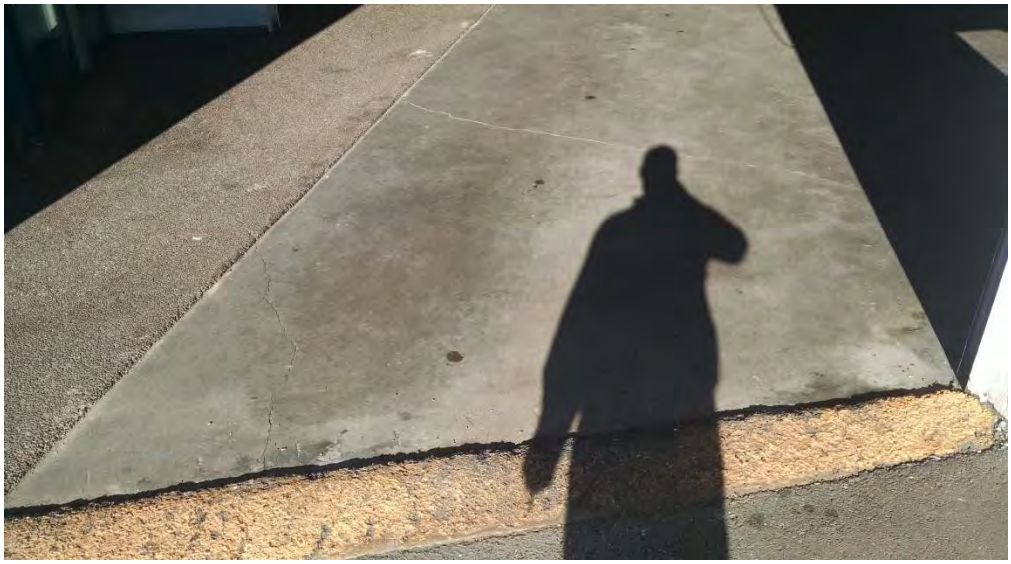
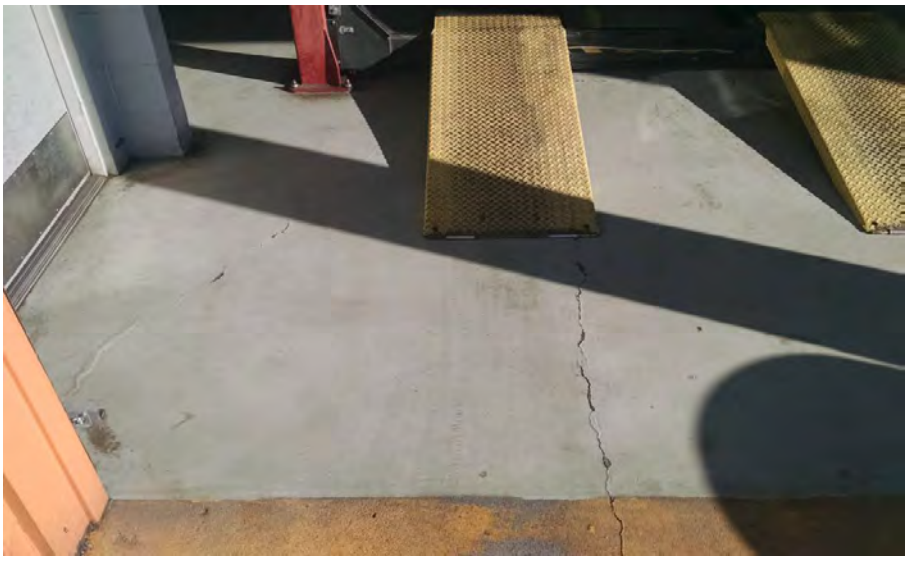
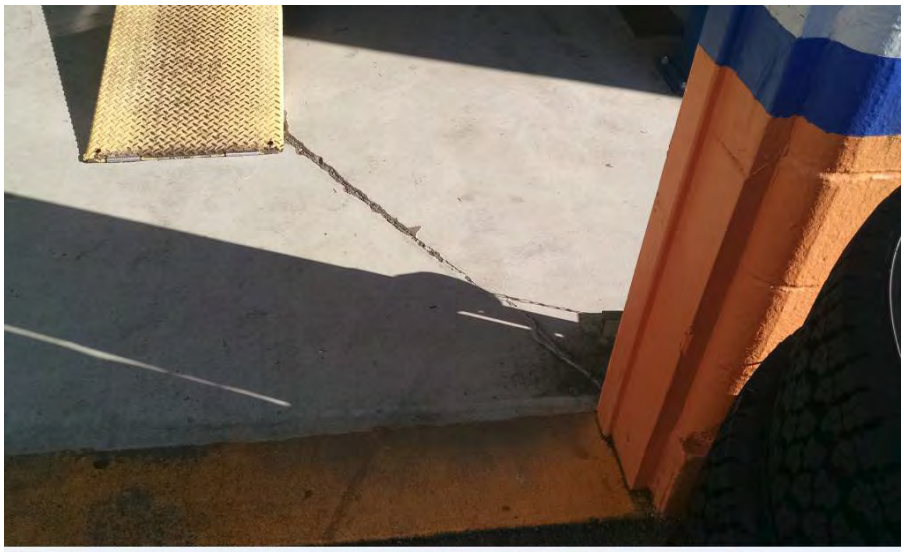
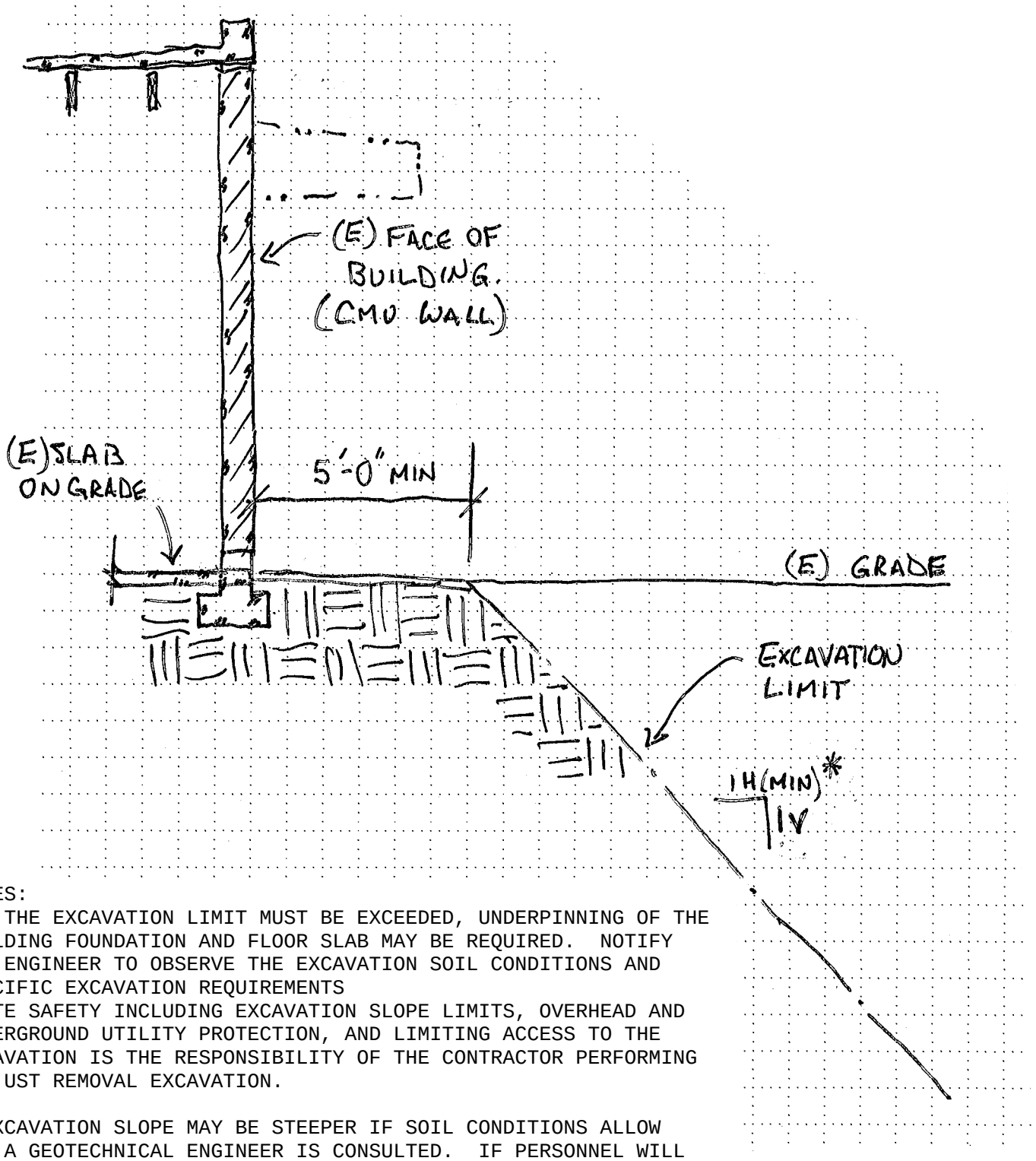


EXHIBIT 9 AREA g FLOOR SLAB CRACKS







NOTES:
-IF THE EXCAVATION LIMIT MUST BE EXCEEDED, UNDERPINNING OF THE BUILDING FOUNDATION AND FLOOR SLAB MAY BE REQUIRED. NOTIFY THE ENGINEER TO OBSERVE THE EXCAVATION SOIL CONDITIONS AND SPECIFIC EXCAVATION REQUIREMENTS
-SITE SAFETY INCLUDING EXCAVATION SLOPE LIMITS, OVERHEAD AND UNDERGROUND UTILITY PROTECTION, AND LIMITING ACCESS TO THE EXCAVATION IS THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING THE UST REMOVAL EXCAVATION.

* EXCAVATION SLOPE MAY BE STEEPER IF SOIL CONDITIONS ALLOW AND A GEOTECHNICAL ENGINEER IS CONSULTED. IF PERSONNEL WILL BE IN THE EXCAVATION, THE CONTRACTOR SHOULD LIMIT THE SLOPE TO 1.5H TO 1V UNLESS ONE OF THE OPTIONS DETAILED IN WAC 296-155-657 IS UTILIZED.

kingworks
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BELLINGHAM, WA 98225
360-714-8260
www.king-works.com

EXCAVATION LIMIT AT FACE OF BUILDING

MSA N CASCADE FORD UST REMOVAL ASSESSMENT

Project number	16094
Date	9/12/16
Drawn by	J KING
Checked by	J KING

SSK-1

Scale 1/4"=1'-0"

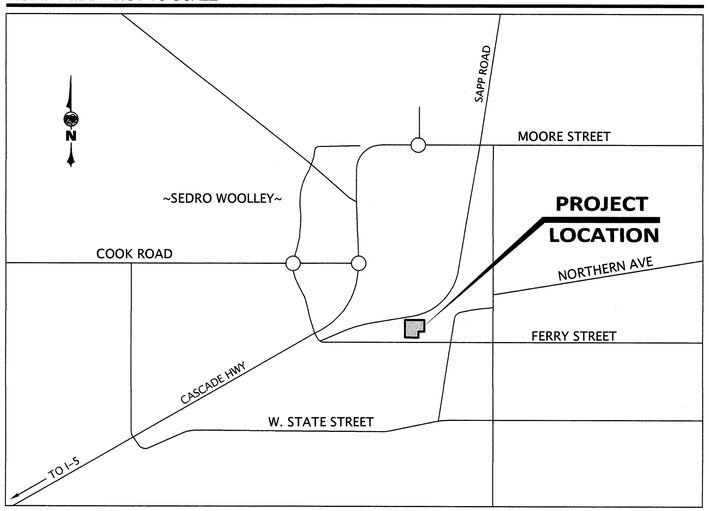
APPENDIX D

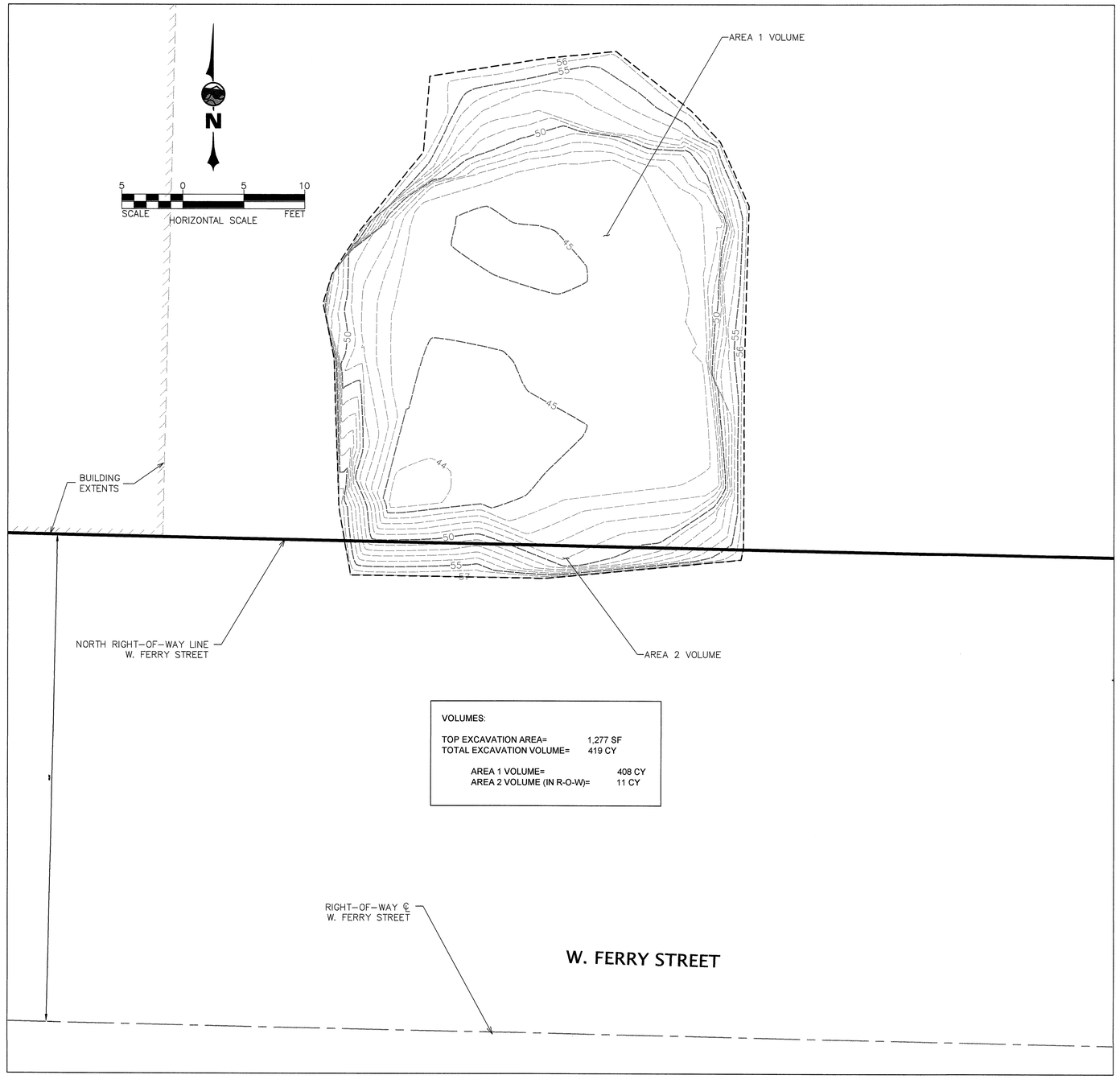
PROPERTY AND EXCAVATION SURVEY

MAUL FOSTER ALONGI

VERN SIMS FORD – 116 W. FERRY ST. PARCEL

VICINITY MAP - NOT TO SCALE





VOLUMES:

TOP EXCAVATION AREA=	1,277 SF
TOTAL EXCAVATION VOLUME=	419 CY
AREA 1 VOLUME=	408 CY
AREA 2 VOLUME (IN R-O-W)=	11 CY

CONTROL NOTES

1. COORDINATES ARE A GROUND-VALUE APPROXIMATION OF NAD83(2011) WASHINGTON STATE PLANE (NORTH ZONE) COORDINATES BASED UPON NETWORKED REAL-TIME KINEMATIC GPS SOLUTIONS.

2. ELEVATIONS ARE IN THE NAVD88 DATUM, BASED UPON THE PUBLISHED NAVD88 ELEVATION OF 56.05 (US FT) AT W.S.D.O.T. SURVEY MONUMENT GP29020-9 AZ. CONTROL ELEVATIONS WERE ESTABLISHED FROM THIS BENCHMARK BY CLOSED DIFFERENTIAL LEVEL LOOP.

811 Call 811 two business days before you dig

SURVEYOR'S CERTIFICATE

JOHN THOMAS BREWSTER STATE OF WASHINGTON 44335 REGISTERED PROFESSIONAL LAND SURVEYOR 10-20-2016

I HEREBY CERTIFY THAT I AM A LICENSED LAND SURVEYOR IN THE STATE OF WASHINGTON, THAT THIS MAP IS BASED ON AN ACTUAL FIELD SURVEY DONE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT ALL DATA SHOWN HEREON ACTUALLY EXISTS IN THE LOCATIONS SHOWN AT THE TIME OF THIS SURVEY. THIS TOPOGRAPHIC MAP WAS DONE AT THE REQUEST OF MAUL FOSTER ALONGI IN 2016.

J. THOMAS BREWSTER, P.L.S. NO. 44335 DATE 10-20-2016

WILSON ENGINEERING, LLC
805 DUPONT STREET
BELLINGHAM, WA 98225
(360) 733-6100 • FAX (360) 647-9061
www.wilsonengineering.com
Wilson SURVEY/ENGINEERING

DESIGNED BY

DRAWN BY JGS

CHECKED BY JTB

MAUL FOSTER ALONGI

SEDRO WOOLLEY WASHINGTON

VERN SIMS FORD – 116 W. FERRY ST. PARCEL

INTERIM-ACTION EXCAVATION

DATE 10-20-2016

SCALE AS SHOWN

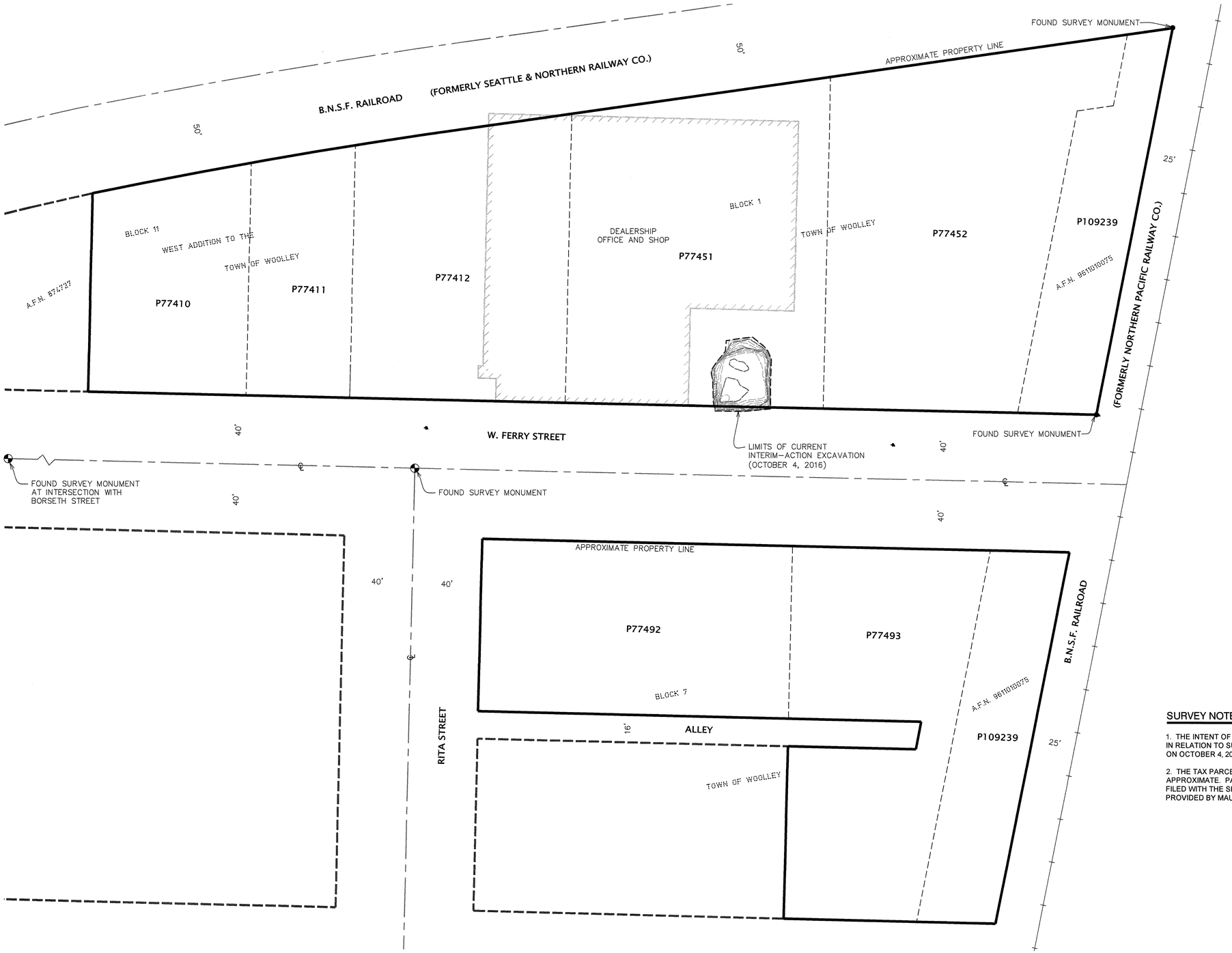
JOB NUMBER 2016-111

SHEET 1

PAGE 2

MAUL FOSTER ALONGI

VERN SIMS FORD – 116 W. FERRY STREET



SURVEY NOTES

1. THE INTENT OF THIS MAP IS TO SHOW THE LOCATION OF AN INTERIM-ACTION EXCAVATION IN RELATION TO SURROUNDING PARCELS. THE EXCAVATION SHOWN HEREON WAS MAPPED ON OCTOBER 4, 2016.

2. THE TAX PARCEL LINES AND BOUNDARIES SHOWN ON THIS MAP SHOULD BE CONSIDERED APPROXIMATE. PARCEL BOUNDARIES ARE BASED UPON THE STATUTORY WARRANTY DEED FILED WITH THE SKAGIT COUNTY AUDITOR UNDER AUDITOR'S FILE NUMBER 200304170009 PROVIDED BY MAUL FOSTER & ALONGI , INC.

WILSON ENGINEERING, LLC
805 DUPONT STREET
BELLINGHAM, WA 98225
(360) 733-6100 • FAX (360) 647-9061
www.wilsonengineering.com
Wilson SURVEY/ENGINEERING

DESIGNED BY
DRAWN BY AKM
CHECKED BY JTB

MAUL FOSTER ALONGI

SEDRO WOOLLEY WASHINGTON

VERN SIMS FORD – 116 W. FERRY STREET

INTERIM-ACTION EXCAVATION

DATE 10-20-2016
SCALE AS SHOWN
JOB NUMBER 2016-111

SHEET 2
PAGE 2

APPENDIX E

SITE PHOTOGRAPHS

PHOTOGRAPHS

Project Name: North Cascade Ford Interim Remedial Action
Project Number: 0747.01.06
Location: 116 West Ferry Street Sedro-Woolley, Washington

Photo No.
1

Description
Looking southwest at underground storage tanks (leaded gasoline tank to east and heating oil tank to west).
September 26, 2016

Photo No.
2

Description
Looking northeast at removal of leaded gasoline tank; green sewer line visible in photo.
September 27, 2016

PHOTOGRAPHS

Project Name: North Cascade Ford Interim Remedial Action
Project Number: 0747.01.06
Location: 116 West Ferry Street Sedro-Woolley, Washington

Photo No.
3

Description
Looking southeast at heating oil tank supply line (north-south trending pipe) and sewer line (green). Former vent line is shown in the foreground.
September 28, 2016

Photo No.
4

Description
Looking north at former vent lines from the two underground storage tanks.
September 28, 2016

PHOTOGRAPHS

Project Name: North Cascade Ford Interim Remedial Action
Project Number: 0747.01.06
Location: 116 West Ferry Street Sedro-Woolley, Washington

Photo No.
5

Description
Looking north at base of excavation.
September 29, 2016

Photo No.
6

Description
Looking south at sloughing excavation sidewalls.
October 3, 2016

PHOTOGRAPHS

Project Name: North Cascade Ford Interim Remedial Action
Project Number: 0747.01.06
Location: 116 West Ferry Street Sedro-Woolley, Washington

Photo No.
7

Description
Looking southwest at sloughing excavation sidewalls (pre-dewatering) and soil staining.
October 3, 2016 AM

Photo No.
8

Description
Looking southwest at sloughing excavation sidewalls (post-dewatering).
October 3, 2016 PM

PHOTOGRAPHS

Project Name: North Cascade Ford
Interim Remedial Action
Project Number: 0747.01.06
Location: 116 West Ferry Street
Sedro-Woolley, Washington

Photo No.
9

Description
Looking north at base of excavation with gravel sub-base, lift of gravel borrow, and temporary well point.
October 4, 2016

Photo No.
10

Description
Looking northwest at lift of gravel borrow mixed with ORC-A® amendment.
October 4, 2016

PHOTOGRAPHS

Project Name: North Cascade Ford Interim Remedial Action
Project Number: 0747.01.06
Location: 116 West Ferry Street Sedro-Woolley, Washington

Photo No.
11

Description
On site water treatment system.
October 3, 2016

APPENDIX F

UST DECOMMISSIONING DOCUMENTATION

UST Site / Tank Data Summary

8/6/2015

Facility Name: VERN SIMS FORD INC Tag(s):

SITE INFORMATION

VERN SIMS FORD INC	**RESP UNIT:** NORTHWEST	**COUNTY:** SKAGIT
116 WEST FERRY ST	**UBI:**	**LAT:** 48.5057489100374
SEDRO-WOOLLEY, WA	**PHONE:** (206) 855-1551	**LONG:** -122.241757388268

SITE IDs:
UST: 9030
FS: 58313566

TANK INFORMATION

TANK NAME: 1

STATUS: Closed in Place	**STATUS DT:** 08/06/1996	**PERMANENTLY CLOSED DT:**
INSTALL DT: 12/31/1964	**UPGRADE DT:**	**PERMIT EXPIRATION DT:**

TANK		PIPING	
MATERIAL:	Steel	**MATERIAL:**	Steel
CONSTRUCTION:		**CONSTRUCTION:**	
CORROSION PROT:		**CORROSION PROT:**	
MANIFOLDED TANK:		**SFC* at TANK:**	
RELEASE DETECT:		**SFC* at DISP/PUMP:**	
TIGHTNESS TEST:		**1ST REL DETECT:**	
SPILL PREVENTION:		**2ND REL DETECT:**	
OVERFILL PREVENT:		**PUMPING SYSTEM:**	
ACTUAL CAPACITY:			
CAPACITY RANGE:			

** SFC = Steel Flex Connector*

COMPARTMENT #	SUBSTANCE STORED	SUBSTANCE USED	CAPACITY
1	A Leaded Gasoline		

TANK NAME: 2

STATUS: Closed in Place	**STATUS DT:** 08/06/1996	**PERMANENTLY CLOSED DT:**
INSTALL DT: 12/31/1964	**UPGRADE DT:**	**PERMIT EXPIRATION DT:**

TANK		PIPING	
MATERIAL:	Steel	**MATERIAL:**	Steel
CONSTRUCTION:		**CONSTRUCTION:**	
CORROSION PROT:		**CORROSION PROT:**	
MANIFOLDED TANK:		**SFC* at TANK:**	
RELEASE DETECT:		**SFC* at DISP/PUMP:**	
TIGHTNESS TEST:		**1ST REL DETECT:**	
SPILL PREVENTION:		**2ND REL DETECT:**	
OVERFILL PREVENT:		**PUMPING SYSTEM:**	
ACTUAL CAPACITY:			
CAPACITY RANGE:	111 TO 1,100 Gallons		

** SFC = Steel Flex Connector*

COMPARTMENT #	SUBSTANCE STORED	SUBSTANCE USED	CAPACITY
1	H Heating Fuel		

UST_SiteTankDataSmry2014

DEPARTMENT OF ECOLOGY
State of Washington

30-DAY NOTICE
FOR UNDERGROUND STORAGE TANKS

This form provides Ecology 30-days' advanced notice for the following projects, as required by Chapter 173-360 WAC. Instructions are found on the back page.

