LIMITED PHASE III

Limited & Targeted Subsurface Investigation

Performed at:
Calhoun's Service Station
4540 Pacific Avenue
Tacoma, WA 98401

AEROTECH
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Philadelphia, Pennsylvania

LIMITED PHASE III

Limited & Targeted Subsurface Investigation

Performed at:
Calhoun's Service Station
4540 Pacific Avenue
Tacoma, WA 98401

Voluntary Cleanup Program
Site No. SW-1180

February 27, 2012

Performed by:
Aerotech Environmental Consulting, Inc.
19600 International Blvd., Suite No.101
SeaTac, Washington 98188
Fax (206) 429-3594
(360) 710-5899

PHASE III

TARGETED & TARGETED SUBSURFACE INVESTIGATION

performed for:

Client:	**Calhoun Family, LLC** P.O. Box 1929 Tacoma, Washington 98401
Point of Contact:	**Ms. Karen Calhoun** **Calhoun Family, LLC** P.O. Box 1929 Tacoma, Washington 98401
Property:	**Calhoun's Service Station** 4540 Pacific Avenue Tacoma, WA 98401 VCP Project No. SW1180
County:	Pierce County Assessor Parcel Nos: 7470024720 and 7470024730
Commercial Activity:	Retail Used Tire Store
Licensed Geologist:	Michael McGowan State of Washington License No. 1737
Project Number:	No. 212 - 6142
Report Date:	February 28, 2012

EXECUTIVE SUMMARY

The subject of this Limited and Targeted Phase III Subsurface Investigation[1] is comprised of two contiguous tax parcels located on the northwest corner of Pacific Avenue and South 46th Street in Tacoma, Washington. The eastern Parcel which houses the building, is approximately 0.17-acres; the western Parcel, an asphalt-paved storage yard, is approximately 0.10-acres. East 56th Street is two-thirds of a mile south; and Interstate 5 is one mile west.

The subject Property is located in a mixed-use commercial and residential area. To the north is a one-lane alley followed by single-family residences; to the south is South 46th Street followed by the Flowerland Store; to the east is Pacific Avenue followed by single-family residences; and to the west are single-family residences.

The subject Property is occupied by a tire sales and automotive repair facility operated as *Llantera Sinaloa Tire Sales & Service*.

The building is a concrete slab on grade, wood framed and sided structure facing east towards Pacific Avenue. On the south end of the east side of the building is the customer entrance into the service counter and customer waiting room. Adjoining on the north side is the two bay service shop; each bay is equipped with an in-ground hydraulic lift. A recessed floor pipe located adjoining each service bay likely served as the remote fill pipes for the underground waste oil tank located on the exterior north side of the building. Directly in front of the building to the east is the former concrete base of the pump dispenser islands. Adjoining the south side of the station building is the former location of the three underground storage tanks.

The subject Property was commercially developed prior to 1926 as the *Melvin Tveten Gasoline Station*. By 1951, the station was reconfigured as *Calhoun's Tourist Service Station*. In 1954, the existing building was demolished and a new station building constructed as *Calhoun's Richfield Oil*. In 1991, four underground tanks were removed from the Site[1]; the pumps were removed in 2005. The Site currently operates as a tires sales and an automotive service business.

During the 1991 removal of the four underground tanks petroleum-impacted soils were encountered at the "fill end of the tank" (the specific tank was not identified). The tank excavation was over excavated by three feet; the bottom of the excavation to a reported fourteen feet below ground surface. A total of approximately 250 cubic yards of petroleum-impacted soils were removed from the excavation and place along the southwestern Property boundary – the dimensions were approximately 55.5 feet north to south and 43.5 feet east to west, to at least a three foot depth[2]. Laboratory analyses of composite soil samples collected by Tacoma Pierce County Health Department ("TPCHD") personnel in the tank excavation reported "N.End Excav." (7,500 mg/kg Total Petroleum); "Middle Excav." (6,800 mg/kg); and "South End" (22 mg/kg); BTEX constituents were also elevated. On April 29, 1991, the TPCHD approved backfill of the excavation. It appears that the excavation was subsequently backfilled.

In the spring of 1992, the Site Owner Donald Calhoun was instructed by TPCHD "not to aerate" the stockpiled soils. In March of 1993, six soils samples were collected from the stockpiled soils; all sample results were below the laboratory limits of detection. The final disposition of the stockpiled soils is unknown.

In 2011 the Site entered the State of Washington Ecology Voluntary Cleanup Program; the initial Ecology determination requested Further Investigative Actions and Characterizations at the Site.

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[1] Two 4,000-gallon gasoline tanks; one 6,000-gallon gasoline tank; and one 50 to 200-gallon (description varies) waste oil tank.

[2] A stock pile with these dimensions is approximately 268 cubic yards.

▪ Conclusions:

Area of Concern No.1 - Former Underground Storage Tank Pit.

The original tank excavation appears to have varied from 12 to 14 feet below ground surface. This Phase III Investigation identified levels of gasoline in the soils above the Model Toxics Control Action ("MTCA") most stringent Cleanup Levels in the center of the former tank pit of 150 parts per million ("ppm") at 12 feet below grade; however at 18 feet below grade the gasoline was non-detect.
Two boring locations adjoining the north edge of the former tank identified gasoline concentrations of 73 ppm and 66 ppm at 14 feet below grade; however these locations were both non-detect at 18 feet below grade. The MTCA Cleanup Level for gasoline is 100 ppm when no benzene is present, and 30 ppm when benzene is present. The soils in the tank pit are all non-detect for benzene; however, the groundwater samples collected to the east of the tank pit – in the assumed downgradient location – exhibited levels of benzene above the MTCA Cleanup Level. Groundwater was not encountered at any of the boring locations inside the former tank pit.

- It is unclear whether the Department of Ecology will allow the Site to use the 100 ppm gasoline soil Cleanup Level, or will require the 30 ppm soil Cleanup Level due to the presence of benzene in the groundwater. If Ecology requires a soil Cleanup Level of 30 ppm, then the lateral extent of contamination to the north (perhaps underneath the building) has not been determined.

- Since the elevated levels of gasoline in sol are present at 12 feet below grade, but non-detect at 18 feet – and the general Ecology Point of Compliance for soils is ground surface to 15 feet below ground surface – it is unclear if Ecology will require remediation of the soils in the center of the tank pit.

Area of Concern No.2 - Former Pump Island:

The area adjoining the former dispenser island has never been excavated. Borings around the former pump island revealed gasoline presence in the soils between 36 and 99 ppm at 8 feet below grade; however gasoline in soil was non-detect at 10 to 17 feet below grade. Benzene was non-detect at all of the boring locations.

Groundwater was encountered at three of the four boring locations adjoining the pump island, and at two boring locations between the pump island and the sidewalk to the east (assumed down gradient location) varying from 5 to 6.5 feet below ground surface. Based upon observed Site conditions, it is likely this water is actually perched within the area of the original pump island installation excavation, and may not be representative of overall Site groundwater conditions.

The groundwater gasoline concentrations around the pump island were 1,500, 4,300, and 12,000 parts per billion ("ppb"); the MTCA Cleanup Level is 800 ppb since benzene was also identified in the groundwater. The assumed down gradient boring located adjoining the sidewalk reported 11,000 ppb gasoline.

It is possible that the source of contamination may be both the historical leakage of the pumps and connecting piping, and the presence of abandoned piping with residual petroleum leakage.

- Due to the presence of elevated levels of gasoline in the water, and the presence of gasoline in the soils, excavation of soils and removal of the abandoned piping underneath and around the former pump island is advisable.

- The groundwater gasoline concentrations indicate that the plume of contamination may extend off Site to the east, underneath the sidewalk and possibly South Pacific Street.

Area of Concern No.3 - Southeastern Property Quadrant:

This Area of Concern is south of the pump island and east of the former tank pit extending to South Pacific Street on the east and South 46th Street on the south. It is assumed to be down gradient from the former tank pit and cross gradient from the pump island.

Three borings were performed in this area to an average depth of 13 to 20 feet below ground surface. Boring location SB-25, located east of the former tank pit, reported elevated gasoline in soils concentrations (4,900 ppm) at 8 feet below grade, and non-detect at 13 feet below grade. This gasoline in soil concentration is the highest reported concentration measured on the Site.

Groundwater was encountered at two boring locations east of the former tank pit. The location the closest to the former tank pit (Boring SB 28) reported gasoline in water of 12,000 ppb, while the location further east (SB 25) reported gasoline in water of 18,000 ppb. This may indicate that the plume of groundwater contamination is increasing in concentration as it nears South Pacific Street.

- Due to the presence of elevated levels of gasoline and benzene in the water, and the presence of gasoline in the soils, excavation of the soils in this area is advisable.

- The groundwater gasoline concentrations indicate that the plume of contamination may extend off Site to the east, underneath the sidewalk and possibly South Pacific Street.

Area of Concern No.4 - Deep Perched Groundwater Zone:

The Department of Ecology *Further Action Determination* dated November 8, 2011, expressed a concern that even though the nearby information suggested that groundwater is located a depths greater than 100 feet below ground surface, a subsurface boring should be advanced to at least 40 feet below ground surface to "identify any perched zones of groundwater that may be present in the area." The Ecology Determination additional stated that "[i]f groundwater is found, it is recommended that temporary wells be completed with the boring and samples be collected and tested for the constituents of concern including the fuel additives 1-2 dibromoethane, 1-2 dichloroethane, and methyl tertiary-butyl ether."

- The investigation of Site conditions to 40 feet below ground surface has not been performed. Due to the presence of gasoline contamination in the Site groundwater, it is anticipated that Ecology will require such an investigation to be performed prior to the issuance of Site Closure.

ECOLOGY MODEL CLEANUP REQUIREMENTS

"Standard points of compliance have been established for the Site. The point of compliance for protection of groundwater is established in the soils throughout the Site. For soil cleanup levels based on human exposure via direct contact or other exposure pathways where contact with the soil is required to complete the pathway, the point of compliance is established in the soils throughout the Site from the ground surface to 15 feet below ground surface. In addition, the point of compliance for the groundwater is established throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth that could potentially be affected by the Site. Once the Site cleanup strategy has been executed, soil confirmation samples will need to be evaluated and approved by Ecology. Quarterly groundwater monitoring will be needed at the Site at least until four consecutive quarters of clean groundwater analytical results are attained."

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INTRODUCTION

Aerotech Environmental Consulting Inc., performed this Limited and Targeted Phase III Subsurface Investigation[3] of the subject Property described as *Calhoun's Service Station* located at 4540 Pacific Avenue, Tacoma, Washington. The objective of this Investigation was to evaluate the condition of the subsurface soils for the Recognized Environmental Conditions in the Areas of Concern to determine if the subject Property had in fact, been impacted by that specific Recognized Environmental Condition. On November 29, 2011, Ms. Karen Calhoun, representative of Calhoun Family LLC (owner of the subject Property) engaged Aerotech Environmental Consulting, Inc. to perform a *Limited and Targeted Environmental Investigation* of the Site – the Scope of Work of said Investigation as delineated in Service Agreement No. 2011-11-29.1. Additional Investigative work was authorized on January 28, 2012, in Service Agreement No. 2012-01-24.1, *Phase III Limited and Targeted Environmental Investigation.* The Site work was performed on February 1 & 2, 2012.

PROJECT SCOPE OF WORK

PHASE II LIMITED & TARGETED SUBSURFACE INVESTIGATION

Scope. By this Agreement and relative to environmental issues raised in the *Phase I Environmental Site Assessment* on September 15, 2011, Project No. 211 - 5306 and the *Limited and Targeted Phase II Subsurface Investigation* on December 1, 20011, Project No. 211 - 7002. Both reports were performed by Aerotech Environmental Consulting, Inc The Scope of Services on this Project is limited to:

SITE SUBSURFACE CHARACTERIZATION – Prior to the start of on Site boring activities, (1) a Ground Penetrating Radar Survey of the Area of Concern will be performed by properly trained third-party professionals; and (2) an on Site Utilities Locate will be performed by third-party professionals in addition to the Location Services performed the potentially affected public and private utilities.

AREA OF CONCERN NO.1: FORMER UNDERGROUND STORAGE TANK LOCATIONS – Objective to determine the likely presence of subsurface contamination originating from the former operations of three underground storage tanks located generally on the south side of the station building via a Limited and Targeted Subsurface Investigation. The Area of Concern (AOC") is located south of the station building to South 46th Street. Investigation may or may not delineate the extent of contamination. Scope of Work to include:

(i) soil explorations at Site AOC location to identify the existence of contamination as determined by the Scope of Work for Site-related constituents, including: (a) gasoline, and (b) fuel additives;

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[3] This Phase II Site Assessment is "targeted" as defined by the ASTM *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*, Designation E 1903-97 (Reapproved 2002); "an assessment performed in accordance with the process described in this [E 1903-97] practice, which addresses only certain *releases* or potential *releases*, or certain *target analytes*, at a property as selcted by the *User* but which does not address all *releases*, potential *releases*, and *target analytes*.[E 1903-97, § 3.1.43]"

(ii) borings at AOC locations to be performed to an average twelve to twenty foot depth below ground surface by powered drilling equipment. Total number of subsurface penetrations between six and seven;

(iii) independent laboratory analysis of at least six soil (or in the alternative groundwater) samples for COCs for State of Washington protocol THP-Gas and BTEX (Benzene, Toluene, Ethylbenzene, Xylene) via EPA SW-846 Method 8020;

(iv) independent laboratory analysis of at two soil (or in the alternative groundwater) samples for COCs for State of Washington protocol gasoline fuel additives;

(v) independent laboratory analysis of two soil (or in the alternative groundwater) samples for COCs for RCRA TCLP Lead via EPA SW-846 Method 6010/GFAA with prep EPA SW-846 Method 1311;

(vi) analytical response time 7 business days from sample submission, report preparation as delineated in the *Schedule* section of this Agreement;

(vii) a report of activities, observations, and findings will be prepared and delivered as agreed in the *Schedule* section of this Agreement;

(viii) site activities may produce soil spoils that will be drummed and left on-site. Management and disposal of this material is not the responsibility of Aerotech.

Groundwater Sampling Exclusions – It is possible that groundwater will be encountered during the subsurface boring activities; samples will be collected. As a result, groundwater well installation and permanent groundwater monitoring is excluded from the Scope of Work of this Proposal.

AREA OF CONCERN NO.2: LOCATION OF THE FORMER PUMP ISLAND – Objective to determine the likely presence of surface and/or subsurface contamination originating from location of the original two pump dispenser located on the east side of the station building via a Limited and Targeted Subsurface Investigation. The Area of Concern (AOC") is located along the eastern Property boundary. Investigation may or may not delineate the extent of contamination. Scope of Work to include:

(i) soil explorations at Site AOC location to identify the existence of contamination as determined by the Scope of Work for Site-related constituents, including: (a) gasoline and (b) diesel fuel;

(ii) borings at AOC locations to be performed to an average four to eight foot depth below ground surface by powered drilling equipment. Total number of subsurface penetrations between four and five;

(iii) independent laboratory analysis of at least four soil (or in the alternative groundwater) samples for COCs for State of Washington protocol THP-Gas and BTEX (Benzene, Toluene, Ethylbenzene, Xylene) via EPA SW-846 Method 8020;

(iv) independent laboratory analysis of at least one soil (or in the alternative groundwater) samples for COCs for State of Washington protocol gasoline fuel additives;

(v) independent laboratory analysis of one soil (or in the alternative groundwater) sample for COCs for State of Washington RCRA TCLP Lead via EPA SW-846 Method 6010/GFAA with prep EPA SW-846 Method 1311;

(vi) analytical response time 7 business days from sample submission, report preparation as delineated in the *Schedule* section of this Agreement;

(vii) a report of activities, observations, and findings will be prepared and delivered as agreed in the *Schedule* section of this Agreement;

(viii) site activities may produce soil spoils that will be drummed and left on-site. Management and disposal of this material is not the responsibility of Aerotech.

Groundwater Sampling Exclusions – It is possible that groundwater will be encountered during the subsurface boring activities; samples will be collected. As a result, groundwater well installation and permanent groundwater monitoring is excluded from the Scope of Work of this Proposal.

AREA OF CONCERN NO.3: HYDRAULIC LIFTS – Objective to determine the likely presence of subsurface contamination originating from operations of the two hydraulic lifts located inside the building via a Limited and Targeted Subsurface Investigation. The Area of Concern (AOC") is located inside the service bays. Investigation may or may not delineate the extent of contamination. Scope of Work to include:

(i) soil explorations at Site AOC location to identify the existence of contamination as determined by the Scope of Work for Site-related constituents, including hydraulic fluid;

(ii) borings at AOC locations to be performed to an average six to eight foot depth below ground surface by powered drilling equipment. Total number of subsurface penetrations between two and three;

(iii) independent laboratory analysis of at least two soil (or in the alternative groundwater) samples for COCs for State of Washington protocol THP-Diesel via EPA SW-846 Method 8020;

(iv) independent laboratory analysis of one soil (or in the alternative groundwater) sample for COCs for State of Washington PCB's;

(v) analytical response time 7 business days from sample submission, report preparation as delineated in the *Schedule* section of this Agreement;

(vi) a report of activities, observations, and findings will be prepared and delivered as agreed in the *Schedule* section of this Agreement;

(vii) site activities may produce soil spoils that will be drummed and left on-site. Management and disposal of this material is not the responsibility of Aerotech.

Groundwater Sampling Exclusions – It is possible that groundwater will be encountered during the subsurface boring activities; samples will be collected. As a result, groundwater well installation and permanent groundwater monitoring is excluded from the Scope of Work of this Proposal.

