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PHASE II
Limited and Targeted Subsurface Investigation

Performed at:
CHJ Properties, LLC
9506 - 19th Avenue Southeast
Everett, Washington 98208

August 13, 2014

Performed by:
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LIMITED AND TARGETED PHASE II
TARGETED SUBSURFACE INVESTIGATION

performed for:

CHJ Properties, LLC
9506 - 19th Avenue Southeast
Everett, Washington 98208

Clients:	**COASTAL COMMUNITY BANK** 10520 - 19th Avenue Southeast Everett, Washington 98208
	U.S. SMALL BUSINESS ADMINISTRATION
Point of Contact:	Mr. Brad Besel Coastal Community Bank
Property:	**CHJ Properties, LLC** 9506 - 19th Avenue Southeast (State Route 527) Everett, Washington 98208
County:	Snohomish County, Washington Parcel Number: 28051800401700
Project Number:	No. 214 - 8130
Report Date:	August 13, 2014

EXECUTIVE SUMMARY

On July 1, 2014, Aerotech Environmental Consulting, Inc., ("Aerotech") conducted a *Phase I Environmental Site Assessment* for the subject Property. The Phase I report recommended a Limited and Targeted Phase II environmental investigation be conducted on this rectangular shaped approximately 0.96-acre Parcel of commercial land located 450 feet south of the Interstate 5 northbound-State Route 527 exit ramp, within the City or Everett, Washington. Significant bodies of water nearby include Wood Creek adjoining the parcel to the west, a channel of the Snohomish River, and Silver Lake 4,000 feet to the south.

The subject Property is occupied by a two-story, 6,574 square foot concrete and masonry building, constructed on a concrete slab at grade, formerly utilized as a gasoline retail service station and convenience store, with a restaurant and casino located on the second floor. An area of exposed gravel and soil south of the building represents the former location of three 10,000-gallon gasoline underground fuel tanks removed in October 2013. Four fuel pumps were removed from the east side of the building, and two pump islands and associated product lines remain, situated underneath the eastern quadrant of the second floor.

The subject Property was originally developed in 1971 with the construction of the present-day building, and utilized as a gasoline retail service station, convenience store, and restaurant since that time, through 2013. In 1992 the original underground gasoline storage tanks and associated distribution system were removed and replaced with new tanks and equipment. At this time petroleum impacted soil was discovered, excavated and removed from the Site to the extent possible without endangering the structural integrity of the building. Ecology reviewed the cleanup report and changed the Site regulatory status to 'No Further Action' in June 1992. On October 10, 2013, the three 10,000 gallon gasoline underground storage tanks, were decommissioned and removed from the Site. The building is presently vacant.

The July 1, 2014 Phase I Site assessment identified the following Recognized Environmental Conditions, potential environmental concerns, or recommended actions:

> **PHASE I CONCLUSION: "Soil Samples Should Collected From the Tank Basin Area.** In October of 2013 the three 10,000 gallon underground gasoline storage tanks were removed from the Site. Soil samples were collected and the samples collected were sent to an environmental laboratory for analysis. Analytical results revealed that soil samples collected from the south, southeast and east walls of the tank basin had elevated levels of benzene levels that exceeded the Ecology MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses. The east wall also showed elevated levels of gasoline. The subject Property should enter the Voluntary Cleanup program with the objective of obtaining a 'No Further Action' letter from the Department of Ecology."

Limited & Targeted Phase II Subsurface Investigation: Conclusions & Recommendations:

Aerotech Environmental Consulting, Inc. performed a Limited & Targeted Phase II Subsurface Investigation on July 6, 2014 in the Areas of Concern identified in the *Phase I Environmental Site Assessment*. Twelve soil borings were advanced on Site to a maximum depth of 17 feet below grade.

The Limited and Targeted Phase II Subsurface Investigation produced the following results:

- **Further Action Recommended.** Laboratory analytical results confirmed the presence of gasoline constituents in perched groundwater within the former fuel tank basin, within the till beneath the former eastern tank, and in the pump island area, at concentrations well above the most stringent State of Washington Model Toxics Control Act Method A Cleanup Levels for water and soil. In the pump area, within till at a depth of 6 feet (B-9), Gasoline Range Organics ("GRO") were detected at concentrations of 6,400 ppm, benzene at 4,400 ppb, ethylbenzene at 60,000 ppb, toluene at 130,000 ppb, xylenes at 480,000 ppb, and naphthalene at 270,000ppb. Elevated levels of benzene were also detected at Borhole B-10, near the northwest pump area. In water within the backfilled tank basin, GRO were detected at 39,000ppb, benzene at 550ppb, ethylbenzene at 850ppb, toluene at 2,600 ppb, xylenes at 5,100ppb, and naphthalene at 500ppb. **Further action is recommended.**

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INTRODUCTION

Aerotech Environmental Consulting, Inc., performed this Limited and Targeted Phase II Subsurface Investigation[1] of the subject Property at 9506 19th Avenue Southeast, in Everett, Washington. The objective of this Investigation was to evaluate the condition of the subsurface soils for the Recognized Environmental Conditions associated with the historic use of the Property as a gasoline retail station, to determine whether the Site has been impacted by petroleum compounds.

On July 25, 2014, Mr. Brad Besel of Coastal Community Bank of Everett, Washington, engaged Aerotech Environmental Consulting, Inc. to perform a *Limited and Targeted Phase II Environmental Investigation* of the Site – the Scope of Work of said Investigation was communicated verbally and in the form of a Service Agreement at that time.

SECTION I.
SITE DESCRIPTION

Site Exterior Description:

The subject Property is occupied by a two-story, 6,574 square foot concrete and masonry building, constructed on a concrete slab at grade, formerly utilized as a gasoline retail service station and convenience store, with a restaurant and casino located on the second floor. An area of exposed gravel and soil south of the building represents the former location of three 10,000-gallon gasoline underground fuel tanks removed in October 2013. Four fuel pumps were removed from the east side of the building, and two pump islands and associated product lines remain, situated underneath the western quadrant of the second floor.

A sole driveway, located near the northeast corner of the Property, provides access from the Site to 19th Avenue Southeast. A somewhat steep and heavily vegetated slope adjoins the Site to the west, descending perhaps twenty or more feet to the Wood Creek below, followed by the Interstate 5 right-of-way and the expansive paved lots of the Everett Mall; this creek discharges to the north toward the Snohomish River. Adjoining to the south is a motel parking lot, separated from the subject Property by a five foot earthen berm, with the higher elevations to the south. Adjoining to the south is a restaurant and parking lot, separated from the subject Property by a five or more foot earthen berm, with the lower elevations to the north.

Site Development Description:

The subject Property was originally developed in 1971 with the construction of the present-day building, and utilized as a gasoline retail service station, convenience store, and restaurant since that time, through 2013. In 1992 the original underground gasoline storage tanks and associated distribution system were removed and replaced with new tanks and equipment. At this time petroleum impacted soil was discovered, excavated and removed from the Site to the

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[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]"

extent possible without endangering the structural integrity of the building. Ecology reviewed the cleanup report and changed the Site regulatory status to 'No Further Action' in June 1992. On October 10, 2013, the three 10,000 gallon gasoline underground storage tanks, were decommissioned and removed from the Site. The building is presently vacant.

Previously Recognized Environmental Conditions:

A Phase I Environmental Site Assessment was performed in June and July 2014 by Aerotech Environmental Consulting, Inc. In accordance with recommendations made in that report, including the review of a UST Decommissioning and Site Assessment report prepared by Eco Compliance Corporation of Bremerton, Washington, dated October 31, 2013, a limited and targeted Phase II environmental investigation was performed to ascertain the presence or absence of petroleum constituents in the vicinity of the former tank basin at the subject Property. It was determined that laboratory sampling completed in October 2013 did not meet the current State of Washington Model Toxics Control Act Method A Cleanup Standards for petroleum constituents.

Previously Identified Contaminants of Concern:

A UST Decommissioning and Site Assessment Report, completed on October 31, 2013 by Aerotech Environmental Consulting, Inc., identified gasoline range petroleum constituents, benzene, ethyl benzene, toluene, and xylenes as Contaminants of Concern at the subject Property.

Site Observations and Reported Conditions:

With the exception of the above referenced environmental concern, there were no additional Recognized Environmental Conditions or concerns identified as potential impacts to the Property.

SECTION II.
FIELD WORK

Notifications - "Public" Utilities:

Due to the age and nature of the Site, a "public" utilities notification was performed prior to the start of work. Aerotech Environmental Consulting, Inc.[2] Performed the "public" utilities notification on July 29, 2014, and was issued Ticket Number 14212785 by the Utilities Underground Location Center.

According to the Utilities Underground Location Center the utilities necessary for notification included:

CC7721	COMCAST CABLE	(800)778-9140
EVT01	CITY OF EVERETT	(425)760-2172
GTE12	FRONTIER COMMUNICATIONS NW INC	(425)392-6412
GTE21	FRONTIER COMMUNICATIONS NW INC	(425)392-6412
PUGG09	PUGET SOUND ENERGY GAS	(800)778-9140
SNOPUD05	SNOHOMISH PUD #1 ELEC	(800)778-9140

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

Notifications - Private Utilities Location:

Additionally, Aerotech Environmental Consulting, Inc engaged personnel of Applied Professional Services, Inc. of North Bend, Washington to locate on Site exterior and building interior utilities on August 6, 2014, prior to the start of the on Site drilling activities.

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

Based upon pavement markings made by utility location technicians; the location of visible utility fixtures such as gas valves, electrical panels and manholes; the locations of patched pavement; and the presence of anomalies detected by induction methodologies and by ground penetrating radar, a sketch map of the possible and probable locations of buried utilities was produced, in order to safely guide the placement of soil borings. Natural gas, sewer, water and electrical service laterals were plotted, with a special focus on the south and east quadrants of the Site. Gas and water utilities were found to approach the southeastern corner of the first story level of the building from the north and east respectively. The product lines were determined to be in place, situated between the center of the two pump islands and the former tank basin, underneath a clear patched area in the asphalt pavement. A sanitary sewer line is present along the south wall of the building, several feet from the former tank basin, and appears to extend toward the vicinity of the southeast corner of the former pump island area.

Ground Penetrating Radar Subsurface Investigation:

A Ground Penetrating Radar Study and magnetometer survey were performed in the Areas of Concern on August 6, 2014 by Mr. Ben Stetz of APS, Inc. Mr. James McDermott, representing Aerotech Environmental, was also present during the survey.

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.

A SRI 3000 GPR device operating at a frequency of 400 MHz and a Metrotech 810 Radio Frequency locating system were utilized.

The GPR Study performed for the subject Property did not identify any other previously unknown or unsuspected Recognized Environmental Concerns or issues that were not analyzed or discussed in the above referenced Phase I Environmental Site Assessment. Depth of radar penetration and reflection appears to have been somewhat limited by the

Magnetometer Investigation:

Due to the nature of the anticipated Constituents of Concern, and in order to confirm or supplement the performance of a Ground Penetrating Radar Study, a magnetometer investigation, employing an induction method, was performed on August 6, 2014, prior to the initiation of the Site subsurface investigation – by personnel from Applied Professional Services, Inc. of North Bend, Washington. Locations of buried electrical, natural gas and other possible impediments to drilling were plotted, with special attention to the planned locations of soil borings.

Site Activities:

The *Limited & Targeted Phase II Subsurface Investigation* was performed on August 6, 2014, under contract with Aerotech Environmental Consulting, Inc. All the work was performed during normal business hours No unusual or unforeseen circumstances occurred during the Site activities.

The subsurface soil borings were performed by equipment owned by and operated by a Licensed Driller from Standard Environmental Probe ("SEP"). The on Site drilling equipment was operated by personnel employed by SEP, Mr. Chris Ross (State of Washington Department of Ecology Well Driller's License No. 3018). The laboratory analytical services were performed by the Advanced Analytical Labs in Redmond, Washington.

Drilling Activities:

Due to the nature of the Site surfaces and working spaces around the Areas of Concern, drilling operations employing a Geoprobe© style direct push truck mounted drill rig were utilized for the exterior Site work.