UST ID #: 9030

County: Skagit

RECEIVED

AUG 12 2016

Department of Ecology
Toxics Cleanup Program

Please ✓ the appropriate box: ☐ Intent to Install ☒ Intent to Close ☐ Change-in-Service

I. SITE INFORMATION		II. OWNER/OPERATOR INFORMATION	
Tag or UBI # (if applicable):		Owner/Operator Name:	Dwayne Lane's
UST ID # (if applicable):		Business Name:	North Cascade Ford
Site Name:	**North Cascade Ford**	Mailing Address:	116 West Ferry Street
Site Address:	**116 West Ferry Street**	City: Sedro-Woolley State: WA Zip:	98284
City:	Sedro-Woolley	Phone:	855-869-8603
Phone:	360-855-1551	Email:	tlane@dwaynelane.com

III. CERTIFIED SERVICE PROVIDER(S)

Check the appropriate boxes. If more than one service provider is required for this project, fill out both sections.

Note: Individuals performing UST services MUST be ICC-certified or have passed another qualifying exam approved by the Department of Ecology.

1) ☐ Installer ☒ Decommissioner ☐ Site Assessor

Company Name: **WYSER Construction Co., Inc.**	Certification Type: **UST Decommissioning**
Service Provider Name: **Mike Redford**	Cert. No.: **ICC00061806** Exp. Date: **3/14/2017**
Provider Phone: **425.742.0898**	Provider Email: **darren@wyserdirt.com**

2) ☐ Installer ☐ Decommissioner ☒ Site Assessor

Company Name: **Maul Foster & Alongi, Inc.**	Certification Type: UST Site Assessor
Service Provider Name: Carolyn Wise	Cert. No.: 231213 Exp. Date: 9/13/2016
Provider Phone: 360.594.6255	Provider Email: cwise@maulfoster.com

IV. TANK INFORMATION

TANK ID	SUBSTANCE STORED	TANK CAPACITY	DATE PROJECT IS EXPECTED TO BEGIN	COMMENTS
1	Leaded Gasoline		09/12/2016	
2	Heating Fuel	111 to 1,100 Gal.	09/12/2016	

JOB COPY
MUST REMAIN ON SITE AND MADE AVAILABLE FOR INSPECTION

CITY OF SEDRO-WOOLLEY
GATEWAY TO THE NORTH CASCADES

3-tanks

COMMERCIAL INSPECTION RECORD

24-HOUR INSPECTION REQUEST LINE: 360-855-0139 EXT. # 1

When you call for an inspection, please have the following information ready:

- **Permit number (on other side of this card)**
- **Type of inspection**
- **Site address**

PERMIT NO. 2016-026

JOB ADDRESS: 116 W Ferry St

Address must be posted and plainly visible on-site prior to inspections

Required Building Setback	Front		Ft.
	Side		Ft.
	Rear		Ft.
Special Conditions			
Critical Areas			

A COPY OF THE APPROVED BUILDING PERMIT /APPROVED DRAWINGS ALONG WITH ALL ENGINEERING MUST BE ON-SITE AND MADE AVAILABLE DURING INSPECTIONS

NO CONCRETE SHALL BE PLACED OR REINFORCING STEEL COVERED WITHOUT APPROVAL

ENGINEERING DEPARTMENT
Inspection Request 360-855-0139 ext. 2

Civil	Date	Initials
Erosion control		
Clear limits flagged		
Grading		
Access		
Right-of-Way		
Sidewalks		
Fire turnaround		
Pipe zone bedding		
Road sub-grade		
Backfill compaction		

BUILDING DEPARTMENT

Footings	Date	Initials
Setbacks		
Reinforcement		
Under-slab insulation		
Below grade plumb.		

Foundation Wall	Date	Initials
Reinforcement		
Vents		
Foundation drains		

Floodplain	Date	Initials
Sub-floor Elevation Certificate		
Final sub-floor Elevation Certificate		

Plumbing	Date	Initials
Drains/Waste		
Water supply		
Mechanical	**Date**	**Initials**
Fuel gas piping		
Mech. equip.		
Ducts/Vents		
Shearwalls	**Date**	**Initials**
Ext. hold downs		
Exterior nailing		
Interior nailing		
Framing	**Date**	**Initials**
Framing		
Sub-floor		
Sp. Insp. Rprt.		
Masonry	**Date**	**Initials**
Veneer/Walls		
Chimney reinf.		
Insulation	**Date**	**Initials**
Walls		
Ceiling-Vaulted		
Ceiling-Flat		
Floors		
Drywall	**Date**	**Initials**
Drywall nailing		

CORRECTIONS

YES / NO If yes, refer to your Correction Notice(s)

CITY OCCUPANCY REQUIREMENTS

BUILDING DEPT.

FINAL	Date	Initials
Building		
City address sign		

FIRE DEPT.

FINAL	Date	Initials
Sprinklers/Test		
Alarm		
Building		
Other: Tank Removal 10/13/16		[illegible]

ENGINEERING DEPT.

FINAL	Date	Initials
Side-Sewer		
Stormwater Drainage		
Site (frontage, driveways etc)		
ULID Waiver		

REINSPECTIONS ARE SUBJECT TO A REINSPECTION FEE AFTER 1st REINSPECTION FOR SAME ITEM
(SWMC 15.04.040 Exhibit B)

Reinspection fees must be paid prior to 2ND reinspection

THIS CARD IS TO REMAIN ON SITE AND MADE AVAILABLE TO THE CITY INSPECTOR AT THE TIME OF INSPECTION. FAILURE TO HAVE THE INSPECTION CARD ON SITE AND AVAILABLE WILL RESULT IN AN AUTOMATIC REINSPECTION CHARGE OF $50.00
REINSPECTION FEES MUST BE PAID PRIOR TO REINSPECTION

JOB COPY
MUST REMAIN ON SITE AND MADE AVAILABLE FOR INSPECTION

City of Sedro-Woolley

325 Metcalf Street
Sedro-Woolley WA 98284
Permit Inspection Line 855-0139
"Call before you dig" 1-800-424-5555 or "811"

CITY OF SEDRO-WOOLLEY
GATEWAY TO THE NORTH CASCADES

Fire Permit

Permit Number: 2016226

Applicant

Approval Date: 9/15/2016

Name: Dwayne Layne's North Cascade Ford-WYSER Construction Co Inc
Address: 116 West Ferry Street
Sedro-Woolley, WA 98284
Phone:

PERMIT APPROVED AND ISSUED VIA FACSIMILE / MAIL
PERMIT NOT VALID UNLESS SIGNED BY CITY OFFICIAL

Parcel

Parcel Number: P77451
Address: 116 W. Ferry St.
Section: 24 **Township:** 35
Addition: **Block:**
Zoning: CBD
Sedro-Woolley, WA 98284
Range: 04
Lot(s):
Legal Description: TOWN OF WOOLLEY PTN VAC NORTHERN AVE & ALLEY ADJ & LTS 1 TO 6

Owners

Name: Coulter Properties LLC
Address: 116 W. Ferry St.
Sedro-Woolley, WA 98284
Phone:
Cellular:

Contractors

Name: Wyser Construction
Address: 19015 109th Ave SE
Snohomish, WA 98296
Phone:
State License: 601735231
Local License: 601735231

Fees and Receipts

322.10.04.000 001	Fire Dept. - Above/Underground Fuel Tank/Removal
322.10.03.000 001	Fire Dept. - Administrative Fee

Total Receipts: **$0.00**

Description

Project Description: Removal of 3 tanks and perform interim cleanup action

Conditions

Date: 9-15-16
Status: Approved

Condition Description:

1. **Install per manufacture's specifications.**
2. **Call for final inspection. 360 855-2252.**

PERMIT APPROVED AND ISSUED VIA FACSIMILE / MAIL
PERMIT NOT VALID UNLESS SIGNED BY CITY OFFICIAL

Applicant Signature **Date**

Fire Department Signature 9/16/16 **Date**

Marine Vacuum Service, Inc.

GENERAL CONTRACTOR

CONTRACTORS LICENSE # MARINVS097JA

P0. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

FAX (206) 763-8084

1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size: 1,000 gallons

Last Contents Leaded Gasoline

Tank Location: 1116 W Ferry St-
Sedro-Woolley, WA 98284

Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in accordance with the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-380(I), API 1604, API 2015 and that all residual product and rinsate has been disposed of in accordance with Federal, State and Local regulations. Tanks listed above are **NOT GAS FREE** or **NOT SAFE FOR HOT WORK**

Tank Owner: North Cascade Ford
1116 W Ferry St
Sedro Woolley WA

Contractor: Wyser Construction

M.V.S. Representative:

Date: 9 27 16

Notes:

Marine Vacuum Service, Inc.

GENERAL CONTRACTOR

CONTRACTORS LICENSE # MARINVS097JA

P0. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

FAX (206) 763-8084

1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size: 1,000 gallons

Last Contents Heating Oil

Tank Location: 116 W Ferry St.
Sedro-Woolley, WA 98284

Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in accordance with the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-380(I), API 1604, API 2015 and that all residual product and rinsate has been disposed of in accordance with Federal, State and Local regulations. Tanks listed above are **NOT GAS FREE** or **NOT SAFE FOR HOT WORK**

Tank Owner: North Cascade Ford
116 W Ferry St
Sedro Woolley, WA 98284

Contractor: Wyser Construction

M.V.S. Representative:

Date: 9 22 16

Notes:

This Shipping Order

must be legibly filled in, in Ink indelible Pencil, or in Carbon, and retained by the agent

Shipper No. 13170

Carrier No. _____

Page _____ of _____

Marine Vacuum Service Inc.
(Name of carrier) (SCAC)

Date 9 27 16

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

TO:
Consignee Marine Vacuum Service Inc.
Street 1516 South Graham Street
City Seattle State WA Zip Code 98108

FROM:
Shipper WYSER CONST
Street 116 W FERRY ST
City SEDRO State WA Zip Code
24 hr. Emergency Contact Tel. No. ChemTel 1-800-255-3924 Contract MIS3627926

Route

Vehicle Number

No. of Units & Container Type	HM	BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 TT	X	(DOT Spec Tank Required) UN1863 Fuel, Aviation, Turbin Engine, Class 3, PG I				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Mixture Class 3, PG II				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Class 3, PG II				
1 TT	X	NA1993 Diesel Mixture, Class 3, PG III				
1 TT	X	NA1993 Diesel, Class 3, PG III				
1 TT	X	NA1270 Petroleum Oil, Class 3, PG I				
1 TT	X	NA1270 Petroleum Oil, Mixture, Class 3, PG I				
1 TT		Oily Waste Water Non Reg by DOT				
1 TT		Waste Water Non Reg by DOT	360	Gals		
1 TT		Marine Vessel Sewage Non Reg by DOT				
1 TT		Street Waste Storm Pipe Cleaning Non Reg by DOT				
		Solids	500	Gals		

PLACARDS TENDERED: YES ☐ NO ☐

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of Item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

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

_____ Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

_____ (Signature of Consignor)

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

SHIPPER

PER _____

9 27 16

CARRIER _____

PER _____

DATE 9 27 16

2

Permanent post-office address of shipper.

SOUND TESTING, INC.
P.O. BOX 16204 SEATTLE, WA 98116
(206) 932-0206 FAX (206) 937-3848
WWW.SOUNDTESTINGINC.COM

MARINE CHEMIST CERTIFICATE
SERIAL Nº 46727

WYSER Survey Requested by	NW CASCADE FORD Vessel Owner or Agent	26 Sep 16 Date
UST Vessel	UST Type of Vessel	1116 W PERRY St, SEDRO WOOLLEY Specific Location of Vessel
(GASOLINE & DIESEL) X3 Last Three (3) Loadings	VISUAL, Co Tests Performed	1505 Time Survey Completed

1615

1000 GAL DIESEL UST

1000 GAL GASOLINE UST

INERTED WITH ~~[redacted]~~ CO_2 (O_2 < 5.0%)

SAFE FOR LIMITED HOT WORK

LIMITATIONS:
1. MARINE CHEMIST WILL MONITOR
2. MAY USE CHOP SAW TO CUT ACCESS HOLES
3. HOT WORK COMPLETE AT 1505
4. ~~[redacted]~~ CUT

SAFE FOR EXCAVATION

SAFE FOR TRANSPORTATION

In the event of changes adversely affecting conditions in the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist.

Qualifications: Manipulation of valves or devices tending to alter conditions in pipe lines or tanks noted above, unless specifically approved in this certificate, will require re-inspection and a new Certificate for spaces so affected. All piping, heating coils, pumps and floating roof gaskets attached to or contained within spaces listed above shall be considered "NOT SAFE" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS

(These detail the minimum conditions for Safe Entry and Hot Work.) The Marine Chemist may request additional measures if workplace conditions so dictate.

ATMOSPHERE SAFE FOR WORKERS means that in a space (a) the oxygen content is between 19.5% and 22% by volume, and (b) combustible gas is less than 10% of the Lower Explosive Limit, and (c) airborne toxic materials are within permissible concentrations as listed in OSHA's Subpart Z or in ACGIH's current list of Threshold Limit Values.

SAFE FOR HOT WORK means that (a) oxygen within the space is less than 22% by volume; and (b) the combustible gas is less than 10% of the Lower Explosive Limit; and (c) cargo residues within the space will not combust during hot work; and (d) pipes that can deliver hazardous materials to the workspace have been separated, blanked, or locked out, and nearby hazardous spaces have been evaluated and noted on the certificate.

NOT SAFE FOR HOT WORK: In the compartment or space so designated, hot work is not permitted.

"The undersigned acknowledges receipt of this Certificate and understands conditions and limitations under which it was issued."

Signed [signature] WYSER 26 Sep 16
Name Company Date

POSTING

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed [signature] #1088
Marine Chemist Certificate No.

CRAIG 206-313-6933

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

Material Purchase Ticket

Ticket # **344953**

MFA-16-1171

Customer ID - 56301

WYSER CONSTRUCTION

Date: 9/27/2016 11:50:08AM
Scale: RomBigScale1
Weighmaster Ric Gonzalez

Driver's License Number:
Vehicle Tag:

Item	Gross	Tare	Net	UM	Price	Total
#2 UNPREPARED STEEL	14,380.00 S	13,400.00 S	**980.00**	Ton		

Total Payment (Cash)
Check Paid

I, the under signed, affirm under penalty of law that the property that is subject to this transaction is not to the best of knowledge stolen property.

Signature of Seller _____ Date _____ Signature of Buyer or Witness _____

(Scrap metal)

EDITED TICKET 9/27/16 12:03 pm Ric Gonzalez

RECYCLING TODAY FOR TOMORROW'S FUTURE
8 TO 4:30 MONDAY THROUGH FRIDAY

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

Material Purchase Ticket

Ticket # **344957**

MFA-16-14741

Customer ID - 56301

WYSER CONSTRUCTION

Date: 9/27/2016 12:58:36PM
Scale: RomBigScale1
Weighmaster Ric Gonzalez

Driver's License Number:
Vehicle Tag:

Item	Gross	Tare	Net	UM	Price	Total
#2 UNPREPARED STEEL	14,540.00 S	13,420.00 S	**1,120.00**	Ton		

Total Payment (Cash)
Check Paid

I, the under signed, affirm under penalty of law that the property that is subject to this transaction is not to the best of knowledge stolen property.

Signature of Seller _____ Date _____ Signature of Buyer or Witness _____

Scrap metal

DEPARTMENT OF ECOLOGY
State of Washington

PERMANENT CLOSURE NOTICE
FOR UNDERGROUND STORAGE TANKS

UST ID #: 9030

County: Skagit

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: Dwayne Lane's
UST ID #:	Business Name: North Cascade Ford
Site Name: North Cascade Ford	Address: 116 West Ferry Street
Site Address: 116 West Ferry Street	City: Sedro Woolley State: WA Zip: 98284
City: Sedro Woolley	Phone: 855.869.8603
Phone: 360.855.1551	Email: tlane@dwaynelane.com

III. CERTIFIED UST DECOMMISSIONER	
Company Name: Wyser Construction Co., Inc.	Service Provider Name: Mike Redford
Address: 19015 109th Ave SE	Certification Type: ICC UST Decommissioning
City: Snohomish State: WA Zip: 98296	Cert. No.: ICC00061806 Exp. Date: 3/14/17
Provider Phone: 425.742.0898	Provider Email: darren@wyserdirt.com
Provider Signature: [signature]	***Date:*** 10/13/16

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	CLOSURE METHOD			CLOSURE DATE
			removal	closed-in-place	change-in-service	
1	1,000-gallon	Leaded Gasoline	☒	☐	☐	
2	1,000-gallon	Heating Oil	☒	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	
			☐	☐	☐	

V. REQUIRED SIGNATURE

Signature acknowledges UST(s) comply with UST regulation WAC 173-360-380 Permanent Closure Requirements.

Date	Signature of Tank Owner/Operator or Authorized Representative	Print or Type Name

ECY 020-94 (July 2014)

UST ID #: _9030_____

County: _Skagit____

DEPARTMENT OF ECOLOGY
State of Washington

SITE CHECK/SITE ASSESSMENT CHECKLIST

FOR UNDERGROUND STORAGE TANKS

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 #: N/A		Owner/Operator Name: Dwayne Lane's		
UST ID #: 9030		Business Name: North Cascade Ford		
Site Name: North Cascade Ford		Address: 116 West Ferry Street		
Site Address: 116 West Ferry Street		City: Sedro-Woolley	State: WA	Zip: 98284
City: Sedro-Woolley		Phone: 855-869-8603		
Phone: 360-855-1551		Email: tlane@dwaynelane.com		

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 North State Street, Suite 301		
Certification #: ICC00231213	Exp. Date: 8/16/2018	City: Bellingham	State: WA	Zip: 98225

IV. TANK INFORMATION

TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
1	1,000	Leaded Gasoline	9/27/2016
2	1,000	Heating Fuel	9/27/2016

V. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT (check one)

- ☒ Release investigation following permanent UST system closure (i.e. tank removal or closure-in-place).
- ☐ Release investigation following a failed tank and/or line tightness test.
- ☐ Release investigation following discovery of contaminated soil and/or groundwater.
- ☐ Release investigation directed by Ecology to determine if the UST system is the source of offsite impacts.
- ☐ 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).
- ☐ Directed by Ecology for UST system permanently closed or abandoned before 12/22/1988.
- ☐ 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.	☒	☐
2. A brief summary of information obtained during the site inspection is provided (Section 3.2)	☒	☐
3. A summary of UST system data is provided (Section 3.1)	☒	☐
4. The soils characteristics at the UST site are described. (Section 5.2)	☒	☐
5. Is there any apparent groundwater in the tank excavation?	☐	☒
6. A brief description of the surrounding land use is provided. (Section 3.1)	☒	☐
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.	☒	☐
8. The following items are provided in one or more sketches:		
• Location and ID number for all field samples collected	☒	☐
• If applicable, groundwater samples are distinguished from soil samples	☒	☐
• Location of samples collected from stockpiled excavated soil	☐	☒
• Tank and piping locations and limits of excavation pit	☒	☐
• Adjacent structures and streets	☒	☐
• Approximate locations of any on-site and nearby utilities	☒	☐
9. If sampling procedures are different from those specified in the guidance, has justification for using these alternative sampling procedures been provided? (Section 3.4)	☐	☐
10. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method, and detection limit for that method. Any sample exceeding MTCA Method A cleanup standards are highlighted or bolded.	☒	☐
11. Any factors that may have compromised the quality of the data or validity of the results are described.	☒	☐
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred. The requirements for reporting confirmed releases can be found in WAC 173-360-372.	☒	☐

VII. Required Signatures

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

Carolyn Wise	Carolyn Wise	10/17/16
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 G

ANALYTICAL LABORATORY REPORTS

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

September 28, 2016

Heather Good
Maul Foster & Alongi, Inc.
Bay Vista Tower
2815 2nd Avenue, Suite 540
Seattle, WA 98121

Re: Analytical Data for Project 0747.01.06-6.3
Laboratory Reference No. 1609-344

Dear Heather:

Enclosed are the analytical results and associated quality control data for samples submitted on September 27, 2016.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

Case Narrative

Samples were collected on September 27, 2016 and received by the laboratory on September 27, 2016. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH Gx + n-Hexane and Volatiles EPA 8260C Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

NWTPH-Gx + n-HEXANE

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**WSW01-S-6.0**					
Laboratory ID:	09-344-01					
n-Hexane	**ND**	0.077	EPA 8015M	9-27-16	9-27-16	
Gasoline	**ND**	7.7	NWTPH-Gx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*108*	*68-129*				
Client ID:	**NSW01--S-6.0**					
Laboratory ID:	09-344-02					
n-Hexane	**ND**	0.079	EPA 8015M	9-27-16	9-27-16	
Gasoline	**ND**	7.9	NWTPH-Gx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*103*	*68-129*				
Client ID:	**ESW01--S-6.0**					
Laboratory ID:	09-344-03					
n-Hexane	**ND**	0.088	EPA 8015M	9-27-16	9-27-16	
Gasoline	**ND**	8.8	NWTPH-Gx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*101*	*68-129*				
Client ID:	**SSW01-S-3.0**					
Laboratory ID:	09-344-04					
n-Hexane	**ND**	0.095	EPA 8015M	9-27-16	9-27-16	
Gasoline	**ND**	9.5	NWTPH-Gx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*101*	*68-129*				
Client ID:	**SSW02--S-6.0**					
Laboratory ID:	09-344-05					
n-Hexane	**ND**	0.075	EPA 8015M	9-27-16	9-27-16	
Gasoline	**ND**	7.5	NWTPH-Gx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*100*	*68-129*				

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

NWTPH-Gx + n-HEXANE

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BASE02--S-10.0**					
Laboratory ID:	09-344-07					
n-Hexane	**ND**	0.083	EPA 8015M	9-27-16	9-27-16	
Gasoline	**ND**	8.3	NWTPH-Gx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*105*	*68-129*				

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

NWTPH-Gx + n-HEXANE
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0927S1					
n-Hexane	**ND**	0.050	EPA 8015M	9-27-16	9-27-16	
Gasoline	**ND**	5.0	NWTPH-Gx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*99*	*68-129*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-344-04										
	ORIG	DUP									
n-Hexane	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*101*	*101*	*68-129*			
SPIKE BLANKS											
Laboratory ID:	SB0927S1										
	SB	SBD	SB	SBD		SB	SBD				
n-Hexane	**0.880**	**0.868**	1.00	1.00		**88**	**87**	70-130	1	20	
Surrogate:											
Fluorobenzene						*103*	*102*	*68-129*			

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

NWTPH-Gx
CONTINUING CALIBRATION SUMMARY

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCVD0927G-1	5.00	4.63	7	+/- 20%
CCVD0927G-2	5.00	4.53	9	+/- 20%

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

n-HEXANE
EPA 8015M
CONTINUING CALIBRATION SUMMARY

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
n-Hexane	CCVD0927B-1	50.0	50.4	-1	+/- 15%
n-Hexane	CCVD0927B-2	50.0	48.0	4	+/- 15%
n-Hexane	CCVD0927B-3	50.0	48.2	4	+/- 15%

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**WSW01-S-6.0**					
Laboratory ID:	09-344-01					
Diesel Range Organics	**ND**	30	NWTPH-Dx	9-27-16	9-27-16	
Lube Oil Range Organics	**ND**	61	NWTPH-Dx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*86*	*50-150*				
Client ID:	**NSW01-S-6.0**					
Laboratory ID:	09-344-02					
Diesel Range Organics	**ND**	31	NWTPH-Dx	9-27-16	9-27-16	
Lube Oil Range Organics	**ND**	61	NWTPH-Dx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*83*	*50-150*				
Client ID:	**ESW01-S-6.0**					
Laboratory ID:	09-344-03					
Diesel Range Organics	**ND**	33	NWTPH-Dx	9-27-16	9-27-16	
Lube Oil Range Organics	**ND**	66	NWTPH-Dx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*73*	*50-150*				
Client ID:	**SSW01-S-3.0**					
Laboratory ID:	09-344-04					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-27-16	9-27-16	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*94*	*50-150*				
Client ID:	**SSW02-S-6.0**					
Laboratory ID:	09-344-05					
Diesel Range Organics	**820**	28	NWTPH-Dx	9-27-16	9-27-16	
Lube Oil Range Organics	**ND**	400	NWTPH-Dx	9-27-16	9-27-16	U1
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*115*	*50-150*				
Client ID:	**BASE02-S-10.0**					
Laboratory ID:	09-344-07					
Diesel Range Organics	**ND**	33	NWTPH-Dx	9-27-16	9-27-16	
Lube Oil Range Organics	**ND**	66	NWTPH-Dx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*91*	*50-150*				

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0927S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	9-27-16	9-27-16	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*93*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	09-333-01									
	ORIG	DUP								
Diesel Fuel #2	**11800**	**9050**	NA	NA		NA	NA	26	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA	NA	NA	NA	U1
Surrogate:										
o-Terphenyl						--- ---	*50-150*			F
SPIKE BLANK										
Laboratory ID:	SB0927S1									
Diesel Fuel #2	**85.3**		100		NA	**85**	61-130	NA	NA	
Surrogate:										
o-Terphenyl						*99*	*50-150*			