AREA OF CONCERN NO.4: FORMER UNDERGROUND WASTE OIL TANK and POSSIBLE REMOTE FILL LINES – Objective to determine the likely presence of subsurface contamination originating from the former location of the underground waste oil tank and possible remove fill lines located on the north exterior side of the station building a Limited and Targeted Subsurface Investigation. The Area of Concern (AOC") is located on the north side of the building and in the existing service bays. Investigation may or may not delineate the extent of contamination. Scope of Work to include:

(i) soil explorations at Site AOC location to identify the existence of contamination as determined by the Scope of Work for Site-related constituents, including: (a) gasoline and (b) diesel fuel;

(ii) borings at AOC locations to be performed to an average twelve to sixteen foot depth below ground surface by powered drilling equipment. Total number of subsurface penetrations between three and five;

(iii) independent laboratory analysis of at least three soil (or in the alternative groundwater) samples for COCs for State of Washington protocol THP-Gas and BTEX (Benzene, Toluene, Ethylbenzene, Xylene) via EPA SW-846 Method 8020;

(iv) independent laboratory analysis of at least three soil (or in the alternative groundwater) samples for COCs for State of Washington protocol THP-Diesel via EPA SW-846 Method 8020;

(v) independent laboratory analysis of one soil (or in the alternative groundwater) samples for COCs for Polynuclear Aromatic Hydrocarbons ("PAHs") via EPA Method 8270 SIMS;

(vi) independent laboratory analysis of one soil (or in the alternative groundwater) sample for COCs for State of Washington "MTCA Five Metals" via EPA SW-846 Method 6010/GFAA with prep EPA SW-846 Method 1311;

(vii) independent laboratory analysis of one sample for COCs for State of Washington protocol Chlorinated Volatile Organic Compounds by EPA Method No.SW-8260B/624 - "Short List Chlorinated Volatiles";

(viii) analytical response time 7 business days from sample submission, report preparation as delineated in the *Schedule* section of this Agreement;

(ix) a report of activities, observations, and findings will be prepared and delivered as agreed in the *Schedule* section of this Agreement;

(x) site activities may produce soil spoils that will be drummed and left on-site. Management and disposal of this material is not the responsibility of Aerotech.

Groundwater Sampling Exclusions – It is possible that groundwater will be encountered during the subsurface boring activities; samples will be collected. As a result, groundwater well installation and permanent groundwater monitoring is excluded from the Scope of Work of this Proposal.

AREA OF CONCERN NO.5: FORMER SOIL AERATION and POSSIBLE DISPOSAL LOCATION – Objective to determine the likely presence of subsurface contamination originating from the former aeration and disposal of previously excavated petroleum-impacted soils via a Limited and Targeted Subsurface Investigation. The Area of Concern (AOC") is located along the western Property boundary on the southern end. Investigation may or may not delineate the extent of contamination. Scope of Work to include:

(i) soil explorations at Site AOC location to identify the existence of contamination as determined by the Scope of Work for Site-related constituents, including: (a) gasoline and (b) diesel fuel;

(ii) borings at AOC locations to be performed to an average four to eight foot depth below ground surface by powered drilling equipment. Total number of subsurface penetrations between four and six;

(iii) independent laboratory analysis of at least four soil (or in the alternative groundwater) samples for COCs for State of Washington protocol THP-Gas and BTEX (Benzene, Toluene, Ethylbenzene, Xylene) via EPA SW-846 Method 8020;

(iv) independent laboratory analysis of two soil (or in the alternative groundwater) samples for COCs for State of Washington Lead via EPA SW-846 Method 6010/GFAA with prep EPA SW-846 Method 1311;

(v) analytical response time 7 business days from sample submission, report preparation as delineated in the *Schedule* section of this Agreement;

(vi) a report of activities, observations, and findings will be prepared and delivered as agreed in the *Schedule* section of this Agreement;

(vii) site activities may produce soil spoils that will be drummed and left on-site. Management and disposal of this material is not the responsibility of Aerotech.

Groundwater Sampling Exclusions – It is possible that groundwater will be encountered during the subsurface boring activities; samples will be collected. As a result, groundwater well installation and permanent groundwater monitoring is excluded from the Scope of Work of this Proposal.

AREA OF CONCERN NO.6: POSSIBLE SITE GROUNDWATER IMPACT– Objective to determine the likely presence of groundwater impacts originating from the former station operations via a Limited and Targeted Subsurface Investigation. The Area of Concern (AOC") is located adjoining the former underground tank pit. Investigation may or may not delineate the extent of contamination. Scope of Work to include:

(i) soil explorations at Site AOC location to identify the existence of contamination as determined by the Scope of Work for Site-related constituents, including: (a) gasoline, (b) diesel, and (c) fuel additives;

(ii) borings at AOC locations to be performed to an average forty foot depth below

ground surface by powered drilling equipment. Total number of subsurface penetrations is one;

(iii) independent laboratory analysis of at least one soil (or in the alternative groundwater) samples for COCs for State of Washington protocol THP-Gas and BTEX (Benzene, Toluene, Ethylbenzene, Xylene) via EPA SW-846 Method 8020;

(iv) independent laboratory analysis of at least one soil (or in the alternative groundwater) samples for COCs for State of Washington protocol THP-Diesel via EPA SW-846 Method 8020;

(v) independent laboratory analysis of one soil (or in the alternative groundwater) sample for COCs for gasoline fuel additives;

(vi) independent laboratory analysis of one soil (or in the alternative groundwater) sample for COCs for State of Washington "MTCA Five Metals" via EPA SW-846 Method 6010/GFAA with prep EPA SW-846 Method 1311;

(vii) analytical response time 7 business days from sample submission, report preparation as delineated in the *Schedule* section of this Agreement;

(viii) a report of activities, observations, and findings will be prepared and delivered as agreed in the *Schedule* section of this Agreement;

(ix) site activities may produce soil spoils that will be drummed and left on-site. Management and disposal of this material is not the responsibility of Aerotech.

Groundwater Sampling Exclusions – It is possible that groundwater will be encountered during the subsurface boring activities; samples will be collected. As a result, groundwater well installation and permanent groundwater monitoring is excluded from the Scope of Work of this Proposal.

PHASE III LIMITED & TARGETED SUBSURFACE INVESTIGATION

Scope. By this Agreement and relative to environmental issues raised in the *Phase I Environmental Site Assessment* performed by Aerotech Environmental Consulting, Inc., on November 28, 2011, Project No.211 - 5233; and the *Phase II Limited & Targeted Subsurface Investigation* performed by Aerotech Environmental Consulting, Inc., dated December 15, 2011, Project No.211 - 7002

Additionally, the Scope of Work follows the recommendations of the State of Washington Department of Ecology Southwest Regional Office regarding the subsurface investigation of former gasoline service stations.

The Scope of Services on this Project is limited to:

SITE SUBSURFACE CHARACTERIZATION – Prior to the start of on Site boring activities, (1) a Ground Penetrating Radar Survey of the Areas of Concern will be performed by properly trained third-party professionals; and (2) an on Site Utilities Locate will be performed by third-party professionals in addition to the Location Services performed th e potentially affected public and private utilities.

AREA OF CONCERN NO.1: FORMER UNDERGROUND STORAGE TANK LOCATIONS – Objective to **characterize** the subsurface contamination originating from the former operations of three underground storage tanks located generally on the south side of the station building via a Limited and Targeted Subsurface Investigation. The Area of Concern (AOC") is located south of the station building to South 46th Street. Investigation may or may not delineate the extent of contamination. Scope of Work to include:

(i) soil explorations at Site AOC location to identify the existence of contamination as determined by the Scope of Work for Site-related constituents, including: (a) gasoline; and (b) fuel additives

(ii) borings at AOC locations to be performed to an average fourteen to eighteen foot depth below ground surface by powered drilling equipment. Total number of subsurface penetrations between five and six;

(iii) independent laboratory analysis of at least eighteen soil (or in the alternative groundwater) samples for COCs for State of Washington protocol THP-Gas and BTEX (Benzene, Toluene, Ethylbenzene, Xylene) via EPA SW-846 Method 8020;

(iv) independent laboratory analysis of at least four soil (or in the alternative groundwater) samples for COCs for State of Washington protocol Fuel Additives (1-2 dibromoethane; 1-2 dichlorethane, and methyl tertiary-butyl ether ("MTBE"));

(v) independent laboratory analysis of four soil (or in the alternative groundwater) samples for COCs for RCRA TCLP Lead via EPA SW-846 Method 6010/GFAA with prep EPA SW-846 Method 1311;

(vi) analytical response time 7 business days from sample submission, report preparation as delineated in the *Schedule* section of this Agreement;

(vii) a report of activities, observations, and findings will be prepared and delivered as agreed in the *Schedule* section of this Agreement;

(viii) site activities may produce soil spoils that will be drummed and left on-site. Management and disposal of this material is not the responsibility of Aerotech.

Groundwater Sampling Exclusions – It is possible that groundwater will be encountered during the subsurface boring activities; samples will be collected. As a result, groundwater well installation and permanent groundwater monitoring is excluded from the Scope of Work of this Proposal.

AREA OF CONCERN NO.2: LOCATION OF THE FORMER PUMP ISLAND – Objective to characterize the subsurface contamination originating from location of the original two pump dispenser located on the east side of the station building via a Limited and Targeted Subsurface Investigation. The Area of Concern (AOC") is located along the eastern Property boundary. Investigation may or may not delineate the extent of contamination. Scope of Work to include:

(i) soil explorations at Site AOC location to identify the existence of contamination as determined by the Scope of Work for Site-related constituents, including: (a) gasoline and (b) fuel additives;

(ii) borings at AOC locations to be performed to an average four to ten foot depth below ground surface by powered drilling equipment. Total number of subsurface penetrations between eight and ten;

(iii) independent laboratory analysis of at least sixteen soil (or in the alternative groundwater) samples for COCs for State of Washington protocol THP-Gas and BTEX (Benzene, Toluene, Ethylbenzene, Xylene) via EPA SW-846 Method 8020;

(iv) independent laboratory analysis of at least two soil (or in the alternative groundwater) samples for COCs for State of Washington protocol Fuel Additives (1-2 dibromoethane; 1-2 dichlorethane, and methyl tertiary-butyl ether ("MTBE"));

(v) independent laboratory analysis of two soil (or in the alternative groundwater) samples for COCs for State of Washington RCRA TCLP Lead via EPA SW-846 Method 6010/GFAA with prep EPA SW-846 Method 1311;

(vi) analytical response time 7 business days from sample submission, report preparation as delineated in the *Schedule* section of this Agreement;

(vii) a report of activities, observations, and findings will be prepared and delivered as agreed in the *Schedule* section of this Agreement;

(viii) site activities may produce soil spoils that will be drummed and left on-site. Management and disposal of this material is not the responsibility of Aerotech.

Groundwater Sampling Exclusions – It is possible that groundwater will be encountered during the subsurface boring activities; samples will be collected. As a result, groundwater well installation and permanent groundwater monitoring is excluded from the Scope of Work of this Proposal.

SECTION I.
SITE DESCRIPTION

Site Exterior Description:

The subject of this Limited and Targeted Phase III Subsurface Investigation is comprised of two contiguous tax parcels located on the northwest corner of Pacific Avenue (State Route 509) and South 46th Street in Tacoma, Washington. The eastern Parcel – which houses the building – is approximately 0.17-acres; the western Parcel – an asphalt-paved storage yard – is approximately 0.10-acres. East 56th Street is two-thirds of a mile south; Interstate 5 is one mile west; and Interstate 705 is one and one-quarter of a mile north.

The subject Property is occupied by a tire sales and automotive repair facility operated as *Llantera Sinaloa Tire Sales & Service*.

The building is a concrete slab on grade, wood framed and sided structure facing east towards Pacific Avenue. On the south end of the east side of the building is the customer entrance into the service counter and customer waiting room. Adjoining on the north side is the two bay service shop, with access to each service bay via overhead roll up doors on the east and west ends of the bays. Each bay is equipped with an in-ground hydraulic lift. A recessed floor pipe is located adjoining each service bay, the pipes appear to have been used as remote fill pipes for the former underground waste oil tank.

Directly in front of the building to the east is the concrete base of the former pump dispenser island. Adjoining the south side of the station building is a large area of patched asphalt over the former location of the three underground storage tanks. The rear of the building is surrounded by a chain link security fence; this fenced storage contains well in excess of 1,000 used tires. The remainder of the Property is a combination of concrete and asphalt-paved surfaces.

The subject Property is located in a mixed-use commercial and residential area. To the north is a one-lane alley followed by single-family residences; to the south is South 46th Street followed by the Flowerland Store; to the east is Pacific Avenue followed by single-family residences; and to the west are single-family residences.

Site Development Description:

The subject Property was commercially developed prior to 1926 as the *Melvin Tveten Gasoline Station*. By 1951, the station was reconfigured as *Calhoun's Tourist Service Station*. In 1954, the existing building was demolished and a new station building constructed as *Calhoun's Richfield Oil*. A canopy was added in 1963.

In 1991, four underground tanks were removed from the Site and petroleum-impacted soils were encountered. In 2011 the Site entered the State of Washington Ecology Voluntary Cleanup Program; the initial Ecology determination requested Further Investigative Actions and Characterizations at the Site.

In 2005 the pumps were removed. The Site is currently operated as a tires sales and and automotive service business.

Site Observations and Reported Conditions:

No additional Recognized Environmental Conditions or concerns identified as potential impacts to the Property.

SECTION II.
FIELD WORK

Notifications - "Public" Utilities:

Due to the developmental nature of the Site, a "public" utilities notification was performed prior to the start of work. The "public" utilities notification was performed on November 23, 2011 by Aerotech Environmental Consulting, Inc.[4] to the Utilities Underground Location Center. Ticket number 11258856.

An additional "public" utilities notification was performed for the Phase III investigation performed on February 1, 2012.

Notifications - Private Utilities Location:

Due to the developmental nature of the Site, a "private" utilities notification was performed prior to the start of work. The Site exterior and building interior utilities were located by personnel engaged by Aerotech Environmental Consulting, Inc, and employed by Mountain View Utilities Detection Service, Inc., of Bonney Lake, Washington on December 1, 2011 and on February 1, 2012., prior to the start of the on Site drilling activities.

No unanticipated or unexpected situations were discovered or encountered during the "private" locating activities.

Ground Penetrating Radar Subsurface Investigation:

A Ground Penetrating Radar Study was performed in the Areas of Concern on December 1, 2011, February 1 and 2, 2012 by an independent third-party geophysical firm.

A Ground Penetrating Radar ("GPR") Study is a geophysical methodology which uses radar pulses to reflect off of subsurface structures and thus provide an image of the subsurface conditions and The possible presence of subsurface objects. The depth of GPR Survey is determined by the electrical conductivity of the ground and the survey equipment transmitting frequency, and is limited to eight to thirteen feet below ground surface. However, the presence of significant subsurface obstructions or concrete rebar may limit the depth and effectiveness of the accuracy of the object identification. Additionally, surficial obstructions may limit the depth and effectiveness of the accuracy of the object identification.

No further Recognized Environmental Concerns or issues were revealed.

Magnetometer Investigation:

Due to the nature of the anticipated Constituents of Concern, a magnetometer investigation was also performed prior to the initiation of the Site subsurface investigation by personnel from Mountain View Location, Inc.

Site Activities:

The *Limited & Targeted Phase III Subsurface Investigation* was performed on February 1 and 2, 2012, under contract with Aerotech Environmental Consulting, Inc. All the work was performed during normal business hours No unusual or unforeseen circumstances occurred during

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[4] Aerotech Environmental Consulting, Inc., was previously issued Contractor Identification Number 58972 by the non-profit Utilities Underground Location Center (www.callbeforeyoudig.com).

the Site activities.

The subsurface borings were performed by equipment owned by and operated by Licensed Drillers from ESN Northwest Drilling, Inc. The on Site drilling equipment was operated by personnel employed by ESN Northwest Drilling, Inc. The laboratory analytical services were performed by the ESN Northwest Chemistry Laboratories in Bellevue and Lacey, Washington.

Drilling and Excavation Activities:

Due to the nature of the Site surfaces and working spaces around the Areas of Concern, drilling operations employed both a Geoprobe© style direct push truck mounted drill rig (on December 1, 2011) and a motorized auger truck mounted drill rig (December 2, 2011, February 1 and 2, 2012) were employed for the Site work.

Groundwater Flow:

The principal aquifers in the Puget Sound Region occur in glacial drift, that along with finer grained interglacial sediments, underlies the basin lowland to depths of more than 1,00 feet. The sand and gravel units in the glacial drift form the principle aquifers. These aquifers receive ample recharge from the typically heavy precipitation characteristic of western Washington. The glacial drift in the Puget Sound region varies greatly in composition and water yielding capacity. Typically, wells in glacial drift that tap silt, clay, or till in the Region at approximately 75 to 100 feet below ground surface may have yields of 100 gallons or more per minute. Deeper wells tapping thick, saturated layers of highly permeable gravel and coarse sand, typically at depths greater than 250 feet below ground surface, can yield more than 1,000 gallons per minute. Based on topography the assumed general groundwater flow is to the north.

Sample Collection:

Samples were hand collected at locations and at depths as identified by the Aerotech Licensed Hydrogeologist. Samples were collected from two to twenty foot depths. A total of ninety-eight discrete samples were collected on December 1 and 2, 2011 for the *Limited & Targeted Phase II Subsurface Investigation*. Ninety-five soil samples and three water samples were obtained.

A total of seventy-nine discrete samples were collected on February 1 and 2, 2012 for the *Limited & Targeted Phase III Subsurface Investigation* . Seventy-five soil samples and four water samples were obtained.

In some situations the upper elevation sample was analyzed as being the most representative of surficial and subsurface conditions – considering the most likely source of possible contamination was surficial releases. In other locations, lower elevation samples were collected as representative of the assumed Site conditions.

Soils collected from each excavation location were physically observed for composition and odor. Samples were placed in sterile glass jars with teflon sealed lids. All sampling equipment for soil sampling, drive rods, and probes were decontaminated after each sampling point by washing with soapy distilled water and rinsing with distilled water. After washing, all external surfaces are wiped with clean paper towels. Plastic tubing is used only once.

Each sample was given a unique identifier number and placed in an iced cooler for sample preservation. A Chain of Custody recorded the collection and handling of every sample. As a result of the Site observations and recorded data, discrete soil and water samples were selected for laboratory analysis. The remaining soil samples were retained by the laboratory for analysis in the event that the groundwater or soil samples selected for laboratory analysis revealed elevated levels of constituents. Following the production of the initial Site sample results, followup laboratory

analysis was requested and performed for the subject Site.

When applicable, water samples were collected from temporary wells that utilized the soil boring locations. The groundwater were collected employing the insertion of sterile, slotted tubing to screen the boring penetration at the appropriate depths. Generally, sample locations were screened at the six to ten foot below ground surface depth range. A sample screening tubing was disposed of after a single use.