Geologic Conditions:

The precise Property location is N 47° 54' 39.7" / W 122° 12' 25.3" as determined by DeLorme mapping data. The Site is located within Universal Tranverse Mercator Zone No.10 The Site elevation is approximately 460 feet above mean sea level ("MSL"). As observed during the Site visit and confirmed on the USGS topographic map, the subject Property and surrounding vicinity slopes toward the north-northeast, with cut and fill methods apparently employed at each parcel in order to provide relatively level surfaces locally. A very slight surficial drainage towards the east and northeast was observed. Elevations along the apex of ridges straddling Wood Creek, the axis of which are situated approximately 500 feet west and 1,000 feet east of the Site, exceed 500 feet in elevation; water levels in Silver Lake, situated approximately 4,000 to the south, are approximately 426 feet MSL; the elevation of the relatively flat plains associated with the Snohomish River Valley nearly 6,000 feet to the northeast, lie at elevations approaching 5 feet MSL. The Snohomish River discharges its water to the Puget Sound, north of the City of Everett. Wood Creek descends quite rapidly to the north and then northeast, disecting the steep wooded bluffs above the valley.

The subject Property and immediate vicinity are mapped as underlain by densely compacted predominantly fine grained sandy glacial tills. A 1985 geologic map depicts the underlying coarser grained Vashon Outwash sands outcropping along the adjoining upper slopes of Wood Creek below elevations of 440 feet, approximately twenty feet below the subject Property. These units are characterized as:

> **Quaternary Vashon Till (Qvt)** "These deposits mantle the hills, ridges, and slopes. The till (referred locally as the Vashon till) is a nonsorted mixture of mud, sand, pebbles, cobbles and boulders (diamicton); it resembles concrete mix. The till contains some lenses of stratified material, particularly in its lower part. It is compact to locally cememted lodgemnet till, commonly called hardpan. The till has a sheeting or fissility near and parallel to the surface and tends to spall and crumble where exposed. It is varied in clast composition and is similar to the recessional outwash. Outcrops of till are from 3 to 20 meters thick i nthe quadrangle. The till was deposited directly by the ice as it advanced over bedrock and older

> Quaternary sediments. Its compactness partly results from the weight of the ice, which was hundreds of meters thick when it overrode the till. Drainage is good in the uppermost 1 to 2 meters of loose, weathered material, but water ponds and moves laterally along the buried hardpan surface. The till lies uncomformably on and against older underlying deposits."

The Vashon Till is underlain by the following:

> **Quaternary Advance Outwash (Qva)** "These deposits underlie the till. They consists of clean, mostly gray, well stratified, unconsolidated sand with shades of brown. Clasts are varied in composition and are similar to those in the recessional outwash. The advance outwash is as much as 70 meters thick in outcrop in the quadrangle. It was deposited as bar and channel sediment in and along meltwater streams flowing from the advancing Vashon glacier, and as deltas in ponded areas. The advance outwash in one of the thickest and most extensive aquifers in the region. It lies conformably on the transitional beds [Qtb]. As mapped, the advance outwash contains the Esperance Sand Member of the Vashon Drift (Newcomb, 1952)."

Geologic Map of the Everett Quadrangle, Snohomish County, Washington, United States Geologic Survey Miscellaneous Field Studies Map MF-1741, James P. Minard, 1985

Natural in situ soils documented at the Site during this investigation are dominated by a slightly cemented and very dense fine sandy diamicton, representing the Vashon glacial till deposits dominating the surface of much of Everett's upland areas. Less than two feet of sandy fill was encountered beneath the pavement in areas beyond the immediate vicinity of the former tank basin.

Hydrological Characteristics:

The shallow gravelly sand fill materials present to depths of nearly two feet, and the sand and pea gravel fill present in the former tank basin to depths approaching 13.5 to 15.3 feet, would be expected to readily store or transmit both groundwater and where present, contaminants, while the finer grained and densely compacted or cemented diamicton till materials would tend to restrict both horizontal and vertical groundwater flow and the migration of contaminants in groundwater. Perched groundwater encountered during this investigation appears to be restricted to the backfilled former tank basin, below depths of approximately seven feet below grade. The natural tills surrounding the backfilled tank basin were not saturated, and appeared to be only slightly moist. Although septic and or petroleum-like odors were observed within the tank basin fill, odors were not present within till encountered underneath or beside the basin. Based upon the elevation at which the USGS geologic map plots the contact between the till and the underlying outwash sands, it appears that the base of the till may be situated as little as four to five feet beneath the base of the filled tank basin.

The glacial materials in the Puget lowland, generally speaking, form a series of layers serving alternately as aquifers and aquitards, where the aquitards are dominated by fine grained sediments that tend to retard groundwater flow and contaminant migration.

Present at depth beneath the Skagit River, Stilaguamish and Snohomish valleys, and often serving as the base of the unconsolidated glacial aquifer and aquitard sequence above, is the underlying generally Oligocene and Eocene bedrock mapped as outcropping in the mountainous terrain over fifteen miles west of the Site.

Generalized Surficial Geology in Tributary Subbasins, Lower Skagit River Basin, Washington, Mark E. Savoca, Kenneth H. Johnson, and Elisabeth T. Fasser, U.S. Geological Survey Scientific Investigations Rreport 2009-5208, 2009.

Regionally groundwater, where present within the Vashon advance outwash sands beneath the relatively impermeable tills, would generally be expected to flow toward the northwest, north or northeast, toward Wood Creek or toward the bluffs above the Snohomish River Valley to the northeast. Where present in shallow permeable fill materials, and within the uppermost weathered portion of the till, perhaps a few feet in thickness, perched water would be expected to flow in subdued mimicry of the original topography of the till surface, to the west, northwest or north, in the immediate vicinity of the subject Property.

Soil Borings:

Twelve soil borings were advanced to depths between four and seventeen feet on August 6, 2014, documenting the presence of as little as two feet of sand or gravelly sand fill, with as much as 15.3 feet of sand or gravelly sand fill in the backfilled excavations once housing the underground tanks). The fill present beyond the tank basins is believed to have been placed throughout the area in a cut and fill terrace pattern, in order to provide level surfaces for parcel development. Densely packed and only slightly moist glacial till (diamicton), marginally cemented, dominated the Site with the exception of shallow sandy fill within two feet of the surface, and pea gravel or sand fill within the former tank basin to depths of thirteen to fifteen feet below grade. Soil boring B-3, B-4, B-5, B-6, and B-7 were advanced within the deeper portions of the backfilled tank basin, while borings B-2 and B-8 were advanced near or outside the margins of the backfilled tank basin. Boreholes B-9, B-10, and B-11 were advanced in the vicinity of the former fuel pump islands, and borehole B-12 was advanced in the vicinity of the product line trench located south of the fuel pump island area.

No groundwater monitoring wells were installed during the course of this investigation.

Sample Collection:

A total of fourteen discrete soil samples and one groundwater sample were collected on August 6, 2014, at twelve soil boring locations, at depths between four and seventeen feet below grade. Refer to the attached Soil Boring Location Map. Visual or olfactory evidence of petroleum impacted soil or groundwater was observed at soil boring locations B-1 and B-5, within the filled tank basin, and at soil boring locations B-9 and B-10, located between the two fuel pump island areas east of the building.

Soils collected from each location were visually inspected for color quality and evidence of staining, and physically observed for the purpose of recording composition and noting odor, where distinctive. Samples were placed in sterile four-ounce glass jars and/or 40cc glass vials. Groundwater samples were collected in 40cc glass vials and one half liter amber glass and one half liter plastic containers.

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. The remaining soil samples were retained by the laboratory for analysis in the event that the soil samples selected for laboratory analysis revealed elevated levels of constituents. Following the production of the initial Site sample results for soil, no follow-up laboratory analysis was requested for the subject Site, as of the date of this report.

Groundwater was sampled from the backfilled tank basin at borehole B-4 by means of peristaltic pump and fresh PVC tubing placed in temporary PVC or stainless steel screens inserted

in the open borehole.

Equipment Decontamination:

All sample acquisition equipment was decontaminated before and after each boring to eliminate the potential for cross-contamination between borings, as required. All reusable 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. Sample media was collected within virgin polyurethane tubes driven through a stainless steel core sampler, and handled with clean latex gloves.

Site Restoration:

Upon completion, each borehole was filled with bentonite chips; the final three to four inches were filled with concrete or asphalt to match the surrounding surficial conditions. or gravel and sand if at the unpaved area at the former tank basin location. No landscape restoration was necessary.

SUMMARY OF SAMPLE ACQUISITION

A total of twelve soil borings were advanced in the two Areas of Concern to a maximum depth of seventeen feet below ground surface. Detailed descriptions of each boring location, observations made during the acquisition, sampling information, and the field screening process are documented in soil boring logs and laboratory analytical document attached to this report.

SECTION III.
ANALYTICAL RESULTS

Diesel and Lubricant Range organics were not detected at concentrations above the most stringent State of Washington Model Toxics C ontrol Act Method "A" Residential Unrestricted Use Cleanup Levels in soil borings advanced in the vicinity of the former diesel fuel tank, near the northwest corner of the Site. Elevated levels of gasoline constituents were detected at concentrations well above the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use Cleanup Levels in soil within the backfilled tank nest excavation, in the southwest quadrant of the Site.

Gasoline, Diesel, and Lube Range Organics, Benzene, Ethyl Benzene, Toluene, and Xylenes in Soil:

The following sample results were reported by the laboratories of Advanced Analytical:

Boring Location:	Sample Number:	* Date Analyzed:	GRO (ppm)	DRO (ppm)	LRO (ppm)	B (ppb)	E (ppb)	T (ppb)	X (ppb)	N (ppb)
B-1	B-1 (8.5')	08-12-14	nd	nd	nd	nd	nd	nd	nd	----
B-4	B-4 (14.5')	08-11-14	5.9	nd	nd	**76**	**110**	**150**	**530**	59
B-5	B-5 (17')	08-12-14	nd	nd	nd	nd	nd	nd	nd	----
B-6	B-6 (7')	08-12-14	nd	nd	nd	----	----	----	----	----
B-8	B-8 (7')	08-12-14	nd	nd	nd	----	----	----	----	----
B-9	B-9 (6')	08-11-14	**6,400**	nd	nd	**4,400**	**60,000**	**130,000**	**480,000**	**270,000**
B-10	B-10 (6')	08-12-14	**44**	nd	nd	**82**	nd	nd	nd	----
B-11	B-11 (4')	08-12-14	nd	nd	nd	----	----	----	----	----
MTCA Method A Cleanup Levels - Soil			30 ppm	2000 ppm	2000 ppm	30 ppb	600 ppb	700 ppb	900 ppb	5,000 ppb

nd - not detected ---- - not analyzed B = Benzene, E = Ethylbenzene, T = Toluene, X = Xylenes, N=Naphthalene
GRO - Total Petroleum Hydrocarbons - Gasoline Range Organics *Some analyses completed on 08-08-14 and 08-11-14
LRO - Total Petroleum Hydrocarbons - Lubricant Range Organics
Bolded numbers and shaded cells denote concentrations above MTCA Cleanup Levels for soil

Petroleum Constituents in Groundwater:

Gasoline constituents were not detected in groundwater (Sample B-11 (W)), sampled at the southwestern corner of the Site, in the downgradient groundwater flow direction relative to the former tank nest, at concentrations above the most stringent State of Washington Model Toxics Control Act Method "A" Residential Unrestricted Use Cleanup Levels for water.

The following sample results were reported by the laboratories of Advanced Analytical:

Slit Trench Location:	Sample Number:	Date Analyzed:	GRO (ppb)	DRO (ppb)	LRO (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	N (ppb)
B-4 (W)	B-4 (W)	08-07-14	**39,000**	nd	nd	**550**	**2,600**	**850**	**5,100**	**500**
MTCA Cleanup Levels Water (ppb)			100	500	500	5	1,000	700	1,000	160

nd - not detected GRO - Gasoline Range Organics DRO - Diesel Range Organics, LRO - Lube Range Organics
B - benzene, E - ethylbenzene, T - toluene, X - xylenes, ---- - not analyzed

Dissolved Lead in Groundwater:

The following sample results were reported by the laboratories of Advanced Analytical:

Dissolved lead was not detected in sample B-4 (W), in the groundwater within the backfilled former tank basin.

Lead in Soil:

Lead was not detected in soil sample B-4 (14.5') and was present in B-9 (6') at concentrations of 1.2 ppm.