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

NWTPH-Dx
CONTINUING CALIBRATION SUMMARY

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCV0927F-T1	100	98.4	1.6	+/-15%
CCV0927F-T2	100	95.8	4.2	+/-15%
CCV0927F-T3	100	98.6	1.4	+/-15%
CCV0927R-T1	100	101	-1.0	+/-15%
CCV0927R-T2	100	101	-0.5	+/-15%
CCV0927R-T3	100	100	-0.4	+/-15%

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

VOLATILES EPA 8260C
page 1 of 2

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**WSW01-S-6.0**					
Laboratory ID:	09-344-01					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Chloromethane	ND	0.0058	EPA 8260C	9-27-16	9-27-16	
Vinyl Chloride	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Bromomethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Chloroethane	ND	0.0058	EPA 8260C	9-27-16	9-27-16	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Acetone	0.011	0.0058	EPA 8260C	9-27-16	9-27-16	Y
Iodomethane	ND	0.0079	EPA 8260C	9-27-16	9-27-16	
Carbon Disulfide	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Methylene Chloride	ND	0.0058	EPA 8260C	9-27-16	9-27-16	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Vinyl Acetate	ND	0.0058	EPA 8260C	9-27-16	9-27-16	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
2-Butanone	ND	0.0058	EPA 8260C	9-27-16	9-27-16	
Bromochloromethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Chloroform	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Benzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Trichloroethene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Dibromomethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Bromodichloromethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
2-Chloroethyl Vinyl Ether	ND	0.0058	EPA 8260C	9-27-16	9-27-16	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Methyl Isobutyl Ketone	ND	0.0058	EPA 8260C	9-27-16	9-27-16	
Toluene	ND	0.0058	EPA 8260C	9-27-16	9-27-16	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

VOLATILES EPA 8260C
page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**WSW01-S-6.0**					
Laboratory ID:	09-344-01					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Tetrachloroethene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
2-Hexanone	ND	0.0058	EPA 8260C	9-27-16	9-27-16	
Dibromochloromethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Chlorobenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Ethylbenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
m,p-Xylene	ND	0.0023	EPA 8260C	9-27-16	9-27-16	
o-Xylene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Styrene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Bromoform	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Isopropylbenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Bromobenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
n-Propylbenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
2-Chlorotoluene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
4-Chlorotoluene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
tert-Butylbenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
sec-Butylbenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
n-Butylbenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,2-Dibromo-3-chloropropane	ND	0.0058	EPA 8260C	9-27-16	9-27-16	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Hexachlorobutadiene	ND	0.0058	EPA 8260C	9-27-16	9-27-16	
Naphthalene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*116*	*76-131*				
Toluene-d8	*121*	*80-126*				
4-Bromofluorobenzene	*119*	*60-146*				

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**NSW01-S-6.0**					
Laboratory ID:	09-344-02					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Chloromethane	ND	0.0064	EPA 8260C	9-27-16	9-27-16	
Vinyl Chloride	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Bromomethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Chloroethane	ND	0.0064	EPA 8260C	9-27-16	9-27-16	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Acetone	0.0095	0.0064	EPA 8260C	9-27-16	9-27-16	Y
Iodomethane	ND	0.0087	EPA 8260C	9-27-16	9-27-16	
Carbon Disulfide	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Methylene Chloride	ND	0.0064	EPA 8260C	9-27-16	9-27-16	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Vinyl Acetate	ND	0.0064	EPA 8260C	9-27-16	9-27-16	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
2-Butanone	ND	0.0064	EPA 8260C	9-27-16	9-27-16	
Bromochloromethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Chloroform	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Benzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Trichloroethene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Dibromomethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Bromodichloromethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
2-Chloroethyl Vinyl Ether	ND	0.0064	EPA 8260C	9-27-16	9-27-16	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Methyl Isobutyl Ketone	ND	0.0064	EPA 8260C	9-27-16	9-27-16	
Toluene	ND	0.0064	EPA 8260C	9-27-16	9-27-16	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	

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Samples Submitted: September 27, 2016
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Project: 0747.01.06-6.3

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**NSW01-S-6.0**					
Laboratory ID:	09-344-02					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Tetrachloroethene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
2-Hexanone	ND	0.0064	EPA 8260C	9-27-16	9-27-16	
Dibromochloromethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Chlorobenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Ethylbenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
m,p-Xylene	ND	0.0026	EPA 8260C	9-27-16	9-27-16	
o-Xylene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Styrene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Bromoform	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Isopropylbenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Bromobenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
n-Propylbenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
2-Chlorotoluene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
4-Chlorotoluene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,3,5-Trimethylbenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
tert-Butylbenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,2,4-Trimethylbenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
sec-Butylbenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
p-Isopropyltoluene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
n-Butylbenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,2-Dibromo-3-chloropropane	ND	0.0064	EPA 8260C	9-27-16	9-27-16	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Hexachlorobutadiene	ND	0.0064	EPA 8260C	9-27-16	9-27-16	
Naphthalene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*116*	*76-131*				
Toluene-d8	*122*	*80-126*				
4-Bromofluorobenzene	*118*	*60-146*				

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ESW01-S-6.0**					
Laboratory ID:	09-344-03					
Dichlorodifluoromethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Chloromethane	ND	0.0070	EPA 8260C	9-27-16	9-27-16	
Vinyl Chloride	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Bromomethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Chloroethane	ND	0.0070	EPA 8260C	9-27-16	9-27-16	
Trichlorofluoromethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloroethene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Acetone	0.015	0.0070	EPA 8260C	9-27-16	9-27-16	Y
Iodomethane	ND	0.0095	EPA 8260C	9-27-16	9-27-16	
Carbon Disulfide	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Methylene Chloride	ND	0.0070	EPA 8260C	9-27-16	9-27-16	
(trans) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Methyl t-Butyl Ether	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloroethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Vinyl Acetate	ND	0.0070	EPA 8260C	9-27-16	9-27-16	
2,2-Dichloropropane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
(cis) 1,2-Dichloroethene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
2-Butanone	ND	0.0070	EPA 8260C	9-27-16	9-27-16	
Bromochloromethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Chloroform	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,1,1-Trichloroethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Carbon Tetrachloride	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloropropene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Benzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,2-Dichloroethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Trichloroethene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,2-Dichloropropane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Dibromomethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Bromodichloromethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
2-Chloroethyl Vinyl Ether	ND	0.0070	EPA 8260C	9-27-16	9-27-16	
(cis) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Methyl Isobutyl Ketone	ND	0.0070	EPA 8260C	9-27-16	9-27-16	
Toluene	ND	0.0070	EPA 8260C	9-27-16	9-27-16	
(trans) 1,3-Dichloropropene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ESW01-S-6.0**					
Laboratory ID:	09-344-03					
1,1,2-Trichloroethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Tetrachloroethene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,3-Dichloropropane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
2-Hexanone	ND	0.0070	EPA 8260C	9-27-16	9-27-16	
Dibromochloromethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,2-Dibromoethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Chlorobenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,1,1,2-Tetrachloroethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Ethylbenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
m,p-Xylene	ND	0.0028	EPA 8260C	9-27-16	9-27-16	
o-Xylene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Styrene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Bromoform	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Isopropylbenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Bromobenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,1,2,2-Tetrachloroethane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,2,3-Trichloropropane	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
n-Propylbenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
2-Chlorotoluene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
4-Chlorotoluene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,3,5-Trimethylbenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
tert-Butylbenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,2,4-Trimethylbenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
sec-Butylbenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,3-Dichlorobenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
p-Isopropyltoluene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,4-Dichlorobenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,2-Dichlorobenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
n-Butylbenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,2-Dibromo-3-chloropropane	ND	0.0070	EPA 8260C	9-27-16	9-27-16	
1,2,4-Trichlorobenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Hexachlorobutadiene	ND	0.0070	EPA 8260C	9-27-16	9-27-16	
Naphthalene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
1,2,3-Trichlorobenzene	ND	0.0014	EPA 8260C	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*99*	*76-131*				
Toluene-d8	*107*	*80-126*				
4-Bromofluorobenzene	*104*	*60-146*				

Date of Report: September 28, 2016
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Project: 0747.01.06-6.3

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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SSW01-S-3.0**					
Laboratory ID:	09-344-04					
Dichlorodifluoromethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Chloromethane	ND	0.0087	EPA 8260C	9-27-16	9-27-16	
Vinyl Chloride	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Bromomethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Chloroethane	ND	0.0087	EPA 8260C	9-27-16	9-27-16	
Trichlorofluoromethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloroethene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Acetone	0.020	0.0087	EPA 8260C	9-27-16	9-27-16	Y
Iodomethane	ND	0.012	EPA 8260C	9-27-16	9-27-16	
Carbon Disulfide	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Methylene Chloride	ND	0.0087	EPA 8260C	9-27-16	9-27-16	
(trans) 1,2-Dichloroethene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Methyl t-Butyl Ether	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloroethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Vinyl Acetate	ND	0.0087	EPA 8260C	9-27-16	9-27-16	
2,2-Dichloropropane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
(cis) 1,2-Dichloroethene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
2-Butanone	ND	0.0087	EPA 8260C	9-27-16	9-27-16	
Bromochloromethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Chloroform	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,1,1-Trichloroethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Carbon Tetrachloride	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloropropene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Benzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,2-Dichloroethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Trichloroethene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,2-Dichloropropane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Dibromomethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Bromodichloromethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
2-Chloroethyl Vinyl Ether	ND	0.0087	EPA 8260C	9-27-16	9-27-16	
(cis) 1,3-Dichloropropene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Methyl Isobutyl Ketone	ND	0.0087	EPA 8260C	9-27-16	9-27-16	
Toluene	ND	0.0087	EPA 8260C	9-27-16	9-27-16	
(trans) 1,3-Dichloropropene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SSW01-S-3.0**					
Laboratory ID:	09-344-04					
1,1,2-Trichloroethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Tetrachloroethene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,3-Dichloropropane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
2-Hexanone	ND	0.0087	EPA 8260C	9-27-16	9-27-16	
Dibromochloromethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,2-Dibromoethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Chlorobenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,1,1,2-Tetrachloroethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Ethylbenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
m,p-Xylene	ND	0.0035	EPA 8260C	9-27-16	9-27-16	
o-Xylene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Styrene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Bromoform	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Isopropylbenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Bromobenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,1,2,2-Tetrachloroethane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,2,3-Trichloropropane	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
n-Propylbenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
2-Chlorotoluene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
4-Chlorotoluene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,3,5-Trimethylbenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
tert-Butylbenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,2,4-Trimethylbenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
sec-Butylbenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,3-Dichlorobenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
p-Isopropyltoluene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,4-Dichlorobenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,2-Dichlorobenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
n-Butylbenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,2-Dibromo-3-chloropropane	ND	0.0087	EPA 8260C	9-27-16	9-27-16	
1,2,4-Trichlorobenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Hexachlorobutadiene	ND	0.0087	EPA 8260C	9-27-16	9-27-16	
Naphthalene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
1,2,3-Trichlorobenzene	ND	0.0017	EPA 8260C	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*108*	*76-131*				
Toluene-d8	*119*	*80-126*				
4-Bromofluorobenzene	*114*	*60-146*				

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SSW02-S-6.0**					
Laboratory ID:	09-344-05					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Chloromethane	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
Vinyl Chloride	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Bromomethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Chloroethane	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Acetone	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
Iodomethane	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
Carbon Disulfide	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Methylene Chloride	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Vinyl Acetate	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
2-Butanone	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
Bromochloromethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Chloroform	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Benzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Trichloroethene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Dibromomethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Bromodichloromethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
2-Chloroethyl Vinyl Ether	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Methyl Isobutyl Ketone	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
Toluene	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	

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Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SSW02-S-6.0**					
Laboratory ID:	09-344-05					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Tetrachloroethene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
2-Hexanone	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
Dibromochloromethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Chlorobenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Ethylbenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
m,p-Xylene	ND	0.0027	EPA 8260C	9-28-16	9-28-16	
o-Xylene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Styrene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Bromoform	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Isopropylbenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Bromobenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
n-Propylbenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
2-Chlorotoluene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
4-Chlorotoluene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,3,5-Trimethylbenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
tert-Butylbenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,2,4-Trimethylbenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
sec-Butylbenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
p-Isopropyltoluene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
n-Butylbenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,2-Dibromo-3-chloropropane	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
1,2,4-Trichlorobenzene	ND	0.0019	EPA 8260C	9-28-16	9-28-16	
Hexachlorobutadiene	ND	0.0067	EPA 8260C	9-28-16	9-28-16	
Naphthalene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	9-28-16	9-28-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*99*	*76-131*				
Toluene-d8	*100*	*80-126*				
4-Bromofluorobenzene	*96*	*60-146*				

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BASE02-S-10.0**					
Laboratory ID:	09-344-07					
Dichlorodifluoromethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Chloromethane	ND	0.0076	EPA 8260C	9-27-16	9-27-16	
Vinyl Chloride	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Bromomethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Chloroethane	ND	0.0076	EPA 8260C	9-27-16	9-27-16	
Trichlorofluoromethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloroethene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Acetone	0.019	0.0076	EPA 8260C	9-27-16	9-27-16	Y
Iodomethane	ND	0.010	EPA 8260C	9-27-16	9-27-16	
Carbon Disulfide	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Methylene Chloride	ND	0.0076	EPA 8260C	9-27-16	9-27-16	
(trans) 1,2-Dichloroethene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Methyl t-Butyl Ether	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloroethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Vinyl Acetate	ND	0.0076	EPA 8260C	9-27-16	9-27-16	
2,2-Dichloropropane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
(cis) 1,2-Dichloroethene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
2-Butanone	ND	0.0076	EPA 8260C	9-27-16	9-27-16	
Bromochloromethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Chloroform	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,1,1-Trichloroethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Carbon Tetrachloride	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloropropene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Benzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,2-Dichloroethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Trichloroethene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,2-Dichloropropane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Dibromomethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Bromodichloromethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
2-Chloroethyl Vinyl Ether	ND	0.0076	EPA 8260C	9-27-16	9-27-16	
(cis) 1,3-Dichloropropene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Methyl Isobutyl Ketone	ND	0.0076	EPA 8260C	9-27-16	9-27-16	
Toluene	ND	0.0076	EPA 8260C	9-27-16	9-27-16	
(trans) 1,3-Dichloropropene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	

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Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BASE02-S-10.0**					
Laboratory ID:	09-344-07					
1,1,2-Trichloroethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Tetrachloroethene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,3-Dichloropropane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
2-Hexanone	ND	0.0076	EPA 8260C	9-27-16	9-27-16	
Dibromochloromethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,2-Dibromoethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Chlorobenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,1,1,2-Tetrachloroethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Ethylbenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
m,p-Xylene	ND	0.0030	EPA 8260C	9-27-16	9-27-16	
o-Xylene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Styrene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Bromoform	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Isopropylbenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Bromobenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,1,2,2-Tetrachloroethane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,2,3-Trichloropropane	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
n-Propylbenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
2-Chlorotoluene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
4-Chlorotoluene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,3,5-Trimethylbenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
tert-Butylbenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,2,4-Trimethylbenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
sec-Butylbenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,3-Dichlorobenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
p-Isopropyltoluene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,4-Dichlorobenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,2-Dichlorobenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
n-Butylbenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,2-Dibromo-3-chloropropane	ND	0.0076	EPA 8260C	9-27-16	9-27-16	
1,2,4-Trichlorobenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Hexachlorobutadiene	ND	0.0076	EPA 8260C	9-27-16	9-27-16	
Naphthalene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
1,2,3-Trichlorobenzene	ND	0.0015	EPA 8260C	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*102*	*76-131*				
Toluene-d8	*111*	*80-126*				
4-Bromofluorobenzene	*107*	*60-146*				

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0927S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Chloromethane	ND	0.0050	EPA 8260C	9-27-16	9-27-16	
Vinyl Chloride	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Bromomethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Chloroethane	ND	0.0050	EPA 8260C	9-27-16	9-27-16	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Acetone	ND	0.0050	EPA 8260C	9-27-16	9-27-16	
Iodomethane	ND	0.0068	EPA 8260C	9-27-16	9-27-16	
Carbon Disulfide	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Methylene Chloride	ND	0.0050	EPA 8260C	9-27-16	9-27-16	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Vinyl Acetate	ND	0.0050	EPA 8260C	9-27-16	9-27-16	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
2-Butanone	ND	0.0050	EPA 8260C	9-27-16	9-27-16	
Bromochloromethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Chloroform	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Benzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Trichloroethene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Dibromomethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Bromodichloromethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	9-27-16	9-27-16	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	9-27-16	9-27-16	
Toluene	ND	0.0050	EPA 8260C	9-27-16	9-27-16	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	

Date of Report: September 28, 2016
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Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

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METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0927S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Tetrachloroethene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
2-Hexanone	ND	0.0050	EPA 8260C	9-27-16	9-27-16	
Dibromochloromethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Chlorobenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Ethylbenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
m,p-Xylene	ND	0.0020	EPA 8260C	9-27-16	9-27-16	
o-Xylene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Styrene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Bromoform	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Isopropylbenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Bromobenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
n-Propylbenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
2-Chlorotoluene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
4-Chlorotoluene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
tert-Butylbenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
sec-Butylbenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
n-Butylbenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	9-27-16	9-27-16	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	9-27-16	9-27-16	
Naphthalene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*113*	*76-131*				
Toluene-d8	*117*	*80-126*				
4-Bromofluorobenzene	*115*	*60-146*				

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0928S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Chloromethane	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
Vinyl Chloride	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Bromomethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Chloroethane	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Acetone	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
Iodomethane	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
Carbon Disulfide	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Methylene Chloride	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Vinyl Acetate	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
2-Butanone	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
Bromochloromethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Chloroform	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Benzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Trichloroethene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Dibromomethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Bromodichloromethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
Toluene	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	

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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0928S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Tetrachloroethene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
2-Hexanone	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
Dibromochloromethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Chlorobenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Ethylbenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
m,p-Xylene	ND	0.0020	EPA 8260C	9-28-16	9-28-16	
o-Xylene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Styrene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Bromoform	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Isopropylbenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Bromobenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
n-Propylbenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
2-Chlorotoluene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
4-Chlorotoluene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
tert-Butylbenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
sec-Butylbenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
n-Butylbenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
1,2,4-Trichlorobenzene	ND	0.0014	EPA 8260C	9-28-16	9-28-16	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	9-28-16	9-28-16	
Naphthalene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	9-28-16	9-28-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*104*	*76-131*				
Toluene-d8	*106*	*80-126*				
4-Bromofluorobenzene	*108*	*60-146*				

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0927S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0499**	**0.0503**	0.0500	0.0500	100	101	68-126	1	15	
Benzene	**0.0503**	**0.0510**	0.0500	0.0500	101	102	70-121	1	15	
Trichloroethene	**0.0461**	**0.0472**	0.0500	0.0500	92	94	75-120	2	15	
Toluene	**0.0486**	**0.0492**	0.0500	0.0500	97	98	80-120	1	15	
Chlorobenzene	**0.0474**	**0.0484**	0.0500	0.0500	95	97	76-120	2	15	
Surrogate:										
Dibromofluoromethane					*101*	*102*	*76-131*			
Toluene-d8					*106*	*106*	*80-126*			
4-Bromofluorobenzene					*102*	*106*	*60-146*			

Date of Report: September 28, 2016
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Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0928S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0479**	**0.0503**	0.0500	0.0500	96	101	68-126	5	15	
Benzene	**0.0508**	**0.0511**	0.0500	0.0500	102	102	70-121	1	15	
Trichloroethene	**0.0439**	**0.0468**	0.0500	0.0500	88	94	75-120	6	15	
Toluene	**0.0502**	**0.0516**	0.0500	0.0500	100	103	80-120	3	15	
Chlorobenzene	**0.0478**	**0.0492**	0.0500	0.0500	96	98	76-120	3	15	
Surrogate:										
Dibromofluoromethane					*100*	*105*	*76-131*			
Toluene-d8					*99*	*103*	*80-126*			
4-Bromofluorobenzene					*96*	*104*	*60-146*			

Date of Report: September 28, 2016
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Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

NAPHTHALENES EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**WSW01-S-6.0**					
Laboratory ID:	09-344-01					
Naphthalene	**ND**	0.0081	EPA 8270D/SIM	9-27-16	9-28-16	
2-Methylnaphthalene	**ND**	0.0081	EPA 8270D/SIM	9-27-16	9-28-16	
1-Methylnaphthalene	**ND**	0.0081	EPA 8270D/SIM	9-27-16	9-28-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*56*	*32 - 115*				
Pyrene-d10	*72*	*30 - 124*				
Terphenyl-d14	*91*	*30 - 117*				

Date of Report: September 28, 2016
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Project: 0747.01.06-6.3

NAPHTHALENES EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**NSW01-S-6.0**					
Laboratory ID:	09-344-02					
Naphthalene	**0.13**	0.0082	EPA 8270D/SIM	9-27-16	9-28-16	
2-Methylnaphthalene	**0.16**	0.0082	EPA 8270D/SIM	9-27-16	9-28-16	
1-Methylnaphthalene	**0.10**	0.0082	EPA 8270D/SIM	9-27-16	9-28-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*51*	*32 - 115*				
Pyrene-d10	*63*	*30 - 124*				
Terphenyl-d14	*80*	*30 - 117*				

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NAPHTHALENES EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ESW01-S-6.0**					
Laboratory ID:	09-344-03					
Naphthalene	**ND**	0.0088	EPA 8270D/SIM	9-27-16	9-28-16	
2-Methylnaphthalene	**ND**	0.0088	EPA 8270D/SIM	9-27-16	9-28-16	
1-Methylnaphthalene	**ND**	0.0088	EPA 8270D/SIM	9-27-16	9-28-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*48*	*32 - 115*				
Pyrene-d10	*52*	*30 - 124*				
Terphenyl-d14	*65*	*30 - 117*				

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NAPHTHALENES EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SSW01-S-3.0**					
Laboratory ID:	09-344-04					
Naphthalene	**0.0084**	0.0075	EPA 8270D/SIM	9-27-16	9-28-16	
2-Methylnaphthalene	**0.0094**	0.0075	EPA 8270D/SIM	9-27-16	9-28-16	
1-Methylnaphthalene	**0.027**	0.0075	EPA 8270D/SIM	9-27-16	9-28-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*64*	*32 - 115*				
Pyrene-d10	*69*	*30 - 124*				
Terphenyl-d14	*90*	*30 - 117*				

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NAPHTHALENES EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SSW02-S-6.0**					
Laboratory ID:	09-344-05					
Naphthalene	**ND**	0.0074	EPA 8270D/SIM	9-27-16	9-28-16	
2-Methylnaphthalene	**ND**	0.0074	EPA 8270D/SIM	9-27-16	9-28-16	
1-Methylnaphthalene	**ND**	0.0074	EPA 8270D/SIM	9-27-16	9-28-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*49*	*32 - 115*				
Pyrene-d10	*46*	*30 - 124*				
Terphenyl-d14	*75*	*30 - 117*				

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NAPHTHALENES EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BASE02-S-10.0**					
Laboratory ID:	09-344-07					
Naphthalene	**ND**	0.0088	EPA 8270D/SIM	9-27-16	9-28-16	
2-Methylnaphthalene	**ND**	0.0088	EPA 8270D/SIM	9-27-16	9-28-16	
1-Methylnaphthalene	**ND**	0.0088	EPA 8270D/SIM	9-27-16	9-28-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*48*	*32 - 115*				
Pyrene-d10	*59*	*30 - 124*				
Terphenyl-d14	*75*	*30 - 117*				

Date of Report: September 28, 2016
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Project: 0747.01.06-6.3

NAPHTHALENES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0927S1					
Naphthalene	**ND**	0.0067	EPA 8270D/SIM	9-27-16	9-27-16	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	9-27-16	9-27-16	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	9-27-16	9-27-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*83*	*32 - 115*				
Pyrene-d10	*85*	*30 - 124*				
Terphenyl-d14	*99*	*30 - 117*				

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NAPHTHALENES EPA 8270D/SIM
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0927S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0660**	**0.0666**	0.0833	0.0833	79	80	61 - 112	1	15	
Acenaphthylene	**0.0717**	**0.0692**	0.0833	0.0833	86	83	65 - 116	4	15	
Acenaphthene	**0.0722**	**0.0683**	0.0833	0.0833	87	82	62 - 116	6	13	
Surrogate:										
2-Fluorobiphenyl					*81*	*76*	*32 - 115*			
Pyrene-d10					*88*	*86*	*30 - 124*			
Terphenyl-d14					*99*	*97*	*30 - 117*			

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TOTAL LEAD
EPA 6010C

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	09-344-01					
Client ID:	**WSW01-S-6.0**					
Lead	**ND**	6.1	6010C	9-27-16	9-27-16	
Lab ID:	09-344-02					
Client ID:	**NSW01-S-6.0**					
Lead	**ND**	6.1	6010C	9-27-16	9-27-16	
Lab ID:	09-344-03					
Client ID:	**ESW01-S-6.0**					
Lead	**ND**	6.6	6010C	9-27-16	9-27-16	
Lab ID:	09-344-04					
Client ID:	**SSW01-S-3.0**					
Lead	**6.8**	5.6	6010C	9-27-16	9-27-16	
Lab ID:	09-344-05					
Client ID:	**SSW02-S-6.0**					
Lead	**13**	5.6	6010C	9-27-16	9-27-16	
Lab ID:	09-344-07					
Client ID:	**BASE02-S-10.0**					
Lead	**ND**	6.6	6010C	9-27-16	9-27-16	

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TOTAL LEAD
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted:	9-27-16
Date Analyzed:	9-27-16
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0927SM1

Analyte	Method	Result	PQL
Lead	6010C	**ND**	5.0

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TOTAL LEAD
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 9-27-16
Date Analyzed: 9-27-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-318-02

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**ND**	**ND**	NA	5.0	

Date of Report: September 28, 2016
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TOTAL LEAD
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 9-27-16
Date Analyzed: 9-27-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-318-02

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	250	**234**	93	**237**	95	2	

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TOTAL LEAD
EPA 6010C
SPIKE BLANK QUALITY CONTROL

Date Extracted: 9-27-16
Date Analyzed: 9-27-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB0927SM1

Analyte	Method	Spike Level	Spike Result	Percent Recovery
Lead	6010C	250	**245**	98

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TOTAL LEAD
EPA 6010C
CONTINUING CALIBRATION SUMMARY

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
Lead	ICV092716P	1.00	1.03	-3.0	+/- 10%
Lead	LLICV1092716P	0.100	0.103	-3.0	+/- 30%
Lead	CCV1092716P	10.0	9.97	0.30	+/- 10%
Lead	CCV2092716P	10.0	10.2	-2.0	+/- 10%
Lead	LLCCV2092716P	0.100	0.104	-4.0	+/- 30%
Lead	CCV3092716P	10.0	10.1	-1.0	+/- 10%
Lead	LLCCV3092716P	0.100	0.0954	4.6	+/- 30%
Lead	CCV4092716P	10.0	10.2	-2.0	+/- 10%
Lead	LLCCV4092716P	0.100	0.100	0	+/- 30%
Lead	CCV5092716P	10.0	9.98	0.20	+/- 10%
Lead	LLCCV5092716P	0.100	0.111	-11	+/- 30%
Lead	CCV6092716P	10.0	10.0	0	+/- 10%
Lead	LLCCV6092716P	0.100	0.115	-15	+/- 30%
Lead	CCV7092716P	10.0	9.92	0.80	+/- 10%
Lead	LLCCV7092716P	0.100	0.112	-12	+/- 30%
Lead	CCV8092716P	10.0	9.90	1.0	+/- 10%
Lead	LLCCV8092716P	0.100	0.0864	14	+/- 30%
Lead	CCV9092716P	10.0	9.86	1.4	+/- 10%
Lead	LLCCV9092716P	0.100	0.101	-1.0	+/- 30%