Sample Screening:

The soil samples are topically collected from each excavation location were recorded and decided in a field log. The soil samples are placed in sterile glass jars with resealabe Teflon lids. Each sample jar is sealed and labeled.

Equipment Decontamination:

All sample acquisition equipment was decontaminated before and after each boring to eliminate the potential for cross-contamination between subsurface borings, as required. Since sample media was primarily collected by virgin polyurethane tubes and clean latex gloves, sample equipment decontamination was not required; and all sampling equipment was single-use only.

Site Restoration:

Due to the nature of the site some boring locations required penetrating concrete slabs and asphalted areas making restoration was necessary. For boring locations on a concrete slab the boring hole was filled with bentonite slurry mixture, and the final 3 to 4 inches were filled with a cement mixture. For boring locations into an asphalt paved area was the hole was filled with bentonite slurry mixture, and the final 6 to 8 inches were filled with "cold patch" asphalt – a quick set asphalt that matched the surrounding surficial conditions.

SUMMARY OF SAMPLE ACQUISITION

A total of twenty-nine discrete sample acquisition locations were advanced in the Areas of Concern to a maximum depth of twenty-two feet below ground surface at the subject Property. The following is a detailed description of each boring location, observations made during the acquisition, sampling information, and the field screening process. lease refer to the Boring Location maps in the Appendix for detailed soil boring locations.

Sample Acquisition Area No. SB-01 -The Former Underground Waste Oil Tank (Southeast Corner):

The Area of Acquisition was located three feet north and four feet east of the northwest corner of the building. This location was on the on the site of the former underground waster oil storage tank. The tank was covered by a concrete slab. The slab was in poor condition with numerous cracks. Boring operations revealed the site was underlain by a brown silty sand without gravel followed by a tan silty sand with occasional gravel. Gravel became less common with depth. No Petroleum-like odors were detected. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 12 feet. Groundwater was not encountered.

Sample Acquisition Area No. SB-02 -The Former Underground Waste Oil Tank (Center):

The Area of Acquisition was located seven feet north and six feet east of the northwest corner of the building. This location was on the on the site of the former underground waste oil storage tank. The tank was covered by a concrete slab. The slab was in poor condition with numerous cracks. Boring operations revealed the site was underlain by a brown silty sand without gravel followed by a similar brown silty sand with occasional rock fragments. By the 12 foot depth there were no rock fragments only the brown silty sand. No Petroleum-like odors were detected . Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 12 feet. Groundwater was not encountered.

Sample Acquisition Area No. SB-03 - The Former Underground Waste Oil Tank (Northeast Corner):

The Area of Acquisition was located nine north and eight feet east of the northwest corner of the building. This location was on the on the site of the former underground waste oil storage tank. This tank was covered with by a concrete slab. The slab was in poor condition with numerous cracks. Boring operations revealed the site was underlain by a brown silty sand without gravel followed by a tan silty sand with occasional gravel. Gravel became less common with depth. No Petroleum-like odors were detected . Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 12 feet. Groundwater was not encountered.

Sample Acquisition Area No. SB-04 - North Hydraulic Lift:

The Area of Acquisition was located five feet south and nine feet east of the northwest corner of the building. This location was the on the site of the hydraulic lift inside garage area.

The boring location was covered by a concrete slab floor. Boring operations revealed the site was underlain by a brown silty sand without gravel followed by a dark brown silty sand with occasional gravel followed by a tan silty sand with occasional gravel. No Petroleum-like odors were detected. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 11 feet. Groundwater was not encountered.

Sample Acquisition Area No. SB-05 – South Hydraulic Lift:

The Area of Acquisition was located five north and nine feet east of the interior wall separating the garage area from the office area. This location was the on the site of the second hydraulic lift located inside the garage area. The boring location was covered with by a concrete slab floor. Boring operations revealed the site was underlain by a brown silty sand without gravel followed by a dark brown silty sand with occasional gravel followed by a tan silty sand with occasional gravel. No Petroleum-like odors were detected . Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 11 feet. Groundwater was not encountered.

Sample Acquisition Area No. SB-06 – Former Soil Aeration and Possible Disposal Location (North):

The Area of Acquisition was located three feet south and twelve feet east of the chain-link fence enclosing the tire storage area. This location was the on southwest side of the paved parking area. This area was used in a previous soil remediation action to store, aerate and possible disposal of previously excavated petroleum-impacted soils. The area was covered with asphalt. Boring operations revealed the site was underlain by a brown silty sand with gravel. No Petroleum-like odors were detected . Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 8 feet. Groundwater was not encountered.

Sample Acquisition Area No. SB-07 – Former Soil Aeration and Possible Disposal Location (Center):

The Area of Acquisition was located sixteen feet south of SB-06. This location was the on southwest side of the paved parking area. This area was used in a previous soil remediation action to store, aerate and possible disposal of previously excavated petroleum-impacted soils. The area was covered with asphalt. Boring operations revealed the site was underlain by a grey silty sand with gravel. No Petroleum-like odors were detected. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 8 feet. Groundwater was not encountered.

Sample Acquisition Area No. SB-08 – Former Soil Aeration and Possible Disposal Location (South):

The Area of Acquisition was located sixteen feet south of SB-07. This location was the on southwest side of the paved parking area. This area was used in a previous soil remediation action to store, aerate and possible disposal of previously excavated petroleum-impacted soils. The area is covered with asphalt. Boring operations revealed the site was underlain by a brown silty sand with gravel. No Petroleum-like odors were detected . Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 8 feet. Groundwater was not encountered.

Sample Acquisition Area No. SB-09 – Location of the Former Pump Island:

The Area of Acquisition was located fourteen feet north of SB-10 or thirteen feet east of the garage's door. This location was at the northwest corner of the former fuel pump island and was covered with concrete. Boring operations revealed the site was underlain by a grey silty sand gravel with occasional gravel. Petroleum-like odors were detected at approximately 6 feet below ground surface and continued to the 11 foot level. Groundwater was encountered at approximately the 6 foot depth. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 17 feet. Groundwater samples were collected.

Sample Acquisition Area No. SB-10 – Location of the Former Pump Island:

This location was northeast corner of the former fuel pump island and was covered with concrete. Boring operations revealed the site was underlain by a dark brown silty sand gravel with occasional gravel followed by a light brown silty sand with increasing gravel content. Petroleum-like odors were detected at approximately 14 feet below ground surface. Groundwater was encountered at approximately the 6 foot depth. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 16 feet. Groundwater samples were collected.

Sample Acquisition Area No. SB-11 – Location of the Former Pump Island:

The Area of Acquisition was located fifteen feet south of SB-10. This location was southeast corner of the former fuel pump island and was covered with concrete. Boring operations revealed the site was underlain by a brown silty sand with occasional gravel followed but a light brown silty sand with decreasing gravel with depth. No Petroleum-like odors were detected. Groundwater was encountered at approximately the 6.5 foot depth. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 17 feet. Groundwater samples were collected.

Sample Acquisition Area No. SB-12 – Location of the Former Pump Island:

The Area of Acquisition was located fourteen feet east of the southeast corner of the building. This location was at the southwest corner of the former fuel pump island and was covered with concrete. Boring operations revealed the site was underlain by a brown silty sand with occasional gravel followed but a tan light brown silty sand without gravel followed by a grey silty sand with no gravel. No petroleum-like odors were detected. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 17 feet. No groundwater was encountered.

Sample Acquisition Area No. SB-13 – Former Underground Storage Tank Locations:

The Area of Acquisition was located fifteen feet west of SB-15. This location on the northwest perimeter of the former gasoline underground storage tanks pit and was covered with asphalt. Boring operations revealed the site was underlain by a brown silty sand with occasional gravel. No petroleum-like odors were detected. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 22 feet. No groundwater was encountered.

Sample Acquisition Area No. SB-14 – Former Underground Storage Tank Locations:

The Area of Acquisition was located eleven feet south and five feet east of the southeast corner of the building. This location on the northeast perimeter of the former gasoline underground storage tanks pit and was covered with asphalt. Boring operations revealed the site was underlain by a grey silty sand without gravel. At 22 feet, the point of drilling termination, a layer of gravel was encountered. A petroleum-like odor was detected at the 14 foot below ground surface. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 22 feet. No groundwater was encountered.

Sample Acquisition Area No. SB-15 – Former Underground Storage Tank Locations:

The Area of Acquisition was located five feet south and fourteen feet east of the southeast corner of the building. This location on the northern side of the former gasoline underground storage tanks pit and was covered with asphalt. Boring operations revealed the site was underlain by a brown well sorted sand that could be imported fill followed by a grey silty sand without gravel. A petroleum-like odor was detected at the 14 foot below ground surface. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 18 feet. No groundwater was encountered.

Sample Acquisition Area No. SB-16 – Former Underground Storage Tank Locations:

The Area of Acquisition was located ten feet south of SB-15. This location is approximately in the center of the former gasoline underground storage tanks pit and was covered with asphalt. Boring operations revealed the site was underlain by a brown well sorted sand that could be imported fill followed by a brown silty sand and clay mix. No petroleum-like odor was detected. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 18 feet. No groundwater was encountered

Sample Acquisition Area No. SB-17 – Former Underground Storage Tank Locations:

The Area of Acquisition was located thirteen south of SB-16. This location is on the southern side of the former gasoline underground storage tanks pit and was covered with asphalt. Boring operations revealed the site was underlain by a brown well sorted sand that could be imported fill followed by a brown silty sand and clay mix. There was a slight petroleum-like odor detected at 14 feet below ground surface. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 18 feet. No groundwater was encountered

Sample Acquisition Area No. SB-18 – Former Underground Storage Tank Locations:

The Area of Acquisition was located thirteen south of SB-16. This location is on the southern side of the former gasoline underground storage tanks pit and was covered with asphalt. Boring operations revealed the site was underlain by a brown silty sand with occasional gravel followed by a grey silty sand without gravel. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 22 feet. No groundwater was encountered.

Sample Acquisition Area No. SB-19 – Former Underground Storage Tank Locations:

Boring operations revealed the site was underlain by a brown silty sand with occasional gravel followed by a tan silty sand without gravel. This could be imported fill. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 18 feet. No groundwater was encountered.

Sample Acquisition Area No. SB-20 – Former Underground Storage Tank Locations:

Boring operations revealed the site was underlain by a brown silty sand with occasional gravel at 4 feet, followed by a grey silty sand without gravel. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 18 feet. No groundwater was encountered.

Sample Acquisition Area No. SB-21 – Former Underground Storage Tank Locations:

Boring operations revealed the site was underlain by a brown silty sand without gravel, followed by a brown silty sand with gravel. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 18 feet. No groundwater was encountered.

Sample Acquisition Area No. SB-22 – Location of the Former Pump Island :

Boring operations revealed the site was underlain by a dark brown silty sand with gravel, followed by a brown silty sand with gravel. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 12 feet. Groundwater was encountered at 5 feet. A water sample was collected.

Sample Acquisition Area No. SB-23 – Location of the Former Pump Island :

Boring operations revealed the site was underlain by a brown silty sand without gravel, followed by a dark brown silty sand without gravel, followed by light brown silty sand without gravel. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 10 feet. Groundwater was encountered at 5 feet. There was a strong petroleum odor at 6 feet. A water sample was collected.

Sample Acquisition Area No. SB-24 – Location of the Former Pump Island :

Boring operations revealed the site was underlain by a brown silty sand without gravel, followed by a grey silty sand without gravel.. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 10 feet. No groundwater was encountered.

Sample Acquisition Area No. SB-25 – Southeast Corner Of The Site (Outside the Tank Pit):

Boring operations revealed the site was underlain by a brown silty sand without gravel, followed by a grey silty sand also without gravel. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 13 feet. Groundwater was encountered at 5 feet. A water sample was collected. There was a petroleum odor at both 10 and 13 feet.

Sample Acquisition Area No. SB- 26 – Location of the Former Pump Island :

Boring operations revealed the site was underlain by a dark brown silty sand without gravel, followed by a grey silty sand without gravel, followed by a grey silty sand. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 12 feet. No groundwater was encountered.

Sample Acquisition Area No. SB-27 –Location of the Former Pump Island :

Boring operations revealed the site was underlain by a brown silty sand without gravel, followed by a grey silty sand without gravel. Soil samples were collected at 2 foot intervals starting at 2 feet below ground surface with penetration terminated at 12 feet. No groundwater was encountered.

Sample Acquisition Area No. SB-28 – Southeast Corner Of The Site (Outside the Tank Pit):

Boring operations revealed the site was underlain by a brown silty sand without gravel, followed by a brown well sorted sand without gravel. Soil samples were collected at 2 foot intervals starting at 14 feet below ground surface with penetration terminated at 20 feet. No groundwater was encountered but there was water leakage that collected into the boring hole and a water sample was collected. There was a strong petroleum odor at 14 feet, a slight petroleum odor at 16 feet and no odor at 18 feet.

Sample Acquisition Area No. SB-29 – Near The Lamp Post In The Southeast Corner::

Boring operations revealed the site was underlain by a brown silty sand without gravel, followed by a brown silty sand with occasional gravel. Soil samples were collected at 2 foot intervals starting at 10 feet below ground surface with penetration terminated at 20 feet. No groundwater was encountered.

SECTION III.
ANALYTICAL RESULTS

ANALYSIS OF WATER SAMPLES:

Gasoline, Diesel & Oil (TPH) Constituents in Water:

All samples were compared to the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Sample Number	Date Analyzed	Gasoline Range Organics
SB-9-W	12-7-11	**12,000 ug/L**
SB-10-W	12-7-11	**4,300 ug/L**
SB-11-W	12-7-11	**1,500 ug/L**
SB-22-W	2-2-12	630 ug/L
SB-23-W	2-2-12	**11,000 ug/L**
SB-25-W	2-2-12	**18,000 ug/L**
SB-28-W	2-2-12	**12,000 ug/L**
MTCA Cleanup Levels		800/1,000 ug/L

* ug/L is the same as parts per billion ('ppb')

Fuel Additives in Water (Method 8260):

All samples were compared to the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Sample Number	Date Analyzed	MTBE	1,2 Dichloroethane
SB-28-W	2-2-12	ND	ND
MTCA Cleanup Levels		20 ug/L*	5 ug/L

* ug/L is the same as parts per billion ('ppb')

Ethylene Dichloroethane (EDC) in Water by Method 8011:

All samples were compared to the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels

Sample Number	Date Analyzed	Ethylene Dichloroethane
SB-28-W	2-2-12	ND
MTCA Cleanup Levels		0.01 ug/L*

* ug/L is the same as parts per billion ('ppb')

All samples were compared to the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Benzene, Toluene, Ethylbenzene & Xylenes (BTEX) Constituents in Water Concentrations:

All samples were compared to the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Sample Number	Date Analyzed	Benzene	Toluene	Ethylbenzene	Xylenes
SB-9-W	12-7-11	**5.8** ug/L	1.7 ug/L	5.2 ug/L	2.3 ug/L
SB-10-W	12-7-11	2.8 ug/L	ND	2.6 ug/L	7.6 ug/L
SB-11-W	12-7-11	ND	ND	ND	ND
SB-12-W	12-7-11	ND	ND	ND	ND
SB-22-W	2-2-12	ND	ND	ND	ND
SB-23-W	2-2-12	ND	ND	ND	ND
SB-25-W	2-2-12	3.3 ug/L	1.6 ug/L	21 ug/L	15 ug/L
SB-28-W	2-2-12	**22g/L**	16g/L	130g/L	200g/L
MTCA Cleanup Levels		5.0 ug/L*	1,000 ug/L	700 ug/L	1,000 ug/L

* ug/L is the same as parts per billion ('ppb')

ANALYSIS OF SOIL SAMPLES:

Diesel & Oil (TPH) Constituents in Soil:

All samples were below the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Sample Number	Date Analyzed	Diesel Range Organics	Lube Oil Range Organics
SB-1-12	12-5-11	ND	ND
SB-2-12	12-5-11	ND	ND
SB-3-12	12-5-11	ND	ND
SB-4-11	12-5-11	ND	ND
SB-5-8	12-5-11	ND	ND
MTCA Cleanup Levels		2,000 mg/kg	2,000 mg/kg

* mg/kg is the same as parts per million ('ppm')

Gasoline (TPH) Constituents in Soil:

All samples were compared to the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Sample Number	Date Analyzed	Gasoline Range Organics
SB-1-12	12-8-11	ND
SB-2-12	12-8-11	ND
SB-3-12	12-8-11	ND
SB-4-11	12-8-11	ND
SB-5-8	12-8-11	ND
SB-6-4	12-8-11	ND
SB-7-4	12-8-11	ND
SB-8-4	12-8-11	ND
SB-9-8	12-8-11	99 mg/kg

SB-9-17	12-8-11	ND
SB-10-10	12-8-11	17
SB-10-16	12-9-11	ND
SB-11-17	12-9-11	ND
SB-12-8	12-9-11	36 mg/kg
SB-12-14	12-9-11	ND
SB-13-14	12-9-11	ND
SB-14-14	12-9-11	73 mg/kg
SB-14-17.5	12-9-11	ND
SB-15-14	12-9-11	66
SB-15-18	12-9-11	ND
SB-16-12	12-9-11	**150 mg/kg**
SB-16-18	12-9-11	15 mg/kg
SB-17-14	12-9-11	14 mg/kg
SB-17-18	12-9-11	ND
SB-18-14	2-1-12	ND
SB-19-14	2-1-12	ND
SB-20-14	2-1-12	ND
SB-20-18	2-1-12	ND
SB-21-10	2-1-12	ND
SB-21-18	2-1-12	ND
SB-22-8	2-2-12	ND
SB-22-10	2-2-12	ND
SB-23-8	2-2-12	ND
SB-23-10	2-2-12	ND
SB-25-2	2-2-12	ND
SB-25-8	2-2-12	**4,900 mg/kg**
SB-25-13	2-2-12	ND
SB-26-8	2-2-12	ND

SB-27-8	2-2-12	ND
SB-27-14	2-2-12	ND
SB-28-14	2-2-12	ND
SB-28-18	2-2-12	ND
SB-29-12	2-2-12	ND
SB-29-18	2-2-12	ND
MTCA Cleanup Levels		30 / 100 mg/kg**

* mg/kg is the same as parts per million ('ppm')
** MTCA cleanup levels for gasoline without benzene is 100 mg/kg but for gasoline with benzene cleanup levels are 30 mg/kg. Refer to sample SB-9-W.