Fuel Additives - Volatile Organic Compounds in Soil:

The following sample results were reported by the laboratories of Advanced Analytical:

Boring Location:	Sample Number:	* Date Analyzed:	EDC (ppb)	EDB (ppb)	Naphthalene (ppb)
B-4	B-4 (14.5')	08-11-14	nd	nd	59
B-9	B-9 (6')	08-11-14	320	nd	**270,000**
MTCA Method A Cleanup Levels - Soil			n/a	5,000 ppb	5,000 ppb

Fuel Additives - Volatile Organic Compounds in Groundwater:

The following sample results were reported by the laboratories of Advanced Analytical:

Boring Location:	Sample Number:	* Date Analyzed:	EDC (ppb)	EDB (ppb)	Naphthalene (ppb)
B-4 (W)	B-4 (W)	08-11-14	nd	nd	**500**
MTCA Method A Cleanup Levels - Water			5 ppb	0.01 ppb	160 ppb

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:

Soil: Gasoline Range Organics & Benzene, Ethylbenzene, Toluene, and Xylenes
State of Washington NWTPH-Gx/8260

Soil: Diesel and Lubricant Range Organics
State of Washington NWTPH-Dx/Dx Extended

Soil: Volatile Organic Compounds - Fuel Additives
(USEPA Method 8260B)

Soil: Lead (MTCA-5)
State of Washington Model Toxics Control Act ("MTCA") (Method 7010/7471)

Water: Gasoline Range Organics & Benzene, Ethylbenzene, Toluene, and Xylenes
State of Washington NWTPH-Gx/8260/8021B

Water: Diesel / Lube Range Organics
State of Washington NWTPH-Dx/Dx Extended

Water: Volatile Organic Compounds - Fuel Additives
(USEPA Method 8260B)

Water: Lead (MTCA-5)
State of Washington Model Toxics Control Act ("MTCA") (Method 7010/7471)

Laboratory Analysis:

Laboratory analysis was provided by:

Advanced Analytical Environmental Testing Laboratory
2821 152nd Avenue Northeast
Redmond, Washington 98052
(425) 497-0110

Signature of Hydrogeologist / Project Manager:

Signature - James G. McDermott

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 Hydrogeologist 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 Washington Hydrogeologist:

Signature – Michael McGowan (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 manade sources, but not due to the release(s) in question. (See, E 1903-97, § 3.1.3).

Phase II 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 II 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 II 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).

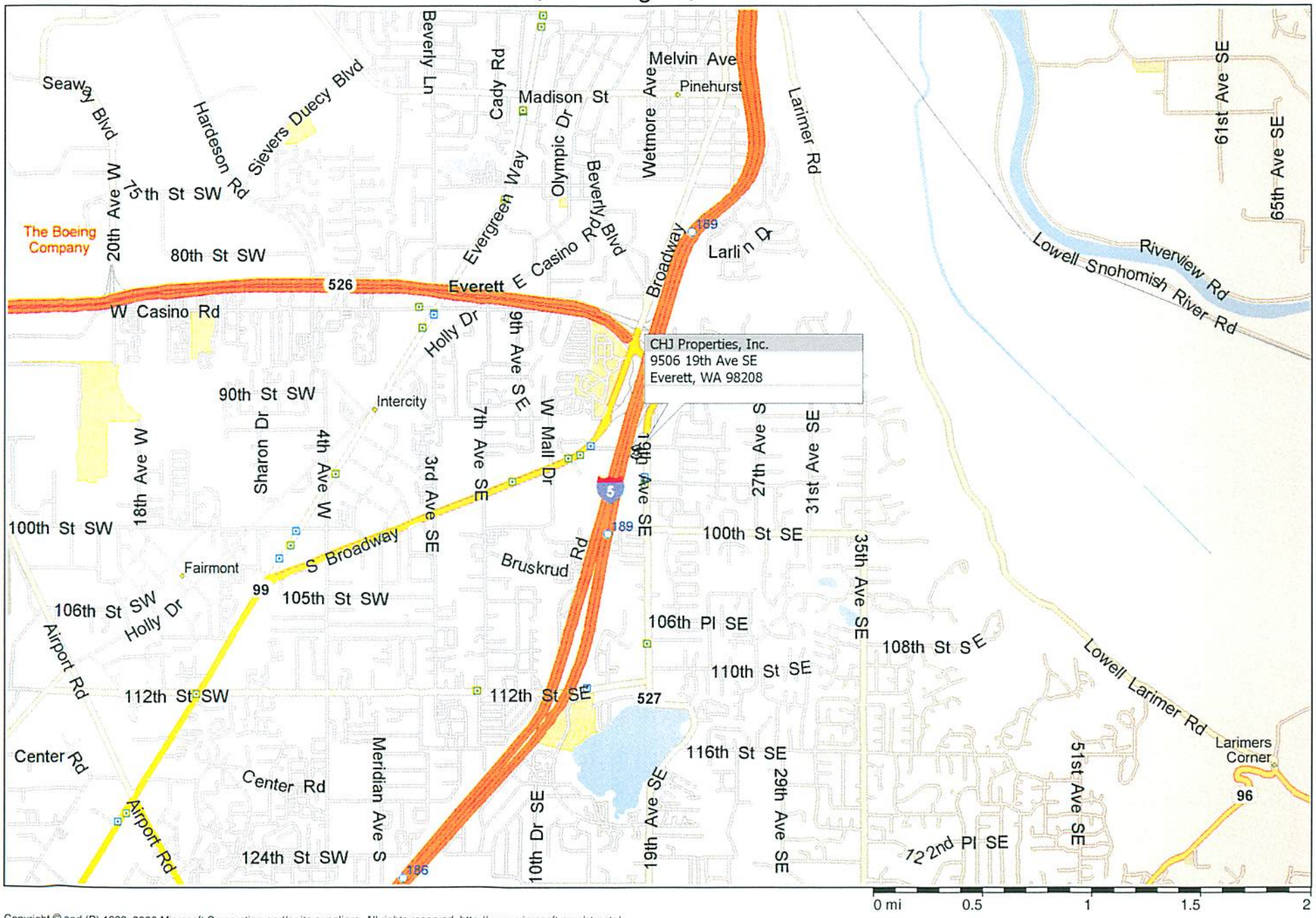
REPORT ENDNOTES

APPENDIX

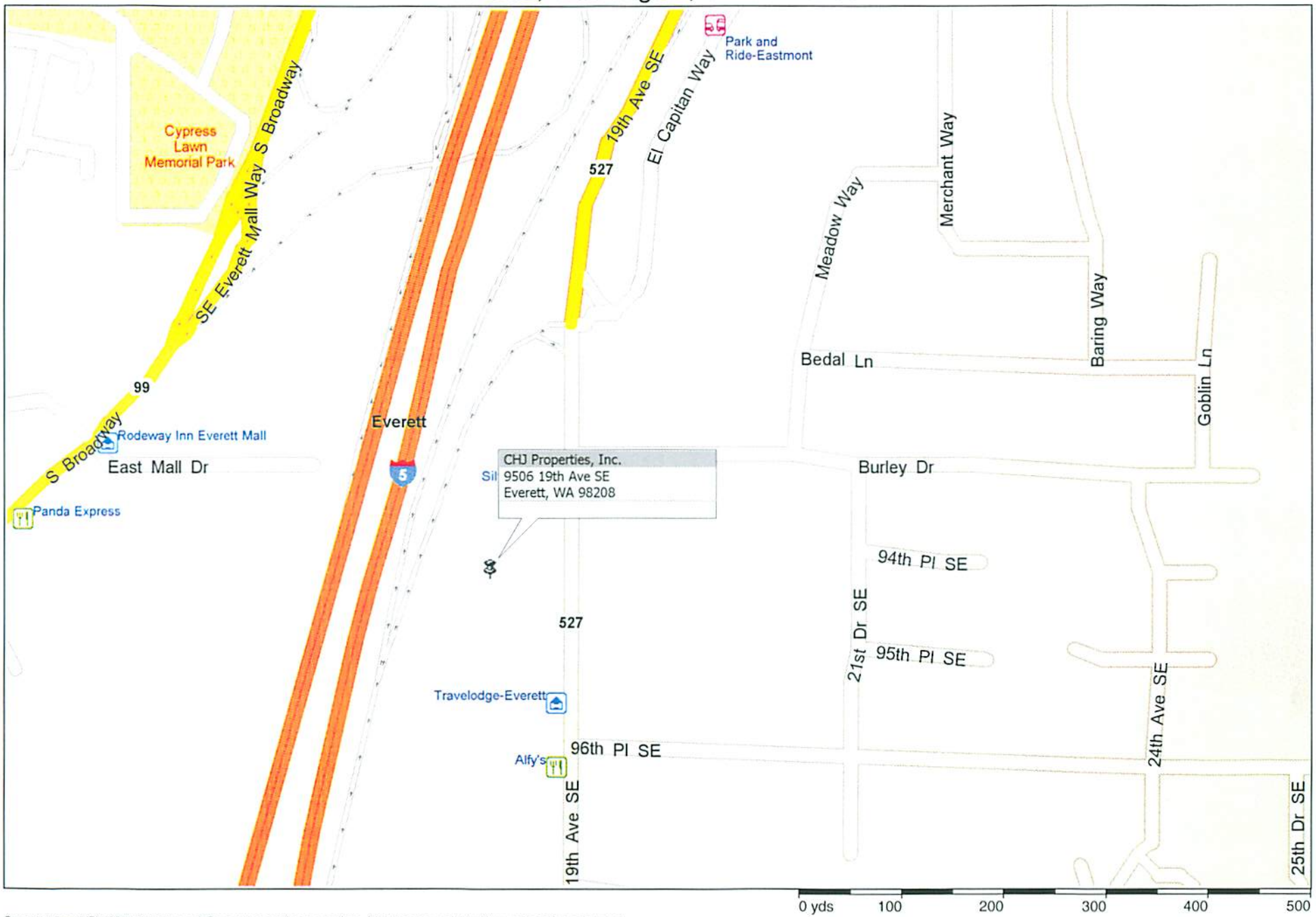
- Site Location and Photographs
- Project Contract Documents
- Boring Logs
- Analytical Results
- Chain of Custody