Date of Report: September 28, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-344
Project: 0747.01.06-6.3

% MOISTURE

Date Analyzed: 9-27-16

Client ID	Lab ID	% Moisture
WSW01-S-6.0	09-344-01	18
NSW01-S-6.0	09-344-02	18
ESW01-S-6.0	09-344-03	24
SSW01-S-3.0	09-344-04	11
SSW02-S-6.0	09-344-05	10
BASE02-S-10.0	09-344-07	24

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 09-344

Company: Maul Foster Alongi
Project Number: 0747.01.06-6.3
Project Name: North Cascade Ford
Project Manager: Heather Good
Sampled by: Carolyn Wise

Turnaround Request (in working days)
(Check One)
- [X] Same Day
- [ ] 1 Day
- [ ] 2 Days
- [ ] 3 Days
- [ ] Standard (7 Days) (TPH analysis 5 Days)
- [ ] _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx + n-hexane	NWTPH-Dx	Volatiles 8260C *	Halogenated Volatiles 8260C	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level) Naphthalenes only	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals/ MTCA Metals (circle one)	TCLP Metals	HEM (oil and grease) 1664A	Total lead		HOLD				% Moisture
1	WSW01-S-6.0	9/27	1050	S	5			X	X	X			X								X						X
2	NSW01-S-6.0		1100	S				X	X	X			X								X						X
3	ESW01-S-6.0		1110	S				X	X	X			X								X						X
4	SSW01-S-3.0		1115	S				X	X	X			X								X						X
5	SSW02-S-6.0		1120	S				X	X	X			X								X						X
6	BASE01-S-10.0		1220	S				X	X	X			X								X		X				X
7	BASE02-S-10.0		1230	S				X	X	X			X								X						X

	Signature	Company	Date	Time
Relinquished	Carolyn Wise	MFA	9/27/16	1230
Received	Pat Mellis	ALPHA	9-27-16	12:42
Relinquished	Pat Mellis	ALPHA	9-27-16	2:17
Received		ORE	9/27/16	1417
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
*EDB reporting limit below MTCA A value

Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐ Standard

Electronic Data Deliverables (EDDs) ☒ Equis

Sample/Cooler Receipt and Acceptance Checklist

Client: MFA

Client Project Name/Number: 0747.01.06-6.3

OnSite Project Number: 09-344

Initiated by: MV

Date Initiated: 9/27/16

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	No	(N/A)	1 2 3 4
1.2 Were the custody seals intact?	Yes	No	(N/A)	1 2 3 4
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	(N/A)	1 2 3 4
1.4 Were the samples delivered on ice or blue ice?	(Yes)	No		1 2 3 4
1.5 Were samples received between 0-6 degrees Celsius?	(Yes)	No	Temperature: 5	
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	(N/A)		
1.7 How were the samples delivered?	Client	(Courier)	UPS/FedEx	OSE Pickup Other

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	(Yes)	No	1 2 3 4
2.2 Was the COC legible and written in permanent ink?	(Yes)	No	1 2 3 4
2.3 Have samples been relinquished and accepted by each custodian?	(Yes)	No	1 2 3 4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	(Yes)	No	1 2 3 4
2.5 Were all of the samples listed on the COC submitted?	(Yes)	No	1 2 3 4
2.6 Were any of the samples submitted omitted from the COC?	Yes	(No)	1 2 3 4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	(No)		1 2 3 4
3.2 Were any sample labels missing or illegible?	Yes	(No)		1 2 3 4
3.3 Have the correct containers been used for each analysis requested?	(Yes)	No		1 2 3 4
3.4 Have the samples been correctly preserved?	Yes	No	(N/A)	1 2 3 4
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	Yes	No	(N/A)	1 2 3 4
3.6 Is there sufficient sample submitted to perform requested analyses?	(Yes)	No		1 2 3 4
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	(No)		1 2 3 4
3.8 Was method 5035A used?	(Yes)	No	N/A	1 2 3 4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#	1	N/A	1 2 3 4

Explain any discrepancies:

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 5, 2016

Heather Good
Maul Foster & Alongi, Inc.
Bay Vista Tower
2815 2nd Avenue, Suite 540
Seattle, WA 98121

Re: Analytical Data for Project 0747.01.06-6.3
Laboratory Reference No. 1609-345

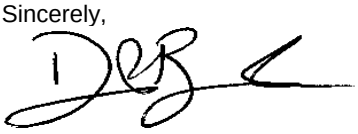
Dear Heather:

Enclosed are the analytical results and associated quality control data for samples submitted on September 27, 2016.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,



David Baumeister
Project Manager

Enclosures

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

Case Narrative

Samples were collected on September 27, 2016 and received by the laboratory on September 27, 2016. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH Gx/BTEX + MTBE Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

NWTPH-Gx/BTEX + MTBE

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST01-1**					
Laboratory ID:	09-345-01					
MTBE	**ND**	0.046	EPA 8021B	9-28-16	9-29-16	
Benzene	**ND**	0.020	EPA 8021B	9-28-16	9-29-16	
Toluene	**ND**	0.046	EPA 8021B	9-28-16	9-29-16	
Ethyl Benzene	**ND**	0.046	EPA 8021B	9-28-16	9-29-16	
m,p-Xylene	**0.051**	0.046	EPA 8021B	9-28-16	9-29-16	
o-Xylene	**ND**	0.046	EPA 8021B	9-28-16	9-29-16	
Gasoline	**ND**	4.6	NWTPH-Gx	9-28-16	9-29-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*92*	*68-129*				
Client ID:	**ST01-2**					
Laboratory ID:	09-345-02					
MTBE	**ND**	0.059	EPA 8021B	9-28-16	9-29-16	
Benzene	**ND**	0.020	EPA 8021B	9-28-16	9-29-16	
Toluene	**ND**	0.059	EPA 8021B	9-28-16	9-29-16	
Ethyl Benzene	**ND**	0.059	EPA 8021B	9-28-16	9-29-16	
m,p-Xylene	**ND**	0.059	EPA 8021B	9-28-16	9-29-16	
o-Xylene	**ND**	0.059	EPA 8021B	9-28-16	9-29-16	
Gasoline	**ND**	5.9	NWTPH-Gx	9-28-16	9-29-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*95*	*68-129*				
Client ID:	**ST01-3**					
Laboratory ID:	09-345-03					
MTBE	**ND**	0.055	EPA 8021B	9-28-16	9-29-16	
Benzene	**0.026**	0.020	EPA 8021B	9-28-16	9-29-16	
Toluene	**ND**	0.055	EPA 8021B	9-28-16	9-29-16	
Ethyl Benzene	**0.056**	0.055	EPA 8021B	9-28-16	9-29-16	
m,p-Xylene	**0.18**	0.055	EPA 8021B	9-28-16	9-29-16	
o-Xylene	**0.086**	0.055	EPA 8021B	9-28-16	9-29-16	
Gasoline	**ND**	5.5	NWTPH-Gx	9-28-16	9-29-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*101*	*68-129*				

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

NWTPH-Gx/BTEX + MTBE
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0928S1					
MTBE	**ND**	0.050	EPA 8021B	9-28-16	9-29-16	
Benzene	**ND**	0.020	EPA 8021B	9-28-16	9-29-16	
Toluene	**ND**	0.050	EPA 8021B	9-28-16	9-29-16	
Ethyl Benzene	**ND**	0.050	EPA 8021B	9-28-16	9-29-16	
m,p-Xylene	**ND**	0.050	EPA 8021B	9-28-16	9-29-16	
o-Xylene	**ND**	0.050	EPA 8021B	9-28-16	9-29-16	
Gasoline	**ND**	5.0	NWTPH-Gx	9-28-16	9-29-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*97*	*68-129*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-345-03										
	ORIG	DUP									
MTBE	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Benzene	**0.0243**	**0.0241**	NA	NA		NA		NA	1	30	
Toluene	**ND**	**0.0511**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**0.0518**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**0.162**	**0.159**	NA	NA		NA		NA	2	30	
o-Xylene	**0.0787**	**0.0752**	NA	NA		NA		NA	5	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*101*	*100*	*68-129*			
SPIKE BLANKS											
Laboratory ID:	SB0928S1										
	SB	SBD	SB	SBD		SB	SBD				
MTBE	**1.11**	**1.13**	1.00	1.00		**111**	**113**	70-130	2	20	
Benzene	**0.964**	**0.990**	1.00	1.00		**96**	**99**	76-124	3	17	
Toluene	**0.972**	**0.994**	1.00	1.00		**97**	**99**	78-124	2	16	
Ethyl Benzene	**0.999**	**1.02**	1.00	1.00		**100**	**102**	77-123	2	17	
m,p-Xylene	**0.953**	**0.978**	1.00	1.00		**95**	**98**	78-124	3	17	
o-Xylene	**0.984**	**1.01**	1.00	1.00		**98**	**101**	76-123	3	18	
Surrogate:											
Fluorobenzene						*99*	*99*	*68-129*			

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

NWTPH-Gx
CONTINUING CALIBRATION SUMMARY

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCVD0929G-1	5.00	4.58	9	+/- 20%
CCVD0929G-2	5.00	4.36	13	+/- 20%

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

BTEX + MTBE
EPA 8021B
CONTINUING CALIBRATION SUMMARY

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
Benzene	CCVD0929B-1	50.0	48.1	4	+/- 15%
Toluene	CCVD0929B-1	50.0	49.2	2	+/- 15%
Ethyl Benzene	CCVD0929B-1	50.0	51.1	-2	+/- 15%
m,p-Xylene	CCVD0929B-1	50.0	48.7	3	+/- 15%
o-Xylene	CCVD0929B-1	50.0	50.6	-1	+/- 15%
MTBE	CCVD0929B-1	50.0	54.0	-8	+/- 15%
Benzene	CCVD0929B-2	50.0	50.8	-2	+/- 15%
Toluene	CCVD0929B-2	50.0	51.2	-2	+/- 15%
Ethyl Benzene	CCVD0929B-2	50.0	52.9	-6	+/- 15%
m,p-Xylene	CCVD0929B-2	50.0	49.6	1	+/- 15%
o-Xylene	CCVD0929B-2	50.0	51.4	-3	+/- 15%
MTBE	CCVD0929B-2	50.0	55.9	-12	+/- 15%

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST01-1**					
Laboratory ID:	09-345-01					
Diesel Range Organics	**ND**	27	NWTPH-Dx	9-29-16	9-29-16	
Lube Oil	**120**	54	NWTPH-Dx	9-29-16	9-29-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*99*	*50-150*				
Client ID:	**ST01-2**					
Laboratory ID:	09-345-02					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-29-16	9-29-16	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	9-29-16	9-29-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*103*	*50-150*				
Client ID:	**ST01-3**					
Laboratory ID:	09-345-03					
Diesel Range Organics	**ND**	43	NWTPH-Dx	9-29-16	9-29-16	U1
Lube Oil	**320**	55	NWTPH-Dx	9-29-16	9-29-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*134*	*50-150*				

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0929S2					
Diesel Range Organics	**ND**	25	NWTPH-Dx	9-29-16	9-29-16	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	9-29-16	9-29-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
o-Terphenyl	*90*	*50-150*				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	09-345-03									
	ORIG	DUP								
Diesel Range	**ND**	**ND**	NA	NA		NA	NA	NA	NA	U1
Lube Oil	**291**	**229**	NA	NA		NA	NA	24	NA	
Surrogate:										
o-Terphenyl						*134* *126*	*50-150*			
SPIKE BLANK										
Laboratory ID:	SB0929S2									
Diesel Fuel #2	**100**		100		NA	**100**	61-130	NA	NA	
Surrogate:										
o-Terphenyl						*100*	*50-150*			

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

NWTPH-Dx
CONTINUING CALIBRATION SUMMARY

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCV0929F-T2	100	103	-3.1	+/-15%
CCV0929F-T3	100	98.0	2.0	+/-15%
CCV0929R-T2	100	106	-6.2	+/-15%
CCV0929R-T3	100	103	-3.4	+/-15%

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST01-1**					
Laboratory ID:	09-345-01					
Naphthalene	**0.012**	0.0072	EPA 8270D/SIM	9-29-16	9-30-16	
2-Methylnaphthalene	**0.016**	0.0072	EPA 8270D/SIM	9-29-16	9-30-16	
1-Methylnaphthalene	**0.017**	0.0072	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo[a]anthracene	**0.0079**	0.0072	EPA 8270D/SIM	9-29-16	9-30-16	
Chrysene	**0.012**	0.0072	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo[b]fluoranthene	**0.014**	0.0072	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo(j,k)fluoranthene	**ND**	0.0072	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo[a]pyrene	**0.0092**	0.0072	EPA 8270D/SIM	9-29-16	9-30-16	
Indeno(1,2,3-c,d)pyrene	**0.0078**	0.0072	EPA 8270D/SIM	9-29-16	9-30-16	
Dibenz[a,h]anthracene	**ND**	0.0072	EPA 8270D/SIM	9-29-16	9-30-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*72*	*32 - 115*				
Pyrene-d10	*81*	*30 - 124*				
Terphenyl-d14	*91*	*30 - 117*				

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST01-2**					
Laboratory ID:	09-345-02					
Naphthalene	**ND**	0.0074	EPA 8270D/SIM	9-29-16	9-30-16	
2-Methylnaphthalene	**ND**	0.0074	EPA 8270D/SIM	9-29-16	9-30-16	
1-Methylnaphthalene	**ND**	0.0074	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo[a]anthracene	**ND**	0.0074	EPA 8270D/SIM	9-29-16	9-30-16	
Chrysene	**ND**	0.0074	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo[b]fluoranthene	**ND**	0.0074	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo(j,k)fluoranthene	**ND**	0.0074	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo[a]pyrene	**ND**	0.0074	EPA 8270D/SIM	9-29-16	9-30-16	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0074	EPA 8270D/SIM	9-29-16	9-30-16	
Dibenz[a,h]anthracene	**ND**	0.0074	EPA 8270D/SIM	9-29-16	9-30-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*71*	*32 - 115*				
Pyrene-d10	*71*	*30 - 124*				
Terphenyl-d14	*78*	*30 - 117*				

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST01-3**					
Laboratory ID:	09-345-03					
Naphthalene	**0.021**	0.0073	EPA 8270D/SIM	9-29-16	9-30-16	
2-Methylnaphthalene	**0.026**	0.0073	EPA 8270D/SIM	9-29-16	9-30-16	
1-Methylnaphthalene	**0.024**	0.0073	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo[a]anthracene	**0.030**	0.0073	EPA 8270D/SIM	9-29-16	9-30-16	
Chrysene	**0.037**	0.0073	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo[b]fluoranthene	**0.044**	0.0073	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo(j,k)fluoranthene	**0.016**	0.0073	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo[a]pyrene	**0.039**	0.0073	EPA 8270D/SIM	9-29-16	9-30-16	
Indeno(1,2,3-c,d)pyrene	**0.025**	0.0073	EPA 8270D/SIM	9-29-16	9-30-16	
Dibenz[a,h]anthracene	**ND**	0.0073	EPA 8270D/SIM	9-29-16	9-30-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*69*	*32 - 115*				
Pyrene-d10	*78*	*30 - 124*				
Terphenyl-d14	*86*	*30 - 117*				

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0929S2					
Naphthalene	**ND**	0.0067	EPA 8270D/SIM	9-29-16	9-30-16	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	9-29-16	9-30-16	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270D/SIM	9-29-16	9-30-16	
Chrysene	**ND**	0.0067	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270D/SIM	9-29-16	9-30-16	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270D/SIM	9-29-16	9-30-16	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270D/SIM	9-29-16	9-30-16	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270D/SIM	9-29-16	9-30-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*76*	*32 - 115*				
Pyrene-d10	*81*	*30 - 124*				
Terphenyl-d14	*92*	*30 - 117*				

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0929S2									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0715**	**0.0734**	0.0833	0.0833	86	88	61 - 112	3	15	
Benzo[a]anthracene	**0.0837**	**0.0847**	0.0833	0.0833	100	102	59 - 129	1	15	
Chrysene	**0.0742**	**0.0759**	0.0833	0.0833	89	91	60 - 122	2	15	
Benzo[b]fluoranthene	**0.0736**	**0.0722**	0.0833	0.0833	88	87	53 - 124	2	17	
Benzo(j,k)fluoranthene	**0.0744**	**0.0782**	0.0833	0.0833	89	94	58 - 124	5	16	
Benzo[a]pyrene	**0.0800**	**0.0811**	0.0833	0.0833	96	97	62 - 127	1	15	
Indeno(1,2,3-c,d)pyrene	**0.0805**	**0.0816**	0.0833	0.0833	97	98	60 - 120	1	15	
Dibenz[a,h]anthracene	**0.0778**	**0.0794**	0.0833	0.0833	93	95	60 - 117	2	15	
Surrogate:										
2-Fluorobiphenyl					*81*	*83*	*32 - 115*			
Pyrene-d10					*80*	*80*	*30 - 124*			
Terphenyl-d14					*90*	*90*	*30 - 117*			

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

PCBs
EPA 8082A

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST01-1**					
Laboratory ID:	09-345-01					
Aroclor 1016	**ND**	0.054	EPA 8082A	10-3-16	10-3-16	
Aroclor 1221	**ND**	0.054	EPA 8082A	10-3-16	10-3-16	
Aroclor 1232	**ND**	0.054	EPA 8082A	10-3-16	10-3-16	
Aroclor 1242	**ND**	0.054	EPA 8082A	10-3-16	10-3-16	
Aroclor 1248	**ND**	0.054	EPA 8082A	10-3-16	10-3-16	
Aroclor 1254	**ND**	0.054	EPA 8082A	10-3-16	10-3-16	
Aroclor 1260	**ND**	0.054	EPA 8082A	10-3-16	10-3-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*97*	*50-139*				
Client ID:	**ST01-2**					
Laboratory ID:	09-345-02					
Aroclor 1016	**ND**	0.056	EPA 8082A	10-3-16	10-3-16	
Aroclor 1221	**ND**	0.056	EPA 8082A	10-3-16	10-3-16	
Aroclor 1232	**ND**	0.056	EPA 8082A	10-3-16	10-3-16	
Aroclor 1242	**ND**	0.056	EPA 8082A	10-3-16	10-3-16	
Aroclor 1248	**ND**	0.056	EPA 8082A	10-3-16	10-3-16	
Aroclor 1254	**ND**	0.056	EPA 8082A	10-3-16	10-3-16	
Aroclor 1260	**ND**	0.056	EPA 8082A	10-3-16	10-3-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*92*	*50-139*				
Client ID:	**ST01-3**					
Laboratory ID:	09-345-03					
Aroclor 1016	**ND**	0.055	EPA 8082A	10-3-16	10-3-16	
Aroclor 1221	**ND**	0.055	EPA 8082A	10-3-16	10-3-16	
Aroclor 1232	**ND**	0.055	EPA 8082A	10-3-16	10-3-16	
Aroclor 1242	**ND**	0.055	EPA 8082A	10-3-16	10-3-16	
Aroclor 1248	**ND**	0.055	EPA 8082A	10-3-16	10-3-16	
Aroclor 1254	**ND**	0.055	EPA 8082A	10-3-16	10-3-16	
Aroclor 1260	**ND**	0.055	EPA 8082A	10-3-16	10-3-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*95*	*50-139*				

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

PCBs EPA 8082A
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1003S1					
Aroclor 1016	**ND**	0.050	EPA 8082A	10-3-16	10-3-16	
Aroclor 1221	**ND**	0.050	EPA 8082A	10-3-16	10-3-16	
Aroclor 1232	**ND**	0.050	EPA 8082A	10-3-16	10-3-16	
Aroclor 1242	**ND**	0.050	EPA 8082A	10-3-16	10-3-16	
Aroclor 1248	**ND**	0.050	EPA 8082A	10-3-16	10-3-16	
Aroclor 1254	**ND**	0.050	EPA 8082A	10-3-16	10-3-16	
Aroclor 1260	**ND**	0.050	EPA 8082A	10-3-16	10-3-16	
Surrogate:	*Percent Recovery*	*Control Limits*				
DCB	*108*	*50-139*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS											
Laboratory ID:	SB1003S1										
	SB	SBD	SB	SBD		SB	SBD				
Aroclor 1260	**0.486**	**0.476**	0.500	0.500	N/A	**97**	**95**	61-135	2	11	
Surrogate:											
DCB						*85*	*85*	*50-139*			

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

PCB's EPA 8082A
CONTINUING CALIBRATION SUMMARY

Lab ID	Analyte	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Column 1					
PCBCCV 1003-2	Aroclor 1016	500	473	5.4	+/- 15%
PCBCCV 1003-2	Aroclor 1260	500	483	3.4	+/- 15%
Column 2					
PCBCCV 1003-2	Aroclor 1016	500	495	1.0	+/- 15%
PCBCCV 1003-2	Aroclor 1260	500	444	11	+/- 15%
Column 1					
PCBCCV 1003-3	Aroclor 1016	500	487	2.6	+/- 15%
PCBCCV 1003-3	Aroclor 1260	500	488	2.4	+/- 15%
Column 2					
PCBCCV 1003-3	Aroclor 1016	500	482	3.6	+/- 15%
PCBCCV 1003-3	Aroclor 1260	500	426	15	+/- 15%
Column 1					
PCBCCV 1003-4	Aroclor 1016	500	483	3.4	+/- 15%
PCBCCV 1003-4	Aroclor 1260	500	480	4.0	+/- 15%
Column 2					
PCBCCV 1003-4	Aroclor 1016	500	477	4.6	+/- 15%
PCBCCV 1003-4	Aroclor 1260	500	418	16	+/- 15%
Column 1					
PCBCCV 1003-5	Aroclor 1016	500	572	-14	+/- 15%
PCBCCV 1003-5	Aroclor 1260	500	579	-16	+/- 15%
Column 2					
PCBCCV 1003-5	Aroclor 1016	500	595	-19	+/- 15%
PCBCCV 1003-5	Aroclor 1260	500	502	-0.40	+/- 15%

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	09-345-01					
Client ID:	**ST01-1**					
Lead	**15**	5.4	6010C	9-30-16	9-30-16	
Lab ID:	09-345-02					
Client ID:	**ST01-2**					
Lead	**ND**	5.6	6010C	9-30-16	9-30-16	
Lab ID:	09-345-03					
Client ID:	**ST01-3**					
Lead	**18**	5.5	6010C	9-30-16	9-30-16	

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted:	9-30-16
Date Analyzed:	9-30-16
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0930SM3

Analyte	Method	Result	PQL
Lead	6010C	**ND**	5.0

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 9-30-16
Date Analyzed: 9-30-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-399-04

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**9.75**	**11.4**	16	5.0	

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 9-30-16
Date Analyzed: 9-30-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-399-04

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	250	**240**	92	**245**	94	2	

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
SPIKE BLANK QUALITY CONTROL

Date Extracted: 9-30-16
Date Analyzed: 9-30-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB0930SM3

Analyte	Method	Spike Level	Spike Result	Percent Recovery
Lead	6010C	250	**234**	93

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
CONTINUING CALIBRATION SUMMARY

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
Lead	ICV093016P	1.00	1.02	-2.0	+/- 10%
Lead	LLICV1093016P	0.100	0.0941	5.9	+/- 30%
Lead	CCV1093016P	10.0	9.79	2.1	+/- 10%
Lead	CCV2093016P	10.0	9.65	3.5	+/- 10%
Lead	LLCCV2093016P	0.100	0.0841	16	+/- 30%
Lead	CCV3093016P	10.0	9.82	1.8	+/- 10%
Lead	LLCCV3093016P	0.100	0.105	-5.0	+/- 30%
Lead	CCV4093016P	10.0	9.82	1.8	+/- 10%
Lead	LLCCV4093016P	0.100	0.0824	18	+/- 30%
Lead	CCV5093016P	10.0	9.78	2.2	+/- 10%
Lead	LLCCV5093016P	0.100	0.104	-4.0	+/- 30%
Lead	CCV6093016P	10.0	9.74	2.6	+/- 10%
Lead	LLCCV6093016P	0.100	0.104	-4.0	+/- 30%
Lead	CCV7093016P	10.0	9.67	3.3	+/- 10%
Lead	LLCCV7093016P	0.100	0.102	-2.0	+/- 30%
Lead	CCV8093016P	10.0	9.63	3.7	+/- 10%
Lead	LLCCV8093016P	0.100	0.0810	19	+/- 30%

Date of Report: October 5, 2016
Samples Submitted: September 27, 2016
Laboratory Reference: 1609-345
Project: 0747.01.06-6.3

% MOISTURE

Date Analyzed: 9-28-16

Client ID	Lab ID	% Moisture
ST01-1	09-345-01	7
ST01-2	09-345-02	10
ST01-3	09-345-03	8

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 09-345

Company: Maul Foster Alongi
Project Number: 0747.01.06 - 6.23
Project Name: North Cascade Ford
Project Manager: Heather Good
Sampled by: Carolyn Wise

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	STO1-1	9/27	~~745~~ PS	S	5
2	STO1-2		750	S	5
3	STO1-3		755	S	5

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level) * only cPAHs	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	MTBE ~~8260B~~ 8021B	Pb 6010A	Naphthalenes ~~8260B~~ 8270D/SIM		% Moisture
1		X		X					X	X								X	X	X		X
2		X		X					X	X								X	X	X		X
3		X		X					X	X								X	X	X		X

	Signature	Company	Date	Time
Relinquished	Carolyn Wise	MFA	9/27/16	1230
Received	Pat Mills	ALPHA	9-27-16	12:47
Relinquished	Pat Mills	ALPHA	9-27-16	2:17
Received			9/27/16	1417
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☒ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒

Equis 4

Sample/Cooler Receipt and Acceptance Checklist

Client: MFA

Client Project Name/Number: 0747.01.06-6.3

OnSite Project Number: 09-345

Initiated by: MV

Date Initiated: 9/27/16

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	No	N/A	1 2 3 4
1.2 Were the custody seals intact?	Yes	No	N/A	1 2 3 4
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	N/A	1 2 3 4
1.4 Were the samples delivered on ice or blue ice?	Yes	No		1 2 3 4
1.5 Were samples received between 0-6 degrees Celsius?	Yes	No	Temperature: 5	
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	N/A		
1.7 How were the samples delivered?	Client	Courier	UPS/FedEx	OSE Pickup Other

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	Yes	No	1 2 3 4
2.2 Was the COC legible and written in permanent ink?	Yes	No	1 2 3 4
2.3 Have samples been relinquished and accepted by each custodian?	Yes	No	1 2 3 4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	Yes	No	1 2 3 4
2.5 Were all of the samples listed on the COC submitted?	Yes	No	1 2 3 4
2.6 Were any of the samples submitted omitted from the COC?	Yes	No	1 2 3 4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	No		1 2 3 4
3.2 Were any sample labels missing or illegible?	Yes	No		1 2 3 4
3.3 Have the correct containers been used for each analysis requested?	Yes	No		1 2 3 4
3.4 Have the samples been correctly preserved?	Yes	No	N/A	1 2 3 4
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	Yes	No	N/A	1 2 3 4
3.6 Is there sufficient sample submitted to perform requested analyses?	Yes	No		1 2 3 4
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	No		1 2 3 4
3.8 Was method 5035A used?	Yes	No	N/A	1 2 3 4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#		N/A	1 2 3 4

Explain any discrepancies:

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 4, 2016

Heather Good
Maul Foster & Alongi, Inc.
Bay Vista Tower
2815 2nd Avenue, Suite 540
Seattle, WA 98121

Re: Analytical Data for Project 0747.01.06-6.3
Laboratory Reference No. 1609-398

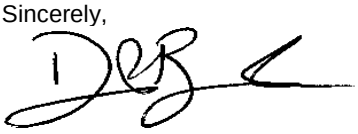
Dear Heather:

Enclosed are the analytical results and associated quality control data for samples submitted on September 30, 2016.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,



David Baumeister
Project Manager

Enclosures

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

Case Narrative

Samples were collected on September 29 and 30, 2016 and received by the laboratory on September 30, 2016. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH Gx + n-Hexane Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Volatiles EPA 8260C Analysis

The last two internal standards did not meet acceptance criteria for samples WSW02-S-7.5 and NSW02-S-7.5 due to co-eluting non-target analytes. The samples were re-extracted and re-analyzed with similar results. The samples were therefore re-analyzed for a third time at the lowest possible dilution allowed by Method 5035A. Since the last two internal standards passed for both samples at the dilution, this is the data that was included in the report. Consequently, the MTCA Method A clean-up level of 0.005-ppm for 1,2-Dibromoethane is not achievable.