Benzene, Toluene, Ethylbenzene & Xylenes (BTEX) Constituents in Soil Concentrations:

All samples were compared to the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Sample Number	Date Analyzed	Benzene	Toluene	Ethylbenzene	Xylenes
SB-1-12	12-8-11	ND	ND	ND	ND
SB-2-12	12-8-11	ND	ND	ND	ND
SB-3-12	12-8-11	ND	ND	ND	ND
SB-4-11	12-8-11	ND	ND	ND	ND
SB-5-8	12-8-11	ND	ND	ND	ND
SB-6-4	12-8-11	ND	ND	ND	ND
SB-7-4	12-8-11	ND	ND	ND	ND
SB-8-4	12-8-11	ND	ND	ND	ND
SB-9-8	12-8-11	ND	ND	ND	ND
SB-10-10	12-8-11	ND	ND	ND	ND
SB-10-16	12-9-11	ND	ND	ND	ND
SB-11-17	12-9-11	ND	ND	ND	ND

SB-12-8	12-9-11	ND	ND	ND	ND
SB-12-14	12-9-11	ND	ND	ND	ND
SB-13-14	12-9-11	ND	ND	ND	ND
SB-14-14	12-9-11	ND	ND	ND	ND
SB-14-17.5	12-9-11	ND	ND	ND	ND
SB-15-14	12-9-11	ND	ND	0.14 mg/kg	0.64 mg/kg
SB-15-18	12-9-11	ND	ND	ND	0.07
SB-16-12	12-9-11	ND	ND	ND	ND
SB-16-18	12-9-11	ND	ND	ND	ND
SB-17-14	12-9-11	ND	ND	ND	ND
SB-17-18	12-9-11	ND	ND	ND	ND
SB-18-14	2-1-12	ND	ND	ND	ND
SB-19-14	2-1-12	ND	ND	ND	ND
SB-19-14	2-1-12	ND	ND	ND	ND
SB-21-10	2-1-12	ND	ND	ND	ND
SB-21-18	2-1-12	ND	ND	ND	ND
SB-20-14	2-1-12	ND	ND	ND	ND
SB-20-18	2-1-12	ND	ND	ND	ND
SB-22-8	2-2-12	ND	ND	ND	ND
SB-22-10	2-2-12	ND	ND	ND	ND
SB-22-8	2-2-12	ND	ND	ND	ND
SB-23-8	2-2-12	ND	ND	ND	ND
SB-23-10	2-2-12	ND	ND	ND	ND
SB-25-2	2-2-12	ND	0.08 mg/kg	0.56 mg/kg	0.58 mg/kg
SB-25-8	2-2-12	ND	ND	ND	ND
SB-25-13	2-2-12	ND	ND	ND	ND
SB-26-8	2-2-12	ND	ND	ND	ND
SB-27-8	2-2-12	ND	ND	ND	ND

SB-27-14	2-2-12	ND	ND	ND	ND
SB-28-14	2-2-12	ND	ND	ND	ND
SB-28-18	2-2-12	ND	ND	ND	ND
SB-29-12	2-2-12	ND	ND	ND	ND
SB-29-18	2-2-12	ND	ND	ND	ND
MTCA Cleanup Levels		0.03 mg/kg	7.0 mg/kg	6.0 mg/kg	9.0 mg/kg

* mg/kg is the same as parts per million ('ppm')

Analysis of Polynuclear Aromatic Hydrocarbons (PAH's) in Soil by Method 8270:

All samples were below the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Sample Number	Date Analyzed	PAHs
SB-2-12	12-7-11	ND

* mg/kg is the same as parts per million ('ppm')

Analysis of Chlorinated Volatile Organic Compounds (VOC's) in Soil by Method 8260CL:

All samples were below the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Sample Number	Date Analyzed	VOCs
SB-2-12	12-8-11	ND

* mg/kg is the same as parts per million ('ppm')

MTCA 5 Metals in Soil Concentrations by Method 6020:

All samples were below the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Sample Number	Date Analyzed	Lead	Cadmium	Chromium	Arsenic	Mercury
SB-2-12	12-8-11	ND	ND	**32 mg/kg****	ND	ND
MTCA Cleanup Levels		250 mg/kg	2.0 mg/kg	19 / 2,000 mg/kg	20.0 mg/kg	2.0 mg/kg

* mg/kg is the same as parts per million ('ppm')
** sample was tested for Hexavalent Chromium on 12-9-11. Refer to the chart below.

Hexavalent Chromium in Soil Concentrations by Method SM3500Cr-D/SW846 7196A:

All samples were below the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Sample Number	Date Analyzed	Hexavalent Chromium
SB-2-12	12-9-11	ND
MTCA Cleanup Levels		19 mg/kg

Analysis of Lead in Soil by Method 8260:

All samples were below the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Sample Number	Date Analyzed	Lead
SB-6-4	12-7-11	78 mg/kg
SB-9-8	12-7-11	ND
SB-15-14	12-7-11	ND
MTCA Cleanup Levels		250 mg/kg

* mg/kg is the same as parts per million ('ppm')

Analysis of Polychlorinate Biophenyls (PCB's) in Soil by Method 8082:

All samples were below the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use cleanup levels.

Sample Number	Date Analyzed	PCB's
SB-2-12	December 9, 2011	ND
MTCA Cleanup Levels		1.0 mg/kg

* mg/kg is the same as parts per million ('ppm')

APPLICABLE ANALYTICAL METHODOLOGIES AND PARAMETERS

The analysis parameters requested were chosen to provide a comprehensive characterization of the subsurface soils and/or water present at the Site Areas of Concern and to comply with State of Washington recommended analysis parameters.

Analytical Methodology:

Gasoline Range Organics
Northwest Total Petroleum Hydrocarbons (Method NWTPH-Gx)

Diesel & Oil Range Organics
State of Washington NWTPH-Dx/Dx Extended

Residual Range Organics
State of Washington NWTPH-Dx/Dx Extended

Volatile Organic Compounds
EPA Method 8260B

Laboratory Analysis:

Laboratory analysis was provided by:

ESN Northwest Chemistry Laboratory
1210 Eastside Street S.E., Suite No.200
Olympia, Washington 98501
(360) 459-4670

SECTION IV.
CONCLUSIONS

- **Conclusions:**

Area of Concern No.1 - Former Underground Storage Tank Pit.

The original tank excavation appears to have varied from 12 to 14 feet below ground surface. This Phase III Investigation identified levels of gasoline in the soils above the Model Toxics Control Action ("MTCA") most stringent Cleanup Levels in the center of the former tank pit of 150 parts per million ("ppm") at 12 feet below grade; however at 18 feet below grade the gasoline was non-detect.
Two boring locations adjoining the north edge of the former tank identified gasoline concentrations of 73 ppm and 66 ppm at 14 feet below grade; however these locations were both non-detect at 18 feet below grade. The MTCA Cleanup Level for gasoline is 100 ppm when no benzene is present, and 30 ppm when benzene is present. The soils in the tank pit are all non-detect for benzene; however, the groundwater samples collected to the east of the tank pit – in the assumed downgradient location – exhibited levels of benzene above the MTCA Cleanup Level. Groundwater was not encountered at any of the boring locations inside the former tank pit.

Area of Concern No.2 - Former Pump Island:

The area adjoining the former dispenser island has never been excavated. Borings around the former pump island revealed gasoline presence in the soils between 36 and 99 ppm at 8 feet below grade; however gasoline in soil was non-detect at 10 to 17 feet below grade. Benzene was non-detect at all of the boring locations.

Groundwater was encountered at three of the four boring locations adjoining the pump island, and at two boring locations between the pump island and the sidewalk to the east (assumed down gradient location) varying from 5 to 6.5 feet below ground surface. Based upon observed Site conditions, it is likely this water is actually perched within the area of the original pump island installation excavation, and may not be representative of overall Site groundwater conditions.

The groundwater gasoline concentrations around the pump island were 1,500, 4,300, and 12,000 parts per billion ("ppb"); the MTCA Cleanup Level is 800 ppb since benzene was also identified in the groundwater. The assumed down gradient boring located adjoining the sidewalk reported 11,000 ppb gasoline.

It is possible that the source of contamination may be both the historical leakage of the pumps and connecting piping, and the presence of abandoned piping with residual petroleum leakage.

Area of Concern No.3 - Southeastern Property Quadrant:

This Area of Concern is south of the pump island and east of the former tank pit extending to South Pacific Street on the east and South 46th Street on the south. It is assumed to be down gradient from the former tank pit and cross gradient from the pump island.

Three borings were performed in this area to an average depth of 13 to 20 feet below ground surface. Boring location SB-25, located east of the former tank pit, reported elevated gasoline in soils concentrations (4,900 ppm) at 8 feet below grade, and non-detect at 13 feet below grade. This gasoline in soil concentration is the highest reported concentration measured on the Site.

Groundwater was encountered at two boring locations east of the former tank pit. The location the closest to the former tank pit (Boring SB 28) reported gasoline in water of 12,000 ppb, while the located further east (SB 25) reported gasoline in water of 18,000 ppb. This may indicate that the plume of groundwater contamination is increasing in concentration as it nears South Pacific Street.

STATEMENT OF THE LICENSED GEOLOGIST

As stipulated in the Regulatory Code of the State of Washington Title 18, Chapter 18.220, the undersigned is a licensed Geologist in the State of Washington, and has met the statutory requirements of RCW § 18.220.060 for such licensing including, but not limited to, educational requirements, work and field experience, examination proficiency, and acceptance by the State Licensing Board.

The undersigned Licensed Geologist has supervised the geological work performed as described in attached Report – a majority of said work being performed by employees of the firm which employs undersigned Licensed Geologist – as delineated in RCW Title 18, Chapter 18.220, Paragraph 190.

Signature of:

Licensed Professional Geologist:
Licensed Professional Hydrogeologist:
Licensed Professional Engineering Geologist:

_____

Michael McGowan
State of Washington License No 1737

DEFINITIONS SPECIFIC TO LIMITED & TARGETED PHASE II ASSESSMENT

Background Concentration..... the concentration of a target analyte in groundwater, surface water, air, soil gas, sediment, or soil at a referenced location near a release or potential release area under investigation, which is not attributable to the release under investigation. Background samples may contain the target analyte, due to either naturally occurring or manmade sources, but not due to the release(s) in question. (See, E 1903-97, § 3.1.3).

Phase III Environmental Site Assessment.... This practice (ASTM E 1903-97, Reapproved 2002) defines a commercially practical process for sound Phase II investigation that includes sampling and chemical testing. Such Phase II investigation is performed, at a minimum, to confirm the actual presence of contamination in environmental media at a property where prior assessment had indicated that contaminants may occur due to releases or potential releases of substances to the environment at the property, or to demonstrate prior to property acquisition that contamination by targeted analytes is absent. (See, E 1903-97, § 1.1.1).

Phase III Environmental Site Assessment Limitations..... "This practice [ASTM E1903-97, Reapproved 2002] recognizes that the *Phase II ESA* process can be applied either to an overall assessment of a property with respect to all releases and potential releases at the property, or to an evaluation targeted to a specific release or potential release. It a property-wide assessment is not necessary to meet the particular *User* objective, then the Phase II investigation process described herein should be applied to generate sound information regarding the specific question of problem to be resolved. If a Phase II investigation does not address all releases and potential releases identified at a property, the report of the assessment must be denoted as a *"Targeted Phase II" Environmental Site Assessment*. [E 1903-97, § 1.1.3]"

Phase III Targeted Environmental Site Assessment.... This Phase II Site Assessment is "targeted" as defined by the ASTM *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*, Designation E 1903-97 (Reapproved 2002); "an assessment performed in accordance with the process described in this [E 1903-97] practice, which addresses only certain *releases* or potential *releases*, or certain *target analytes*, at a property as selcted by the *User* but which does not address all *releases*, potential *releases*, and *target analytes*.[E 1903-97, § 3.1.43]"

Prior Knowledge.... "This Standard Practice [ASTM E 1903-97, Reapproved 2002] assumes ... that all reasonably ascertainable information, including but not limited to prior Phase I Environmental Site Assessment Reports, will be considered in conducting a Phase II ESA and interpreting its results. [E 1903-97, § 1.1.2]."

Targeted Analytes.... substances that have been released or potentially have been released to environmental media at the site, and which are of interest in the context of the particular Phase II ESA and its objectives, the presence of which will be sought and concentrations of which will be quantified through field screening or chemical testing. (See, E 1903-97, § 3.1.63).

REPORT ENDNOTES

1.
This Phase II Site Assessment is "targeted" as defined by the ASTM *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*, Designation E 1903-97 (Reapproved 2002); "an assessment performed in accordance with the process described in this [E 1903-97] practice, which addresses only certain *releases* or potential *releases*, or certain *target analytes*, at a property as selcted by the *User* but which does not address all *releases*, potential *releases*, and *target analytes*.[E 1903-97, § 3.1.43]"

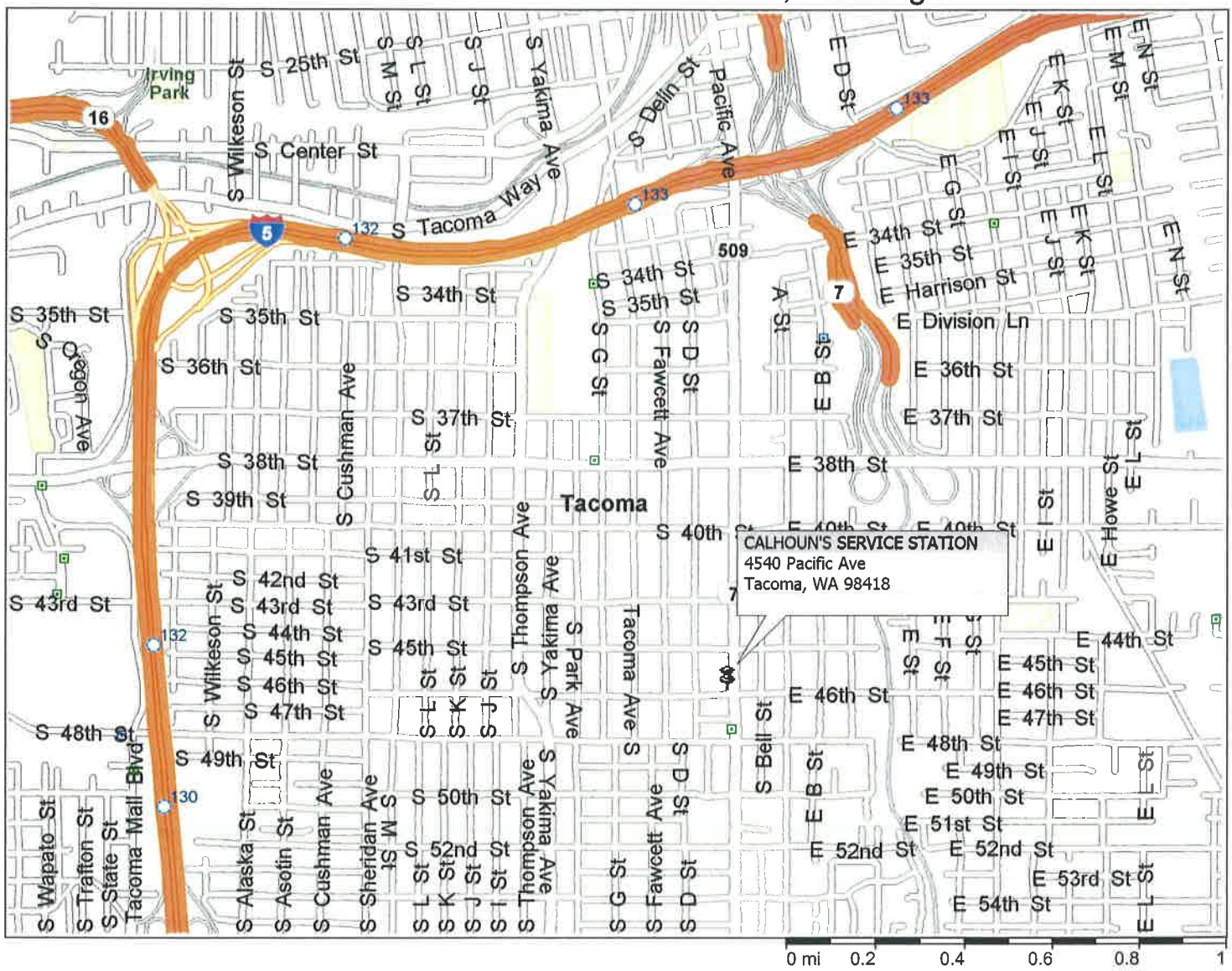
APPENDIX

- Site Location and Photographs
- Project Contract Documents
- Project Correspondence / Boring Logs
- Analytical Results
- Chain of Custody