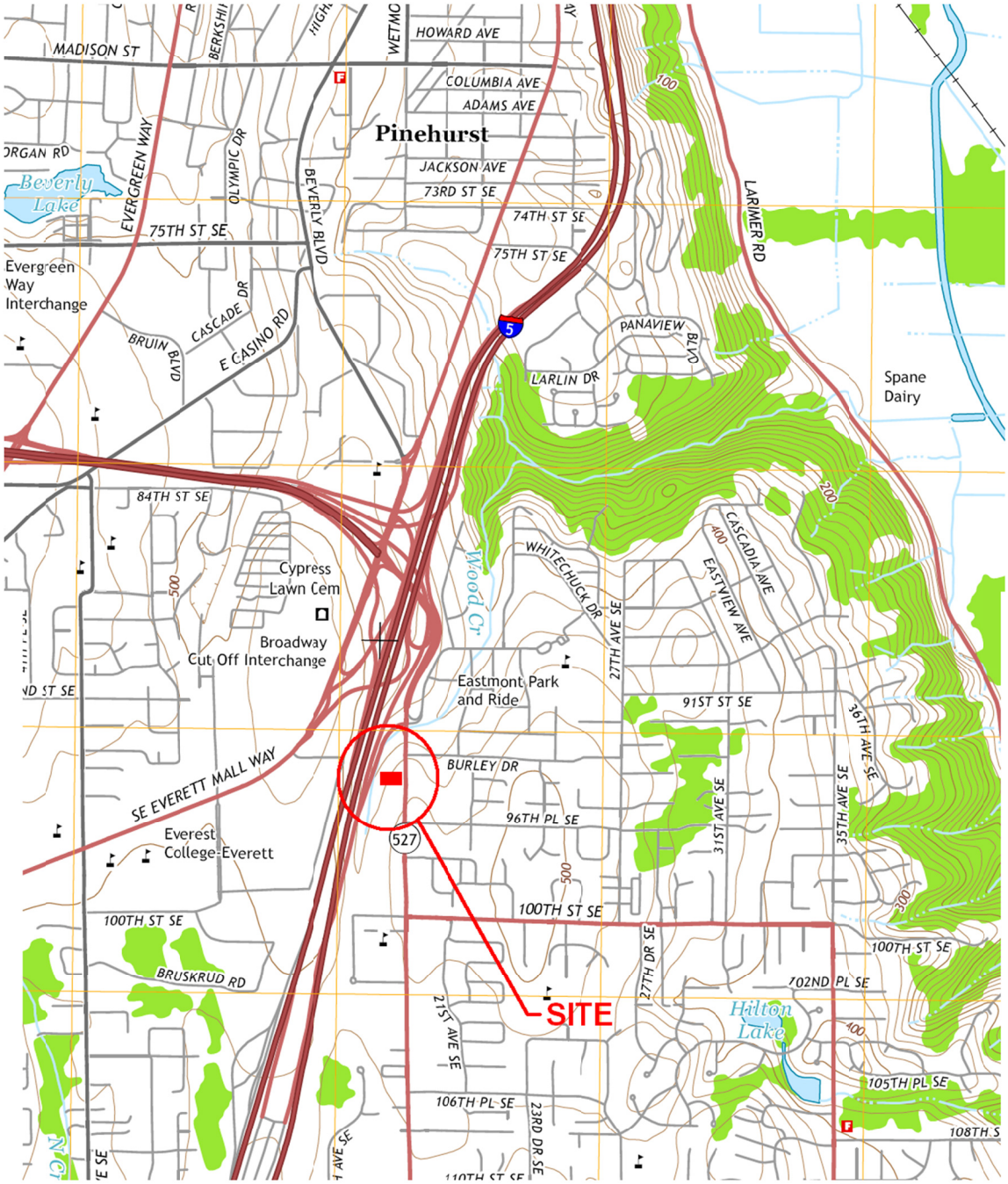
- Site Location and Photographs

Everett, Washington, United States



Everett, Washington, United States





Aerotech Environmental Consulting, Inc
19600 nternational Blvd., Ste. 101
SeaTac, Washington
www.aerotechenvironmental.com
Drawing by McDermott : 13 Aug 2014

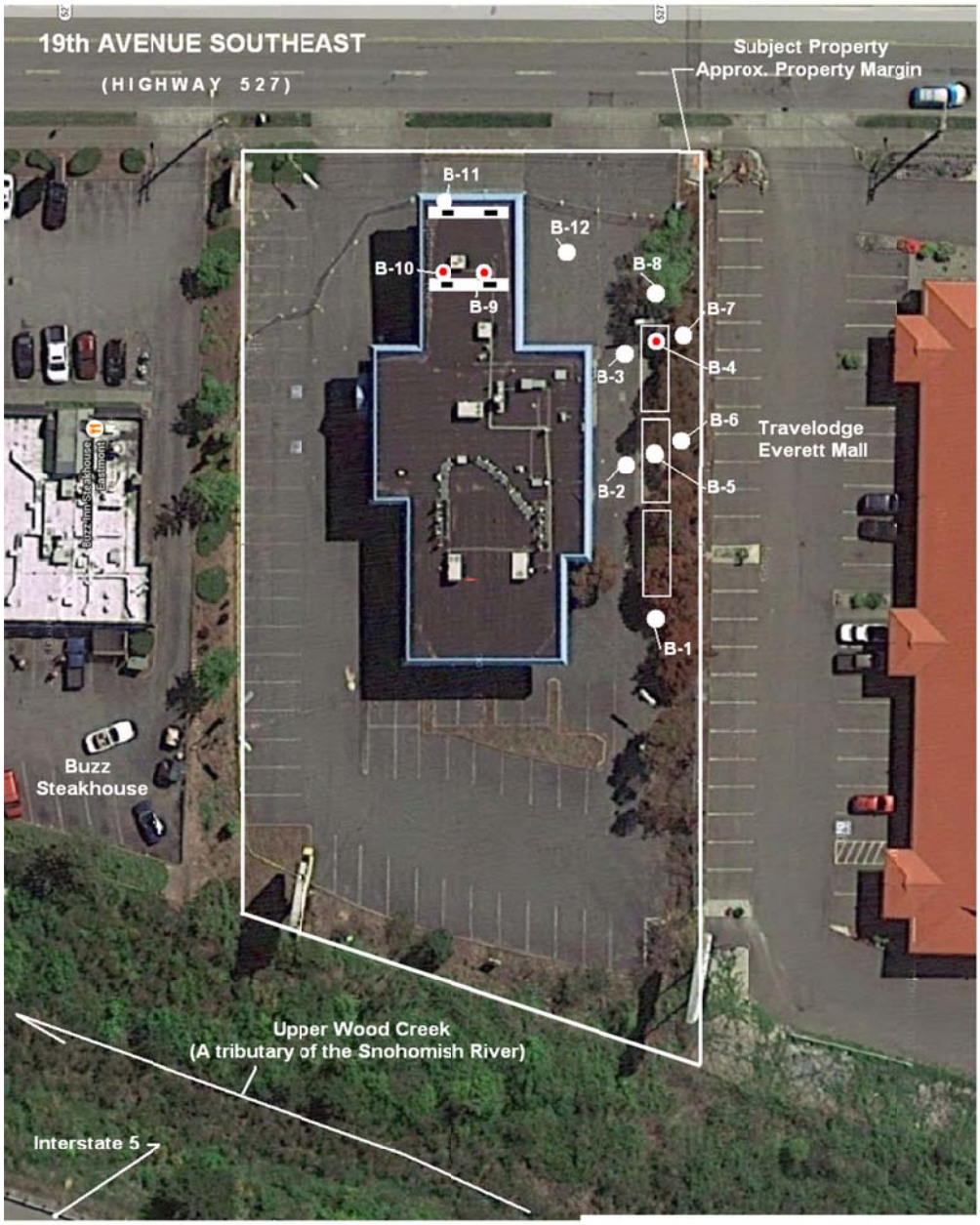
SITE LOCATION MAP

USGS Topographic Map
7.5-Minute Everett, Washington
Quadrangle 2014

CHJ Properties, Inc
9506 - 19th Avenue Southeast
Everett, Washington 98208

60 Feet

Approximate Scale



Aerotech Environmental Consulting, Inc 19600 International Blvd., Ste. 101 SeaTac, Washington www.aerotechenvironmental.com Drawing by McDermott : 13 Aug 2014	**BOREHOLE LOCATION MAP** **AERIAL PHOTOGRAPH** **Circa 2014**	**CHJ Properties, Inc** **9506 - 19th Avenue Southeast** **Everett, Washington 98208**

CHJ Properties, Inc. - 9506 19th Avenue SE, Everett, WA - Former tank basin area (View SW)

Sample B-1 (8.5 ft)

Borehole B-2 (View NW)

Sample B-2 (9.0 ft) Diamiction dominated by very densely compacted and marginally cemented very fine sand

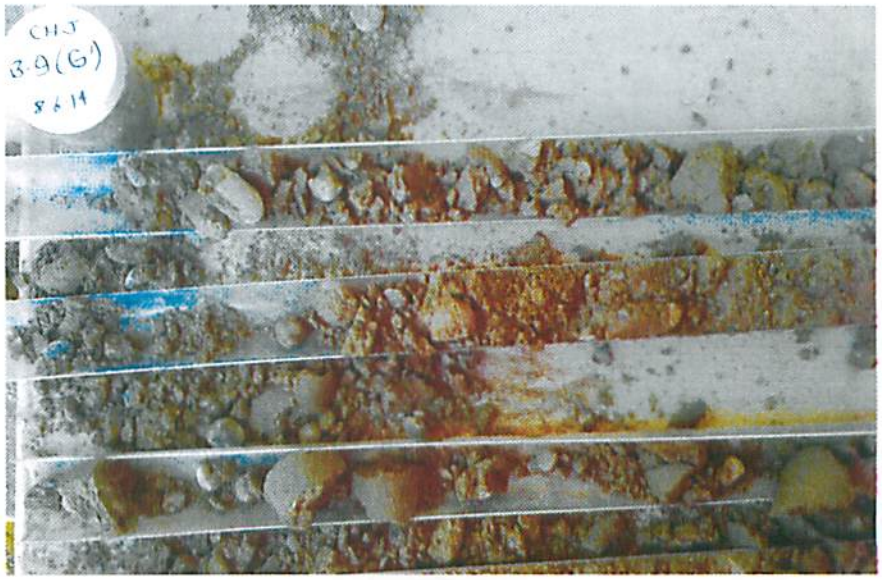
Borehole B-4 (View NE)

Borehole B-5 - Core tubes bottom to top: 4 ft, 8ft, 12ft, and 16ft - In situ diamicton at 15.3 to 16.0 ft (Beneath basin backfill)

Borehole B-8 (View south)

Borehole B-9 (View north)

Sample B-9 (6 ft)



- Project Contract Documents

ENVIRONMENTAL CONTRACTOR'S CERTIFICATION

CHJ Properties, LLC
10219 - 269th Place Northwest
Everett, Washington 98208

1. Contractor's Name: Aerotech Environmental Consulting, Inc.

2. Contractor's Address: 19600 international Blvd. Ste. 101, SeaTac, Washington 98188

3. Name and title of person completing this certification: Alan T. Blotch / President

4. Answer the following questions about each employee that contractor will have perform the assessment or prepare the report showing the results of the inspection:

   a. Name and Title of Employee: Alan T. Blotch – Environmental Professional

   b. Length of experience doing environmental assessments: 30 years

   c. Education degrees received: Masters of Business Administration
   Juris Doctor – Environmental Law

   d. Relevant training received: ASTM E50 Environmental Assessment Committee Meetings

5. Identify any certifications and approvals issued to contractor pursuant to an official Federal, State of local program or policy to conduct environmental assessments: Registered Environmental Assessor
   Issued by State of California

6. Describe the generally recognized standards which the contractor will use to perform the assessment.
   Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (ASTM E 1903)

7. Disclose the nature of any previous environmental inspections contractor has ever performed for the Owner of the property: Phase I Environmental Site Assessment

8. Disclose the nature of any affiliation or association contractor now has, or ever had, with the above referenced seller of the property, of the above referenced buyer of the property: N/A

9. Describe the liability insurance carried by contractor to cover claims in the event that ir fails to discover adverse environmental conditions during an environmental inspection.
   Professional Errors & Omissions Coverage $1,000,000 / claim and $1,000,000 aggregate liability

THE UNDERSIGNED HEREBY CERTIFIES, UNDER PENALTY OF THE CRIMINAL AND/OR CIVIL PENALTIES IN 18 U.S.C. § 1001 FOR FALSE STATEMENTS TO THE UNITED STATES GOVERNMENT, THAT THE ABOVE INFORMATION IS TRUE AND CORRECT.

Signature

08/14/14
Date

CURRICULUM VITAE

James McDermott

Geologist/Hydrogeologist – Environmental Professional

Mr. McDermott has 15 years experience in small business, and 9 years experience in environmental consulting with increasing scope, responsibility, innovation and effective results involving commercial and industrial properties spanning the country from the upper Midwestern states within glacial, alluvial or coastal geologic/hydrogeologic settings to complex bedrock, volcanic and glacial/fluvial settings in the northern Rocky Mountain states, the Pacific Northwest and Alaska. He has conducted field work and mapping in mountainous terrain in northern Wyoming and in central Utah where he has published: Utah Geologic Survey Geologic Quadrangle (Chriss Canyon 7.5 min.). These projects included extensive sampling of soils, rock, surface waters, groundwater, limited submarine sampling, soil borings, monitoring well installations, soil vapor extraction wells and systems, and dual-phase extraction and incineration. He is proficient in the application of aerial photographs, satellite imagery and on-line tools, and has limited surveying experience. His work has included compliance activities involving Superfund Sites, and waste remediation sites, as well as Phase I Environmental Site Assessments, Phase II Subsurface Investigations, hydrogeologic studies, pump tests, remediation system design, and groundwater monitoring. His work has required a familiarity with ASTM Phase I and Phase II Protocols, and other relevant ASTM Protocols as well as USEPA, CERCLA, RCRA regulations. He is familiar with Washington State MTCA regulations (hazardous assessments and independent remedial actions), as well as State of Oregon Risk Based Standards. His academic background has included work in organic chemistry and chemical engineering as well as an undergraduate engineering physics and calculus sequence.