Naphthalenes EPA 8270D/SIM Analysis

Sample NSW02-S-7.5 had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

NWTPH-Gx + n-HEXANE

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BASE03-S-15.0**					
Laboratory ID:	09-398-03					
n-Hexane	**ND**	0.11	EPA 8015M	9-30-16	9-30-16	
Gasoline	**ND**	11	NWTPH-Gx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***112***	***68-129***				
Client ID:	**SSW03-S-7.5**					
Laboratory ID:	09-398-04					
n-Hexane	**ND**	0.066	EPA 8015M	9-30-16	9-30-16	
Gasoline	**ND**	6.6	NWTPH-Gx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***105***	***68-129***				

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

NWTPH-Gx + n-HEXANE
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0930S1					
n-Hexane	**ND**	0.050	EPA 8015M	9-30-16	9-30-16	
Gasoline	**ND**	5.0	NWTPH-Gx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***94***	***68-129***				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-398-04										
	ORIG	DUP									
n-Hexane	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						***105***	***103***	***68-129***			
SPIKE BLANKS											
Laboratory ID:	SB0930S1										
	SB	SBD	SB	SBD		SB	SBD				
n-Hexane	**0.87**	**0.822**	1.00	1.00		**87**	**82**	70-130	5	20	
Surrogate:											
Fluorobenzene						***87***	***82***	***68-129***			

Date of Report: October 4, 2016
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NWTPH-Gx
CONTINUING CALIBRATION SUMMARY

Lab ID	Gasoline True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCVD0930G-1	5.00	4.32	14	+/- 20%
CCVD0930G-2	5.00	4.22	16	+/- 20%

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Project: 0747.01.06-6.3

n-HEXANE
EPA 8015M
CONTINUING CALIBRATION SUMMARY

Lab ID	n-Hexane True Value (ppb)	Calc. Value	Percent Difference	Control Limits
CCVD0930B-1	50.0	44.8	10	+/- 20%
CCVD0930B-2	50.0	43.3	13	+/- 20%
CCVD0930B-3	50.0	41.1	18	+/- 20%

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NWTPH-Gx + n-HEXANE

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**WSW02-S-7.5**					
Laboratory ID:	09-398-01					
n-Hexane	**ND**	0.84	EPA 8015M	9-30-16	9-30-16	
Gasoline	**ND**	84	NWTPH-Gx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***88***	***68-129***				
Client ID:	**NSW02-S-7.5**					
Laboratory ID:	09-398-02					
n-Hexane	**ND**	0.95	EPA 8015M	9-30-16	9-30-16	
Gasoline	**ND**	95	NWTPH-Gx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***90***	***68-129***				
Client ID:	**ESW02-S-7.5**					
Laboratory ID:	09-398-05					
n-Hexane	**ND**	0.082	EPA 8015M	9-30-16	10-3-16	
Gasoline	**ND**	8.2	NWTPH-Gx	9-30-16	10-3-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***85***	***68-129***				

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Project: 0747.01.06-6.3

NWTPH-Gx + n-HEXANE
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0930S1					
n-Hexane	**ND**	0.050	EPA 8015M	9-30-16	9-30-16	
Gasoline	**ND**	5.0	NWTPH-Gx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***94***	***68-129***				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-398-04										
	ORIG	DUP									
n-Hexane	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						***105***	***103***	***68-129***			
SPIKE BLANKS											
Laboratory ID:	SB0930S1										
	SB	SBD	SB	SBD		SB	SBD				
n-Hexane	**1.02**	**0.969**	1.00	1.00		**102**	**97**	70-130	5	20	
Surrogate:											
Fluorobenzene						***87***	***82***	***68-129***			

Date of Report: October 4, 2016
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NWTPH-Gx
CONTINUING CALIBRATION SUMMARY

Lab ID	Gasoline True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCVD0930G-1	5.00	4.32	14	+/- 20%
CCVD0930G-2	5.00	4.22	16	+/- 20%
CCVD0930G-3	5.00	4.46	11	+/- 20%
CCVD1003G-1	5.00	4.45	11	+/- 20%
CCVD1003G-2	5.00	4.60	8	+/- 20%

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Project: 0747.01.06-6.3

n-HEXANE
EPA 8015M
CONTINUING CALIBRATION SUMMARY

Lab ID	n-Hexane True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCVD0930B-1	50.0	44.8	10	+/- 20%
CCVD0930B-2	50.0	43.3	13	+/- 20%
CCVD0930B-3	50.0	41.1	18	+/- 20%
CCVD1003B-1	50.0	45.4	9	+/- 20%
CCVD1003B-2	50.0	45.4	9	+/- 20%

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Project: 0747.01.06-6.3

NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BASE03-S-15.0**					
Laboratory ID:	09-398-03					
Diesel Range Organics	**ND**	40	NWTPH-Dx	9-30-16	9-30-16	
Lube Oil Range Organics	**ND**	79	NWTPH-Dx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***56***	***50-150***				
Client ID:	**SSW03-S-7.5**					
Laboratory ID:	09-398-04					
Diesel Range Organics	**ND**	28	NWTPH-Dx	9-30-16	9-30-16	
Lube Oil Range Organics	**ND**	56	NWTPH-Dx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***88***	***50-150***				
Client ID:	**ESW02-S-7.5**					
Laboratory ID:	09-398-05					
Diesel Fuel #2	**270**	34	NWTPH-Dx	9-30-16	9-30-16	
Lube Oil Range Organics	**ND**	68	NWTPH-Dx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***66***	***50-150***				

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NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0930S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	9-30-16	9-30-16	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***105***	***50-150***				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	09-384-03									
	ORIG	DUP								
Diesel Range	**ND**	**ND**	NA	NA		NA	NA	NA	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						***87*** ***89***	***50-150***			
SPIKE BLANK										
Laboratory ID:	SB0930S1									
Diesel Fuel #2	**118**		100		NA	**118**	61-130	NA	NA	
Surrogate:										
o-Terphenyl						***119***	***50-150***			

Date of Report: October 4, 2016
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Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

NWTPH-Dx
CONTINUING CALIBRATION SUMMARY

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCV0930F-V1	100	105	-4.8	+/-15%
CCV0930F-V2	100	104	-4.1	+/-15%
CCV0930R-V1	100	100	-0.3	+/-15%
CCV0930R-V2	100	98.2	1.8	+/-15%
CCV0930R-T1	100	103	-3.2	+/-15%
CCV0930R-T2	100	102	-2.4	+/-15%

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NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**WSW02-S-7.5**					
Laboratory ID:	09-398-01					
Diesel Fuel #2	**9600**	170	NWTPH-Dx	9-30-16	10-3-16	
Lube Oil Range Organics	**ND**	370	NWTPH-Dx	9-30-16	10-3-16	U1
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***105***	***50-150***				
Client ID:	**NSW02-S-7.5**					
Laboratory ID:	09-398-02					
Diesel Fuel #2	**14000**	180	NWTPH-Dx	9-30-16	10-3-16	
Lube Oil Range Organics	**ND**	430	NWTPH-Dx	9-30-16	10-3-16	U1
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***122***	***50-150***				

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NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0930S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	9-30-16	9-30-16	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***105***	***50-150***				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	09-384-03									
	ORIG	DUP								
Diesel Range	**ND**	**ND**	NA	NA		NA	NA	NA	NA	
Lube Oil Range	**ND**	**ND**	NA	NA		NA	NA	NA	NA	
Surrogate:										
o-Terphenyl						***87*** ***89***	***50-150***			
SPIKE BLANK										
Laboratory ID:	SB0930S1									
Diesel Fuel #2	**118**		100		NA	**118**	61-130	NA	NA	
Surrogate:										
o-Terphenyl						***119***	***50-150***			

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NWTPH-Dx
CONTINUING CALIBRATION SUMMARY

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCV0930F-V1	100	105	-4.8	+/-15%
CCV0930F-V2	100	104	-4.1	+/-15%
CCV0930R-T1	100	103	-3.2	+/-15%
CCV0930R-T2	100	102	-2.4	+/-15%
CCV1003F-T1	100	95.3	4.7	+/-15%
CCV1003F-T2	100	94.4	5.6	+/-15%
CCV1003R-T1	100	102	-2.0	+/-15%
CCV1003R-T2	100	101	-0.8	+/-15%

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Project: 0747.01.06-6.3

VOLATILES EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BASE03-S-15.0**					
Laboratory ID:	09-398-03					
Methyl t-Butyl Ether	ND	0.0023	EPA 8260C	9-30-16	9-30-16	
Benzene	ND	0.0023	EPA 8260C	9-30-16	9-30-16	
1,2-Dichloroethane	ND	0.0023	EPA 8260C	9-30-16	9-30-16	
Toluene	ND	0.011	EPA 8260C	9-30-16	9-30-16	
1,2-Dibromoethane	ND	0.0023	EPA 8260C	9-30-16	9-30-16	
Ethylbenzene	ND	0.0023	EPA 8260C	9-30-16	9-30-16	
m,p-Xylene	ND	0.0046	EPA 8260C	9-30-16	9-30-16	
o-Xylene	ND	0.0023	EPA 8260C	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***101***	***76-131***				
Toluene-d8	***99***	***80-126***				
4-Bromofluorobenzene	***95***	***60-146***				

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VOLATILES EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SSW03-S-7.5**					
Laboratory ID:	09-398-04					
Methyl t-Butyl Ether	ND	0.0017	EPA 8260C	9-30-16	9-30-16	
Benzene	ND	0.0017	EPA 8260C	9-30-16	9-30-16	
1,2-Dichloroethane	ND	0.0017	EPA 8260C	9-30-16	9-30-16	
Toluene	ND	0.0083	EPA 8260C	9-30-16	9-30-16	
1,2-Dibromoethane	ND	0.0017	EPA 8260C	9-30-16	9-30-16	
Ethylbenzene	ND	0.0017	EPA 8260C	9-30-16	9-30-16	
m,p-Xylene	ND	0.0033	EPA 8260C	9-30-16	9-30-16	
o-Xylene	ND	0.0017	EPA 8260C	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***104***	***76-131***				
Toluene-d8	***107***	***80-126***				
4-Bromofluorobenzene	***104***	***60-146***				

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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0930S1					
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	9-30-16	9-30-16	
Benzene	ND	0.0010	EPA 8260C	9-30-16	9-30-16	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	9-30-16	9-30-16	
Toluene	ND	0.0050	EPA 8260C	9-30-16	9-30-16	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	9-30-16	9-30-16	
Ethylbenzene	ND	0.0010	EPA 8260C	9-30-16	9-30-16	
m,p-Xylene	ND	0.0020	EPA 8260C	9-30-16	9-30-16	
o-Xylene	ND	0.0010	EPA 8260C	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***102***	***76-131***				
Toluene-d8	***109***	***80-126***				
4-Bromofluorobenzene	***105***	***60-146***				

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VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0930S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0435**	**0.0449**	0.0500	0.0500	87	90	68-126	3	15	
Benzene	**0.0464**	**0.0475**	0.0500	0.0500	93	95	70-121	2	15	
Trichloroethene	**0.0460**	**0.0471**	0.0500	0.0500	92	94	75-120	2	15	
Toluene	**0.0490**	**0.0507**	0.0500	0.0500	98	101	80-120	3	15	
Chlorobenzene	**0.0498**	**0.0503**	0.0500	0.0500	100	101	76-120	1	15	
Surrogate:										
Dibromofluoromethane					***98***	***94***	***76-131***			
Toluene-d8					***99***	***97***	***80-126***			
4-Bromofluorobenzene					***99***	***95***	***60-146***			

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VOLATILES EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ESW02-S-7.5**					
Laboratory ID:	09-398-05					
Methyl t-Butyl Ether	ND	0.0015	EPA 8260C	10-3-16	10-3-16	
Benzene	ND	0.0015	EPA 8260C	10-3-16	10-3-16	
1,2-Dichloroethane	ND	0.0015	EPA 8260C	10-3-16	10-3-16	
Toluene	ND	0.0074	EPA 8260C	10-3-16	10-3-16	
1,2-Dibromoethane	ND	0.0015	EPA 8260C	10-3-16	10-3-16	
Ethylbenzene	ND	0.0015	EPA 8260C	10-3-16	10-3-16	
m,p-Xylene	ND	0.0030	EPA 8260C	10-3-16	10-3-16	
o-Xylene	ND	0.0015	EPA 8260C	10-3-16	10-3-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***109***	***76-131***				
Toluene-d8	***105***	***80-126***				
4-Bromofluorobenzene	***104***	***60-146***				

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VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1003S1					
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	10-3-16	10-3-16	
Benzene	ND	0.0010	EPA 8260C	10-3-16	10-3-16	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	10-3-16	10-3-16	
Toluene	ND	0.0050	EPA 8260C	10-3-16	10-3-16	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	10-3-16	10-3-16	
Ethylbenzene	ND	0.0010	EPA 8260C	10-3-16	10-3-16	
m,p-Xylene	ND	0.0020	EPA 8260C	10-3-16	10-3-16	
o-Xylene	ND	0.0010	EPA 8260C	10-3-16	10-3-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***110***	***76-131***				
Toluene-d8	***110***	***80-126***				
4-Bromofluorobenzene	***108***	***60-146***				

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
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Project: 0747.01.06-6.3

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1003S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0489**	**0.0467**	0.0500	0.0500	98	93	68-126	5	15	
Benzene	**0.0488**	**0.0509**	0.0500	0.0500	98	102	70-121	4	15	
Trichloroethene	**0.0444**	**0.0479**	0.0500	0.0500	89	96	75-120	8	15	
Toluene	**0.0506**	**0.0533**	0.0500	0.0500	101	107	80-120	5	15	
Chlorobenzene	**0.0494**	**0.0505**	0.0500	0.0500	99	101	76-120	2	15	
Surrogate:										
Dibromofluoromethane					***107***	***102***	***76-131***			
Toluene-d8					***104***	***103***	***80-126***			
4-Bromofluorobenzene					***105***	***101***	***60-146***			

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

VOLATILES EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**WSW02-S-7.5**					
Laboratory ID:	09-398-01					
Methyl t-Butyl Ether	ND	0.0017	EPA 8260C	10-3-16	10-3-16	
Benzene	ND	0.0017	EPA 8260C	10-3-16	10-3-16	
1,2-Dichloroethane	ND	0.0017	EPA 8260C	10-3-16	10-3-16	
Toluene	ND	0.40	EPA 8260C	10-3-16	10-3-16	
1,2-Dibromoethane	ND	0.081	EPA 8260C	10-3-16	10-3-16	
Ethylbenzene	0.22	0.081	EPA 8260C	10-3-16	10-3-16	
m,p-Xylene	0.35	0.16	EPA 8260C	10-3-16	10-3-16	
o-Xylene	ND	0.081	EPA 8260C	10-3-16	10-3-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***126***	***76-131***				
Toluene-d8	***101***	***80-126***				
4-Bromofluorobenzene	***99***	***60-146***				

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

VOLATILES EPA 8260C

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**NSW02-S-7.5**					
Laboratory ID:	09-398-02					
Methyl t-Butyl Ether	ND	0.0016	EPA 8260C	10-3-16	10-3-16	
Benzene	ND	0.0016	EPA 8260C	10-3-16	10-3-16	
1,2-Dichloroethane	ND	0.0016	EPA 8260C	10-3-16	10-3-16	
Toluene	ND	0.46	EPA 8260C	10-3-16	10-3-16	
1,2-Dibromoethane	ND	0.093	EPA 8260C	10-3-16	10-3-16	
Ethylbenzene	0.41	0.093	EPA 8260C	10-3-16	10-3-16	
m,p-Xylene	0.92	0.19	EPA 8260C	10-3-16	10-3-16	
o-Xylene	ND	0.093	EPA 8260C	10-3-16	10-3-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***113***	***76-131***				
Toluene-d8	***90***	***80-126***				
4-Bromofluorobenzene	***99***	***60-146***				

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1003S1					
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	10-3-16	10-3-16	
Benzene	ND	0.0010	EPA 8260C	10-3-16	10-3-16	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	10-3-16	10-3-16	
Toluene	ND	0.0050	EPA 8260C	10-3-16	10-3-16	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	10-3-16	10-3-16	
Ethylbenzene	ND	0.0010	EPA 8260C	10-3-16	10-3-16	
m,p-Xylene	ND	0.0020	EPA 8260C	10-3-16	10-3-16	
o-Xylene	ND	0.0010	EPA 8260C	10-3-16	10-3-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Dibromofluoromethane	***110***	***76-131***				
Toluene-d8	***110***	***80-126***				
4-Bromofluorobenzene	***108***	***60-146***				

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1003S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	**0.0489**	**0.0467**	0.0500	0.0500	98	93	68-126	5	15	
Benzene	**0.0488**	**0.0509**	0.0500	0.0500	98	102	70-121	4	15	
Trichloroethene	**0.0444**	**0.0479**	0.0500	0.0500	89	96	75-120	8	15	
Toluene	**0.0506**	**0.0533**	0.0500	0.0500	101	107	80-120	5	15	
Chlorobenzene	**0.0494**	**0.0505**	0.0500	0.0500	99	101	76-120	2	15	
Surrogate:										
Dibromofluoromethane					***107***	***102***	***76-131***			
Toluene-d8					***104***	***103***	***80-126***			
4-Bromofluorobenzene					***105***	***101***	***60-146***			

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

NAPHTHALENES EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**WSW02-S-7.5**					
Laboratory ID:	09-398-01					
Naphthalene	**2.4**	0.90	EPA 8270D/SIM	9-30-16	10-4-16	
2-Methylnaphthalene	**15**	0.90	EPA 8270D/SIM	9-30-16	10-4-16	
1-Methylnaphthalene	**10**	0.90	EPA 8270D/SIM	9-30-16	10-4-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***47***	***32 - 115***				
Pyrene-d10	***94***	***30 - 124***				
Terphenyl-d14	***94***	***30 - 117***				

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

NAPHTHALENES EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**NSW02-S-7.5**					
Laboratory ID:	09-398-02					
Naphthalene	**8.2**	0.94	EPA 8270D/SIM	9-30-16	10-4-16	
2-Methylnaphthalene	**27**	0.94	EPA 8270D/SIM	9-30-16	10-4-16	
1-Methylnaphthalene	**18**	0.94	EPA 8270D/SIM	9-30-16	10-4-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***101***	***32 - 115***				
Pyrene-d10	***103***	***30 - 124***				
Terphenyl-d14	***133***	***30 - 117***				Q

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

NAPHTHALENES EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BASE03-S-15.0**					
Laboratory ID:	09-398-03					
Naphthalene	**ND**	0.011	EPA 8270D/SIM	9-30-16	9-30-16	
2-Methylnaphthalene	**0.020**	0.011	EPA 8270D/SIM	9-30-16	9-30-16	
1-Methylnaphthalene	**0.017**	0.011	EPA 8270D/SIM	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***65***	***32 - 115***				
Pyrene-d10	***71***	***30 - 124***				
Terphenyl-d14	***79***	***30 - 117***				

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

NAPHTHALENES EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SSW03-S-7.5**					
Laboratory ID:	09-398-04					
Naphthalene	**ND**	0.0075	EPA 8270D/SIM	9-30-16	9-30-16	
2-Methylnaphthalene	**ND**	0.0075	EPA 8270D/SIM	9-30-16	9-30-16	
1-Methylnaphthalene	**ND**	0.0075	EPA 8270D/SIM	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***78***	***32 - 115***				
Pyrene-d10	***78***	***30 - 124***				
Terphenyl-d14	***88***	***30 - 117***				

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

NAPHTHALENES EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ESW02-S-7.5**					
Laboratory ID:	09-398-05					
Naphthalene	**0.047**	0.0090	EPA 8270D/SIM	9-30-16	10-3-16	
2-Methylnaphthalene	**0.016**	0.0090	EPA 8270D/SIM	9-30-16	10-3-16	
1-Methylnaphthalene	**0.075**	0.0090	EPA 8270D/SIM	9-30-16	10-3-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***62***	***32 - 115***				
Pyrene-d10	***67***	***30 - 124***				
Terphenyl-d14	***67***	***30 - 117***				

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

NAPHTHALENES EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0930S1					
Naphthalene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***88***	***32 - 115***				
Pyrene-d10	***87***	***30 - 124***				
Terphenyl-d14	***97***	***30 - 117***				

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

NAPHTHALENES EPA 8270D/SIM
MS/MSD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	09-398-04										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	**0.0679**	**0.0700**	0.0833	0.0833	ND	82	84	35 - 114	3	28	
Acenaphthylene	**0.0713**	**0.0714**	0.0833	0.0833	ND	86	86	42 - 116	0	32	
Acenaphthene	**0.0682**	**0.0686**	0.0833	0.0833	ND	82	82	39 - 113	1	30	
Surrogate:											
2-Fluorobiphenyl						***77***	***76***	***32 - 115***			
Pyrene-d10						***76***	***75***	***30 - 124***			
Terphenyl-d14						***84***	***84***	***30 - 117***			

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

NAPHTHALENES EPA 8270D/SIM
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0930S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0747**	**0.0759**	0.0833	0.0833	90	91	61 - 112	2	15	
Acenaphthylene	**0.0808**	**0.0795**	0.0833	0.0833	97	95	65 - 116	2	15	
Acenaphthene	**0.0759**	**0.0750**	0.0833	0.0833	91	90	62 - 116	1	13	
Surrogate:										
2-Fluorobiphenyl					***84***	***75***	***32 - 115***			
Pyrene-d10					***85***	***85***	***30 - 124***			
Terphenyl-d14					***93***	***93***	***30 - 117***			

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	09-398-03					
Client ID:	**BASE03-S-15.0**					
Lead	**ND**	7.9	6010C	9-30-16	9-30-16	
Lab ID:	09-398-04					
Client ID:	**SSW03-S-7.5**					
Lead	**ND**	5.6	6010C	9-30-16	9-30-16	
Lab ID:	09-398-05					
Client ID:	**ESW02-S-7.5**					
Lead	**ND**	6.7	6010C	9-30-16	9-30-16	

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted:	9-30-16
Date Analyzed:	9-30-16
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0930SM3

Analyte	Method	Result	PQL
Lead	6010C	**ND**	5.0

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 9-30-16
Date Analyzed: 9-30-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-399-04

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**9.75**	**11.4**	16	5.0	

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 9-30-16
Date Analyzed: 9-30-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-399-04

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	250	**240**	92	**245**	94	2	

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
SPIKE BLANK QUALITY CONTROL

Date Extracted: 9-30-16
Date Analyzed: 9-30-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB0930SM3

Analyte	Method	Spike Level	Spike Result	Percent Recovery
Lead	6010C	250	**234**	93

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
CONTINUING CALIBRATION SUMMARY

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
Lead	ICV093016P	1.00	1.02	-2.0	+/- 10%
Lead	LLICV1093016P	0.100	0.0941	5.9	+/- 30%
Lead	CCV1093016P	10.0	9.79	2.1	+/- 10%
Lead	CCV2093016P	10.0	9.65	3.5	+/- 10%
Lead	LLCCV2093016P	0.100	0.0841	16	+/- 30%
Lead	CCV3093016P	10.0	9.82	1.8	+/- 10%
Lead	LLCCV3093016P	0.100	0.105	-5.0	+/- 30%
Lead	CCV4093016P	10.0	9.82	1.8	+/- 10%
Lead	LLCCV4093016P	0.100	0.0824	18	+/- 30%
Lead	CCV5093016P	10.0	9.78	2.2	+/- 10%
Lead	LLCCV5093016P	0.100	0.104	-4.0	+/- 30%
Lead	CCV6093016P	10.0	9.74	2.6	+/- 10%
Lead	LLCCV6093016P	0.100	0.104	-4.0	+/- 30%
Lead	CCV7093016P	10.0	9.67	3.3	+/- 10%
Lead	LLCCV7093016P	0.100	0.102	-2.0	+/- 30%
Lead	CCV8093016P	10.0	9.63	3.7	+/- 10%
Lead	LLCCV8093016P	0.100	0.0810	19	+/- 30%

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	09-398-01					
Client ID:	**WSW02-S-7.5**					
Lead	**ND**	6.8	6010C	10-3-16	10-3-16	
Lab ID:	09-398-02					
Client ID:	**NSW02-S-7.5**					
Lead	**ND**	7.1	6010C	10-3-16	10-3-16	

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted:	10-3-16
Date Analyzed:	10-3-16
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB1003SM2

Analyte	Method	Result	PQL
Lead	6010C	**ND**	5.0

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 10-3-16
Date Analyzed: 10-3-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-388-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**29.6**	**27.9**	6	5.0	

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 10-3-16
Date Analyzed: 10-3-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-388-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	250	**278**	99	**275**	98	1	