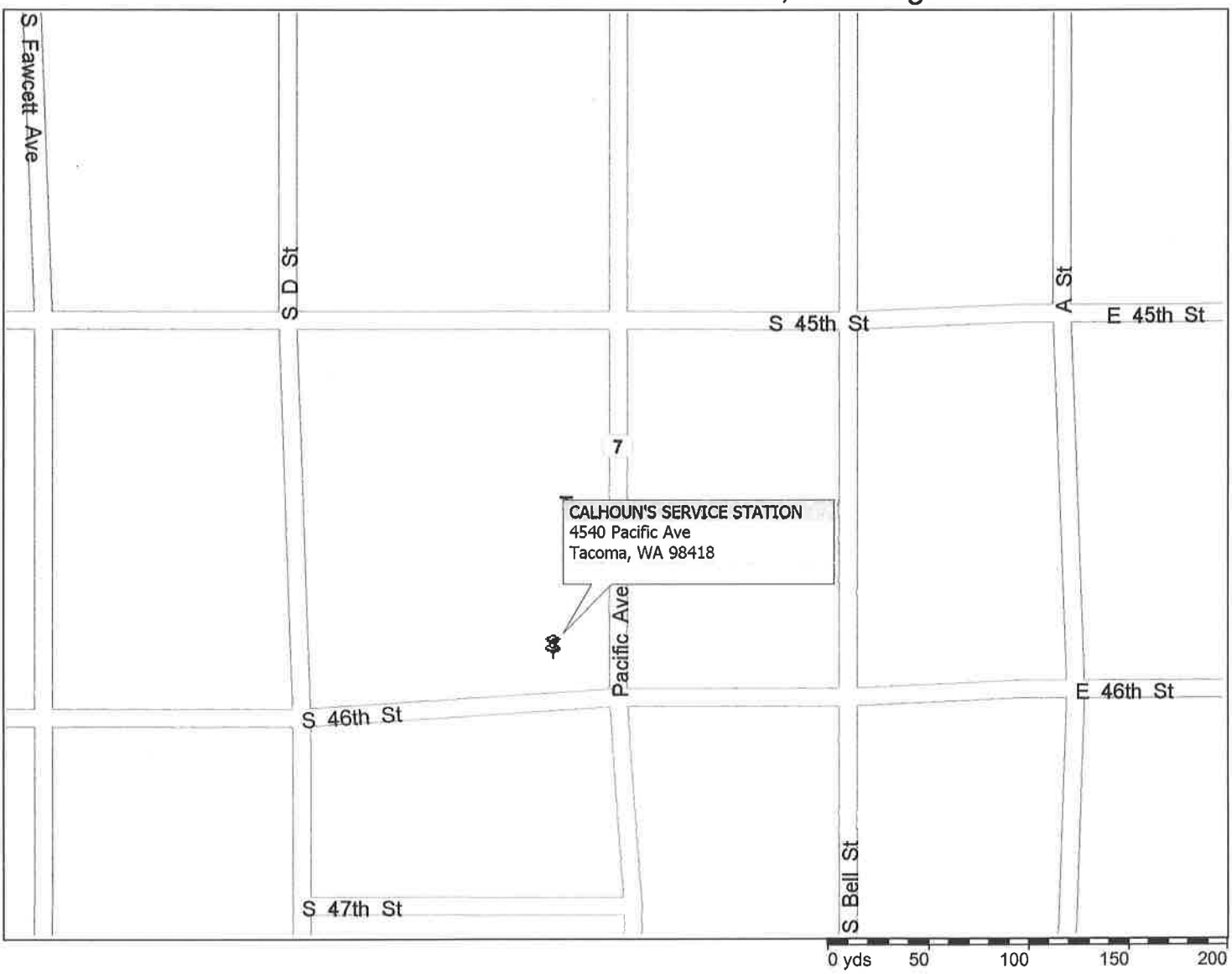
Site Location and Photographs

- Site Location and Photographs

Calhoun's Service Station - Tacoma, Washington

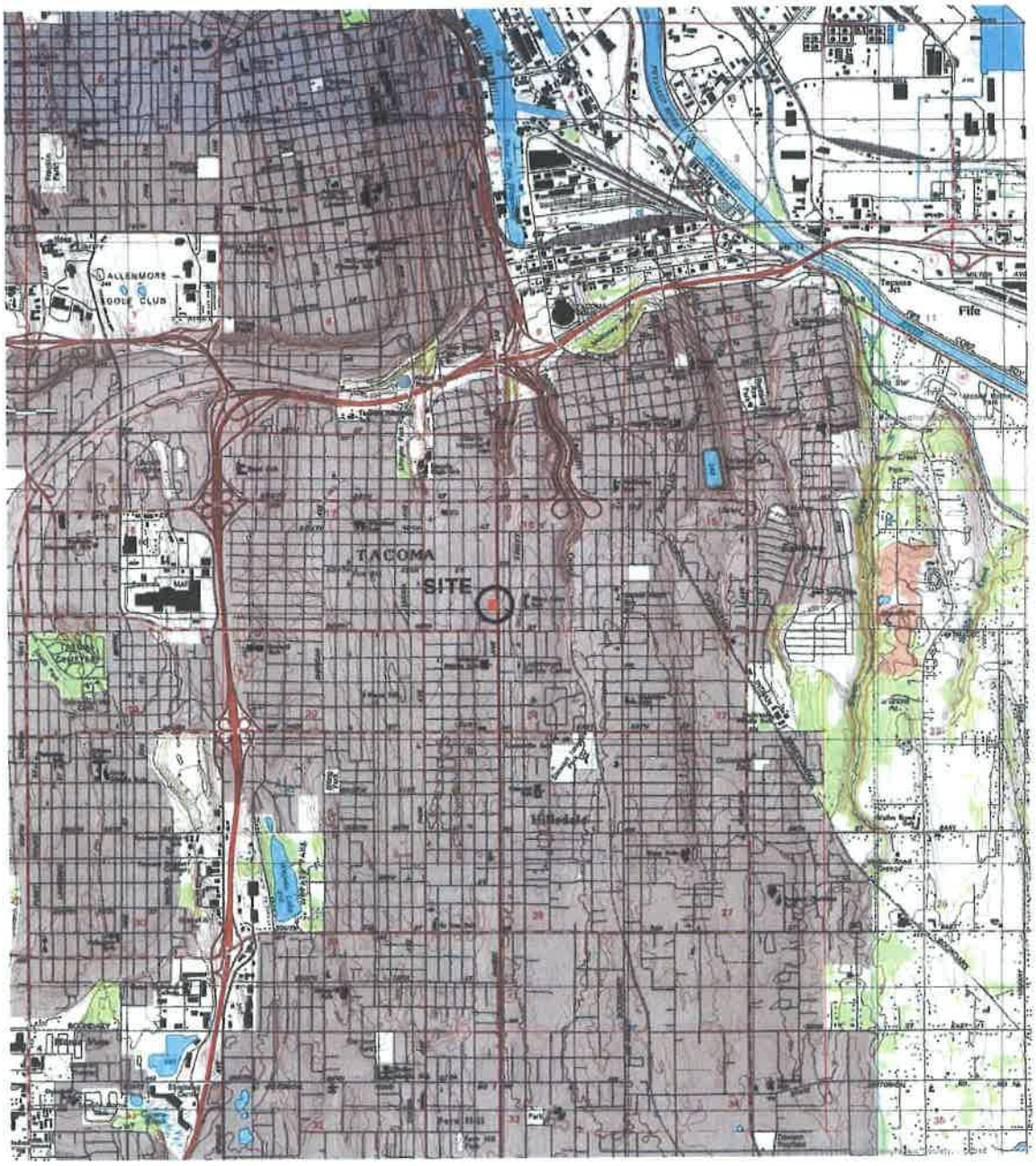


Calhoun's Service Station - Tacoma, Washington



Pushpins

My Pushpins



0.0 0.4 0.8

Scale in Miles

NORTH

Aerotech Environmental Consulting, Inc
19600 International Blvd., Ste. 101
Seattle, Washington

Drawing by McDermott | 5 Dec 2011

USGS Topographic Map

Calhoun Service Station
4540 Pacific Avenue, Tacoma, WA

Calhoun's Service Station
Phase 3 Investigation

Boring Location SB-14

Boring Location SB-22

Boring Location SB-24

Boring Location SB-26

Boring Location SB-25

Boring Location SB-29

- Project Contract Documents

AEROTECH ENVIRONMENTAL CONSULTING, INC.
Professional Service Agreement
Limited and Targeted
Phase III Environmental Investigation

Parties. This Agreement is made this 24th day of January, 2011 between:

CALHOUN FAMILY, LLC
P.O. Box ~~1929~~ 928
Tacoma, Washington 98401

subsequently referred to as "Client", and Aerotech Environmental Consulting, Inc., subsequently referred to as "Aerotech".

Subject Project. By joining in this Agreement, Client retains Aerotech to provide services in regard to the Project located at and referred to as:

Calhoun's Service Station
4540 Pacific Avenue
Tacoma, Washington 98418

Scope. By this Agreement and relative to environmental issues raised in the *Phase I Environmental Site Assessment* performed by Aerotech Environmental Consulting, Inc., on November 28, 2011, Project No.211 - 5233; and the *Phase II Limited & Targeted Subsurface Investigation* performed by Aerotech Environmental Consulting, Inc., dated December 15, 2011, Project No.211 - 7002

Additionally, the Scope of Work follows the recommendations of the State of Washington Department of Ecology Southwest Regional Office regarding the subsurface investigation of former gasoline service stations.

The Scope of Services on this Project is limited to:

SITE SUBSURFACE CHARACTERIZATION – Prior to the start of on Site boring activities, (1) a Ground Penetrating Radar Survey of the Areas of Concern will be performed by properly trained third-party professionals; and (2) an on Site Utilities Locate will be performed by third-party professionals in addition to the Location Services performed th e potentially affected public and private utilities.

AREA OF CONCERN NO. 1: FORMER UNDERGROUND STORAGE TANK LOCATIONS – Objective to characterize the subsurface contamination originating from the former operations of three underground storage tanks located generally on the south side of the station building via a Limited and Targeted Subsurface Investigation. The Area of Concern (AOC") is located south of the station building to South 46th Street. Investigation may or may not delineate the extent of contamination. Scope of Work to include:

(i) soil explorations at Site AOC location to identify the existence of contamination as determined by the Scope of Work for Site-related constituents, including: (a) gasoline; and (b) fuel additives

(ii) borings at AOC locations to be performed to an average fourteen to eighteen foot depth below ground surface by powered drilling equipment. Total number of subsurface penetrations between five and six;

(iii) independent laboratory analysis of at least eighteen soil (or in the alternative groundwater) samples for COCs for State of Washington protocol THP-Gas and BTEX (Benzene, Toluene, Ethylbenzene, Xylene) via EPA SW-846 Method 8020;

(iv) independent laboratory analysis of at least four soil (or in the alternative

groundwater) samples for COCs for State of Washington protocol Fuel Additives (1-2 dibromoethane; 1-2 dichlorethane, and methyl tertiary-butyl ether ("MTBE"));

(v) independent laboratory analysis of four soil (or in the alternative groundwater) samples for COCs for RCRA TCLP Lead via EPA SW-846 Method 6010/GFAA with prep EPA SW-846 Method 1311;

(vi) analytical response time 7 business days from sample submission, report preparation as delineated in the *Schedule* section of this Agreement;

(vii) a report of activities, observations, and findings will be prepared and delivered as agreed in the *Schedule* section of this Agreement;

(viii) site activities may produce soil spoils that will be drummed and left on-site. Management and disposal of this material is not the responsibility of Aerotech.

Groundwater Sampling Exclusions – It is possible that groundwater will be encountered during the subsurface boring activities; samples will be collected. As a result, groundwater well installation and permanent groundwater monitoring is excluded from the Scope of Work of this Proposal.

AREA OF CONCERN NO. 2: LOCATION OF THE FORMER PUMP ISLAND – Objective to characterize the subsurface contamination originating from location of the original two pump dispenser located on the east side of the station building via a Limited and Targeted Subsurface Investigation. The Area of Concern (AOC") is located along the eastern Property boundary. Investigation may or may not delineate the extent of contamination. Scope of Work to include:

(i) soil explorations at Site AOC location to identify the existence of contamination as determined by the Scope of Work for Site-related constituents, including: (a) gasoline and (b) fuel additives;

(ii) borings at AOC locations to be performed to an average four to ten foot depth below ground surface by powered drilling equipment. Total number of subsurface penetrations between eight and ten;

(iii) independent laboratory analysis of at least sixteen soil (or in the alternative groundwater) samples for COCs for State of Washington protocol THP-Gas and BTEX (Benzene, Toluene, Ethylbenzene, Xylene) via EPA SW-846 Method 8020;

(iv) independent laboratory analysis of at least two soil (or in the alternative groundwater) samples for COCs for State of Washington protocol Fuel Additives (1-2 dibromoethane; 1-2 dichlorethane, and methyl tertiary-butyl ether ("MTBE"));

(v) independent laboratory analysis of two soil (or in the alternative groundwater) samples for COCs for State of Washington RCRA TCLP Lead via EPA SW-846 Method 6010/GFAA with prep EPA SW-846 Method 1311;

(vi) analytical response time 7 business days from sample submission, report preparation as delineated in the *Schedule* section of this Agreement;

(vii) a report of activities, observations, and findings will be prepared and delivered as agreed in the *Schedule* section of this Agreement;

(viii) site activities may produce soil spoils that will be drummed and left on-site. Management and disposal of this material is not the responsibility of Aerotech.

Groundwater Sampling Exclusions – It is possible that groundwater will be encountered during the subsurface boring activities; samples will be collected. As a result, groundwater well installation and permanent groundwater monitoring is excluded from the Scope of Work of this Proposal.

Potential Client Reporting Responsibilities: As a result of State of Washington requirements under the Leaking Underground Storage Tank regulation and other environmental regulations, site owners and/or operators may have responsibility for notification to local, State, or Federal agencies of suspected releases. The Client is advised to make their own determination of the necessity for reporting under applicable regulations.

Potential Waste Disposal: Site activities may produce soil spoils that will be drummed and left on-site. Management and disposal of this material is not the responsibility of Aerotech.

Client's Responsibilities: As applicable to this Agreement the Client will (i) provide all information available to Client pertinent to the Project, including previous reports and any other data, and Aerotech may rely on such information without confirmation; (ii) provide rights of access or permission to enter the property or to enter upon public or private lands as required for Aerotech to perform its services under this Agreement; (iii) designate a person to act as the Client's Key Site Manager with respect to the services to be rendered under this Agreement; (iv) where applicable identify known underground utilities and subsurface structures; and (v) to supply Aerotech a steady and sufficient source of potable water and electrical power.

Conditions: Prior to the start of work, Aerotech will contact the appropriate Utility Locating Information Service for Excavators to request identification of underground utilities located at the Site. Aerotech cannot be held responsible for utilities not identified by Service, the owner, or owner's designee. The Scope of Work may include activities that require the use of heavy equipment which may cause damage to deciduous vegetation, shrubs, small trees, landscaped, or paved surfaces. The Scope of Work may include equipment that requires significant amounts of water for proper operation. While Aerotech will make an effort to avoid damage or impact, Aerotech cannot be held responsible for damages due to equipment operation, weight, or by water.

Representations and Warranties of Third Parties: Aerotech may rely without confirmation upon information provided by others and federal, state, and local agencies, pertinent to the project. When applicable, Aerotech will contact the Utility Locating Service prior to subsurface activities. Underground utilities not identified by the Locating Service or the Key Site Manager are not the responsibility of Aerotech.

Standard of Care/Warranty: Aerotech shall perform its services in accordance with generally accepted practices and standards prevailing in the locality of the Project current at the time the services are performed and not according to later standards.

Ownership and Use of Documents: Reports are prepared for the exclusive use by, and are the property of the Client, but may be used or referred to by Aerotech for like or similar work for others. Client shall hold harmless and indemnify Aerotech from and against any and all claims for damages arising out of, or in any way connected with, the use of reports by any person, corporation, agency or partnership not a party to this Agreement.

Successor and Assigns: Neither the Client nor Aerotech shall assign, sublet or transfer any rights under or interest in this Agreement without the written consent of the other and except to the extent that this limitation may be restricted by law. Nothing herein shall be construed to give any rights or benefits to anyone hereunder other than the Client or Aerotech.

Fee: This offer is valid for 30 days from the date of offering of this agreement. Aerotech agrees to provide the services described in this Agreement for the stipulated fee of:

Schedule of Fees:

Phase II Scope of Work:
Underground Private Utilities Locate
Ground Penetrating Radar:

Total Phase II Investigation:

Payment: Client shall pay to Aerotech the sum stipulated within 20 days of receipt of completed Report.

Schedule: Aerotech agrees to provide 2 copies of the report or document no later than 20 business days following receipt of this signed Professional Service Agreement at Aerotech offices.

Limitations: This Phase 3 Limited and Targeted Environmental Site Investigation is an intrusive examination of Site conditions. As such, it cannot be a full and complete assessment of every possible environmental condition. Adverse conditions may exist that could not be discovered by the Investigation; however, Aerotech has made every reasonable effort within the confines of the Scope of Work to discover and interpret the information and current conditions regarding the site within the time period available. This Assessment must not be regarded as a guarantee that no further contamination exists beyond what may have been suspected or detected by the Investigation. Any and all liability for damages, injury, or harm, either direct, indirect, or consequential are hereby limited to the direct damages or ten times the Aerotech fee for services, whichever is smaller. In no situation, will the Aerotech liability exceed the available insurance coverage available to Aerotech, and in effect at the time of the claim.

Authorized Representative: Client designates the undersigned or another as directed, as Client's authorized representative to act in Client's behalf with respect to the services to be performed by Aerotech.

Governing Law: This Agreement made under and shall be governed by and construed and enforced under the laws of the state of Washington, County of King. By signing this Agreement, the undersigned affirms possession of the required authority to executed this Agreement on behalf of the named parties.

~~Authorized by:~~ Accepted by.

AEROTECH ENVIRONMENTAL CONSULTING, INC.