Education	University of Illinois - Urbana, IL – BSci Geology – 1984 (Field Mapping: Sheridan, WY)
	Northern Illinois University - DeKalb, IL – Graduate research/Published USGS Map, Utah).
Publications	Chriss Canyon 7.5-Min. Geologic Quadrangle, Utah, Coauthor, UGS Map 185, 2003
Professional History	Aerotech Environmental Consulting, Inc. Hydrogeologist /Environmental Professional (2011-Present)
	James McDermott Consulting, Proprietor, Web Design-IT (1995-2010)
	Earthscience Consulting, Proprietor, Hydrogeologist (1993-1994)
	ATEC Environmental Associates, Inc., Hydrogeologist (1991-1993)
	EIS Environmental, Inc., Staff Geoscientist (1989-1991)
Certifications	OSHA 40-hr Hazwoper, 8hr Refresher (2013)
	Participation Certificate: Chlorinated Solvent Remediation - Sequential In-Situ Chemical Oxidation and Enhanced Anaerobic Biodegredation.
Organizations & Memberships	Geological Society of America – Cordilleran Section, Rocky Mountain Section, Environmental and Engineering Geology Division, Hydrogeology Division, Structural Geology and Tectonics Division.
Expertise	Mr. McDermott has performed over 150 Phase I and Phase II investigations including property transfers and LUST closures, conducted site reconnaissance, and prepared Phase I and Phase II Site Assessment reports. Phase II investigations included groundwater monitoring well design, installation and monitoring. He has participated in the design and monitoring of several remediation systems installed at selected Phase II project sites, contributed to RCRA landfill compliance monitoring projects and often the associated subsurface investigation and planning. He managed and planned a large number of these projects, implemented the investigations, created both preliminary and final reports, and defined and implemented the additional investigation where required.

USGS GEOLOGIC MAPPING PROGRAM (Utah Geological Survey): He has contributed to the study and mapping of geologic units as a part of the related US Geological Survey program to complete national coverage of geologic maps at the 1:24,000 scale. He has mapped intrusive and volcanic bodies, faults, landslide hazards, mineral deposits, hydrothermal alteration, and springs. He has integrated data such as petroleum exploration well logs (gamma/SP), aerial and satellite imagery.

SUPERFUND SITE INVESTIGATIONS : He has performed subsurface characterization and hydrogeological assessments including the assembly and interpretation of soil boring and laboratory data, monitoring well design, well installation and groundwater monitoring well sampling plans.

RCRA COMPLIANCE : He has participated in the subsurface characterization and hydrogeological assessments on RCRA sites and has contributed to research and evaluation of previous investigations as well as pertinent public records.

UST SITE CHARACTERIZATION & REMEDIATION: He has performed Phase I, Phase II investigation, and planned and participated in successful Phase III remediation projects, including the management and on-site supervision of the removal of tanks at a 40-unit, 25,000 gallon pre-WWII aircraft engine tank farm site. Contaminants included fuels, solvents and lubricants, DNAPLs. He has performed numerous subsurface characterization and hydrogeological assessments including soil borings, split spoon, cores, monitoring well design and installation, remediation sampling, monitoring, pump testing, modeling /analysis.

REAL ESTATE TRANSFERS: He has performed Phase II Subsurface investigation / preliminary hydrogeological evaluations for the purpose of property transfers for lenders, property owners and prospective buyers.

GEOPHYSICAL SURVEYS: He has participated in the performance of a groundwater investigation for the Illinois Geological Survey designed to locate and define gravel channel aquifers in buried bedrock valleys.

BIOREMEDIATION APPLICATIONS: He has participated in a seminar devoted to groundwater bioremediation with particular attention to chlorinated solvents and the use of in-situ chemical oxidation and enhanced anaerobic biodegradation. This technique is being applied to contaminated industrial properties in Washington state.

Notable Projects and Innovations

His subsurface investigation experience has also included field studies and reports on projects such a Superfund property in an industrial park, several RCRA landfill compliance projects, a large underground tank farm (over 40 25,000-gal. tanks and a great variety of fuels, solvents and lubricants) at the location of a former WWII-era aircraft engine plant, a contaminant incineration remediation project at a major LUST site located within a sensitive urban area, the mapping and excavation of over 20,000 cubic yards of contaminated fluvial and alluvial sands in an aging 19th – 20th century riverside industrial complex, landslide mapping, risk assessment and an aquifer mapping project for a State Geological Survey.

Innovations and improvements he has introduced during his environmental consulting career have included the composition and refinement of numerous Standard Operating Procedures including those related to monitoring well design and encompassing equipment maintenance, calibration and operation. An innovation at the time and place, he initiated the routine incorporation of documentation and analysis of utility and transportation conduits (sewer, storm water and tunnel plans) in considering groundwater and contaminant flow dynamics, and their

potential as primary or secondary conduits for the transport of contaminants in groundwater or in surface runoff for Phase I, Phase II and other investigations. For example, in one case in the central Chicago business district where flammable vapors were reported in the basement of a landmark building, he utilized both sewer design plans and subway depth measurements to trace probable vapor pathways and successfully divert the unproven assignment of primary responsibility from his client. In another case he devised and implemented a simple incinerator design change which greatly reduced time and cost associated with automated emergency systems shutdowns. In routinely evaluating previous studies prior to incorporation into his reports, he occasionally discovered and corrected errors in groundwater flow calculations or elevation data. He discovered forged soil boring logs, accepting no external material without some verification where the economic and legal concerns of a client might be jeopardized.

Small Business Experience

He has fifteen years experience operating a web design and computer consulting business as a sole proprietor with several staff, meeting the unique needs and budgets of the small business and mid-sized business community, employing web design and marketing to increase the profits a of one small business by over 1000 percent.

CURRICULUM VITAE

Michael McGowan

Licenced Geologist, Engineering Geologist, and Hydrogeologist – Environmental Professional

Mr. McGowan has over 27 years experience devoted to a wide variety of projects ranging from small retail strip centers to major interstate highway construction, and high voltage transmission lines in both New York and Washington. He has participated in field data collection, monitoring of construction sites, and site evaluations. Previously, Mr. McGowan planned and conducted Phase I Environmental Site Assessments, Phase II Subsurface Investigations, and engineering investigations. His work has included compliance activities involving Superfund Sites, and waste remediation sites, and groundwater monitoring. Additionally, Mr. McGowan is a Certified Erosion and Sediment Control Lead for construction and site development activities..

Education	State University of New York - Binghamton, NY – BSci Geology – 1983
	University College of New York - New York, NY – Master of Science, Geology – 1994 .
Professional Certifications and Licenses	Professional Geologist – Washington State Geologist Licensing Board, License No. 1737
	Professional Engineering Geologist – Washington State Geologist Licensing Board, License No. 1737
	Professional Hydrogeologist – Washington State Geologist Licensing Board, License No. 1737
	Professional Geologist – Washington State Geologist Licensing Board, License No. 1737
	OSHA Hazardous Waste Operations – OSHA 40-hour Training certified
	Certified Erosion & Sediment Control Lead
Professional History	Aerotech Environmental Consulting, Inc., Project Hydrogeologist (2010-Present)
	Earth Solutions Northwest, Inc., Project Geologist / Hydrogeologist (2006-2010)
	Earth Consultants, Inc., Field Geologist/Engineering Geologist (2005-2006)
	Natraco Consultants, Geologist / Hydrogeologist (2002-2005)
	Boateng Engineering,. Project Geologist / Hydrogeologist (2001-2003)
	Airteck Consulting,. Project Geologist / Hydrogeologist (1992-1999)
	Certified Engineering & Testing, Project Geologist / Hydrogeologist (1989-1992)
	New York Power Authority, Engineering Geologist (1983-1989)
Certifications	OSHA 40-hr Hazwoper, 8hr Refresher (2013).
Organizations & Memberships	National Ground Water Association.
	American Institute of Professional Geologists
Expertise	Mr. McGowan has performed over 300 Phase I, Phase II, and engineering investigations including those related to property transfers and LUST closures, conducted site reconnaissance, and prepared Phase I and Phase II Site Assessment reports. Phase II investigations included groundwater monitoring well design, installation and monitoring. He has participated in several large high-profile engineering projects, including a submarine cable project in New York, and the Sound Transit light rail project in Washington state. He assisted in the management and planning of many of these projects, implemented the investigations, created both preliminary and final reports, and defined and implemented the additional investigation where required.

REAL ESTATE TRANSFERS: He has performed Phase II Subsurface investigation / preliminary hydrogeological evaluations for the purpose of property transfers for lenders, property owners and prospective buyers.

Notable Projects

Downtown Kirkland: a subsurface investigation in a an downtown urban area that included advancement of soil borings and collect of both soil and water samples.

Holcombe Inc, Renton: a Phase II investigation on an industrial site that also included undeveloped wooded areas, a stream and wetlands. A subsurface investigation designed to characterize the site was conducted on the property. This included advancement of soil boring and collection of both soil and groundwater samples.

Lynwood Body Shop: a former automotive repair site that once had underground gasoline storage tanks. A Phase I, a Phase II and a Remediation of the former automotive repair site was conducted designed to delineate the extent of petroleum contaminated soils on the property. Work included but was not limited to characterizing the site and extension of soil contamination and the removal and properly disposal of the contamination soil.

Shopping Center, Gig Harbor, WA: a former dry cleansers site whose soil was contaminated by Perchloroethylene. A site characterization study was conducted to target the areas and extent of contamination,. After the 'hot' spots were delineated the remediation was conducted to remove and dispose of the contaminated soil properly.

Townhouse Development, Kenmore, WA: a geotechnical survey done for a townhouse development that included the generation of stratigraphic maps designed to identify and establish a thick peat layer that required unique foundation support to insure stability and proper flow for the sewer lines. There was also a de-watering operation.

East Lake Sammamish Lake Storage Facility, Redmond, WA: geotechnical tests for the design and construction for the foundations, parking areas, and utility pipelines of the project.

Levco Metals, Queens, NY : a hydrogeological study and decommissioning of an abandoned metal plating facility. Groundwater monitoring wells were installed and a monitoring program was established.

Sound Transit Light Rail: Phase I and Phase II field work and reports for the southern section of the Sound Light Rail Project going to the SeaTac airport..

Atafia Chemical Plant: ongoing remediation project involved installation of groundwater monitoring wells, soil borings, collecting and logging field samples, groundwater monitoring and remediation. An extraction system of arsenic and cyanide from groundwater implemented.

Horseheads Industrial Park: a hydrogeological survey of an industrial park. The survey included a subsurface investigation, geotechncial tests, installation of groundwater monitoring wells, a

groundwater monitoring program, and a groundwater flow study.

Long Island Sound Submarine Cable: a submarine high voltage electric transmission line that transversed Long Island Sound from New Rochelle to Nassau County, New York. Responsibilities included but were not limited to geological mapping, environmental protection for sensitive areas planning, test pits and geotechincal tests,, seismic survey, hydrogeological and groundwater studies.

Marcy - South Transmission Line Project New York State: a 365 mile long high voltage electric transmission line that transversed New York State from Marcy, New York to New York City. Responsibilities included but were not limited to geological mapping, environmental protection for sensitive areas planning, test pits and geotechincal tests, slope stabilization, seismic survey, hydrogeological and groundwater studies, and grading supervision.

Once the construction phase began, responsibilities included ensuring work was done according to both State and Federal regulations and contract specifications. In addition, the evaluation and report preparation of potion gravel deposits along the lines route.