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
SPIKE BLANK QUALITY CONTROL

Date Extracted: 10-3-16
Date Analyzed: 10-3-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB1003SM2

Analyte	Method	Spike Level	Spike Result	Percent Recovery
Lead	6010C	250	**261**	104

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
CONTINUING CALIBRATION SUMMARY

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
Lead	ICV100316P	1.00	1.01	-1.0	+/- 10%
Lead	LLICV100316P	0.100	0.111	-11	+/- 30%
Lead	CCV110316P	10.0	9.94	0.60	+/- 10%
Lead	CCV2100316P	10.0	10.0	0	+/- 10%
Lead	LLCCV2100316P	0.100	0.108	-8.0	+/- 30%
Lead	CCV3100316P	10.0	9.92	0.80	+/- 10%
Lead	LLCCV3100316P	0.100	0.081	19	+/- 30%
Lead	CCV4100316P	10.0	9.78	2.2	+/- 10%
Lead	LLCCV4100316P	0.100	0.0866	13	+/- 30%
Lead	CCV4100316P	10.0	9.62	3.8	+/- 10%
Lead	LLCCV4100316P	0.100	0.119	-19	+/- 30%

Date of Report: October 4, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-398
Project: 0747.01.06-6.3

% MOISTURE

Date Analyzed: 9-30-16

Client ID	Lab ID	% Moisture
WSW02-S-7.5	09-398-01	26
NSW02-S-7.5	09-398-02	29
BASE03-S-15.0	09-398-03	37
SSW03-S-7.5	09-398-04	11
ESW02-S-7.5	09-398-05	26

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 09-398

Company:	Maul Foster Alongi
Project Number:	0747.01.06-6.3
Project Name:	North Cascade Ford
Project Manager:	Heather Good
Sampled by:	Carolyn Wise

Turnaround Request (in working days)

(Check One)

- [X] Same Day (Dx #5) [X] 1 Day (remainder)
- [ ] 2 Days [ ] 3 Days
- [ ] Standard (7 Days) (TPH analysis 5 Days)
- [ ] _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	WSW02-S-7.5	9/29	900	S	5
2	NSW02-S-7.5	9/29	1340	S	5
3	BASE03-S-15.0	9/29	1200	S	5
4	SSW03-S-7.5	9/30	915	S	5
5	ESW02-S-7.5**	9/30	1030	S	5

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx + n-hexane	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C * BTEX EDB, EDC, MTBE	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level) Naphthalenes only	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	Total Lead	Hold			% Moisture
1			X	X	X				X									X	NO			X
2			X	X	X				X									X	NO			X
3			X	X	X				X									X				X
4			X	X	X				X									X				X
5			X	X	X				X									X				X

	Signature	Company	Date	Time
Relinquished	Carolyn Wise	MFA	9/30/16	1100
Received		Alpha	9-30-16	11:00
Relinquished		Alpha	9-30-16	12:20
Received			9/30/16	1220
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

*EDB reporting limit below MTCA A value

○ - Hold pending Dx results

** - Priority sample! Results ASAP please

Data Package: Standard [X] Level III [ ] Level IV [ ]

Chromatograms with final report [ ] Electronic Data Deliverables (EDDs) [X]

(X) Added 10/3/16. DB (Same day)

(X) Added 9/30/16. DB (SAME DAY) Equis 4

Sample/Cooler Receipt and Acceptance Checklist

Client: MFA

Client Project Name/Number: 0747.01.06-63

OnSite Project Number: 09-398

Initiated by: Blair Goodrow

Date Initiated: 9/30/09

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	(No)	N/A	1 2 3 4
1.2 Were the custody seals intact?	Yes	No	(N/A)	1 2 3 4
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	(N/A)	1 2 3 4
1.4 Were the samples delivered on ice or blue ice?	(Yes)	No		1 2 3 4
1.5 Were samples received between 0-6 degrees Celsius?	(Yes)	No	Temperature: 4°C	
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	(N/A)		
1.7 How were the samples delivered?	Client	(Courier)	UPS/FedEx	OSE Pickup Other

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	(Yes)	No		1 2 3 4
2.2 Was the COC legible and written in permanent ink?	(Yes)	No		1 2 3 4
2.3 Have samples been relinquished and accepted by each custodian?	(Yes)	No		1 2 3 4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	(Yes)	No		1 2 3 4
2.5 Were all of the samples listed on the COC submitted?	(Yes)	No		1 2 3 4
2.6 Were any of the samples submitted omitted from the COC?	Yes	(No)		1 2 3 4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	(No)		1 2 3 4
3.2 Were any sample labels missing or illegible?	Yes	(No)		1 2 3 4
3.3 Have the correct containers been used for each analysis requested?	(Yes)	No		1 2 3 4
3.4 Have the samples been correctly preserved?	Yes	No	(N/A)	1 2 3 4
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	Yes	No	(N/A)	1 2 3 4
3.6 Is there sufficient sample submitted to perform requested analyses?	(Yes)	No		1 2 3 4
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	(No)		1 2 3 4
3.8 Was method 5035A used?	(Yes)	No	N/A	1 2 3 4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	# 1		N/A	1 2 3 4

Explain any discrepancies:

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 5, 2016

Heather Good
Maul Foster & Alongi, Inc.
Bay Vista Tower
2815 2nd Avenue, Suite 540
Seattle, WA 98121

Re: Analytical Data for Project 0747.01.06-6.3
Laboratory Reference No. 1609-399

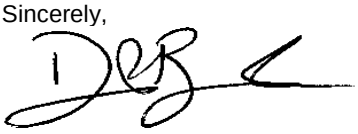
Dear Heather:

Enclosed are the analytical results and associated quality control data for samples submitted on September 30, 2016.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,



David Baumeister
Project Manager

Enclosures

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

Case Narrative

Samples were collected on September 30, 2016 and received by the laboratory on September 30, 2016. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH Gx/BTEX + MTBE Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

PAHs EPA 8270D/SIM Analysis

Sample ST02-2 had one surrogate recovery out of control limits. This is within allowance of our standard operating procedure as long as the recovery is above 10%.

Please note that any other QA/QC issues associated with these extractions and analyses will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

NWTPH-Gx/BTEX + MTBE

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST02-1**					
Laboratory ID:	09-399-01					
MTBE	**ND**	0.069	EPA 8021B	9-30-16	9-30-16	
Benzene	**ND**	0.020	EPA 8021B	9-30-16	9-30-16	
Toluene	**ND**	0.069	EPA 8021B	9-30-16	9-30-16	
Ethyl Benzene	**ND**	0.069	EPA 8021B	9-30-16	9-30-16	
m,p-Xylene	**ND**	0.069	EPA 8021B	9-30-16	9-30-16	
o-Xylene	**ND**	0.069	EPA 8021B	9-30-16	9-30-16	
Gasoline	**ND**	6.9	NWTPH-Gx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***92***	***68-129***				
Client ID:	**ST02-2**					
Laboratory ID:	09-399-02					
MTBE	**ND**	0.48	EPA 8021B	9-30-16	10-3-16	
Benzene	**ND**	0.096	EPA 8021B	9-30-16	10-3-16	
Toluene	**ND**	0.48	EPA 8021B	9-30-16	10-3-16	
Ethyl Benzene	**ND**	0.48	EPA 8021B	9-30-16	10-3-16	
m,p-Xylene	**ND**	0.48	EPA 8021B	9-30-16	10-3-16	
o-Xylene	**ND**	0.48	EPA 8021B	9-30-16	10-3-16	
Gasoline	**ND**	48	NWTPH-Gx	9-30-16	10-3-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***94***	***68-129***				
Client ID:	**ST02-3**					
Laboratory ID:	09-399-03					
MTBE	**ND**	0.080	EPA 8021B	9-30-16	9-30-16	
Benzene	**ND**	0.020	EPA 8021B	9-30-16	9-30-16	
Toluene	**ND**	0.080	EPA 8021B	9-30-16	9-30-16	
Ethyl Benzene	**ND**	0.080	EPA 8021B	9-30-16	9-30-16	
m,p-Xylene	**ND**	0.080	EPA 8021B	9-30-16	9-30-16	
o-Xylene	**ND**	0.080	EPA 8021B	9-30-16	9-30-16	
Gasoline	**ND**	8.0	NWTPH-Gx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***98***	***68-129***				

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

NWTPH-Gx/BTEX + MTBE

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST02-4**					
Laboratory ID:	09-399-04					
MTBE	**ND**	0.074	EPA 8021B	9-30-16	9-30-16	
Benzene	**ND**	0.020	EPA 8021B	9-30-16	9-30-16	
Toluene	**ND**	0.074	EPA 8021B	9-30-16	9-30-16	
Ethyl Benzene	**ND**	0.074	EPA 8021B	9-30-16	9-30-16	
m,p-Xylene	**ND**	0.074	EPA 8021B	9-30-16	9-30-16	
o-Xylene	**ND**	0.074	EPA 8021B	9-30-16	9-30-16	
Gasoline	**ND**	7.4	NWTPH-Gx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***95***	***68-129***				
Client ID:	**ST02-5**					
Laboratory ID:	09-399-05					
MTBE	**ND**	0.52	EPA 8021B	9-30-16	10-3-16	
Benzene	**ND**	0.10	EPA 8021B	9-30-16	10-3-16	
Toluene	**ND**	0.52	EPA 8021B	9-30-16	10-3-16	
Ethyl Benzene	**ND**	0.52	EPA 8021B	9-30-16	10-3-16	
m,p-Xylene	**0.79**	0.52	EPA 8021B	9-30-16	10-3-16	
o-Xylene	**ND**	0.52	EPA 8021B	9-30-16	10-3-16	
Gasoline	**ND**	52	NWTPH-Gx	9-30-16	10-3-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***91***	***68-129***				

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

NWTPH-Gx/BTEX
QUALITY CONTROL

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0930S1					
MTBE	**ND**	0.050	EPA 8021B	9-30-16	9-30-16	
Benzene	**ND**	0.020	EPA 8021B	9-30-16	9-30-16	
Toluene	**ND**	0.050	EPA 8021B	9-30-16	9-30-16	
Ethyl Benzene	**ND**	0.050	EPA 8021B	9-30-16	9-30-16	
m,p-Xylene	**ND**	0.050	EPA 8021B	9-30-16	9-30-16	
o-Xylene	**ND**	0.050	EPA 8021B	9-30-16	9-30-16	
Gasoline	**ND**	5.0	NWTPH-Gx	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***94***	***68-129***				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-398-04										
	ORIG	DUP									
MTBE	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						***105***	***103***	***68-129***			
SPIKE BLANKS											
Laboratory ID:	SB0930S1										
	SB	SBD	SB	SBD		SB	SBD				
MTBE	**1.15**	**1.12**	1.00	1.00		**115**	**112**	70-130	3	20	
Benzene	**1.00**	**0.952**	1.00	1.00		**100**	**95**	76-124	5	17	
Toluene	**1.01**	**0.959**	1.00	1.00		**101**	**96**	78-124	5	16	
Ethyl Benzene	**1.04**	**0.986**	1.00	1.00		**104**	**99**	77-123	5	17	
m,p-Xylene	**0.989**	**0.931**	1.00	1.00		**99**	**93**	78-124	6	17	
o-Xylene	**1.02**	**0.969**	1.00	1.00		**102**	**97**	76-123	5	18	
n-Hexane	**1.02**	**0.969**	1.00	1.00		**102**	**97**	70-130	5	20	
Surrogate:											
Fluorobenzene						***87***	***82***	***68-129***			

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

NWTPH-Gx
CONTINUING CALIBRATION SUMMARY

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCVD0930G-1	5.00	4.32	14	+/- 20%
CCVD0930G-2	5.00	4.22	16	+/- 20%
CCVD1003G-1	5.00	4.45	11	+/- 20%
CCVD1003G-2	5.00	4.60	8	+/- 20%

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

BTEX + MTBE
EPA 8021B
CONTINUING CALIBRATION SUMMARY

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
Benzene	CCVD0930B-1	50.0	47.5	5	+/- 15%
Toluene	CCVD0930B-1	50.0	48.5	3	+/- 15%
Ethyl Benzene	CCVD0930B-1	50.0	49.8	0	+/- 15%
m,p-Xylene	CCVD0930B-1	50.0	48.0	4	+/- 15%
o-Xylene	CCVD0930B-1	50.0	48.8	2	+/- 15%
MTBE	CCVD0930B-1	50.0	55.0	-10	+/- 15%
Benzene	CCVD0930B-2	50.0	46.0	8	+/- 15%
Toluene	CCVD0930B-2	50.0	46.4	7	+/- 15%
Ethyl Benzene	CCVD0930B-2	50.0	47.9	4	+/- 15%
m,p-Xylene	CCVD0930B-2	50.0	45.0	10	+/- 15%
o-Xylene	CCVD0930B-2	50.0	46.5	7	+/- 15%
MTBE	CCVD0930B-2	50.0	51.1	-2	+/- 15%
Benzene	CCVD0930B-3	50.0	43.0	14	+/- 15%
Toluene	CCVD0930B-3	50.0	44.2	12	+/- 15%
Ethyl Benzene	CCVD0930B-3	50.0	45.0	10	+/- 15%
m,p-Xylene	CCVD0930B-3	50.0	43.0	14	+/- 15%
o-Xylene	CCVD0930B-3	50.0	44.7	11	+/- 15%
MTBE	CCVD0930B-3	50.0	49.2	2	+/- 15%
Benzene	CCVD1003B-1	50.0	48.3	3	+/- 15%
Toluene	CCVD1003B-1	50.0	49.1	2	+/- 15%
Ethyl Benzene	CCVD1003B-1	50.0	50.5	-1	+/- 15%
m,p-Xylene	CCVD1003B-1	50.0	48.1	4	+/- 15%
o-Xylene	CCVD1003B-1	50.0	49.2	2	+/- 15%
MTBE	CCVD1003B-1	50.0	45.8	8	+/- 15%
Benzene	CCVD1003B-2	50.0	45.2	10	+/- 15%
Toluene	CCVD1003B-2	50.0	46.6	7	+/- 15%
Ethyl Benzene	CCVD1003B-2	50.0	48.0	4	+/- 15%
m,p-Xylene	CCVD1003B-2	50.0	46.3	7	+/- 15%
o-Xylene	CCVD1003B-2	50.0	47.7	5	+/- 15%
MTBE	CCVD1003B-2	50.0	46.2	8	+/- 15%

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

NWTPH-Dx

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST02-1**					
Laboratory ID:	09-399-01					
Diesel Fuel #2	**560**	29	NWTPH-Dx	10-3-16	10-3-16	
Lube Oil	**160**	57	NWTPH-Dx	10-3-16	10-3-16	N1
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***83***	***50-150***				
Client ID:	**ST02-2**					
Laboratory ID:	09-399-02					
Diesel Fuel #2	**9800**	140	NWTPH-Dx	10-3-16	10-4-16	
Lube Oil Range Organics	**ND**	580	NWTPH-Dx	10-3-16	10-4-16	U1
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***112***	***50-150***				
Client ID:	**ST02-3**					
Laboratory ID:	09-399-03					
Diesel Fuel #2	**210**	30	NWTPH-Dx	10-3-16	10-3-16	
Lube Oil Range Organics	**ND**	60	NWTPH-Dx	10-3-16	10-3-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***90***	***50-150***				
Client ID:	**ST02-4**					
Laboratory ID:	09-399-04					
Diesel Fuel #2	**880**	29	NWTPH-Dx	10-3-16	10-3-16	
Lube Oil	**150**	58	NWTPH-Dx	10-3-16	10-3-16	N1
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***83***	***50-150***				
Client ID:	**ST02-5**					
Laboratory ID:	09-399-05					
Diesel Fuel #2	**32000**	280	NWTPH-Dx	10-3-16	10-4-16	
Lube Oil Range Organics	**ND**	1400	NWTPH-Dx	10-3-16	10-4-16	U1
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***---***	***50-150***				S

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

NWTPH-Dx
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1003S1					
Diesel Range Organics	**ND**	25	NWTPH-Dx	10-3-16	10-3-16	
Lube Oil Range Organics	**ND**	50	NWTPH-Dx	10-3-16	10-3-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***106***	***50-150***				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-368-03										
	ORIG	DUP									
Diesel Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	X1
Lube Oil Range	**ND**	**ND**	NA	NA		NA		NA	NA	NA	X1
Surrogate:											
o-Terphenyl						***105***	***119***	***50-150***			
SPIKE BLANK											
Laboratory ID:	SB1003S1										
Diesel Fuel #2	**94.2**		100		NA	**94**		61-130	NA	NA	
Surrogate:											
o-Terphenyl						***94***		***50-150***			

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

NWTPH-Dx
CONTINUING CALIBRATION SUMMARY

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCV1003F-V1	100	97.5	2.5	+/-15%
CCV1003F-V2	100	103	-2.8	+/-15%
CCV1003F-V3	100	108	-8.3	+/-15%
CCV1003F-V4	100	114	-14	+/-15%
CCV1004F-T1	100	97.4	2.6	+/-15%
CCV1004F-T2	100	96.3	3.7	+/-15%

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST02-1**					
Laboratory ID:	09-399-01					
Naphthalene	**0.046**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
2-Methylnaphthalene	**0.060**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
1-Methylnaphthalene	**0.058**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[a]anthracene	**0.053**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Chrysene	**0.073**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[b]fluoranthene	**0.090**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo(j,k)fluoranthene	**ND**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[a]pyrene	**0.075**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Indeno(1,2,3-c,d)pyrene	**0.045**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Dibenz[a,h]anthracene	**ND**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***55***	***32 - 115***				
Pyrene-d10	***65***	***30 - 124***				
Terphenyl-d14	***67***	***30 - 117***				

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST02-2**					
Laboratory ID:	09-399-02					
Naphthalene	**0.11**	0.0072	EPA 8270D/SIM	9-30-16	10-4-16	
2-Methylnaphthalene	**0.37**	0.0072	EPA 8270D/SIM	9-30-16	10-4-16	
1-Methylnaphthalene	**0.50**	0.0072	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[a]anthracene	**0.014**	0.0072	EPA 8270D/SIM	9-30-16	10-4-16	
Chrysene	**0.057**	0.0072	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[b]fluoranthene	**0.023**	0.0072	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo(j,k)fluoranthene	**0.0073**	0.0072	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[a]pyrene	**0.016**	0.0072	EPA 8270D/SIM	9-30-16	10-4-16	
Indeno(1,2,3-c,d)pyrene	**0.012**	0.0072	EPA 8270D/SIM	9-30-16	10-4-16	
Dibenz[a,h]anthracene	**ND**	0.0072	EPA 8270D/SIM	9-30-16	10-4-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***40***	***32 - 115***				
Pyrene-d10	***236***	***30 - 124***				Q
Terphenyl-d14	***94***	***30 - 117***				

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST02-3**					
Laboratory ID:	09-399-03					
Naphthalene	**0.057**	0.0080	EPA 8270D/SIM	9-30-16	10-4-16	
2-Methylnaphthalene	**0.10**	0.0080	EPA 8270D/SIM	9-30-16	10-4-16	
1-Methylnaphthalene	**0.10**	0.0080	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[a]anthracene	**0.032**	0.0080	EPA 8270D/SIM	9-30-16	10-4-16	
Chrysene	**0.039**	0.0080	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[b]fluoranthene	**0.037**	0.0080	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo(j,k)fluoranthene	**0.0099**	0.0080	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[a]pyrene	**0.032**	0.0080	EPA 8270D/SIM	9-30-16	10-4-16	
Indeno(1,2,3-c,d)pyrene	**0.016**	0.0080	EPA 8270D/SIM	9-30-16	10-4-16	
Dibenz[a,h]anthracene	**ND**	0.0080	EPA 8270D/SIM	9-30-16	10-4-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***54***	***32 - 115***				
Pyrene-d10	***61***	***30 - 124***				
Terphenyl-d14	***61***	***30 - 117***				

Date of Report: October 5, 2016
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Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST02-4**					
Laboratory ID:	09-399-04					
Naphthalene	**0.032**	0.0077	EPA 8270D/SIM	9-30-16	10-4-16	
2-Methylnaphthalene	**0.045**	0.0077	EPA 8270D/SIM	9-30-16	10-4-16	
1-Methylnaphthalene	**0.042**	0.0077	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[a]anthracene	**0.026**	0.0077	EPA 8270D/SIM	9-30-16	10-4-16	
Chrysene	**0.037**	0.0077	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[b]fluoranthene	**0.033**	0.0077	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo(j,k)fluoranthene	**0.0092**	0.0077	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[a]pyrene	**0.028**	0.0077	EPA 8270D/SIM	9-30-16	10-4-16	
Indeno(1,2,3-c,d)pyrene	**0.017**	0.0077	EPA 8270D/SIM	9-30-16	10-4-16	
Dibenz[a,h]anthracene	**ND**	0.0077	EPA 8270D/SIM	9-30-16	10-4-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***58***	***32 - 115***				
Pyrene-d10	***60***	***30 - 124***				
Terphenyl-d14	***67***	***30 - 117***				

Date of Report: October 5, 2016
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Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST02-5**					
Laboratory ID:	09-399-05					
Naphthalene	**0.24**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
2-Methylnaphthalene	**0.24**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
1-Methylnaphthalene	**0.22**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[a]anthracene	**0.039**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Chrysene	**0.19**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[b]fluoranthene	**0.063**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo(j,k)fluoranthene	**ND**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Benzo[a]pyrene	**0.049**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Indeno(1,2,3-c,d)pyrene	**0.041**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Dibenz[a,h]anthracene	**ND**	0.038	EPA 8270D/SIM	9-30-16	10-4-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***38***	***32 - 115***				
Pyrene-d10	***112***	***30 - 124***				
Terphenyl-d14	***82***	***30 - 117***				

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB0930S1					
Naphthalene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
2-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
1-Methylnaphthalene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
Benzo[a]anthracene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
Chrysene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
Benzo[b]fluoranthene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
Benzo(j,k)fluoranthene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
Benzo[a]pyrene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
Dibenz[a,h]anthracene	**ND**	0.0067	EPA 8270D/SIM	9-30-16	9-30-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
2-Fluorobiphenyl	***88***	***32 - 115***				
Pyrene-d10	***87***	***30 - 124***				
Terphenyl-d14	***97***	***30 - 117***				

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM
MS/MSD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	09-398-04										
	MS	MSD	MS	MSD		MS	MSD				
Naphthalene	**0.0679**	**0.0700**	0.0833	0.0833	ND	82	84	35 - 114	3	28	
Acenaphthylene	**0.0713**	**0.0714**	0.0833	0.0833	ND	86	86	42 - 116	0	32	
Acenaphthene	**0.0682**	**0.0686**	0.0833	0.0833	ND	82	82	39 - 113	1	30	
Benzo[a]anthracene	**0.0762**	**0.0769**	0.0833	0.0833	ND	91	92	28 - 133	1	31	
Chrysene	**0.0701**	**0.0698**	0.0833	0.0833	ND	84	84	27 - 124	0	31	
Benzo[b]fluoranthene	**0.0685**	**0.0676**	0.0833	0.0833	ND	82	81	30 - 122	1	33	
Benzo(j,k)fluoranthene	**0.0719**	**0.0722**	0.0833	0.0833	ND	86	87	26 - 122	0	31	
Benzo[a]pyrene	**0.0743**	**0.0735**	0.0833	0.0833	ND	89	88	32 - 128	1	34	
Indeno(1,2,3-c,d)pyrene	**0.0761**	**0.0765**	0.0833	0.0833	ND	91	92	30 - 118	1	30	
Dibenz[a,h]anthracene	**0.0722**	**0.0720**	0.0833	0.0833	ND	87	86	35 - 115	0	33	
Surrogate:											
2-Fluorobiphenyl						***77***	***76***	***32 - 115***			
Pyrene-d10						***76***	***75***	***30 - 124***			
Terphenyl-d14						***84***	***84***	***30 - 117***			

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

PAHs EPA 8270D/SIM
SB/SBD QUALITY CONTROL

Matrix: Soil
Units: mg/Kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0930S1									
	SB	SBD	SB	SBD	SB	SBD				
Naphthalene	**0.0747**	**0.0759**	0.0833	0.0833	90	91	61 - 112	2	15	
Acenaphthylene	**0.0808**	**0.0795**	0.0833	0.0833	97	95	65 - 116	2	15	
Acenaphthene	**0.0759**	**0.0750**	0.0833	0.0833	91	90	62 - 116	1	13	
Benzo[a]anthracene	**0.0862**	**0.0861**	0.0833	0.0833	103	103	59 - 129	0	15	
Chrysene	**0.0767**	**0.0779**	0.0833	0.0833	92	94	60 - 122	2	15	
Benzo[b]fluoranthene	**0.0744**	**0.0743**	0.0833	0.0833	89	89	53 - 124	0	17	
Benzo(j,k)fluoranthene	**0.0831**	**0.0831**	0.0833	0.0833	100	100	58 - 124	0	16	
Benzo[a]pyrene	**0.0841**	**0.0840**	0.0833	0.0833	101	101	62 - 127	0	15	
Indeno(1,2,3-c,d)pyrene	**0.0862**	**0.0876**	0.0833	0.0833	103	105	60 - 120	2	15	
Dibenz[a,h]anthracene	**0.0822**	**0.0827**	0.0833	0.0833	99	99	60 - 117	1	15	
Surrogate:										
2-Fluorobiphenyl					***84***	***75***	***32 - 115***			
Pyrene-d10					***85***	***85***	***30 - 124***			
Terphenyl-d14					***93***	***93***	***30 - 117***			

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

PCBs EPA 8082A

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST02-1**					
Laboratory ID:	09-399-01					
Aroclor 1016	**ND**	0.057	EPA 8082A	10-4-16	10-5-16	
Aroclor 1221	**ND**	0.057	EPA 8082A	10-4-16	10-5-16	
Aroclor 1232	**ND**	0.057	EPA 8082A	10-4-16	10-5-16	
Aroclor 1242	**ND**	0.057	EPA 8082A	10-4-16	10-5-16	
Aroclor 1248	**ND**	0.057	EPA 8082A	10-4-16	10-5-16	
Aroclor 1254	**ND**	0.057	EPA 8082A	10-4-16	10-5-16	
Aroclor 1260	**ND**	0.057	EPA 8082A	10-4-16	10-5-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
DCB	***74***	***50-139***				
Client ID:	**ST02-2**					
Laboratory ID:	09-399-02					
Aroclor 1016	**ND**	0.054	EPA 8082A	10-4-16	10-5-16	
Aroclor 1221	**ND**	0.054	EPA 8082A	10-4-16	10-5-16	
Aroclor 1232	**ND**	0.054	EPA 8082A	10-4-16	10-5-16	
Aroclor 1242	**ND**	0.054	EPA 8082A	10-4-16	10-5-16	
Aroclor 1248	**ND**	0.054	EPA 8082A	10-4-16	10-5-16	
Aroclor 1254	**ND**	0.054	EPA 8082A	10-4-16	10-5-16	
Aroclor 1260	**ND**	0.054	EPA 8082A	10-4-16	10-5-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
DCB	***71***	***50-139***				
Client ID:	**ST02-3**					
Laboratory ID:	09-399-03					
Aroclor 1016	**ND**	0.060	EPA 8082A	10-4-16	10-5-16	
Aroclor 1221	**ND**	0.060	EPA 8082A	10-4-16	10-5-16	
Aroclor 1232	**ND**	0.060	EPA 8082A	10-4-16	10-5-16	
Aroclor 1242	**ND**	0.060	EPA 8082A	10-4-16	10-5-16	
Aroclor 1248	**ND**	0.060	EPA 8082A	10-4-16	10-5-16	
Aroclor 1254	**ND**	0.060	EPA 8082A	10-4-16	10-5-16	
Aroclor 1260	**ND**	0.060	EPA 8082A	10-4-16	10-5-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
DCB	***71***	***50-139***				