(Signature)

~~Alan T. Blotch~~

President

1/28/12
(Date)

~~Accepted by:~~ Authorized by

~~CALHOUN FAMILY, LLC~~ AEROTECH Environmental Consulting LLC

(Signature)

~~Alan T. Blotch~~ Karen Calhoun

(Print name)

President

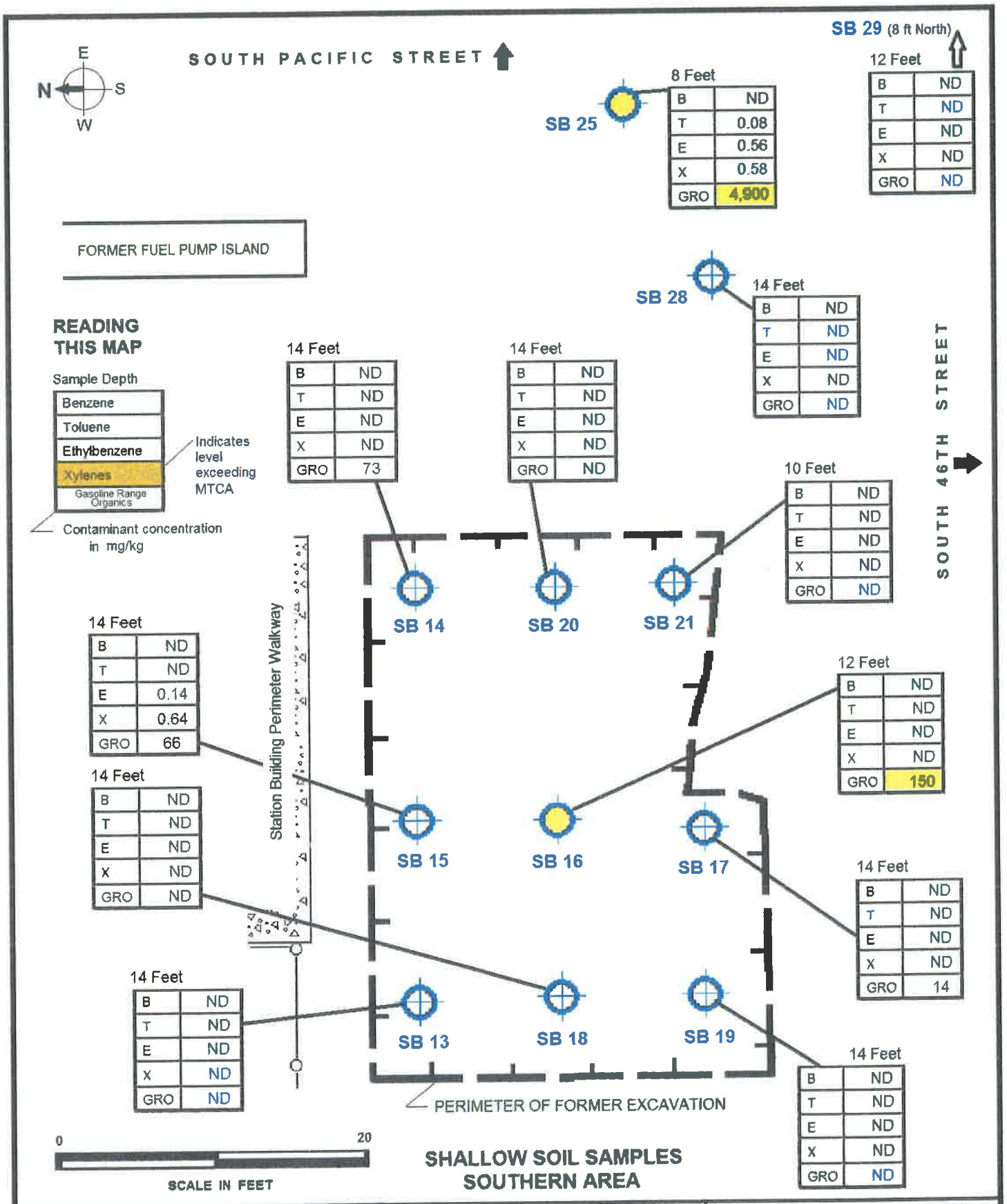
(Print title)

02/05/12
(Date)

Service Agreement No. 2012-01-24.1
AEROTECH ENVIRONMENTAL CONSULTING, INC.
19600 International Blvd., Suite 101
Sea Tac, Washington 98188
Phone: (360) 710-5899
Fax: (206) 402-3473

Boring Logs

- Project Correspondence & Boring Logs



Aerotech Environmental Consulting, Inc
19600 International Blvd., Ste. 101
Seattle, Washington

Drawing by McDermott · 22 Feb 2012

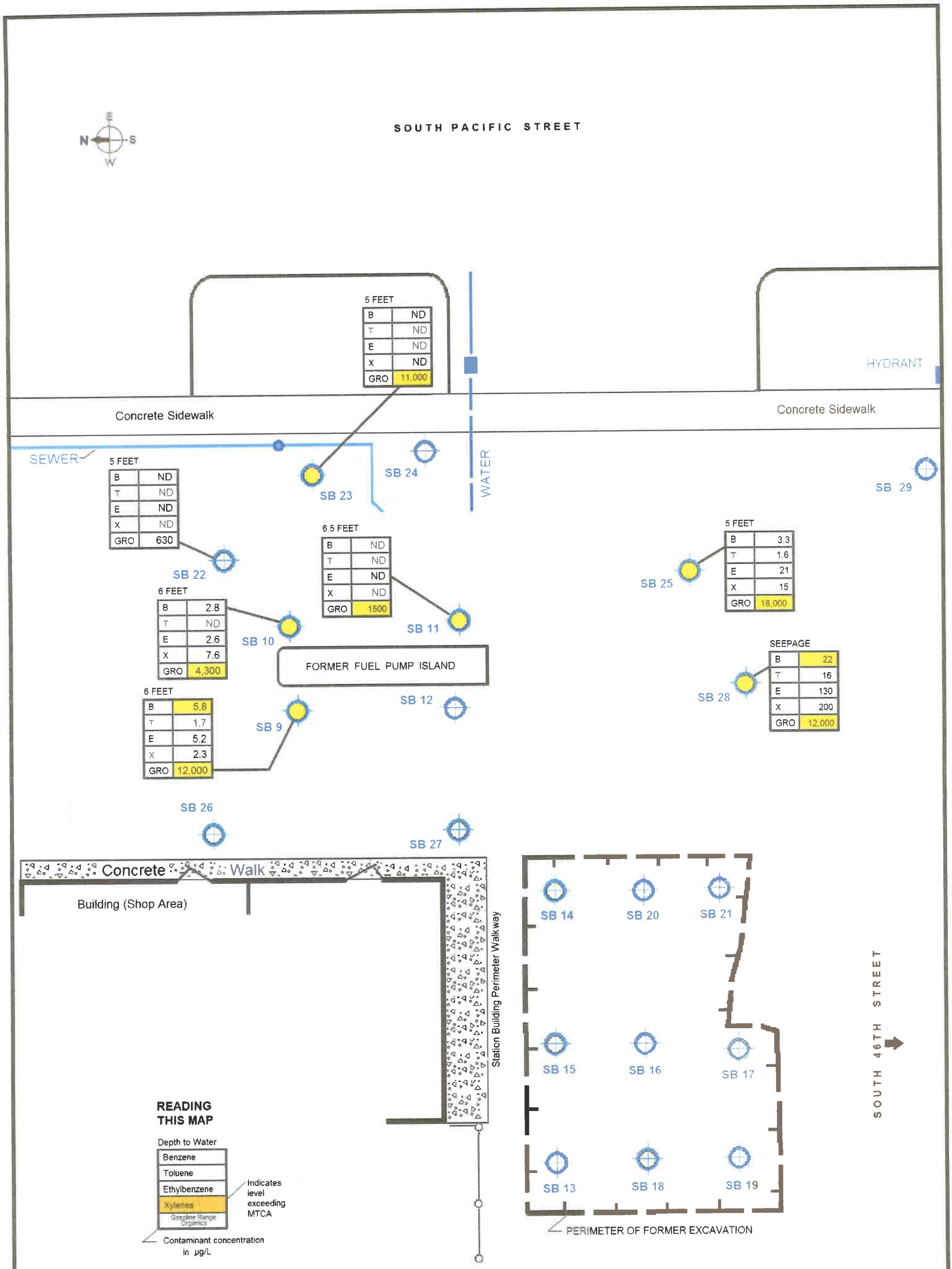
EXPLANATION

- PERIMETER OF FORMER EXCAVATION
- SEWER
- WATER
- FENCE
- SOIL BORING
- WATER FIXTURE

Boring Location Map

LAB RESULTS (SOIL 8 - 14 ft)

Calhoun Service Station
4540 Pacific Avenue, Tacoma, WA



Aerotech Environmental Consulting, Inc
19600 International Blvd. Ste. 101
Seattle, Washington

Drawing by McDermott 26 Feb 2012

EXPLANATION
PERIMETER OF FORMER EXCAVATION
SEWER
WATER
FENCE
SOIL BORING
WATER FIXTURE

WATER SAMPLES

0 20

SCALE IN FEET

Boring Location Map

LAB RESULTS (SOIL 10 - 17 ft)

Calhoun Service Station
4540 Pacific Avenue, Tacoma, WA

N E S W

SOUTH PACIFIC STREET

HYDRANT

Concrete Sidewalk

Concrete Sidewalk

SEWER

WATER

SOUTH 46TH STREET

FORMER FUEL PUMP ISLAND

Concrete Walk

Building (Shop Area)

Station Building Perimeter Walkway

SB 22		SB 23		SB 24	SB 29	SB 25	SB 10	SB 11	SB 9	SB 12	SB 28	SB 26	SB 27	SB 14	SB 20	SB 21	SB 15	SB 16	SB 17	SB 13	SB 18	SB 19
10 FEET		10 FEET			18 Feet	13 Feet	16 FEET	17 FEET	17 FEET	14 FEET	18 Feet	14 FEET		17.5 Feet	18 Feet	18 Feet	18 Feet	18 Feet	18 Feet			18 Feet
B	ND	B	ND		B ND	B ND	B ND	B ND	B ND	B ND	B ND	B ND		B ND	B ND	B ND	B 0.07	B ND	B ND			B ND
T	ND	T	ND		T ND	T ND	T ND	T ND	T ND	T ND	T ND	T ND		T ND	T ND	T ND	T ND	T ND	T ND			T ND
E	ND	E	ND		E ND	E ND	E ND	E ND	E ND	E ND	E ND	E ND		E ND	E ND	E ND	E ND	E ND	E ND			E ND
X	ND	X	ND		X ND	X ND	X ND	X ND	X ND	X ND	X ND	X ND		X ND	X ND	X ND	X ND	X ND	X ND			X ND
GRO	ND	GRO	ND		GRO ND	GRO ND	GRO ND	GRO ND	GRO ND	GRO ND	GRO ND	GRO ND		GRO ND	GRO ND	GRO ND	GRO ND	GRO 15	GRO ND			GRO ND

READING THIS MAP

Sample Depth

Benzene
Toluene
Ethylbenzene
Xylenes
Gasoline Range Organics

Indicates level exceeding MTCA

Contaminant concentration in mg/kg

PERIMETER OF FORMER EXCAVATION

Aerotech Environmental Consulting, Inc
19600 International Blvd. Ste 101
Seattle, Washington

Drawing by McDermott 23 Feb 2012

EXPLANATION

- PERIMETER OF FORMER EXCAVATION
- SEWER
- SOIL BORING
- WATER
- WATER FIXTURE
- FENCE

DEEP SOIL SAMPLES

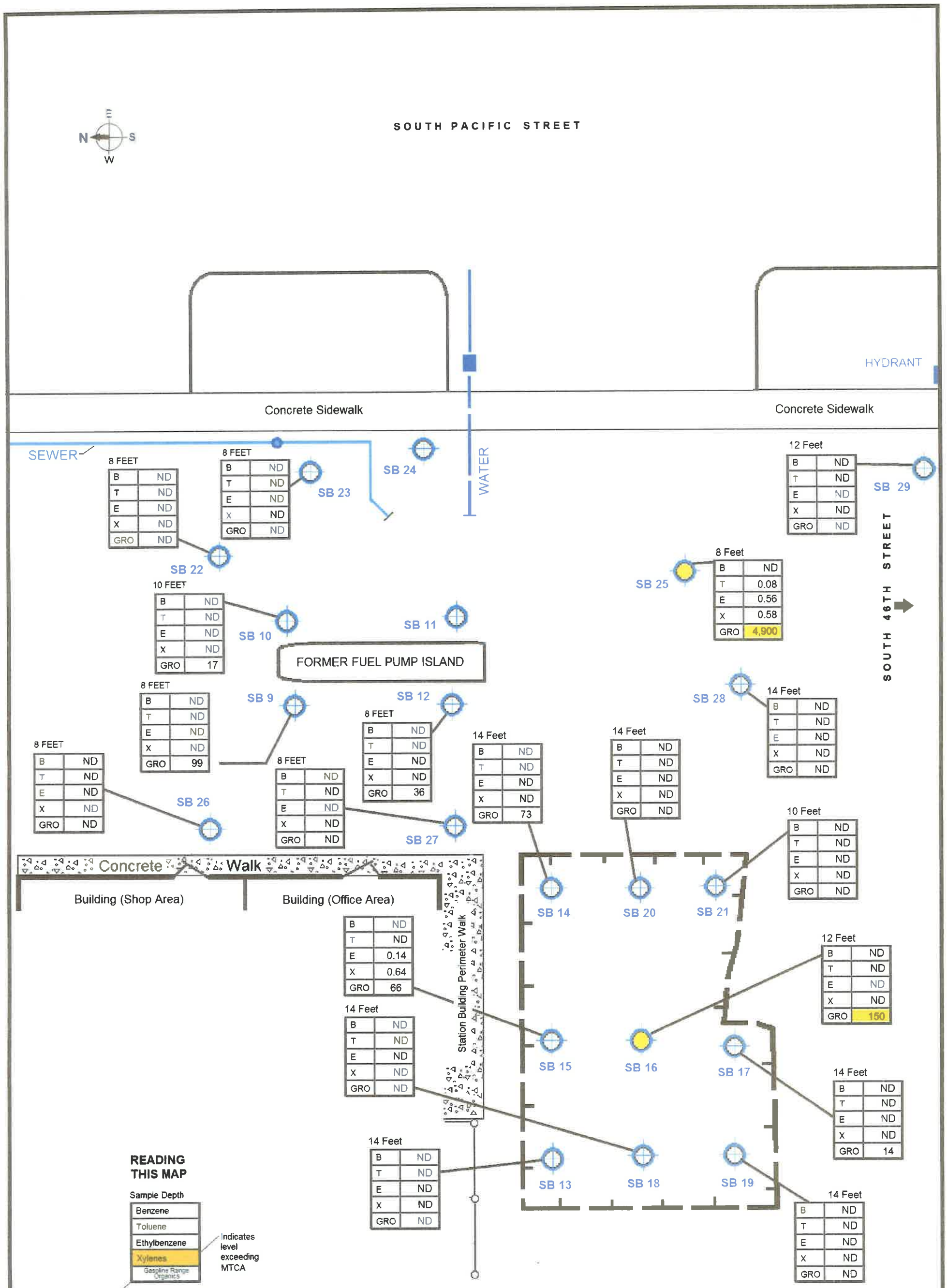
0 20

SCALE IN FEET

Boring Location Map

LAB RESULTS (SOIL 10 - 17 ft)

Calhoun Service Station
4540 Pacific Avenue, Tacoma, WA



READING THIS MAP

Sample Depth

Benzene
Toluene
Ethylbenzene
Xylenes
Gasoline Range Organics

Indicates level exceeding MTCA

Contaminant concentration in mg/kg

Aerotech Environmental Consulting, Inc
19600 International Blvd., Ste. 101
Seattle, Washington

Drawing by McDermott 22 Feb 2012

EXPLANATION

- PERIMETER OF FORMER EXCAVATION
- SEWER
- SOIL BORING
- WATER
- WATER FIXTURE
- FENCE

SHALLOW SOIL SAMPLES

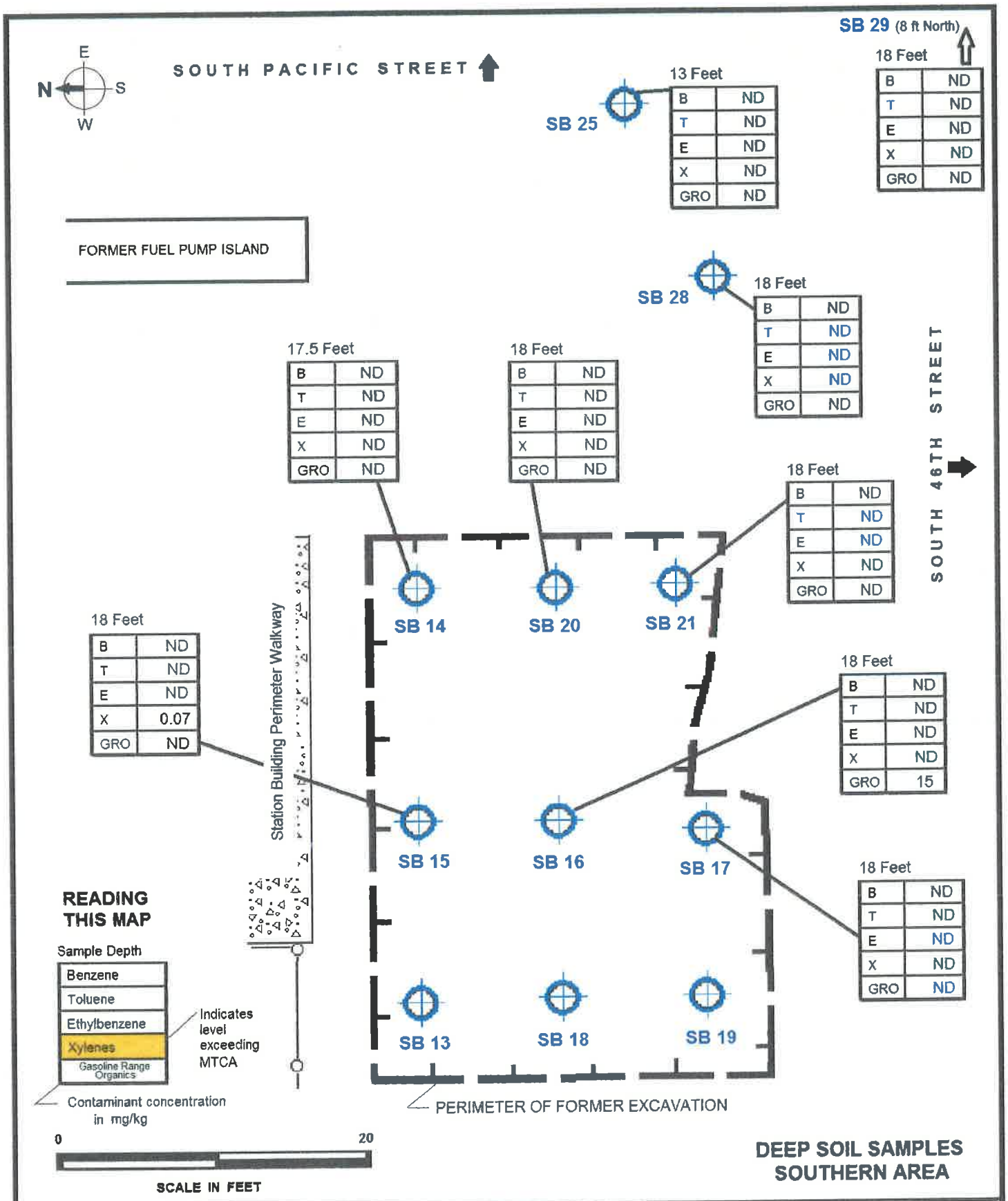
0 20

SCALE IN FEET

Boring Location Map

LAB RESULTS (SOIL 8 - 14 ft)