- Boring Logs and Ecology Water Well Records

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ENVIRONMENTAL CONSULTING
www.AerotechEnvironmental.com

MONITORING WELL ID: **BORING LOG #: B-1** **Page 1 of**

Project Name: CHJ Properties, LLC
Project Number: 214-8130

Site Location: 9506 - 19th Ave SE, Everett, Wa

Borehole Location: 18 ft south and 15 ft west of southwest corner of south wing of building

Borehole Area (AOC): Former UST Basin - west sidewall - west of west tank

Logged by: J. McDermott: Boring Depth: 8.5 feet

GW Encountered: NO Static GW Level:

Notes:

Drilling Information

Drilling Contractor:	SEP, Tumwater, Wa
Drilling Method:	Direct Push
Borehole Diameter:	2"
Sampler Type:	Core sampler + virgin poly-sleeve

Approx. Surface Elevation: 540 MSL

Start Date: 08-06-14 End Date: Same

Depth (ft)	Groundwater	PID	Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description	Well Construction
1							SP	FILL - Pea GRAVEL and SAND, medium to fine, loose, well sorted, medium brownish gray, dry.	
2									
3							GP	FILL - Pea GRAVEL, trace medium to fine sand, loose, medium brownish gray, dry.	
4									
5							SP	DIAMICTON - SAND, fine, with medium, trace coarse sand and grit,, moderate sorting, little gravel (small to medium, subrounded to rounded), medium brownish gray, dry. Moderate but indistinct odor was observed between 7 and 8.5 feet.	
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18								Bottom of Borehole at 8.5 ft	
19								Groundwater: Not encountered	
20								Borehole sealed with bentonite chips No monitoring well was installed	

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www.AerotechEnvironmental.com

MONITORING WELL ID: **BORING LOG #: B-1** **Page 2 of**

Project Name:

Project Number:

Drilling Information

Drilling Contractor:

Logged by:

Start Date: End Date:

Depth (ft)	Groundwater		Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description **UNIFIED SOIL CLASSIFICATION SYSTEM EXPLANATION**	Well Construction		
21							GW	**GRAVELS**, well-graded* OR Gravel+Sand mix, little-no fines			
							GP	**GRAVELS**, poorly-graded* OR Gravel+Sand mix, little-no fines			
22							GM	**GRAVELS**, silty OR Gravel-sand-silt mix			
							GC	**GRAVELS**, clayey OR Gravel-sand-clay mix			
23							SW	**SAND**, well-graded OR **Gravelly Sands**, little-no fines			
							SP	**SAND**, poorly-graded OR **Gravelly Sands**, little-no fines			
24							SM	**SAND**, silty OR Sand-silt mix			
							SC	**SAND**, clayey OR Sand-clay mix			
25							ML	**SILT**, inorganic (very fine sands, rock flour, silty or clayey fine			
								sands) OR Clayey silts with slight plasticity			
26							CL	**CLAY**, inorganic, low-med plasticity (gravelly, sandy, silty, lean)			
							OL	**SILT**, organic, AND **SILT-CLAY**, organic, low plasticity			
27							MH	**SILT**, inorganic (micaceous or diatomaceous fn sndy/silty soils)			
								OR SILTY SOILS, elastic SILTS			
28							CH	**CLAY**, inorganic, high plasticity, fat clays			
							OH	**CLAY**, organic, med-high plasticity OR Organic SILTS			
29							PT	**PEAT** and other highly organic SOILS			
30								**** Terminology clarification:*** *The term "**Well graded**" is a synonym for "**Poorly sorted**," both meaning that a wide range of particle sizes are present. The former term is employed in geotechnical descriptions, while the latter is preferred by the USDA in characterizing topsoils and subsoils.*			
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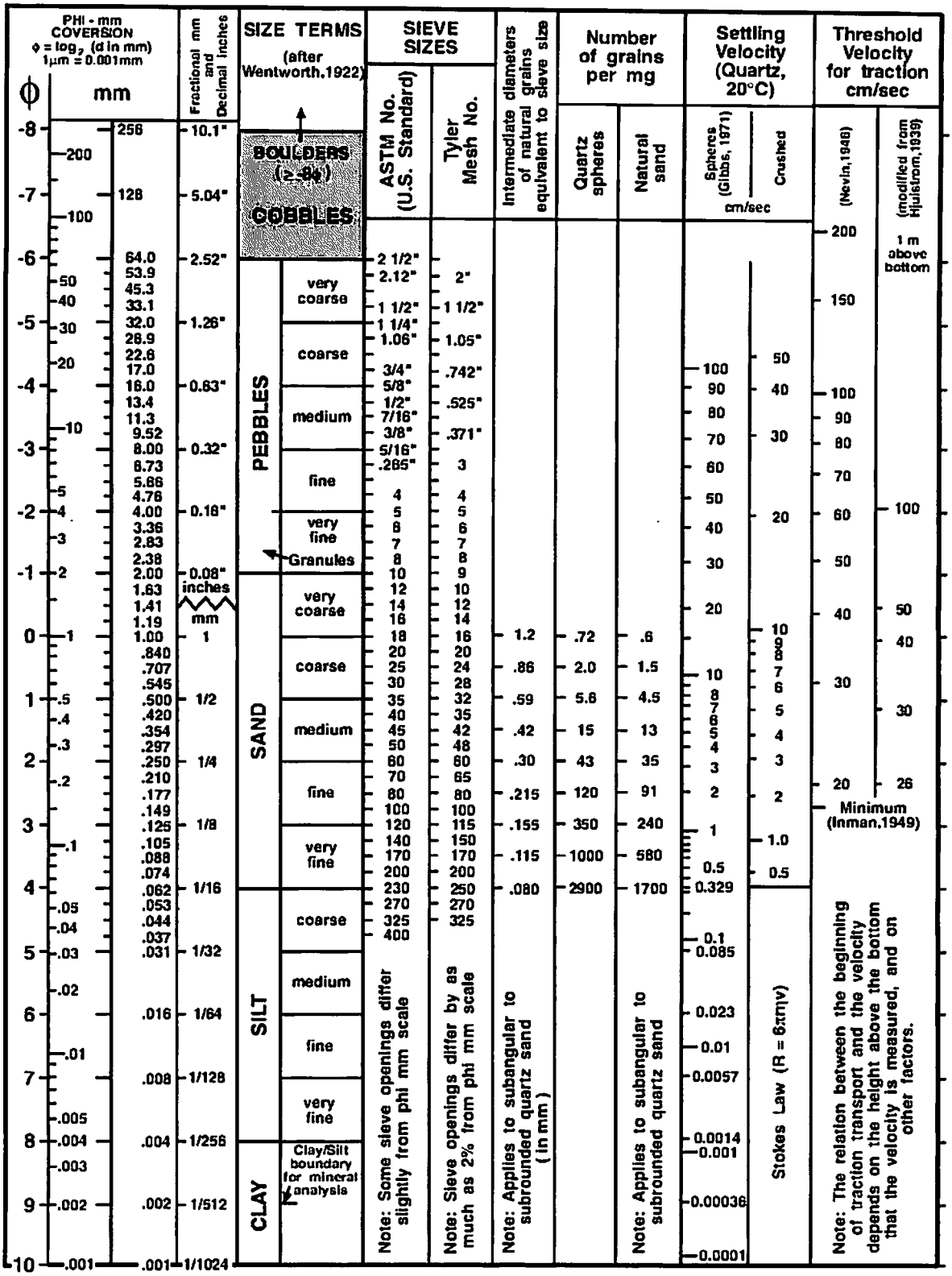


US Geological Survey

UNIFIED SOIL CLASSIFICATION INCLUDING IDENTIFICATION AND DESCRIPTION

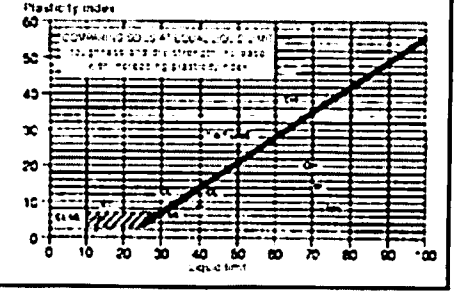
	FIELD IDENTIFICATION PROCEDURES (excluding particles larger than 3 inches and basing fractions on estimated weights)			GROUP SYMBOLS	TYPICAL NAMES	INFORMATION REQUIRED FOR DESCRIBING SOILS	LABORATORY CLASSIFICATION CRITERIA
COARSE GRAINED SOILS More than half material is larger than No. 200 sieve size	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size	CLEAN GRAVELS (Little or no fines)	Wide range in grain size and substantial amounts of all intermediate particle sizes	GW	Well graded gravels, gravel-sand mixtures, little or no fines	Give typical name; indicate approximate percentage of sand and gravel; max size; angularity, surface condition and hardness of the coarse grains; local or geological name and other pertinent descriptive information; and symbol in parentheses For undisturbed soils add information on stratification, degree of compactness, cementation, moisture conditions and drainage characteristics EXAMPLE Silty sand, gravelly; about 20% hard, angular gravel particles 1/2 - in. maximum size; rounded and subangular sand grains coarse to fine, about 15% nonplastic fines with low dry strength; well compacted and moist in place; alluvial sand; (SM)	$C_u = \frac{D_{60}}{D_{10}}$ Greater than 4 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between one and 3 Not meeting all gradation requirements for GW Atterberg limits above "A" line with PI greater than 7 / Atterberg limits below "A" line or PI greater than 7 / Above "A" line with PI between 4 and 7 are borderline cases requiring use of dual symbols
		GRAVELS WITH FINES (Appreciable amount of fines)	Predominantly one size or a range of sizes with some intermediate sizes missing	GP	Poorly graded gravels, gravel-sand mixtures, little or no fines		
			Non-plastic fines (for identification procedures see ML below)	GM	Silty gravels, poorly graded gravel-sand-silt mixtures		
			Plastic fines (for identification procedures see CL below)	GC	Clayey gravels, poorly graded gravel-sand-clay mixtures		
	SANDS More than half of coarse fraction is smaller than No. 4 sieve size	CLEAN SANDS (Little or no fines)	Wide range in grain sizes and substantial amount of all intermediate particle sizes	SW	Well graded sands, gravelly sands, little or no fines		$C_u = \frac{D_{60}}{D_{10}}$ Greater than 6 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between one and 3 Not meeting all gradation requirements for SW Atterberg limits below "A" line or PI less than 4 / Atterberg limits above "A" line with PI greater than 7 / Above "A" line with PI between 4 and 7 are borderline cases requiring use of dual symbols
			Predominantly one size or a range of sizes with some intermediate sizes missing	SP	Poorly graded sand, gravelly sands, little or no fines		
		SANDS WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML below)	SM	Silty sand, poorly graded sand-silt mixtures		
			Plastic fines (for identification procedures see CL below)	SC	Clayey sand, poorly graded sand-clay mixtures		
FINE GRAINED SOILS More than half material is smaller than No. 200 sieve size	IDENTIFICATION PROCEDURES ON FRACTION SMALLER THAN No. 40 SIEVE SIZE						
		DRY STRENGTH (CRUSHING CHARACTERISTICS)	DILATANCY (REACTION TO SHAKING)	TOUGHNESS (CONSISTENCY NEAR PLASTIC LIMIT)			
SILTS AND CLAYS Liquid limit less than 50		None to slight	Quick to slow	None	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sand with slight plasticity	Give typical name; indicate degree and character of plasticity, amount and maximum size of coarse grains; color in wet condition, odor if any, local or geologic name, and other pertinent descriptive information; and symbol in parentheses For undisturbed soils add information on structure, stratification, consistency in undisturbed and remolded states, moisture and drainage conditions EXAMPLE Clayey silt, brown; slightly plastic; small percentage of fine sand; numerous vertical root holes; firm and dry in place; loess; (ML)
		Medium to high	None to very slow	Medium	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	
		Slight to medium	Slow	Slight	MH	Organic silts and organic silt-clays of low plasticity	
SILTS AND CLAYS Liquid limit greater than 50		Slight to medium	Slow to none	Slight to medium	OL	Inorganic silt, micaceous or diatomaceous fine sandy or silty soils, elastic silts	
		High to very high	None	High	CH	Inorganic clays of high plasticity	
		Medium to high	None to very slow	Slight to medium	OH	Organic clays of medium to high plasticity	
HIGHLY ORGANIC SOILS	Readily identified by color, odor, spongy feel and frequently by fibrous texture			Pt	Peat and other organic soils		

Boundary classifications: Coarse-grained soils with between 5% and 12% fines require use of dual symbols (GW-GM, GW-GC, SW-SM, SW-SC, GP-GM, GP-GC, SP-SM, SP-SC)

Use grain size curve in identifying the fractions as given under field identification

PLASTICITY CHART

FOR LABORATORY CLASSIFICATION OF FINE GRAINED SOILS



Adapted Unified Soil Classification System (adapted from U.S. Department of the Interior, Bureau of Reclamation)

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MONITORING WELL ID: **BORING LOG #: B-2** **Page 1 of**