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Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

PCBs EPA 8082A

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**ST02-4**					
Laboratory ID:	09-399-04					
Aroclor 1016	**ND**	0.058	EPA 8082A	10-4-16	10-5-16	
Aroclor 1221	**ND**	0.058	EPA 8082A	10-4-16	10-5-16	
Aroclor 1232	**ND**	0.058	EPA 8082A	10-4-16	10-5-16	
Aroclor 1242	**ND**	0.058	EPA 8082A	10-4-16	10-5-16	
Aroclor 1248	**ND**	0.058	EPA 8082A	10-4-16	10-5-16	
Aroclor 1254	**ND**	0.058	EPA 8082A	10-4-16	10-5-16	
Aroclor 1260	**ND**	0.058	EPA 8082A	10-4-16	10-5-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
DCB	***75***	***50-139***				
Client ID:	**ST02-5**					
Laboratory ID:	09-399-05					
Aroclor 1016	**ND**	0.056	EPA 8082A	10-4-16	10-5-16	
Aroclor 1221	**ND**	0.056	EPA 8082A	10-4-16	10-5-16	
Aroclor 1232	**ND**	0.056	EPA 8082A	10-4-16	10-5-16	
Aroclor 1242	**ND**	0.056	EPA 8082A	10-4-16	10-5-16	
Aroclor 1248	**ND**	0.056	EPA 8082A	10-4-16	10-5-16	
Aroclor 1254	**ND**	0.056	EPA 8082A	10-4-16	10-5-16	
Aroclor 1260	**ND**	0.056	EPA 8082A	10-4-16	10-5-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
DCB	***75***	***50-139***				

Date of Report: October 5, 2016
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PCBs EPA 8082A
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1004S2					
Aroclor 1016	**ND**	0.050	EPA 8082A	10-4-16	10-5-16	
Aroclor 1221	**ND**	0.050	EPA 8082A	10-4-16	10-5-16	
Aroclor 1232	**ND**	0.050	EPA 8082A	10-4-16	10-5-16	
Aroclor 1242	**ND**	0.050	EPA 8082A	10-4-16	10-5-16	
Aroclor 1248	**ND**	0.050	EPA 8082A	10-4-16	10-5-16	
Aroclor 1254	**ND**	0.050	EPA 8082A	10-4-16	10-5-16	
Aroclor 1260	**ND**	0.050	EPA 8082A	10-4-16	10-5-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
DCB	***87***	***50-139***				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	09-399-01										
	MS	MSD	MS	MSD		MS	MSD				
Aroclor 1260	**0.427**	**0.398**	0.500	0.500	ND	**85**	**80**	49-133	7	17	
Surrogate:											
DCB						***82***	***77***	***50-139***			

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Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

PCB's EPA 8082A
CONTINUING CALIBRATION SUMMARY

Lab ID	Analyte	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Column 1					
PCBCCV 1005-1	Aroclor 1016	500	533	-6.6	+/- 15%
PCBCCV 1005-1	Aroclor 1260	500	550	-10	+/- 15%
Column 2					
PCBCCV 1005-1	Aroclor 1016	500	575	-15	+/- 15%
PCBCCV 1005-1	Aroclor 1260	500	487	2.6	+/- 15%
Column 1					
PCBCCV 1005-2	Aroclor 1016	500	510	-2.0	+/- 15%
PCBCCV 1005-2	Aroclor 1260	500	541	-8.2	+/- 15%
Column 2					
PCBCCV 1005-2	Aroclor 1016	500	515	-3.0	+/- 15%
PCBCCV 1005-2	Aroclor 1260	500	481	3.8	+/- 15%
Column 1					
PCBCCV 1005-3	Aroclor 1016	500	517	-3.4	+/- 15%
PCBCCV 1005-3	Aroclor 1260	500	538	-7.6	+/- 15%
Column 2					
PCBCCV 1005-3	Aroclor 1016	500	506	-1.2	+/- 15%
PCBCCV 1005-3	Aroclor 1260	500	467	6.6	+/- 15%

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C

Matrix: Soil
Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	09-399-01					
Client ID:	**ST02-1**					
Lead	**38**	5.7	6010C	9-30-16	9-30-16	
Lab ID:	09-399-02					
Client ID:	**ST02-2**					
Lead	**ND**	5.4	6010C	9-30-16	9-30-16	
Lab ID:	09-399-03					
Client ID:	**ST02-3**					
Lead	**14**	6.0	6010C	9-30-16	9-30-16	
Lab ID:	09-399-04					
Client ID:	**ST02-4**					
Lead	**11**	5.8	6010C	9-30-16	9-30-16	
Lab ID:	09-399-05					
Client ID:	**ST02-5**					
Lead	**16**	5.6	6010C	9-30-16	9-30-16	

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Samples Submitted: September 30, 2016
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Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
METHOD BLANK QUALITY CONTROL

Date Extracted:	9-30-16
Date Analyzed:	9-30-16
Matrix:	Soil
Units:	mg/kg (ppm)
Lab ID:	MB0930SM3

Analyte	Method	Result	PQL
Lead	6010C	**ND**	5.0

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
DUPLICATE QUALITY CONTROL

Date Extracted: 9-30-16
Date Analyzed: 9-30-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-399-04

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**9.75**	**11.4**	16	5.0	

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
MS/MSD QUALITY CONTROL

Date Extracted: 9-30-16
Date Analyzed: 9-30-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: 09-399-04

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	250	**240**	92	**245**	94	2	

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
SPIKE BLANK QUALITY CONTROL

Date Extracted: 9-30-16
Date Analyzed: 9-30-16

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: SB0930SM3

Analyte	Method	Spike Level	Spike Result	Percent Recovery
Lead	6010C	250	**234**	93

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 6010C
CONTINUING CALIBRATION SUMMARY

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
Lead	ICV093016P	1.00	1.02	-2.0	+/- 10%
Lead	LLICV1093016P	0.100	0.0941	5.9	+/- 30%
Lead	CCV1093016P	10.0	9.79	2.1	+/- 10%
Lead	CCV2093016P	10.0	9.65	3.5	+/- 10%
Lead	LLCCV2093016P	0.100	0.0841	16	+/- 30%
Lead	CCV3093016P	10.0	9.82	1.8	+/- 10%
Lead	LLCCV3093016P	0.100	0.105	-5.0	+/- 30%
Lead	CCV4093016P	10.0	9.82	1.8	+/- 10%
Lead	LLCCV4093016P	0.100	0.0824	18	+/- 30%
Lead	CCV5093016P	10.0	9.78	2.2	+/- 10%
Lead	LLCCV5093016P	0.100	0.104	-4.0	+/- 30%
Lead	CCV6093016P	10.0	9.74	2.6	+/- 10%
Lead	LLCCV6093016P	0.100	0.104	-4.0	+/- 30%
Lead	CCV7093016P	10.0	9.67	3.3	+/- 10%
Lead	LLCCV7093016P	0.100	0.102	-2.0	+/- 30%
Lead	CCV8093016P	10.0	9.63	3.7	+/- 10%
Lead	LLCCV8093016P	0.100	0.0810	19	+/- 30%

Date of Report: October 5, 2016
Samples Submitted: September 30, 2016
Laboratory Reference: 1609-399
Project: 0747.01.06-6.3

% MOISTURE

Date Analyzed: 9-30-16

Client ID	Lab ID	% Moisture
ST02-1	09-399-01	13
ST02-2	09-399-02	8
ST02-3	09-399-03	16
ST02-4	09-399-04	14
ST02-5	09-399-05	11

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 09-399

Company: Maul Foster Alongi
Project Number: 0747.01.06-6.3
Project Name: North Cascade Ford
Project Manager: Heather Good
Sampled by: Carolyn Wise

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☒ 2 Days ☐ 3 Days
☐ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level) * only cPAHs	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	MTBE 8021	Pb 6010	Naphthalenes 8270 SIM		% Moisture
1	ST02-1	9/30	730	S	5		X		X					X	X								X	X	X		X
2	ST02-2		735	S	5		X		X					X	X								X	X	X		X
3	ST02-3		740	S	5		X		X					X	X								X	X	X		X
4	ST02-4		745	S	5		X		X					X	X								X	X	X		X
5	ST02-5		750	S	5		X		X					X	X								X	X	X		X

	Signature	Company	Date	Time
Relinquished	Carolyn Wise	MFA	9/30/16	1100
Received	Jie Kang	alpha	9-30-16	1100
Relinquished		alpha	9-30-16	12:20
Received		Critical Env	9/30/16	1220
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☒ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒

Equis 4

Sample/Cooler Receipt and Acceptance Checklist

Client: MFA

Client Project Name/Number: 0747.01.02-63

OnSite Project Number: 09-399

Initiated by: Blair Goodrow

Date Initiated: 9/30/09

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	(No)	N/A	1 2 3 4	
1.2 Were the custody seals intact?	Yes	No	(N/A)	1 2 3 4	
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	(N/A)	1 2 3 4	
1.4 Were the samples delivered on ice or blue ice?	(Yes)	No		1 2 3 4	
1.5 Were samples received between 0-6 degrees Celsius?	(Yes)	No	Temperature: 4°C		
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	(N/A)			
1.7 How were the samples delivered?	Client	(Courier)	UPS/FedEx	OSE Pickup	Other

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	(Yes)	No		1 2 3 4
2.2 Was the COC legible and written in permanent ink?	(Yes)	No		1 2 3 4
2.3 Have samples been relinquished and accepted by each custodian?	(Yes)	No		1 2 3 4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	(Yes)	No		1 2 3 4
2.5 Were all of the samples listed on the COC submitted?	(Yes)	No		1 2 3 4
2.6 Were any of the samples submitted omitted from the COC?	Yes	(No)		1 2 3 4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	(No)		1 2 3 4
3.2 Were any sample labels missing or illegible?	Yes	(No)		1 2 3 4
3.3 Have the correct containers been used for each analysis requested?	(Yes)	No		1 2 3 4
3.4 Have the samples been correctly preserved?	Yes	No	(N/A)	1 2 3 4
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	Yes	No	(N/A)	1 2 3 4
3.6 Is there sufficient sample submitted to perform requested analyses?	(Yes)	No		1 2 3 4
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	(No)		1 2 3 4
3.8 Was method 5035A used?	(Yes)	No	N/A	1 2 3 4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	# 1		N/A	1 2 3 4

Explain any discrepancies:

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 6, 2016

Heather Good
Maul Foster & Alongi, Inc.
Bay Vista Tower
2815 2nd Avenue, Suite 540
Seattle, WA 98121

Re: Analytical Data for Project 0747.01.06-6.3
Laboratory Reference No. 1610-044

Dear Heather:

Enclosed are the analytical results and associated quality control data for samples submitted on October 5, 2016.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

Case Narrative

Samples were collected on October 5, 2016 and received by the laboratory on October 5, 2016. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

NWTPH-Gx/BTEX

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BTPOST-WS-01**					
Laboratory ID:	10-044-01					
Benzene	**ND**	1.0	EPA 8021B	10-5-16	10-5-16	
Toluene	**ND**	1.0	EPA 8021B	10-5-16	10-5-16	
Ethyl Benzene	**ND**	1.0	EPA 8021B	10-5-16	10-5-16	
m,p-Xylene	**ND**	1.0	EPA 8021B	10-5-16	10-5-16	
o-Xylene	**ND**	1.0	EPA 8021B	10-5-16	10-5-16	
Gasoline	**ND**	100	NWTPH-Gx	10-5-16	10-5-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***98***	***71-111***				

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

NWTPH-Gx/BTEX
METHOD BLANK QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1005W1					
Benzene	**ND**	1.0	EPA 8021B	10-5-16	10-5-16	
Toluene	**ND**	1.0	EPA 8021B	10-5-16	10-5-16	
Ethyl Benzene	**ND**	1.0	EPA 8021B	10-5-16	10-5-16	
m,p-Xylene	**ND**	1.0	EPA 8021B	10-5-16	10-5-16	
o-Xylene	**ND**	1.0	EPA 8021B	10-5-16	10-5-16	
Gasoline	**ND**	100	NWTPH-Gx	10-5-16	10-5-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
Fluorobenzene	***96***	***71-111***				

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

NWTPH-Gx/BTEX
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-009-01										
	ORIG	DUP									
Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Toluene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Ethyl Benzene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
m,p-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
o-Xylene	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						***94***	***96***	***71-111***			
MATRIX SPIKES											
Laboratory ID:	10-009-01										
	MS	MSD	MS	MSD		MS	MSD				
Benzene	**46.5**	**46.0**	50.0	50.0	ND	**93**	**92**	83-123	1	15	
Toluene	**47.1**	**46.6**	50.0	50.0	ND	**94**	**93**	83-124	1	16	
Ethyl Benzene	**48.8**	**48.1**	50.0	50.0	ND	**98**	**96**	82-123	1	15	
m,p-Xylene	**45.7**	**44.9**	50.0	50.0	ND	**91**	**90**	81-125	2	17	
o-Xylene	**47.4**	**47.0**	50.0	50.0	ND	**95**	**94**	82-123	1	15	
Surrogate:											
Fluorobenzene						***89***	***93***	***71-111***			
SPIKE BLANKS											
Laboratory ID:	SB1005W2										
	SB	SBD	SB	SBD		SB	SBD				
Benzene	**47.9**	**46.2**	50.0	50.0		**96**	**92**	83-119	4	13	
Toluene	**49.2**	**46.9**	50.0	50.0		**98**	**94**	83-120	5	13	
Ethyl Benzene	**50.1**	**48.6**	50.0	50.0		**100**	**97**	82-120	3	12	
m,p-Xylene	**47.4**	**45.6**	50.0	50.0		**95**	**91**	80-122	4	13	
o-Xylene	**48.7**	**47.4**	50.0	50.0		**97**	**95**	80-120	3	10	
Surrogate:											
Fluorobenzene						***88***	***91***	***71-111***			

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

NWTPH-Gx
CONTINUING CALIBRATION SUMMARY

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCVH1005G-1	5.00	4.84	3	+/- 20%
CCVH1005G-2	5.00	4.72	6	+/- 20%
CCVH1005G-3	5.00	4.69	6	+/- 20%
CCVD1005G-1	5.00	4.39	12	+/- 20%
CCVD1005G-2	5.00	4.30	14	+/- 20%

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

BTEX by
EPA 8021B
CONTINUING CALIBRATION SUMMARY

Analyte	Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
Benzene	CCVH1005B-1	50.0	47.0	6	+/- 15%
Toluene	CCVH1005B-1	50.0	50.5	-1	+/- 15%
Ethyl Benzene	CCVH1005B-1	50.0	49.3	1	+/- 15%
m,p-Xylene	CCVH1005B-1	50.0	50.3	-1	+/- 15%
o-Xylene	CCVH1005B-1	50.0	48.8	2	+/- 15%
Benzene	CCVH1005B-2	50.0	46.5	7	+/- 15%
Toluene	CCVH1005B-2	50.0	49.2	2	+/- 15%
Ethyl Benzene	CCVH1005B-2	50.0	48.7	3	+/- 15%
m,p-Xylene	CCVH1005B-2	50.0	49.1	2	+/- 15%
o-Xylene	CCVH1005B-2	50.0	48.3	3	+/- 15%
Benzene	CCVH1005B-3	50.0	45.5	9	+/- 15%
Toluene	CCVH1005B-3	50.0	47.1	6	+/- 15%
Ethyl Benzene	CCVH1005B-3	50.0	47.2	6	+/- 15%
m,p-Xylene	CCVH1005B-3	50.0	46.9	6	+/- 15%
o-Xylene	CCVH1005B-3	50.0	46.5	7	+/- 15%
Benzene	CCVD1005B-1	50.0	48.9	2	+/- 15%
Toluene	CCVD1005B-1	50.0	50.4	-1	+/- 15%
Ethyl Benzene	CCVD1005B-1	50.0	51.3	-3	+/- 15%
m,p-Xylene	CCVD1005B-1	50.0	49.4	1	+/- 15%
o-Xylene	CCVD1005B-1	50.0	50.3	-1	+/- 15%
Benzene	CCVD1005B-2	50.0	49.2	2	+/- 15%
Toluene	CCVD1005B-2	50.0	49.8	0	+/- 15%
Ethyl Benzene	CCVD1005B-2	50.0	51.4	-3	+/- 15%
m,p-Xylene	CCVD1005B-2	50.0	48.2	4	+/- 15%
o-Xylene	CCVD1005B-2	50.0	50.0	0	+/- 15%
Benzene	CCVD1005B-3	50.0	43.3	13	+/- 15%
Toluene	CCVD1005B-3	50.0	44.3	11	+/- 15%
Ethyl Benzene	CCVD1005B-3	50.0	45.6	9	+/- 15%
m,p-Xylene	CCVD1005B-3	50.0	43.1	14	+/- 15%
o-Xylene	CCVD1005B-3	50.0	44.8	10	+/- 15%

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

NWTPH-Dx

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BTPOST-WS-01**					
Laboratory ID:	10-044-01					
Diesel Range Organics	**ND**	0.26	NWTPH-Dx	10-5-16	10-5-16	
Lube Oil Range Organics	**ND**	0.41	NWTPH-Dx	10-5-16	10-5-16	
Surrogate:	***Percent Recovery***	***Control Limits***				
o-Terphenyl	***93***	***50-150***				

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

NWTPH-Dx
QUALITY CONTROL

Matrix: Water
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1005W1					
Diesel Range Organics	**ND**	0.25	NWTPH-Dx	10-5-16	10-5-16	
Lube Oil Range Organics	**ND**	0.40	NWTPH-Dx	10-5-16	10-5-16	
Surrogate:	Percent Recovery	Control Limits				
o-Terphenyl	92					

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-020-02										
	ORIG	DUP									
Diesel Range Organics	**0.528**	**0.427**	NA	NA		NA		NA	21	NA	
Lube Oil	**1.12**	**0.920**	NA	NA		NA		NA	20	NA	
Surrogate:											
o-Terphenyl						***92***	***81***	***50-150***			
SPIKE BLANK											
Laboratory ID:	SB1005W1										
Diesel Fuel #2	**0.779**		1.00		NA	**78**		62-113	NA	NA	
Surrogate:											
o-Terphenyl						***84***		***50-150***			

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

NWTPH-Dx
CONTINUING CALIBRATION SUMMARY

Lab ID	True Value (ppm)	Calc. Value	Percent Difference	Control Limits
CCV1005R-T2	100	102	-2.1	+/-15%
CCV1005R-T3	100	103	-2.6	+/-15%
CCV1005F-T2	100	96.7	3.3	+/-15%
CCV1005F-T3	100	98.3	1.7	+/-15%

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

pH
SM 4500-H B

Matrix: Water
Units: pH (@ 25ºC)

Analyte	Result	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**BTPOST-WS-01**				
Laboratory ID:	10-044-01				
pH	**9.6**	SM 4500-H B	10-5-16	10-5-16	

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 200.8

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	10-044-01					
Client ID:	**BTPOST-WS-01**					
Lead	**1.1**	1.1	200.8	10-5-16	10-5-16	

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 200.8
METHOD BLANK QUALITY CONTROL

Date Extracted:	10-5-16
Date Analyzed:	10-5-16
Matrix:	Water
Units:	ug/L (ppb)
Lab ID:	MB1005WM1

Analyte	Method	Result	PQL
Lead	200.8	**ND**	1.1

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 200.8
DUPLICATE QUALITY CONTROL

Date Extracted: 10-5-16
Date Analyzed: 10-5-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-044-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Lead	**1.13**	**1.16**	2	1.1	

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 200.8
MS/MSD QUALITY CONTROL

Date Extracted: 10-5-16
Date Analyzed: 10-5-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: 10-044-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Lead	111	**110**	98	**111**	99	1	

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 200.8
SPIKE BLANK QUALITY CONTROL

Date Extracted: 10-5-16
Date Analyzed: 10-5-16

Matrix: Water
Units: ug/L (ppb)

Lab ID: SB1005WM1

Analyte	Method	Spike Level	Result	Percent Recovery
Lead	200.8	111	**118**	106

Date of Report: October 6, 2016
Samples Submitted: October 5, 2016
Laboratory Reference: 1610-044
Project: 0747.01.06-6.3

TOTAL LEAD
EPA 200.8
CONTINUING CALIBRATION SUMMARY

Analyte	Lab ID	True Value (ppb)	Calc. Value	Percent Difference	Control Limits
Lead	ICV100516X	50.0	48.3	3.4	+/- 10%
Lead	CCV1100516X	40.0	38.7	3.2	+/- 10%
Lead	CCV1100516X	20.0	19.5	2.8	+/- 10%
Lead	CCV2100516X	40.0	38.5	3.8	+/- 10%
Lead	CCV2100516X	20.0	19.0	5.0	+/- 10%

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-napthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1- Sample extract treated with a Sulfuric acid/Silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: Maul Foster Alongi
Project Number: 0747.01.06-6.3
Project Name: North Cascade Ford
Project Manager: Heather Good
Sampled by: Carolyn Wise

Turnaround Request (in working days)
(Check One)
☒ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days) (TPH analysis 5 Days)
☐ _____ (other)

Laboratory Number: 10-044

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664A	pH (9 oz. jar)	Total Pb			% Moisture
1	BTPOST-WS-01	10/5/16	1300	W	8		X		X														X	X			

	Signature	Company	Date	Time
Relinquished	Carolyn Wise	MFA	10/5/16	1325
Received	Justin Chi		10/5/16	1325
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Data Package: Standard ☒ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☒

Sample/Cooler Receipt and Acceptance Checklist

Client: MFA

Client Project Name/Number: 0747.01.06-03

OnSite Project Number: 10-044

Initiated by: Blair Goodrow

Date Initiated: 10/15/10

1.0 Cooler Verification

1.1 Were there custody seals on the outside of the cooler?	Yes	(No)	N/A	1 2 3 4
1.2 Were the custody seals intact?	Yes	No	(N/A)	1 2 3 4
1.3 Were the custody seals signed and dated by last custodian?	Yes	No	(N/A)	1 2 3 4
1.4 Were the samples delivered on ice or blue ice?	(Yes)	No		1 2 3 4
1.5 Were samples received between 0-6 degrees Celsius?	Yes	(No)	Temperature: 8 °C	
1.6 Have shipping bills (if any) been attached to the back of this form?	Yes	(N/A)		
1.7 How were the samples delivered?	Client	(Courier)	UPS/FedEx	OSE Pickup Other

2.0 Chain of Custody Verification

2.1 Was a Chain of Custody submitted with the samples?	(Yes)	No		1 2 3 4
2.2 Was the COC legible and written in permanent ink?	(Yes)	No		1 2 3 4
2.3 Have samples been relinquished and accepted by each custodian?	(Yes)	No		1 2 3 4
2.4 Did the sample labels (ID, date, time, preservative) agree with COC?	(Yes)	No		1 2 3 4
2.5 Were all of the samples listed on the COC submitted?	(Yes)	No		1 2 3 4
2.6 Were any of the samples submitted omitted from the COC?	Yes	(No)		1 2 3 4

3.0 Sample Verification

3.1 Were any sample containers broken or compromised?	Yes	(No)		1 2 3 4
3.2 Were any sample labels missing or illegible?	Yes	(No)		1 2 3 4
3.3 Have the correct containers been used for each analysis requested?	(Yes)	No		1 2 3 4
3.4 Have the samples been correctly preserved?	(Yes)	No	N/A	1 2 3 4
3.5 Are volatiles samples free from headspace and bubbles greater than 6mm?	(Yes)	No	N/A	1 2 3 4
3.6 Is there sufficient sample submitted to perform requested analyses?	(Yes)	No		1 2 3 4
3.7 Have any holding times already expired or will expire in 24 hours?	Yes	(No)		1 2 3 4
3.8 Was method 5035A used?	Yes	No	(N/A)	1 2 3 4
3.9 If 5035A was used, which sampling option was used (#1, 2, or 3).	#		(N/A)	1 2 3 4

Explain any discrepancies:

1 - Discuss issue in Case Narrative

2 - Process Sample As-is

3 - Client contacted to discuss problem

4 - Sample cannot be analyzed or client does not wish to proceed

APPENDIX H

DATA VALIDATION MEMORANDUM

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0747.01.06-6.3 | NOVEMBER 8, 2016 | VSF PROPERTIES, LLC

Maul Foster & Alongi, Inc. (MFA) conducted an independent review of the quality of analytical results for excavation confirmation and stockpile soil samples collected at the North Cascade Ford property in Sedro-Woolley, Washington. The samples were collected in September and October, 2016.

Onsite Environmental, Inc. (OnSite) performed the analyses. OnSite report number 1609-344, 1609-345, 1609-398, 1609-399, and 1610-044 were reviewed. The analyses performed and samples analyzed are listed below. In report 1609-344, one sample was put on hold after receipt by the laboratory, and the hold status is indicated below.

Analysis	Reference
BTEX and MTBE	USEPA 8021B
Diesel- and Lube Oil-Range Organics	NWTPH-Dx
Gasoline	NWTPH-Gx
n-Hexane	USEPA 8015 Modified
Naphthalenes	USEPA 8270D SIM
pH	SM 4500H-B
Polychlorinated Biphenyls (PCBs)	USEPA 8082A
Polycyclic Aromatic Hydrocarbons (PAHs)	USEPA 8270D SIM
Total Metals	USEPA 6010C/200.8
Volatile Organic Compounds (VOCs)	USEPA 8260C

BTEX = benzene, toluene, ethylbenzene, and xylenes.
MTBE = methyl tert-butyl ether.
NWTPH = Northwest Total Petroleum Hydrocarbons.
SIM = selected ion monitoring.
SM = Standard Methods for the Examination of Water and Wastewater.
USEPA = U.S. Environmental Protection Agency.

Samples Analyzed				
Report 1609-344	**Report 1609-345**	**Report 1609-398**	**Report 1609-399**	**Report 1610-044**
WSW01-S-6.0	ST01-1	WSW02-S-7.5	ST02-1	BTPOST-WS-01
NSW01-S-6.0	ST01-2	NSW02-S-7.5	ST02-2	-
ESW01-S-6.0	ST01-3	BASE03-S-15.0	ST02-3	-
SSW01-S-3.0	-	SSW03-S-7.5	ST02-4	-
SSW02-S-6.0	-	ESW02-S-7.5	ST02-5	-
BASE01-S-10.0 (hold)	-	-	-	-
BASE02-S-10.0	-	-	-	-

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2014a,b) and appropriate laboratory and method-specific guidelines (OnSite, 2015; USEPA, 1986).