Calhoun Service Station
4540 Pacific Avenue, Tacoma, WA



Aerotech Environmental Consulting, Inc
19600 International Blvd., Ste. 101
Seattle, Washington

Drawing by McDermott : 22 Feb 2012

EXPLANATION
PERIMETER OF FORMER EXCAVATION
SEWER
SOIL BORING
WATER
WATER FIXTURE
FENCE

Boring Location Map
LAB RESULTS (SOIL 13-18 ft)
Calhoun Service Station
4540 Pacific Avenue, Tacoma, WA

AEROTECH

BORING LOG #: SB-1 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 211-7002
Location: 4540 Pacific Avenue
Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Geoprobe
Drillers Name: Don
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 12 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-1-11
End Date:

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	Dark Brown silty sand, no gravel (2 feet bgs). At 4' brown silty sand showing some 'clay' traits
5	4'			SM	
	6			SM	5-10' bgs: tan silty sand with large volume of silt (6 feet). At 8 feet the same tan silty sand.
7.5	8'			SM	
10	10			SM	10-15' bgs: Tan silty sand with occaional gravel. Increase in denseness with depth. Drilling terminated at 12 feet. No groundwater encounter.
12.5	12'			SM	
15					
17.5					
20					20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-2 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information
Drilling Contractor: ESN
Drilling Method: Geoprobe
Drillers Name: Don
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 12 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-1-11
End Date:

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	Brown silty sand, no gravel (2 and 4 feet bgs).
5	4'			SM	
7.5	6			SM	5-10' bgs: Brown silty sand, no gravel (6 and 8 feet bgs). Increase in denseness with depth. Some rock fragments at 8 feet
10	8'			SM	
12.5	10			SM	10-12' bgs: Brown silty sand, no gravel. Increase in denseness with depth. Drilling terminated at 12 feet. No groundwater encounter.
15	12'			SM	
17.5					
20					20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-3 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 211-7002
Location: 4540 Pacific Avenue
Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Geoprobe
Drillers Name: Don
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 12 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-1-11
End Date: 12-1-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	Brown silty sand, no gravel (2 feet bgs). Tan silty sand with a lot of silt content
	4'			SM	
5	6			SM	5-10' bgs: Tan silty sand, some rock fragments! (6 and 8 feet bgs).
7.5	8'			SM	
10	10			SM	10-12' bgs: Tan silty sand, some rock fragments. Increase in denseness with depth. Drilling terminated at 12 feet. No groundwater encounter.
12.5	12'			SM	
15					
17.5					
20					20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-4 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Geoprobe
Drillers Name: Don
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 11 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-1-11
End Date: 12-1-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	Brown silty sand, no gravel (2 feet bgs). Dark brown silty sand, no gravel (4 feet bgs)
5	4'			SM	
	6			SM	5-10' bgs: Brwon silty sand, clay like traits. Densier with depth (6 and 8 feet bgs).
7.5	8'			SM	
10				SM	10-12' bgs: Light brown silty sand, sncrease in denseness with depth. Drilling terminated at 11 feet. No groundwater encounter.
12.5	11			SM	
15					
17.5					
20					20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-5 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Geoprobe
Drillers Name: Don
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 11 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-1-11
End Date: 12-1-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	Brown silty sand, no gravel (2 and 4 feet bgs).
5	4			SM	
7.5	6			SM	5-10' bgs: Brwon silty sand, no gravel. (6 and 8 feet bgs).
10	8			SM	
12.5	11			SM	10-12' bgs: Light brown silty sand, increase in denseness with depth. Drilling terminated at 11 feet. No groundwater encounter.
15					
17.5					
20					20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-6 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Geoprobe
Drillers Name: Don
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 8 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-1-11
End Date: 12-1-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	Brown silty sand, occasional gravel (2 and 4 feet bgs).
5	4			SM	
7.5	6			SM	5-10' bgs: Brown silty sand, occasional gravel. (6 and 8 feet bgs). Drilling was terminated at 8 feet. No groundwater was encountered
10	8			SM	
12.5					10-12' bgs:
15					
17.5					
20					20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-7 Page 1 of 1

Project Name: Calhoun's Service St
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Geoprobe
Drillers Name: Don
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 8 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-1-11
End Date: 12-1-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	Brown silty sand, occasional gravel (2 and 4 feet bgs).
5	4			SM	
	6			SM	5-10' bgs: Brown silty sand, occasional gravel. (6 and 8 feet bgs). Drilling was terminated at 8 feet. No groundwater was encountered
7.5	8			SM	
10					10-12' bgs:
12.5					
15					
17.5					
20					20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-8 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information
Drilling Contractor: ESN
Drilling Method: Geoprobe
Drillers Name: Don
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 8 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-1-11
End Date: 12-1-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	There was no sample recovery at 2 feet. At 4 feet there was brown silty sand intermixed with gravel)
5	4			SM	
7.5	6			SM	5-10' bgs: Light brown silty sand, occasional gravel (6 feet bgs). At 8 feet tan silty sand, no gravel. Drilling was terminated at 8 feet. No groundwater was encountered
10	8			SM	
12.5					10-12' bgs:
15					
17.5					
20					20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-9 Page 1 of 1

Project Name: Calhoun's Service Su
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Geoprobe
Drillers Name: Don
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 17 feet
GW Encountered Yes
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-1-11
End Date: 12-1-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-4' bgs: Grey silty sand with occasional gravel (2' and 4')
5	4			SM	
	6			SM	5-10' bgs: Grey silty sand with occasional gravel (6' and 8'). Groundwater was at approximately 6 feet. There was a strong petroleum-like odor at approximatey 6 feet
7.5	8			SM	
10	11			SM	10-14' bgs: Grey silty sand with less gravel (11' and 15'). Petroleum-like odor present but less strong
12.5					
15	14			SM	
	15			SM	10-16' bgs: Grey silty sand some gravel, odor is gone. Drilling terminated at 17'. Groundwater was encountered at approximately 6 feet.
17.5	17			SM	
20					20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-10 Page 1 of 1

Project Name: Calhoun's Service St
Project Number: 211-7002
Location: 4540 Pacific Avenue
Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Geoprobe
Drillers Name: Don
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 16 feet
GW Encountered Yes
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-1-11
End Date: 12-1-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-5' bgs: Dark brown silty sand with occasional gravel (2' and 4')
5	4			SM	
7.5	6			SM	5-10' bgs: Dark brown silty sand with occasional gravel, less silt more sand (6'). At 8' there was light brown silty sand with occasional gravel. Groundwater was encountered at approximately 6'
10	8			SM	
12.5	10			SM	10-15' bgs: Light brown silty with occasional gravel (10'), light brown silty sand, no gravel. There was a slight petroleum-like odor (13' and 14').
15	13			SM	
17.5	14			SM	15-20 ' bgs: Light brown silty sand no gravel. There was a slight petroleum-like odor. Drilling terminated at 16' . Groundwater was encountered at approximately 6 feet.
20	16			SM	
22.5					20-25' bgs:
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-11 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information
Drilling Contractor: ESN
Drilling Method: Geoprobe
Drillers Name: Don
Borehole Diameter:
Sampler Type:

Event Information
Logged by: Michael W. McGowan
Boring Depth: 17 feet
GW Encountered Yes
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-1-11
End Date: 12-1-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-4' bgs: Brown silty sand with occasional gravel, there is less gravel at the 4' depth (2' and 4')
5	4			SM	
	6			SP	5-10' bgs: White porrly sorted sand with occasional gravel (6'). At 8' there was brown silty sand with no gravel. Groundwater was encountered at approximately 6.5'
7.5	8			SM	
10	11			SM	10-15' bgs: Light brown silty, no gravel (11' and 14').
12.5				SM	
15	14			SM	15-20 ' bgs: Light brown silty sand some gravel. Drilling terminated at 17' . Groundwater was encountered at approximately 6.5 feet.
	15			SM	
17.5	17				
20					20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-12 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 211-7002
Location: 4540 Pacific Avenue
Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Geoprobe
Drillers Name: Don
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 17 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-1-11
End Date: 12-1-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-5' bgs: Brown silty sand with occasional gravel (2') Tan silty sand with heavy silt content (4')
5	4			SM	
7.5	6			SM	5-10' bgs: Dark brown silty sand with occasional gravel (6'). At 8' there w as grey silty san, no gravel. Dense.
10	8			SM	
12.5	10			SM	10-15' bgs: Grey silty sand no gravel (10', 11' and 14')
15	11			SM	
17.5	14			SM	15-20 ' bgs: Grey silty sand no gravel. Drilling terminated at 17' . Groundwater was not encountered.
20	17				20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-13 Page 1 of 1

Project Name: Calhoun's Service St
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information
Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 18 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-2-11
End Date: 12-2-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-5' bgs: Brown silty sand with occasional gravel (2') Brown silty sand, no gravel (4')
5	4			SM	
	6			SM	5-10' bgs: Dark brown silty sand, more silt (6'). At 8' there was tan silty sand gravel
7.5	8			SM	
10	10			SM	10-15' bgs: Brown silty sand , high silt content (10'). At 14' there was brown silty sand
12.5				SM	
15	14			SM	15-20 ' bgs: brown silty sand, occasional gravel. Drilling terminated at 18' . Groundwater was not encountered.
17.5	18				
20					20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-14 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information
Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 22 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-2-11
End Date: 12-2-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5				SM	0-5' bgs: Brown silty sand with occasional gravel (4')
5	4			SM	
	6			SM	5-10' bgs: Brown silty sand, no gravel (8').
7.5	8			SM	
10				SM	10-15' bgs: no sample recovery at 12 feet. Grey silty sand at 14 feet. There was a slight petroleum-like odor
12.5	12				
15	14			SM	
17.5	16			SM	15-20 ' bgs: Grey silty sand, no gravel.
	17.5				
20	20				20-25' bgs:Grey silty sand, no gravel. At 22 feet there appeared to a layer of gravel. Drilling terminated at 22 feet due to refusal. Groundwater was not encountered
22.5	22				
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-15 Page 1 of 1

Project Name: Calhoun's Service St
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 18 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-2-11
End Date: 12-2-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5				SM	0-5' bgs: Brown silty sand with occasional gravel (4')
5	4			SM	
7.5				SM	5-10' bgs: Grey silty sand, no gravel (10', 12', and 14') There was a slight petroleum-like odor
10	10			SM	10-15' bgs: no sample recovery at 12 feet. Grey silty sand at 14 feet. There was a slight petroleum-like odor
12.5	12				
15	14			SM	
17.5	16			SM	15-20 ' bgs: Grey silty sand, no gravel (16' and 18') There was no odor. Drilling terminated at 18 feet. No groundwater was encountered
20	18				20-25' bgs:Grey silty sand, no gravel. Drilling terminated at 22 feet. Groundwater was not encountered
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-16 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information
Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 18 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-2-11
End Date: 12-2-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5				SM	0-5' bgs: No samples recovered
5				SM	
7.5	6			SM	5-10' bgs: Grey Brown silty sand, occasional gravel (6') Gravel is larger at the 8' level
10	8			SM	
12.5	10			SM	10-15' bgs: Brown silty sand with occasional gravel (10' and 12') At 14 feet there was grey silty sand with some clay fines.
15	12			SM	
17.5	14			SM	
20	16			SM	15-20 ' bgs: Grey silty sand, no gravel (16' and 18') Drilling terminated at 18 feet. No groundwater was encountered
22.5	18				
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-17 Page 1 of 1

Project Name: Calhoun's Service St
Project Number: 211-7002
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 18 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 12-2-11
End Date: 12-2-11

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5				SM	0-5' bgs: Brown silty sand
5	4				
7.5	6			GM	5-10' bgs: Gravel (6')
	8				
10	10			SM	10-15' bgs: Brown silty sand with occasional gravel (10' and 12'). At 14' there was grey silty sand, no gravel
12.5	12				
15	14			SM	15-20 ' bgs: Grey silty sand, no gravel (16' and 18') Drilling terminated at 18 feet. No groundwater was encountered
17.5	16				
	18				
20					20-25' bgs:
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-18 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 212-7008
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 22 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 2-1-12
End Date: 2-1-12

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
				SM	0-5' bgs: Brown silty sand at both 2 and 4 feet
2.5	2				
	4			SM	
5				SM	5-10' bgs: (8') Brown silty sand with more fines, at 8' feet Brown Silty sand with some gravel
7.5	6				
	8			SM	
10				SM	10-15' bgs: Grey sand, no gravel (10') and at (12' and at 14' there was Brown silty sand, no gravel
	10				
12.5	12			SM	
15	14			SM	
					15-20 ' bgs: Grey silty sand, no gravel (16' and 16')
17.5	16			SM	
	18			SM	
20					
	20			SM	20-25' bgs: at 20 ' and 22' feet Brown silty sand, no gravel. Drilling terminated at 22' feet. No groundwater was encountered
22.5	22			SM	
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-19 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 212-7008
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information
Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information
Logged by: Michael W. McGowan
Boring Depth: 18 feet
GW Encountered No
Static GW Level:
Notes:
MW Number:
Surface Elevation:
Start Date: 2-1-12
End Date: 2-1-12

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-5' bgs: Brown silty sand with some gravel at 2'. Tan silty sand, no gravel at 4 feet
5	4			SM	
7.5	6			SM	5-10' bgs: (6')Tan silty sand , no gravel; at 8' Tan Silty Sand, no gravel
	8			SM	
10	10			SM	10-15' bgs: Grey sand no gravel (10') and at (12' and at 14' Tan silty sand,some gravel
12.5	12			SM	
15	14			SM	
17.5	16			SM	15-20 ' bgs: Tan silty sand, no gravel (16' and 18') Drilling terminated at 18 feet. No groundwater was encountered
	18			SM	
20					
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-20 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 212-7008
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 18 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 2-1-12
End Date: 2-1-12

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-5' bgs: Brown silty sand , no gravel at 2'. Brown silty sand with gravel at 4 feet
5	4			SM	
7.5	6			SM	5-10' bgs: (6')Brown silty sand with gravel; at 8' Brown Silty Sand, no gravel
10	8			SM	
12.5	10			SM	10-15' bgs: Brown silty sand no gravel (10'). There was no sample recovery 12'. At 14' Grey silty sand.
15	12			SM	
17.5	14			SM	
20	16			SM	15-20 ' bgs: Grey silty sand, no gravel (16' and 18') Drilling terminated at 18 feet. No groundwater was encountered
22.5	18			SM	
25	20				
27.5	22				25-30' bgs:

AEROTECH

BORING LOG #: SB-21 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 212-7008
Location: 4540 Pacific Avenue
Tacoma, WA

Drilling Information
Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 18 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 2-1-12
End Date: 2-1-12

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-5' bgs: Brown silty sand , no gravel at 2'. Brown silty sand with occasional gravel at 4 feet
5	4			SM	
7.5	8			SM	5-10' bgs: at 8' Brown Silty Sand, more silt
10	10			SM	10-15' bgs: Brown silty sand no gravel (10'). There was no sample recovery 12'. At 14' Grey silty sand.
12.5					
15					
17.5	16			SM	15-20 ' bgs: Light Brown Silty Sand with gravel (16' and 18') Drilling terminated at 18 feet. No groundwater was encountered
	18			SM	
20	20				
22.5	22				
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-22 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 212-7008
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information
Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 12 feet
GW Encountered Yes
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 2-2-12
End Date: 2-2-12

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-5' bgs: Dark Brown silty sand with gravel at 2'. Brown silty sand with occasional gravel at 4 feet. Goundwater was encountered at 5'
5	4			SM	
	6			SM	5-10' bgs: at 6' and 8' Brown Silty Sand, more silt
7.5	8			SM	
10	10			SM	10-15' bgs: Brown silty sand no gravel (10'). There was no sample recovery 12'. Drilling terminated at 12 feet. Groundwater was encountered at 5'
12.5	12			SM	
15					15-20 ' bgs:
17.5					
20					
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-23 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 212-7008
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 10 feet
GW Encountered Yes
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 2-2-12
End Date: 2-2-12

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-5' bgs: Dark Brown silty sand no gravel at 2'. Grey silty sand no gravel at 4 feet. Goundwater was encountered at 5'
5	4			SM	
	6			SM	5-10' bgs: at 6' Dark Brown Silty Sand. At 8' Light Brown silty sand. There was a strong petroleum odor at 6'.
7.5	8			SM	
10	10			SM	10-15' bgs: Light Brown silty sand no gravel (10'). Drilling terminated at 10 feet. Groundwater was encountered at 5'
12.5					
15					15-20 ' bgs:
17.5					
20					
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-24 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 212-7008
Location: 4540 Pacific Avenue
Tacoma, WA

Drilling Information

Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 10 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 2-2-12
End Date: 2-2-12

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-5' bgs: No sample recovery at 2' due to possible encounter with a concrete pad. Brown sand sand no gravel at 4 feet.
5	4			SM	
7.5	6			SM	5-10' bgs: at 6' Brown Silty Sand. At 8' Grey silty sand (possible till).
10	8			SM	
12.5	10			SM	10-15' bgs: Grey silty sand no gravel at 10', possible till. Drilling terminated at 10 feet. No groundwater was encountered
15					15-20 ' bgs:
17.5					
20					
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-25 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 212-7008
Location: 4640 Pacific Avenue, Tacoma, WA

Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 13 feet
GW Encountered Yes
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 2-2-12
End Date: 2-2-12

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-5' bgs: 2' and 4' Brown silty sand. Groundwater encountered at 5'
5	4			SM	
7.5	6			SM	5-10' bgs: at 6' and 8' Brown Silty Sand. Petroleum odor at 6' and 8'
10	8			SM	
12.5	10			SM	10-15' bgs: Brown silty sand at 10' annd 13', possible till. Slight petroleum ordor at both 10' and 13'. Drilling terminated at 13 feet. Groundwater was encountered at 5'
15	13			SM	
17.5					15-20 ' bgs:
20					
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-26 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 212-7008
Location: 4540 Pacific Avenue
Tacoma, WA

Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 12 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 2-2-12
End Date: 2-2-12