Project Name: CHJ Properties, LLC

Project Number: 214-8130

Site Location: 9506 - 19th Ave SE, Everett, Wa

Borehole Location: 12 ft south and 33 ft west of southeast corner of south wing of building

Borehole Area (AOC): Former UST Basin - north sidewall north of center tank

Logged by: J. McDermott: Boring Depth: 9 feet

GW Encountered: NO Static GW Level:

Notes:

Drilling Information

Drilling Contractor:	SEP, Tumwater, Wa
Drilling Method:	Direct Push
Borehole Diameter:	2"
Sampler Type:	Core sampler + virgin poly-sleeve

Approx. Surface Elevation: 540 MSL

Start Date: 08-06-14 End Date: Same

Depth (ft)	Groundwater	PID	Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description	Well Construction
							SW	FILL - SAND, fine to coarse, with grit, little small gravel, brownish gray, dry, Surface: 2 inch asphalt pavement	
1								DIAMICTION - SAND, fine, little medium, well sorted, trace grit, small to medium gravel (well rounded to subangular), brownish gray, dry (moist below 8 ft). Very dense and marginally cemented.	
2									
3									
4							SW		
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18								Bottom of Borehole at 9.0 ft	
19								Groundwater: Not encountered.	
20								Borehole sealed with bentonite chips No monitoring well was installed	

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MONITORING WELL ID: **BORING LOG #: B-3** **Page 1 of**

Project Name: CHJ Properties, LLC

Project Number: 214-8130

Drilling Information

Drilling Contractor:	SEP, Tumwater, Wa
Drilling Method:	Direct Push
Borehole Diameter:	2"
Sampler Type:	Core sampler + virgin poly-sleeve

Site Location: 9506 - 19th Ave SE, Everett, Wa

Borehole Location: 12.5 ft south and 3 ft west of southeast corner of south wing of building

Borehole Area (AOC): Former UST Basin -north sidewall north of east tank

Logged by: J. McDermott: Boring Depth: 9 feet

GW Encountered: NO Static GW Level:

Notes:

Approx. Surface Elevation: 540 MSL

Start Date: 08-06-14 End Date: Same

Depth (ft)	Groundwater	PID	Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description	Well Construction
							SW	FILL - SAND, fine to coarse, with grit, little small gravel, brownish gray, dry, Surface: 2 inch asphalt pavement	
1								DIAMICTION - SAND, fine, little medium, well sorted, trace grit, small to medium gravel (well rounded to subangular), brownish gray, dry (moist below 7 ft). Very dense and marginally cemented.	
2									
3									
4									
5							SP		
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18								Bottom of Borehole at 9 ft	
19								Groundwater: Not encountered Borehole sealed with bentonite chips	
20								No monitoring well was installed	

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MONITORING WELL ID: **BORING LOG #: B-4** **Page 1 of**

Project Name: CHJ Properties, LLC

Project Number: 214-8130

Drilling Information

Drilling Contractor:	SEP, Tumwater, Wa
Drilling Method:	Direct Push
Borehole Diameter:	2"
Sampler Type:	Core sampler + virgin poly-sleeve

Site Location: 9506 - 19th Ave SE, Everett, Wa

Borehole Location: 21 ft south and 1 ft east of southeast corner of south wing of building

Borehole Area (AOC): Former UST Basin - beneath east tank

Logged by: J. McDermott: Boring Depth: 15 feet

GW Encountered: YES Static GW Level:7 feet

Notes:

Approx. Surface Elevation: 540 MSL

Start Date: 08-06-14 End Date: Same

Depth (ft)	Groundwater	PID	Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description	Well Construction
1								FILL - SAND, fine, well sorted, trace small rounded gravel, medium brown, slightly moist. Ashalt fragments at base of unit.	
2									
3							SP		
4									
5									
6									
7								FILL - Pea GRAVEL, trace coarse sand, silt, and clay, gray, very moist, moderate septic odor at base of gravel, gray, wet.	
8									
9									
10			No recov at 8-12 ft				GP		
11									
12									
13									
14							SW	DIAMICTION - SAND, fine, little med+crs, poorly sorted, little grit, small to medium gravel (well rounded to subangular), brownish gray, very sl moist, very dense / margin. cemented.	
15									
16									
17									
18								Bottom of Borehole at 15 ft	
19								Groundwater: At 7 ft	
20								Borehole sealed with bentonite chips No monitoring well was installed	

AEROTECH ENVIRONMENTAL CONSULTING

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MONITORING WELL ID: **BORING LOG #: B-5** **Page 1 of**

Project Name: CHJ Properties, LLC

Project Number: 214-8130

Site Location: 9506 - 19th Ave SE, Everett, Wa

Borehole Location: 20 ft south and 29 ft west of southeast corner of south wing of building

Borehole Area (AOC): Former UST Basin - beneath center tank area

Logged by: J. McDermott: Boring Depth: 17 feet

GW Encountered: YES Static GW Level: 7 feet

Notes:

Drilling Information

Drilling Contractor:	SEP, Tumwater, Wa
Drilling Method:	Direct Push
Borehole Diameter:	2"
Sampler Type:	Core sampler + virgin poly-sleeve

Approx. Surface Elevation: 540 MSL

Start Date: 08-06-14 End Date: Same

Depth (ft)	Groundwater	PID	Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description	Well Construction
1–5							SP	FILL - SAND, fine, trace medium, very well sorted, light brown, very slightly moist. Exception at 2.5 to 3.6 ft: fine sand, little medium sand, very dark brown, with roots and silty organics matrix.	
5–15							GP	FILL - Pea GRAVEL, trace fine to coarse sand, and silt, gray, very moist, moderate septic odor at base of gravel, gray, wet below 8 ft. Moderate petrol odor beneath 10.5 feet	
16–17							SW	DIAMICTION - SAND, fine, little med+crs, poorly sorted, little grit, small to medium gravel (well rounded to subangular), brownish gray, very sl moist, very dense / margin. cemented.	
18								Bottom of Borehole at 17 ft	
19								Groundwater: At 7 ft	
20								Borehole sealed with bentonite chips No monitoring well was installed	

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MONITORING WELL ID: **BORING LOG #: B-6** **Page 1 of**

Project Name: CHJ Properties, LLC

Project Number: 214-8130

Drilling Information

Drilling Contractor:	SEP, Tumwater, Wa
Drilling Method:	Direct Push
Borehole Diameter:	2"
Sampler Type:	Core sampler + virgin poly-sleeve

Site Location: 9506 - 19th Ave SE, Everett, Wa

Borehole Location: 25 ft south and 24 ft west of southeast corner of south wing of building

Borehole Area (AOC): Former UST Basin - south sidewall, south of center tank

Logged by: J. McDermott: Boring Depth: 12 feet

GW Encountered: YES Static GW Level: 6.8 ft

Notes:

Approx. Surface Elevation: 540 MSL

Start Date: 08-06-14 End Date: Same

Depth (ft)	Groundwater	PID	Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description	Well Construction
1–7							SP	FILL - SAND, fine, well sorted, medium brown, very slightly moist. Exception at 3.5 to 4 ft: Sand, fine, mod sorted, trace silt and small gravel, roots and organic matrix, very dark brown. Wet below 7 ft. Slight to moderate petrol odor beneath 6.5 ft.	
8–12							GP	FILL - Pea GRAVEL, trace fine sand and silt, gray, gray, wet. Slight to moderate petrol odor.	
13–20								Bottom of Borehole at 12 ft Groundwater: At 7 ft Borehole sealed with bentonite chips No monitoring well was installed	

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MONITORING WELL ID: **BORING LOG #: B-7** **Page 1 of**

Project Name: CHJ Properties, LLC

Project Number: 214-8130

Site Location: 9506 - 19th Ave SE, Everett, Wa

Borehole Location: 27.5 ft south and 6 ft east of southeast corner of south wing of building

Borehole Area (AOC): Former UST Basin - south sidewall - south of east tank

Logged by: J. McDermott: Boring Depth: 12 feet

GW Encountered: YES Static GW Level: 7.5 ft

Notes:

Drilling Information

Drilling Contractor:	SEP, Tumwater, Wa
Drilling Method:	Direct Push
Borehole Diameter:	2"
Sampler Type:	Core sampler + virgin poly-sleeve

Approx. Surface Elevation: 540 MSL

Start Date: 08-06-14 End Date: Same

Depth (ft)	Groundwater		Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description	Well Construction
1								FILL - SAND, fine, very well sorted, trace small rounded gravel, light brown, dry. Exception: Beneath 7.9 ft: SAND, fine, organic matrix, well sorted, dark brown to black, very moist to wet.	
2									
3									
4									
5									
6									
7									
8									
9									
10									
11								DIAMICTION - SAND, fine, mod sorted, trace coarese, medium and grit, trace small gravel (rounded to subrounded), brownish gray, moist, very dense +cemented.	
12									
13									
14									
15									
16								Due to the present of a relatively steep earthen berm to the south, the borehole was advanced at a ten degree angle to the vertical / angled toward the south, in order to obtain a proper sidewall sample.	
17									
18								Bottom of Borehole at 12 ft	
19								Groundwater: 7.5 ft	
20								Borehole sealed with bentonite chips No monitoring well was installed	

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MONITORING WELL ID: **BORING LOG #: B-8** **Page 1 of**

Project Name: CHJ Properties, LLC

Project Number: 214-8130

Site Location: 9506 - 19th Ave SE, Everett, Wa

Borehole Location: 19 ft south and 23.5 ft east of southeast corner of south wing of building

Borehole Area (AOC): Former UST Basin - east sidewall

Logged by: J. McDermott: Boring Depth: 7 feet

GW Encountered: NO Static GW Level:

Notes:

Drilling Information

Drilling Contractor:	SEP, Tumwater, Wa
Drilling Method:	Direct Push
Borehole Diameter:	2"
Sampler Type:	Core sampler + virgin poly-sleeve

Approx. Surface Elevation: 540 MSL

Start Date: 08-06-14 End Date: Same

Depth (ft)	Groundwater		Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description	Well Construction		
							SW	FILL-Sand (poorly sorted) and Gravel (small subround), gray			
1								DIAMICTION - SAND, fine, little medium, coarse and grit, gravel (small, subrounded), gray, dry, very dense / marginally cemented.			
2											
3							SW				
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18								Bottom of Borehole at 7 ft			
19								Groundwater: Not encountered			
								Borehole sealed with bentonite chips			
20								No monitoring well was installed			

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MONITORING WELL ID: **BORING LOG #: B-9** **Page 1 of**

Project Name: CHJ Properties, LLC

Project Number: 214-8130

Site Location: 9506 - 19th Ave SE, Everett, Wa

Borehole Location: 2 ft north and 2 ft east of former SW fuel pump location

Borehole Area (AOC): Pump island area - SW Pump vicinity

Logged by: J. McDermott: Boring Depth: 6 feet

GW Encountered: NO Static GW Level:

Former fuel pumps were located approx 7 ft from outer margins of island.

Notes: Concrete pump Islands are 26 ft in length, 3 ft width, and 20 ft and 45 ft east of bldg

Drilling Information

Drilling Contractor:	SEP, Tumwater, Wa
Drilling Method:	Direct Push
Borehole Diameter:	2"
Sampler Type:	Core sampler + virgin poly-sleeve

Approx. Surface Elevation: 540 MSL

Start Date: 08-06-14 End Date: Same

Depth (ft)	Groundwater		Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description	Well Construction		
								6 in cement pavement atop 6 in gravel and sand			
1							SP	FILL - SAND, trace medium, trace silt, trace gravel (small to medium, subround to rounded), moderate to low density, gray, dry			
2											
3								DIAMICTION - SAND, fine, trace medium to coarse, mod sorted, little grit, small to medium gravel (subrounded to rounded), gray, very sl moist, very dense / marginally cemented. Petrol odor beneath 2 ft depth.			
4							SP				
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18								Bottom of Borehole at 6 ft			
19								Groundwater: Not encountered.			
20								Borehole sealed with bentonite chips			
								No monitoring well was installed			

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MONITORING WELL ID: **BORING LOG #: B-10** **Page 1 of**

Project Name: CHJ Properties, LLC

Project Number: 214-8130

Drilling Information

Drilling Contractor:	SEP, Tumwater, Wa
Drilling Method:	Direct Push
Borehole Diameter:	2"
Sampler Type:	Core sampler + virgin poly-sleeve

Site Location: 9506 - 19th Ave SE, Everett, Wa

Borehole Location: 3 ft north and 2 ft east of former NW fuel pump location

Borehole Area (AOC): Pump island area - NW Pump vicinity

Logged by: J. McDermott: Boring Depth: 6 feet

GW Encountered: NO Static GW Level:

Former fuel pumps were located approx 7 ft from outer margins of island.