Data validation procedures were modified, as appropriate, to accommodate quality-control requirements for methods not specifically addressed by the USEPA procedures (i.e., NWTPH-Dx and NWTPH-Gx analyses).

In report 1609-399, the NWTPH-Dx lube oil results for samples ST02-1 and ST02-4 were flagged by OnSite due to impacts from high concentrations of diesel fuel #2 results. The reviewer confirmed that the lube oil results were appropriately reported based on the NWTPH-Dx method; thus, no qualification was required.

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

In report 1610-044, OnSite indicated that the sample was received by the laboratory at 8 degrees Celsius (°C), which is outside of the recommended temperature range of 0 to 6°C. The sample was submitted to the laboratory 25 minutes after collection. The recorded temperature demonstrates sufficient cooling between collection and receipt by the laboratory; thus, no results were qualified by the reviewer.

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. All method blank results were non-detect at method reporting limits.

Trip Blanks

Trip blanks were not submitted for this sampling event.

Equipment Rinsate Blanks

Equipment rinsate blanks were not submitted for this sampling event.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance on individual samples. Surrogate results associated with samples that were diluted were not evaluated for percent recovery.

In report 1609-344, the NWTPH-Dx laboratory duplicate surrogate percent recoveries were not evaluated due to sample matrix interference. No action was required.

In report 1609-398, the USEPA Method 8270D SIM surrogate terphenyl-d14 exceeded the upper percent recovery acceptance limit of 117, at 133%. The remaining surrogates had acceptable percent recovery. The exceedance was minor; thus, no results were qualified.

In report 1609-399, the USEPA Method 8270D SIM surrogate pyrene-d10 result exceeded the upper percent recovery acceptance limit due to matrix interference. The remaining two surrogates had acceptable percent recovery; thus, no results were qualified.

All remaining 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. In report 1609-344, the NWTPH-Dx laboratory duplicate RDP control limit was not reported. The diesel standard RPD was 26%; the reviewer confirmed that the RPD met acceptance criteria.

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. The LCS/LCSD samples were extracted and analyzed at the required frequency. All LCS/LCSD results 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.

CONTINUING CALIBRATION VERIFICATION RESULTS

Continuing calibration verification (CCV) results are used to demonstrate instrument precision and accuracy throughout the sample batch. CCV results were reported for NWTPH-Dx and NWTPH-Gx analyses; CCV results were within control limits.

In report 1609-344, USEPA Method 8260C CCV results were not reported. All detected acetone results were flagged by OnSite due to a CCV percent drift exceedance. All detected acetone results have been qualified by the reviewer with "J" as estimated.

Report	Sample	Component	Original Result (mg/kg)	Qualified Result (mg/kg)
1609-344	WSW01-S-6.0	Acetone	0.011	0.011 J
1609-344	NSW01-S-6.0	Acetone	0.0095	0.0095 J
1609-344	ESW01-S-6.0	Acetone	0.015	0.015 J
1609-344	SSW01-S-3.0	Acetone	0.020	0.020 J
1609-344	BASE02-S-10.0	Acetone	0.019	0.019 J

J = the result is an estimated value.
mg/kg = milligrams per kilogram.

In report 1609-345, a USEPA Method 8082A CCV analyzed on 10/3/2016 (PCBCCV 1003-5) exceeded the percent difference acceptance limits of +/-15% for Aroclor 1260 on column 1, at -16%, and the percent difference acceptance limit of +/-15% for Aroclor 1016 on column 2, at -19%. The percent difference results from the associated column were within acceptance limits; thus, no results were qualified.

REPORTING LIMITS

OnSite used routine reporting limits for non-detect results.

In report 1609-344, the NWTPH-Dx lube oil range organics reporting limit for sample SSW02-S-6.0 was raised due to high concentrations of diesel range organics. No action was required by the reviewer.

In report 1609-345, the NWTPH-Dx diesel range organics reporting limit for sample ST01-3 was raised due to high concentrations of lube oil range organics. No action was required by the reviewer.

In report 1609-398, the NWTPH-Dx lube oil range organics reporting limits for samples WSW02-S-7.5 and NSW02-S-7.5 were raised due to high concentrations of diesel range organics. No action was required by the reviewer.

In report 1609-399, the NWTPH-Dx lube oil range organics reporting limits for samples ST02-2 and ST02-5 were raised due to high concentrations of diesel fuel #2. No action was required by the reviewer.

In report 1609-398, some of the USEPA Method 8260C results for samples WSW02-S-7.5 and NSW02-S-7.5 were reported from dilutions due to matrix interference. The results for

toluene, 1,2-dibromoethane, and o-xylene were reported as non-detect with raised reporting limits due to the dilution. No qualification was required.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies.

In report 1609-344, both hold and several analyses were marked on the chain of custody for sample BASE01-S-10.0. The reviewer confirmed that the analyses for sample BASE01-S-10.0 were put on hold after samples were received by the laboratory.

In report 1609-344, several samples were reported with an additional hyphen in the sample name (e.g., BASE02—S-10.0). The samples were also reported with the correct sample name for other analyses in the same report. No action was required.

In report 1609-345, analytical methods for methyl tert-butyl ether and naphthalenes were changed from USEPA 8260B to USEPA 8021B and from USEPA 8260B to USEPA 8270D SIM, respectively, after receipt by the laboratory. No action was required by the reviewer.

In report 1609-398, some analyses were added after samples were received by the laboratory. The additional analyses requested were recorded on the chain of custody by the laboratory.

No additional issues were found.

REFERENCES

OnSite. 2015. Quality assurance manual. OnSite Environmental, Inc. Redmond, Washington.

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

CEMEX DISPOSAL CERTIFICATE

Ticket List By Customer\Order\Product

Date From 08/01/2016 **To** 10/08/2016
Location(s) 1876
Order: 41080041

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	Ship	Cash	Void
Scale Tickets										
WYSER CONSTRUCTION INC-VARIOUS VARIOUS										
41080041										
1192508										
9/28/16	1876088969	P:76:NORTH CASCADE FORD	WC30T,WYSER CONSTRUCTION	0:00:00	11:12:00	25.85	TON			
9/29/16	1876088982	P:76:NORTH CASCADE FORD	LL4,L&L TRANSPORT	8:44:00	8:58:00	27.23	TON	R		
9/29/16	1876088986	P:76:NORTH CASCADE FORD	WC30T,WYSER CONSTRUCTION	9:34:00	9:46:00	27.62	TON	R		
9/29/16	1876088990	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	0:00:00	11:24:00	31.29	TON			
9/29/16	1876088997	P:76:NORTH CASCADE FORD	WC30T,WYSER CONSTRUCTION	0:00:00	13:00:00	30.96	TON			
9/29/16	1876088998	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	0:00:00	14:20:00	29.44	TON			
9/30/16	1876089000	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	8:45:00	8:58:00	29.88	TON	R		
9/30/16	1876089001	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	0:00:00	11:30:00	32.04	TON			
9/30/16	1876089002	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	0:00:00	14:41:00	30.23	TON			
10/3/16	1876089004	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	8:42:00	8:57:00	30.23	TON	R		
10/3/16	1876089005	P:76:NORTH CASCADE FORD	WC30T,WYSER CONSTRUCTION	9:11:00	9:27:00	21.34	TON	R		
10/3/16	1876089009	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	0:00:00	11:58:00	31.36	TON			
10/3/16	1876089011	P:76:NORTH CASCADE FORD	LL4,L&L TRANSPORT	0:00:00	15:12:00	11.08	TON	R		
10/5/16	1876089045	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	9:53:00	10:05:00	28.45	TON	R		
10/6/16	1876089067	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	7:13:00	7:28:00	29.51	TON	R		
10/6/16	1876089074	P:76:NORTH CASCADE FORD	WC30T,WYSER CONSTRUCTION	9:37:00	9:57:00	28.66	TON	R		
10/6/16	1876089076	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	0:00:00	10:28:00	30.69	TON			
10/6/16	1876089081	P:76:NORTH CASCADE FORD	WC30T,WYSER CONSTRUCTION	0:00:00	12:46:00	28.92	TON			
10/6/16	1876089086	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	0:00:00	13:29:00	30.87	TON			

Date	TicketNo	Delivery Address	Vehicle	TimeIn	TicketTime	Qty	Unit	Ship	Cash	Void
10/7/16	1876089103	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	10:35:00	10:48:00	33.66	TON	R		
10/7/16	1876089111	P:76:NORTH CASCADE FORD	LL4T,L&L TRANSPORT	0:00:00	15:07:00	31.90	TON			
Product Totals	**21**				**Qty**	**601.21**	**TON**			
Order Totals	**21**				**Qty**	**601.21**	**TON**			
Customer Totals	**21**				**Qty**	**601.21**	**TON**			
Grand Total		**21**			**Qty**	**601.21**	**TON**			

APPENDIX J

SANITARY SEWER DISCHARGE DOCUMENTATION

INDUSTRIAL WATER DISCHARGED
TO THE CITY OF SEDRO-WOOLLEY SEWER SYSTEM

Date:	10-10-16
Location:	116 West Ferry Street, North Cascade Ford site
Project:	Fuel tank removal-site clean-up
Site Manager:	Darren Ness
Company:	Wyser Construction Company 19015 109th Ave SE Snohomish, WA 98296 Darren@wyserdirt.com

Meter reading at start:	159,664
Meter reading at end:	177,882
Total gallons discharged:	18,218

Billing Details:

18,218 gallons /7.48 gallons per cuft = 2,436 cuft

Base rate: first 750 cuft = $57.46

Volume rate: 2,436-750=1,686 cuft x 5.40/100 cuft=$ 91.04

Total owing: $148.50

APPENDIX K

BACKFILL DOCUMENTATION

Materials Testing & Consulting, Inc.

Geotechnical Engineering • Special Inspection • Materials Testing • Environmental Consulting

Client:	Wyser Construction	**Date:**	October 1, 2016
Address:	19015 109th Ave. SE	**Project:**	North Cascade Ford
	Snohomish, WA. 98270	**Project #:**	16B190-01
Attn:	Darren Ness	**Sample #:**	B16-1130
Revised on:		**Sample date:**	September 28, 2016

As requested MTC, Inc. has performed the following test(s) on the sample referenced above. The testing was performed in accordance with current applicable AASHTO or ASTM standards as indicated below. The results obtained in our laboratory were as follows below or on the attached pages:

	Test(s) Performed:	Test Results		Test(s) Performed:	Test Results
X	Sieve Analysis	Pass		Sulfate Soundness	
X	Proctor	140.5 pcf at 6.5%		Bulk Density & Voids	
	Sand Equivalent			WSDOT Degradation	
	Fracture Count				
	Moisture Content				
	Specific Gravity, Coarse				
	Specific Gravity, Fine				
	Hydrometer Analysis				
	Atterberg Limits				

If you have any questions concerning the test results, the procedures used, or if we can be of any further assistance please call on us at the number below.

Respectfully Submitted,
Cheryl Meredith
WABO Supervising Laboratory Technician

Materials Testing & Consulting, Inc.

Geotechnical Engineering • Special Inspection • Materials Testing • Environmental Consulting

Sieve Report

Project: North Cascade Ford
Project #: 16B190-01
Client: Wyser Construction
Source: Not reported
Sample#: B16-1130

Date Received: 28-Sep-16
Sampled By: Other
Date Tested: 29-Sep-16
Tested By: C. Meredith

ASTM D-2487 Unified Soils Classification System
SP-SM, Poorly graded Sand with Silt and Gravel
Sample Color:
brown

ACCREDITED
Certificate #: 1366.01, 1366.02

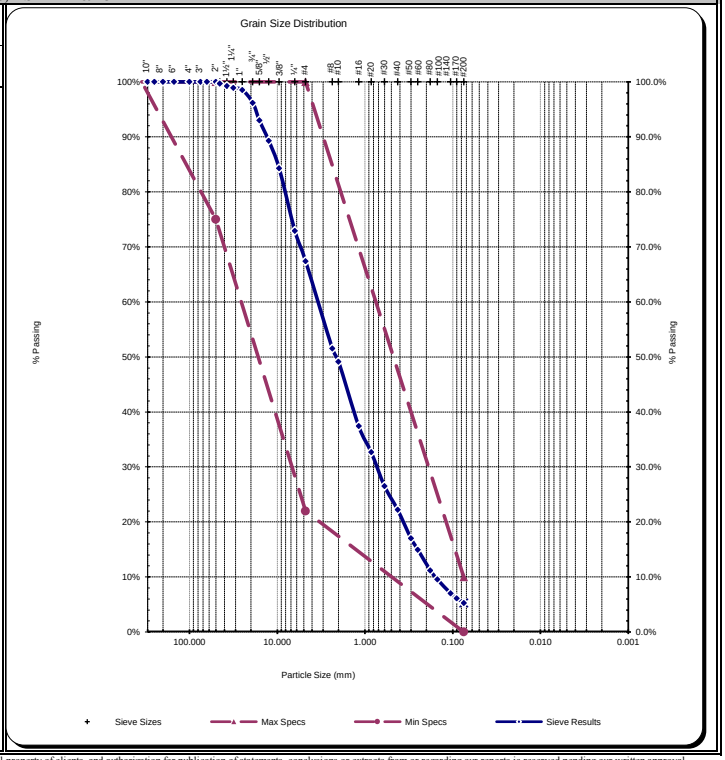
ASTM D-2216, ASTM D-2419, ASTM D-4318, ASTM D-5821

Specifications
2016 WSDOT 9-03.10 Gravel Base
Sample Meets Specs ? Yes

$D_{(5)}$ =	0.071	mm	% Gravel =	32.6%	Coeff. of Curvature, C_C = 0.96
$D_{(10)}$ =	0.158	mm	% Sand =	62.1%	Coeff. of Uniformity, C_U = 23.00
$D_{(15)}$ =	0.251	mm	% Silt & Clay =	5.3%	Fineness Modulus = 4.10
$D_{(30)}$ =	0.741	mm	Liquid Limit =	n/a	Plastic Limit = n/a
$D_{(50)}$ =	2.126	mm	Plasticity Index =	n/a	Moisture %, as sampled = n/a
$D_{(60)}$ =	3.634	mm	Sand Equivalent =	n/a	Req'd Sand Equivalent =
$D_{(90)}$ =	13.159	mm	Fracture %, 1 Face =	n/a	Req'd Fracture %, 1 Face =
Dust Ratio =	19/80		Fracture %, 2+ Faces =	n/a	Req'd Fracture %, 2+ Faces =

ASTM C-136, ASTM D-6913

Sieve Size US	Sieve Size Metric	Actual Cumulative Percent Passing	Interpolated Cumulative Percent Passing	Specs Max	Specs Min
12.00"	300.00		100%		
10.00"	250.00		100%		
8.00"	200.00		100%		
6.00"	150.00		100%		
4.00"	100.00		100%		
3.00"	75.00		100%		
2.50"	63.00		100%		
2.00"	50.00	100%	100%	100.0%	75.0%
1.75"	45.00		100%		
1.50"	37.50		99%		
1.25"	31.50		99%		
1.00"	25.00	99%	99%		
3/4"	19.00	96%	96%		
5/8"	16.00		93%		
1/2"	12.50	89%	89%		
3/8"	9.50	84%	84%		
1/4"	6.30		73%		
#4	4.75	67%	67%	100.0%	22.0%
#8	2.36		52%		
#10	2.00	49%	49%		
#16	1.18		37%		
#20	0.850	33%	33%		
#30	0.600		27%		
#40	0.425	22%	22%		
#50	0.300		17%		
#60	0.250	15%	15%		
#80	0.180		11%		
#100	0.150	10%	10%		
#140	0.106		7%		
#170	0.090		6%		
#200	0.075	5.3%	5.3%	10.0%	0.0%



Comments: _____

Reviewed by: _____

Materials Testing & Consulting, Inc.

Geotechnical Engineering • Special Inspection • Materials Testing • Environmental Consulting

Proctor Report

Project: North Cascade Ford
Project #: 16B190-01
Client: Wyser Construction
Source: Not reported
Sample#: B16-1130

Date Received: 28-Sep-16
Sampled By: Other
Date Tested: 29-Sep-16
Tested By: C. Meredith

Unified Soils Classification System, ASTM D-2487
SP-SM, Poorly graded Sand with Silt and Gravel
Sample Color
brown

Sample Prepared: Moist: X, Dry:
Test Standard: ASTM D698:, ASTM D 1557: X
Manual:, Mechanical: X
AASHTO T 99:, AASHTO T 180:
Method B

Assumed Sp. Gr. 2.85

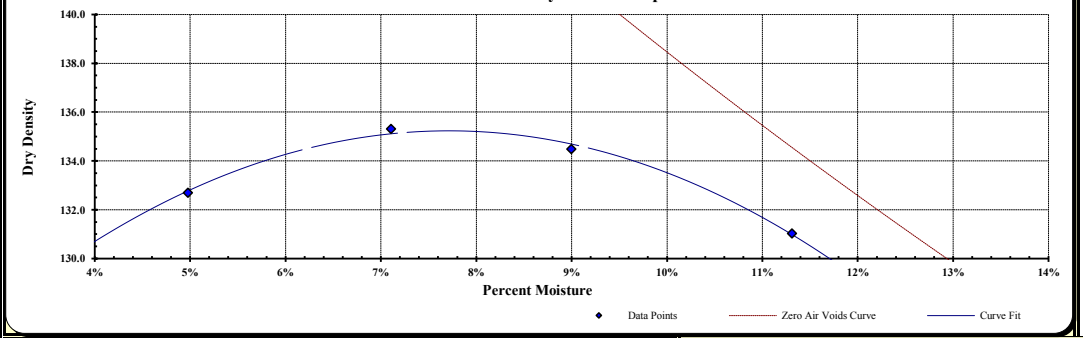
ACCREDITED
Certificate #: 1366.01, 1366.02

Point Number	Percent Moisture	Dry Density
1	5.0 %	132.7
2	7.1 %	135.3
3	9.0 %	134.5
4	11.3 %	131.0

Uncorrected Proctor Value
Max. Dry Density **Optimum Moist.**
135.2 **lbs/ft³** **7.7 %**

Value w/ Oversize Correction Applied
Max. Dry Density **Optimum Moist.**
140.5 **lbs/ft³** **6.5%**

Moisture Density Relationship



ASTM C-136

Sieve US	Size mm	Percent Passing	Specifications Max	Specifications Min
12.00"	300.00			
10.00"	250.00			
8.00"	200.00			
6.00"	150.00			
4.00"	100.00			
3.00"	75.00			
2.50"	63.00			
2.00"	50.00	100 %	100 %	75.0 %
1.75"	45.00			
1.50"	37.50			
1.25"	31.50			
1.00"	25.00	99 %		
3/4"	19.00	96 %		
5/8"	16.00			
1/2"	12.50	89 %		
3/8"	9.50	84 %		
1/4"	6.30			
#4	4.75	67 %	100 %	22.0 %
#8	2.36			
#10	2.00	49 %		
#16	1.18			
#20	0.850	33 %		
#30	0.600			
#40	0.425	22 %		
#50	0.300			
#60	0.250	15 %		
#80	0.180			
#100	0.150	10 %		
#140	0.106			
#170	0.090			
#200	0.075	5.3 %	10.0 %	0.0 %

ASTM D-4718, Misc. Oversize Correction Values

% Oversize Mat'l: 16%

% Oversize Retained	Corrected Density	Optimum Moisture
5%	136.9	7.3%
10%	138.6	7.0%
15%	140.3	6.6%
20%	142.0	6.2%
25%	143.9	5.9%
30%	145.7	5.5%

Specs: 2016 WSDOT 9-03.10 Gravel Base **Meets Specs? Yes**

% Gravel: 32.6%
% Sand: 62.1%
% Silt&Clay: 5.3%

C_C: 0.96
C_U: 23.00
FM: 4.10

$D_{(10)}$: 0.158
$D_{(30)}$: 0.741
$D_{(60)}$: 3.634

LL: n/a
PL: n/a
PI: n/a

Sand Equivalent: n/a
Req'd Sand Equivalent:

Fracture %, 1 Face: n/a
Fracture %, 2+ Faces: n/a
Req'd Fracture %, 1 Face:
Req'd Fracture %, 2+ Faces:

Comments:

Reviewed by:

Maul, Foster & Alongi, Inc. **Import/Export** **MFA-16-1474**

North Cascade Ford UST Decommissioning

DATE	Export Concrete	Export Asphalt	Export Carbon	Export Class 3 Soil	Export Gasoline/ Heating Oil	Export Waste Water	Import: Pit Run	Import: 2 1/2" x 3/4"	Import: 1 1/4" Rock	Import: Pea Gravel
Sept. 2016										
9/26/2016	6.95 ton√									
9/27/2016					1,000 gal					
9/27/2016					1,000 gal					
9/28/2016				25.85 ton√						
9/29/2016				146.54 ton√						
9/30/2016				92.15 ton√						
	6.95 ton			***264.54 ton***						
Oct. 2016										
10/3/2016				94.01 ton√						
10/4/2016		13.45 ton√					181.69 ton√	61.03 ton √		
10/5/2016				28.45 ton√			215.57 ton√			
10/6/2016		30.71 ton√		148.65 ton√			117.88 ton√			
10/7/2016				65.56 ton√			92.05 ton√		61.79 ton√	
		44.16 ton		***336.67 ton***			***607.19 ton***	***61.03 ton***	***61.79 ton***	
10/12/2016		10.09 ton√								
10/13/2016			3,000 Lbs.			1,000 Gal.				
		10.09 ton	***3,000 Lbs.***			***1,000 Gal.***				
Sub Total Tons	**6.95 ton**	**54.25 ton**		**601.21 ton**	**1,000 gal**		**607.19 ton**	**61.03 ton**	**61.79 ton**	
			3,000 Lbs.		**1,000 gal**	**1,000 Gal**				
Sub Total yds										

APPENDIX L

COMPACTION TESTING REPORTS

North Cascade Ford - 16B190-01 - IPD-Soil Compaction: Report #D38076

CLIENT	Wyser Construction, Inc	**DATE**	10/06/2016
PROJECT LOCATION	116 W Ferry Street Sedro Woolley WA	**PERMIT #**	

Inspection Information:

Inspection Date: 10/06/2016 **Time Onsite:** 12:55 PM **Weather Conditions:** Overcast 60F

Inspection Performed: IPD-Soil Compaction

Field Data:

Work / Location:	Tire Center Backfill	**Gauge Standard MS:**	613
Equipment ID & Serial #:	Troxler 3430D, Ser. #19286	**Gauge Standard DS:**	1694

Test Samples:

	Sample #:	Description:	Proctor Value(pcf):	Optimum Moisture and Oversize Rock Correction:
1.	B16-1130	SP-SM, Poorly graded sand with silt and gravel	140.5	6.5%

TEST METHOD ☒ ASTM D-1557 /AASHTO T-180

In Place Density Test Results (ASTM D-6938):

Test #	Mode / Depth	Location of Test	Elev.	Wet Dens.	Dry Dens.	Moist %	Sample #	% Comp.	% Reqd.
1	8	N end of area	-4' BFG	144.9	133.4	8.6	1	94.9	95
2	8	S end of area	-4' BFG	144.3	133.1	8.4	1	94.7	95
3	8	NW end of area	-3' BFG	142.4	133.7	6.5	1	95.2	95
4	8	SE end of area	-3' BFG	144.1	136.1	5.9	1	96.9	95

☐ Native Soils	Soils consistent with Proctor	◉ Yes	○ No
☒ Imported Fills	Soils found to be firm and stable; and to the best of our knowledge, meet compaction	◉ Yes	○ No
	Contractor notified of results	◉ Yes	○ No

Remarks:

MTC onsite per client's request to test for compaction of backfill material in vacinity of Tire Center.

Soils were placed via dozer and compacted with a Hoepack in approximately one foot lifts.

All soils tested met the required 95% compaction and were firm and unyielding. Contractor was notified of results.

Images:

Corporate • 777 Chrysler Drive • Burlington, WA 98233 • Phone 360.755.1990 • Fax 360.755.1980
SW Region • 2118 Black Lake Blvd. S.W.• Olympia, WA 98512 • Phone 360.534.9777 • Fax 360.534.9779
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Visit our website: www.mtc-inc.net

UPLOADED: 10/06/2016 14:06:00

REPORTED BY: Greg Moran REVIEWED BY: Curtis Shear, Project Manager

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North Cascade Ford - 16B190-01 - IPD-Soil Compaction: Report #D38081

CLIENT	Wyser Construction, Inc	**DATE**	10/07/2016
PROJECT LOCATION	116 W Ferry Street Sedro Woolley WA	**PERMIT #**	

Inspection Information:

Inspection Date: 10/07/2016 **Time Onsite:** 9:19 am **Weather Conditions:** Overcast 60F

Inspection Performed: IPD-Soil Compaction

Field Data:

Work / Location:	Tire Center Backfill	**Gauge Standard MS:**	696
Equipment ID & Serial #:	Troxler 3430B, Ser. #19828	**Gauge Standard DS:**	1841

Test Samples:

	Sample #:	Description:	Proctor Value(pcf):	Optimum Moisture and Oversize Rock Correction:
1.	B16-1130	SP-SM, Poorly graded sand with silt and gravel	140.5	6.5%

TEST METHOD ☒ ASTM D-1557 /AASHTO T-180

In Place Density Test Results (ASTM D-6938):

Test #	Mode / Depth	Location of Test	Elev.	Wet Dens.	Dry Dens.	Moist %	Sample #	% Comp.	% Reqd.
1	6	NW corner	-2' BFG	145.8	135.9	7.3	1	96.7	95
2	8	N end	-1' BFG	145.4	134.5	8.1	1	95.7	95
3	8	S end	AFG	149.8	137.8	8.7	1	98.1	95

☐ Native Soils	Soils consistent with Proctor	◉ Yes	○ No
☒ Imported Fills	Soils found to be firm and stable; and to the best of our knowledge, meet compaction	◉ Yes	○ No
	Contractor notified of results	◉ Yes	○ No

Remarks:

MTC onsite per client's request to test for compaction of imported backfill.

Soils were placed via excavator and compacted with a Hoepack.

All soils tested met the required 95% compaction and were firm and unyielding.

Contractor was notified of results.

Images:

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UPLOADED: 10/07/2016 14:02:00

REPORTED BY: Greg Moran REVIEWED BY: Curtis Shear, Project Manager

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APPENDIX M

IN SITU 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

$$CaO(OH)_2 + H_2O \rightarrow \tfrac{1}{2}O_2 + Ca(OH)_2 + H_2O$$

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

OXYGEN RELEASE COMPOUND

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.

REGENESIS

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