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5	2			SM	0-5' bgs: at 2' dark brown silty sand and 4' Brown silty sand, no gravel.
5	4			SM	
	6			SM	5-10' bgs: at 6' and 8' Grey Silty Sand.
7.5	8			SM	
10	10			SM	10-15' bgs: Brown silty sand at 10' annd 12'. Drilling terminated at 12 feet. Groundwater was not encountered.
12.5	12			SM	
15					15-20 ' bgs:
17.5					
20					
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-27 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 212-7008
Location: 4540 Pacific Avenue, Tacoma, WA

Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 12 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 2-2-12
End Date: 2-2-12

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
					0-5' bgs: at 2' brown silty sand and 4' silty sand, no gravel.
2.5	2			SM	
5	4			SM	
	6			SM	5-10' bgs: at 6' brown silty sand and at 8' grey silty sand.
7.5	8			SM	
10	10			SM	10-15' bgs: light brown silty sand (possible till) at 10' and at 12' brown silty sand, at 14' grey silty sand.
12.5	12			SM	
15	14			SM	
	16			SM	15-20 ' bgs: at 16' grey silty sand. Drilling terminated at 16 feet. Groundwater was not encountered.
17.5					
20					
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-28 Page 1 of 1

Project Name: Calhoun's Service Station
Project Number: 212-7008
Location: 4640 Pacific Avenue, Tacoma, WA

Drilling Contractor: ESN
Drilling Method: Auger
Drillers Name:
Borehole Diameter:
Sampler Type:

Event Information

Logged by: Michael W. McGowan
Boring Depth: 20 feet
GW Encountered No
Static GW Level:
Notes:

MW Number:
Surface Elevation:
Start Date: 2-2-12
End Date: 2-2-12

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
2.5					0-5' bgs: No samples collected
5					5-10' bgs: No samples collected
7.5					
10					10-15' bgs: Brown well sorted sand. There was a strong petroleum odor
12.5					
15	14			SW	
17.5	16			SW	15-20 ' bgs: at 16' brown well sorted sand. A slight petroleum odor. At 18' brown silty sand, no odor. At 20' brown silty sand with some gravel. Drilling terminated at 20 feet. Groundwater was not encountered. There was leakage into the hole that allowed a water sample to be collected.
	18			SM	
20	20			SM	
22.5					
25					25-30' bgs:
27.5					

AEROTECH

BORING LOG #: SB-29 Page 1 of 1

Project Name:	Calhoun's Service St	**Drilling Contractor:**	ESN
Project Number:	212-7008	**Drilling Method:**	Auger
		Drillers Name:	
Location:	4540 Pacific Avenue Tacoma, WA	**Borehole Diameter:**	
		Sampler Type:	

Event Information

Logged by:	Michael W. McGowan	**MW Number:**	
Boring Depth:	20 feet	**Surface Elevation:**	
GW Encountered	No	**Start Date:**	2-2-12
Static GW Level:		**End Date:**	2-2-12
Notes:			

Depth (ft)	Sample Type/Number	Blow Counts	PID/FID Readings	USCS Classification	Soil Classification/ Description
					0-5' bgs: No samples collected
2.5					
5					5-10' bgs: at 10' brown silty sand
7.5					
10				SM	
					10-15' bgs: at 12' brown silty sand, at 14' brown silty sand with some gravel
12.5	12			SM	
15	14			SM	
					15-20 ' bgs: at 16' brown silty sand. At 18' and 20' brown silty sand with heavy gravel content. Drilling terminated at 20 feet. Groundwater was not encountered.
17.5	16			SM	
	18			SM	
20	20			SM	
22.5					
25					25-30' bgs:
27.5					

- Analytical Results

ESN NORTHWEST CHEMISTRY LABORATORY

Aerotech
CALHOUN'S SERVICE STATION PROJECT
Tacoma, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Gasoline Range Organics & BTEX in Soil by Method NWTPH-Gx/8260

Sample Number	Date Prepared	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline Range Organics (mg/kg)	Surrogate Recovery (%)
Method Blank	2/2/2012	2/2/2012	nd	nd	nd	nd	nd	112
LCS	2/2/2012	2/2/2012	98%	88%	91%	90%	107%	104
LCSD	2/2/2012	2/2/2012	99%	90%	95%	93%	—	110
SB-21-10	2/2/2012	2/2/2012	nd	nd	nd	nd	nd	113
SB-21-18	2/2/2012	2/2/2012	nd	nd	nd	nd	nd	116
Reporting Limits			0.02	0.05	0.05	0.15	10	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Bromoflurorbenzene) & LCS: 65% TO 135%

ESN NORTHWEST CHEMISTRY LABORATORY

Aerotech Consultants
CALHOUN'S SERVICE STATION PROJECT
Tacoma, Washington

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1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Gasoline Range Organics, BTEX in Water by Method NWTPH-Gx/8260

Sample Number	Date Analyzed	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	Gasoline Range Organics (ug/L)	Surrogate Recovery (%)
Method Blank	2/11/2012	nd	nd	nd	nd	nd	112
LCS	2/11/2012	99%	119%	106%	108%	79%	99
LCSD	2/11/2012	96%	97%	100%	115%	---	100
SB-22	2/11/2012	nd	nd	nd	nd	**630**	117
SB-23	2/11/2012	nd	nd	nd	nd	**11,000**	114
SB-25	2/11/2012	**3.3**	**1.6**	**21**	**15**	**18,000**	116
SB-28	2/11/2012	**22**	**16**	**130**	**200**	**12,000**	116
Trip Blank	2/11/2012	nd	nd	nd	nd	nd	114
Reporting Limits		1.0	1.0	1.0	3.0	100	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Bromoflurorbenzene) & LCS: 65% TO 135%

ESN NORTHWEST CHEMISTRY LABORATORY

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lab@esnnw.com

Analysis of Fuel Additives in Water by Method 8260

Sample Number	Date Analyzed	MTBE (ug/L)	1,2-Dichloroethane (ug/L)	Surrogate Recovery (%)
Method Blank	2/11/2012	nd	nd	112
LCS	2/11/2012	105%	107%	99
LCSD	2/11/2012	111%	108%	100
SB-28	2/11/2012	nd	nd	116
Trip Blank	2/11/2012	nd	nd	114
Reporting Limits		1.0	1.0	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Bromoflurorbenzene) & LCS: 65% TO 135%

ESN NORTHWEST CHEMISTRY LABORATORY

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Tacoma, Washington

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(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

EDB in Water by Method 8011

Sample Number	Date Prepared	Date Analyzed	1,2-Dibromoethane (EDB) (ug/L)	Surrogate Recovery (%)
Method Blank	2/9/2012	2/10/2012	nd	110
LCS	2/9/2012	2/10/2012	108%	99
LCSD	2/9/2012	2/10/2012	126%	111
SB-28	2/9/2012	2/10/2012	nd	70
Reporting Limits			0.02	

Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 35%

ESN NORTHWEST CHEMISTRY LABORATORY

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(360) 459-4670 (360) 459-3432 Fax
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Analysis of Gasoline Range Organics & BTEX in Soil by Method NWTPH-Gx/8260

Sample Number	Date Prepared	Date Analyzed	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Gasoline Range Organics (mg/kg)	Surrogate Recovery (%)
Method Blank	2/6/2012	2/9/2012	nd	nd	nd	nd	nd	116
LCS	2/6/2012	2/9/2012	89%	91%	92%	91%	101%	111
LCSD	2/6/2012	2/9/2012	84%	89%	94%	86%	---	112
SB-18-14	2/6/2012	2/9/2012	nd	nd	nd	nd	nd	109
SB-18-14 Duplicate	2/6/2012	2/9/2012	nd	nd	nd	nd	nd	110
SB-19-14	2/6/2012	2/9/2012	nd	nd	nd	nd	nd	110
SB-20-14	2/6/2012	2/9/2012	nd	nd	nd	nd	nd	112
SB-20-18	2/6/2012	2/9/2012	nd	nd	nd	nd	nd	113
SB-22-8	2/6/2012	2/9/2012	nd	nd	nd	nd	nd	112
SB-22-10	2/6/2012	2/9/2012	nd	nd	nd	nd	nd	108
SB-23-8	2/6/2012	2/9/2012	nd	nd	nd	nd	nd	107
SB-23-10	2/6/2012	2/9/2012	nd	nd	nd	nd	nd	108
SB-25-2	2/6/2012	2/9/2012	nd	nd	nd	nd	nd	112
SB-25-8	2/6/2012	2/9/2012	nd	**0.08**	**0.56**	**0.58**	**4900**	124
SB-25-13	2/6/2012	2/10/2012	nd	nd	nd	nd	nd	114
SB-25-13 Duplicate	2/6/2012	2/10/2012	nd	nd	nd	nd	nd	117
SB-26-8	2/6/2012	2/10/2012	nd	nd	nd	nd	nd	116
SB-27-8	2/6/2012	2/10/2012	nd	nd	nd	nd	nd	118
SB-27-14	2/6/2012	2/10/2012	nd	nd	nd	nd	nd	121
SB-28-14	2/6/2012	2/10/2012	nd	nd	nd	nd	nd	117
SB-28-18	2/6/2012	2/10/2012	nd	nd	nd	nd	nd	116
SB-29-12	2/6/2012	2/10/2012	nd	nd	nd	nd	nd	118
SB-29-18	2/6/2012	2/10/2012	nd	nd	nd	nd	nd	119
Reporting Limits			0.02	0.05	0.05	0.15	10	

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE (Bromoflurorbenzene) & LCS: 65% TO 135%

Calhoun's Service Station ..... February 6, 2012
4540 Pacific Avenue
Tacoma, Washington

Samples collected: February 1 & 2, 2012

All samples 5-day turn around

Water Samples - NWTPH-Gx/BTEX

SB-22
SB-23
SB-25
SB-28

Water Samples - Fuel Additives (MTBE / EDB / EDC 8260)
SB-28

Can we run additional fuel additives after we receive the initial gas water results?

Soil Samples - TPH Gas and BTEX

SB-18-14
SB-19-14
SB-20-14
SB-20-18
SB-22-8
SB-22-10
SB-23-8
SB-23-10
SB-24-2
SB-25-8
SB-25-13
SB-26-8
SB-27-8
SB-27-14
SB-28-14
SB-28-18
SB-29-12
SB-29-18

- Chain of Custody

ESN NORTHWEST, INC. | Environmental Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: Aerotech

ADDRESS: 19600 International Blvd #101 SeTac 98188

PHONE: 425-686-0032 FAX: 206-429-3594

CLIENT PROJECT #: _____ PROJECT MANAGER: _____

DATE: 2-1-2012 PAGE 1 OF 2

PROJECT NAME: Calhoun's Service Station Phase II

LOCATION: Pacific Ave, Tacoma

COLLECTOR: Michael W McGown DATE OF COLLECTION 2-1-12

Sample Number	Depth	Time	Sample Type	Container Type	TPH-HCID	TPH - DIESEL & OIL	TPH - GASOLINE	BTEX	VOC 8260CL	VOC 8260	SemiVol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos-PLM	GRO Suite	DRO Suite	WO Suite	NOTES	Total Number of Containers	Laboratory Note Number
1. SB-18-2	2		Soil	G(V)																				
2. SB-18-4	4		"	"																				
3. SB-18-6	6		"	"																				
4. SB-18-8	8		"	"																				
5. SB-18-10	10		"	"																				
6. SB-18-12	12		"	"																				
7. SB-18-14	14		"	"																				
8. SB-18-16	16		"	"																				
9. SB-18-18	18		"	"																				
10. SB-18-20	20		"	"																				
11. SB-18-22	22		"	"																				
12. SB-19-2	2		"	"																				
13. SB-19-4	4		"	"																				
14. SB-19-6	6		"	"																				
15. SB-19-8	8		"	"																				
16. SB-19-10	10		"	"																				
17. SB-19-12	12		"	"																				
18. SB-19-14	14		"	"																				

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
	2-1-12		
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR 5 DAY

ESN NORTHWEST, INC. | Environmental Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: Aertech

ADDRESS: 19600 International Blvd #101 Seatac

PHONE: 425-686-0032 FAX:

CLIENT PROJECT #: PROJECT MANAGER: M. McGown

DATE: 2-1-12 PAGE 2 OF 2

PROJECT NAME: Calhoun Park TH

LOCATION: 4550 Portland Ave Tacoma

COLLECTOR: M. McGown DATE OF COLLECTION 2-1-12

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES: TPH-HCID	TPH - DIESEL & OIL	TPH - GASOLINE	BTEX	VOC 8260/CL	VOC 8260	Semi Vol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos-PLM	GRO Suite	DRO Suite	WO Suite	NOTES	Total Number of Containers	Laboratory Note Number
1. SB-19-16	16		Soil	Glass																				
2. SB-19-18	18		"	"																				
3. SB-20-2	2		"	Glass																				
4. SB-20-4	4		"	"																				
5. SB-20-6	6		"	"																				
6. SB-20-8	8		"	"																				
7. SB-20-10	10		"	"																				
8. SB-20-14	14		"	"																				
9. SB-20-16	16		"	"																				
10. SB-20-18	18		"	"																				
11. SB-21-2	2		"	"																				
12. SB-21-4	4		"	"																				
13. SB-21-8	8		"	"																				
14. SB-21-10	10		"	"			X	X																
15. SB-21-16	16		"	"																				
16. SB-21-18	18		"	"			X	X																
17.																								
18.																								

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
MW McGown	2-1-12 5:58		
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR 5 DAY

ESN NORTHWEST, INC. | Environmental Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: Aerotech

ADDRESS: 19600 International Blvd # 101 SeaTac

PHONE: 425-~~644~~-868-0032 FAX: _____

CLIENT PROJECT #: _____ PROJECT MANAGER: M. McGown

DATE: 2-2-12 PAGE 1 OF 3

PROJECT NAME: Calhoun Service Stn

LOCATION: 4540 Pacific Ave Tacoma

COLLECTOR: M. McGown DATE OF COLLECTION 2-2-12

Sample Number	Depth	Time	Sample Type	Container Type	NOTES	Total Number of Containers	Laboratory Note Number
1. SB-22-2	2		Soil	Jar			
2. SB-22-4	4		Soil	"			
3. SB-22-6	6		Soil	"			
4. SB-22-8	8		Soil	"			
5. SB-22-10	10		Soil	"	~~2nd~~		
6. SB-22-W			water	VOC	2 VOC, 1 plastic		
7. SB-23-2	2		Soil	Jar			
8. SB-23-4	4		"	"			
9. SB-23-6	6		"	"			
10. SB-23-8	8		"	"			
11. SB-23-10	16		"	"			
12. SB-23-W			water	2 VOC	2 VOCs, 1 plastic		
13. SB-25-2	2		Soil	Jar			
14. SB-25-4	4		"	"			
15. SB-25-6	6		"	"			
16. SB-25-8	8		"	"			
17. SB-25-10	10		"	"			
18. SB-25-13	13		"	"			

ANALYSES: TPH-HCID; TPH - DIESEL & OIL; TPH - GASOLINE; BTEX; VOC 8260CL; VOC 8260; SemiVol 8270; PAH's 8270; PCB's 8082; CL Pesticides 8081; RCRA 8 Metals; MTCA 5 Metals; Pb; Asbestos-PLM; GRO Suite; DRO Suite; WO Suite

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
MW [illegible]	2-3-12 4:38		
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
[illegible]	2-2-12		

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR 5 DAY

ESN NORTHWEST, INC. | Environmental Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: Aeotech

ADDRESS: 19600 International Blvd 101 SeaTac

PHONE: 425-686-0032 FAX:

CLIENT PROJECT #: PROJECT MANAGER:

DATE: 2-2-12 PAGE 2 OF 3

PROJECT NAME: Colbert's Serves Station

LOCATION: 4540 Pacific Tacoma

COLLECTOR: M. W. Mynn DATE OF COLLECTION 2-2-12

Sample Number	Depth	Time	Sample Type	Container Type	TPH-HCID	TPH - DIESEL & OIL	TPH - GASOLINE	BTEX	VOC 8260CL	VOC 8260	SemiVol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos-PLM	GRO Suite	DRO Suite	IVO Suite	NOTES	Total Number of Containers	Laboratory Note Number
1. SB-25-W			Wgh	2 VOCs																		2 VOC, 1 p/mL	1	
2. SB-26-2	2		Soil	Jar																				
3. SB-26-4	4		"	"																				
4. SB-26-6	6		"	"																				
5. SB-26-8	8		"	"																				
6. SB-26-10	10		"	"																				
7. SB-26-12	12		"	"																				
8. SB-27-2	2		"	"																				
9. SB-27-4	4		"	"																				
10. SB-27-6	6		"	"																				
11. SB-27-8	8		"	"																				
12. SB-27-10	10		"	"																				
13. SB-27-12	12		"	"																				
14. SB-27-14	14		"	"																				
15. SB-27-16	16		"	"																				
16. SB-28-14	14		"	"																				
17. SB-28-16	16		"	"																				
18. SB-28-18	18		"	"																				

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
M W Mynn	2-2-12	4:30	
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
Brian Banks	2-2-12		

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR 5 DAY

ESN Northwest, Inc. | Environmental Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: Aerotech

ADDRESS: 19600 International Blvd. #101 SeaTac

PHONE: 425-686-0032 FAX:

CLIENT PROJECT #: PROJECT MANAGER: M. McCann

DATE: 2-2-11 PAGE 3 OF 3

PROJECT NAME: Calhoun Service Station

LOCATION: 4540 Pacific, Tacoma

COLLECTOR: Michael W McCann DATE OF COLLECTION 2-2-11

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES: TPH-HCID	TPH - DIESEL & OIL	TPH - GASOLINE	BTEX	VOC 8260/CL	VOC 8260	Semivol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos-PLM	GRO Suite	DRO Suite	WO Suite	NOTES	Total Number of Containers	Laboratory Note Number
1. SB-28-20	20		Soil	Jar																				
2. SB-29-10	10		"	"																				
3. SB-29-12	12		"	"																				
4. SB-29-14	14		"	"																				
5. SB-29-16	16		"	"																				
6. SB-29-18	18		"	"																				
7. SB-29-20	20		"	"																				
8. Blank																								
9. SB-28-W			Water																			2 VOCs. 1 pint	1	
10.																								
11.																								
12.																								
13.																								
14.																								
15.																								
16.																								
17.																								
18.																								

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
MW McCann	2-2-11 4:30		
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
Ben Rees	2-2-11		

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR 5 DAY