Notes: Concrete pump Islands are 26 ft in length, 3 ft width, and 20 ft and 45 ft east of bldg

Approx. Surface Elevation: 540 MSL

Start Date: 08-06-14 End Date: Same

Depth (ft)	Groundwater		Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description	Well Construction		
								6 in cement pavement atop 6 in gravel and sand			
1								FILL - SAND, trace medium, trace silt, trace gravel (small to medium, subround to rounded), moderate to low density, gray, dry. Moderate petrol odor beneath 1 ft depth (slight odor above 1 ft) .			
2											
3								DIAMICTION - SAND, fine, trace medium to coarse, mod sorted, little grit, small to medium gravel (subrounded to rounded), gray, very sl moist, very dense / marginally cemented. Moderate petrol odor.			
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18								Bottom of Borehole at 6 ft			
19								Groundwater: Not encountered.			
								Borehole sealed with bentonite chips			
20								No monitoring well was installed			

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MONITORING WELL ID: **BORING LOG #: B-11** **Page 1 of**

Project Name: CHJ Properties, LLC
Project Number: 214-8130

Drilling Information

Drilling Contractor:	SEP, Tumwater, Wa
Drilling Method:	Direct Push
Borehole Diameter:	2"
Sampler Type:	Core sampler + virgin poly-sleeve

Site Location: 9506 - 19th Ave SE, Everett, Wa

Borehole Location: 3 ft north and 2 ft east of former SE fuel pump location

Borehole Area (AOC): Pump island area - SE Pump vicinity

Logged by: J. McDermott: Boring Depth: 4 feet

GW Encountered: NO Static GW Level:

Former fuel pumps were located approx 7 ft from outer margins of island.

Notes: Concrete pump Islands are 26 ft in length, 3 ft width, and 20 ft and 45 ft east of bldg

Approx. Surface Elevation: 540 MSL

Start Date: 08-06-14 End Date: Same

Depth (ft)	Groundwater		Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description	Well Construction		
								Concrete pavement - 6 in, atop gravel			
1								DIAMICTION - SAND, fine, trace medium to coarse, mod sorted, little grit, small to medium gravel (subrounded to rounded), gray, very sl moist, very dense / marginally cemented. No odors.			
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18								Bottom of Borehole at 4 ft			
19								Groundwater: Not encountered.			
								Borehole sealed with bentonite chips			
20								No monitoring well was installed			

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MONITORING WELL ID: **BORING LOG #: B-12** **Page 1 of**

Project Name: CHJ Properties, LLC

Project Number: 214-8130

Drilling Information

Drilling Contractor:	SEP, Tumwater, Wa
Drilling Method:	Direct Push
Borehole Diameter:	2"
Sampler Type:	Core sampler + virgin poly-sleeve

Site Location: 9506 - 19th Ave SE, Everett, Wa

Borehole Location: 10 ft north and 29 ft east of SE corner of south wing of building

Borehole Area (AOC): Product line trench area - between pump islands and former UST basin

Logged by: J McDermott Boring Depth: 4 feet

GW Encountered: NO Static GW Level:

Notes:

Approx. Surface Elevation: 540 MSL

Start Date: 08-06-14 End Date: Same

Depth (ft)	Groundwater		Visual or Olfactory Evidence	Blow Counts	Recovery		USCS Classification	Soil Classification/ Description	Well Construction		
1								FILL - SAND, fine to coarse, very poorly sorted, with asphalt fragments, little small gravel, gray, dry. Surface: Asphalt pavement - 4 inch.			
2								DIAMICTION - SAND, fine, mod sorted, little grit, small to medium gravel (well rounded to subangular), gray, very sl moist, very dense / margin. cemented. No odor,			
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18								Bottom of Borehole at 6 ft			
19								Groundwater: Not encountered. Borehole sealed with bentonite chips			
20								No monitoring well was installed			

- Analytical Results and Radar Survey Report

ADVANCED ANALYTICAL

Environmental Testing Laboratory

August 14, 2014

James McDermott
Aerotech Environmental, Inc.
19600 International Blvd.
SeaTac, WA 98188

Dear Mr. McDermott:

Please find enclosed the analytical data report for the *CHJ (B40807-1)* Project.

Samples were received on *August 07, 2014.* The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 497-0110.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

V. Ivanov

Val G. Ivanov, Ph.D.
Laboratory Manager

Overlake Business Center ■ 2821 152 Avenue NE ■ Redmond, WA 98052
ph 425.497.0110 fax 425.497.8089
E-mail: aachemlab@yahoo.com

Advanced Analytical Laboratory
(425)497-0110, fax(425)497-8089

AAL Job Number:	B40807-1
Client:	Aerotech Environmental
Project Manager:	Jim McDermott
Client Project Name:	CHJ, Inc
Client Project Number:	9506 19 Ave SE, Everett
Date received:	08/07/14

Advanced Analytical Laboratory
(425) 497-0110, fax (425) 497-8089

AAL Job Number: B40807-1
Client: Aerotech Environmental
Project Manager: Jim McDermott
Client Project Name: CHJ, Inc
Client Project Number: 9506 19 Ave SE, Everett
Date received: 08/07/14

Analytical Results

8260B, µg/kg		MTH BLK	LCS	B-4 (14.5')	B-9 (6')	MS	MSD	RPD
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	08/11/14	08/11/14	08/11/14	08/11/14	08/11/14	08/11/14	08/11/14
Date analyzed	Limits	08/11/14	08/11/14	08/11/14	08/11/14	08/11/14	08/11/14	08/11/14
MTBE	50	nd		nd	nd			
Benzene	20	nd	99%	76	4,400	110%	109%	0%
1,2-Dichloroethane(EDC)	50	nd		nd	320			
Toluene	50	nd	93%	150	130,000	99%	100%	1%
1,2-Dibromoethane (EDB)*	5	nd		nd	nd			
Ethylbenzene	50	nd		110	60,000			
Xylenes	50	nd		530	480,000			
Naphthalene	50	nd		59	270,000			

*-instrument detection limits

Surrogate recoveries							
Toluene-d8	93%	91%	102%	98%	96%	95%	
1,2-Dichloroethane-d4	90%	85%	96%	91%	85%	87%	
4-Bromofluorobenzene	84%	82%	87%	82%	85%	78%	

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
Results reported on dry-weight basis
M - matrix interference
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

Advanced Analytical Laboratory
(425) 497-0110, fax (425) 497-8089

AAL Job Number: B40807-1
Client: Aerotech Environmental
Project Manager: Jim McDermott
Client Project Name: CHJ, Inc
Client Project Number: 9506 19 Ave SE, Everett
Date received: 08/07/14

Analytical Results

NWTPH-Gx / BTEX		MTH BLK	LCS	B-1 (8.5')	B-4 (14.5')	B-5 (17')	B-6 (7')
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14
Date analyzed	Limits	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14
NWTPH-Gx, mg/kg							
Mineral spirits/Stoddard	5.0	nd		nd	nd	nd	nd
Gasoline	5.0	nd		nd	5.9	nd	nd
BTEX 8021B, µg/kg							
Benzene	20	nd	98%	nd		nd	nd
Toluene	50	nd	99%	nd		nd	nd
Ethylbenzene	50	nd		nd		nd	nd
Xylenes	50	nd		nd		nd	nd
Surrogate recoveries:							
Trifluorotoluene		73%	80%	70%	75%	74%	75%
Bromofluorobenzene		99%	96%	100%	94%	94%	88%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
M - matrix interference
Results reported on dry-weight basis
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

Advanced Analytical Laboratory
(425) 497-0110, fax (425) 497-8089

AAL Job Number: B40807-1
Client: Aerotech Environmental
Project Manager: Jim McDermott
Client Project Name: CHJ, Inc
Client Project Number: 9506 19 Ave SE, Everett
Date received: 08/07/14

Analytical Results					Dupl	RPD	
NWTPH-Gx / BTEX		B-8 (7')	B-9 (6')	B-10 (6')	B-10 (6')	B-10 (6')	B-11 (4')
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14
Date analyzed	Limits	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14
NWTPH-Gx, mg/kg							
Mineral spirits/Stoddard	5.0	nd	nd	nd	nd		nd
Gasoline	5.0	nd	6,400	34	44	24%	nd
BTEX 8021B, µg/kg							
Benzene	20	nd		nd	nd		nd
Toluene	50	nd		nd	nd		nd
Ethylbenzene	50	nd		nd	nd		nd
Xylenes	50	nd		65	82	24%	nd
Surrogate recoveries:							
Trifluorotoluene		71%	70%	79%	92%		72%
Bromofluorobenzene		94%	99%	98%	130%		108%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
M - matrix interference
Results reported on dry-weight basis
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

Advanced Analytical Laboratory
(425) 497-0110, fax (425) 497-8089

AAL Job Number: B40807-1
Client: Aerotech Environmental
Project Manager: Jim McDermott
Client Project Name: CHJ, Inc
Client Project Number: 9506 19 Ave SE, Everett
Date received: 08/07/14

Analytical Results

NWTPH-Gx / BTEX		MS	MSD	RPD
Matrix	Soil	Soil	Soil	Soil
Date extracted	Reporting	08/12/14	08/12/14	08/12/14
Date analyzed	Limits	08/12/14	08/12/14	08/12/14
NWTPH-Gx, mg/kg				
Mineral spirits/Stoddard	5.0			
Gasoline	5.0			
BTEX 8021B, µg/kg				
Benzene	20	99%	109%	10%
Toluene	50	102%	113%	10%
Ethylbenzene	50			
Xylenes	50			
Surrogate recoveries:				
Trifluorotoluene		81%	84%	
Bromofluorobenzene		99%	99%	

Data Qualifiers and Analytical Comments
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Results reported on dry-weight basis
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

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AAL Job Number: B40807-1
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Client Project Name: CHJ, Inc
Client Project Number: 9506 19 Ave SE, Everett
Date received: 08/07/14

Analytical Results

NWTPH-Dx, mg/kg		MTH BLK	B-1 (8.5')	B-4 (14.5')	B-5 (17')	B-9 (6')	B-10 (6')	Dupl B-10 (6')
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14
Date analyzed	Limits	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14	08/12/14
Kerosene/Jet fuel	20	nd	nd	nd	nd	nd	nd	nd
Diesel/Fuel oil	20	nd	nd	nd	nd	nd	nd	nd
Heavy oil	50	nd	nd	nd	nd	nd	nd	nd
Surrogate recoveries:								
Fluorobiphenyl		119%	119%	119%	118%	122%	119%	120%
o-Terphenyl		128%	130%	129%	128%	125%	125%	120%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
Results reported on dry-weight basis
M - matrix interference
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

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AAL Job Number: B40807-1
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Client Project Number: 9506 19 Ave SE, Everett
Date received: 08/07/14

Analytical Results

Metals (7010), mg/kg		MTH BLK	LCS	B-4 (14.5')	B-9 (6')	MS	MSD	RPD
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	08/14/14	08/14/14	08/14/14	08/14/14	08/14/14	08/14/14	08/14/14
Date analyzed	Limits	08/14/14	08/14/14	08/14/14	08/14/14	08/14/14	08/14/14	08/14/14
Lead (Pb)	1.0	nd	101%	nd	1.2	115%	112%	3%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
M - matrix interference
Results reported on dry-weight basis
Acceptable Recovery limits: 65% TO 135%
Acceptable RPD limit: 30%

Advanced Analytical Laboratory
(425) 497-0110, fax (425) 497-8089

AAL Job Number: B40807-1
Client: Aerotech Environmental
Project Manager: Jim McDermott
Client Project Name: CHJ, Inc
Client Project Number: 9506 19 Ave SE, Everett
Date received: 08/07/14

Analytical Results

8260B, µg/L	Water	MTH BLK	LCS	B-4 (W)	MS	MSD	RPD
Matrix	Reporting	Water	Water	Water	Water	Water	Water
Date analyzed	Limits	08/11/14	08/11/14	08/11/14	08/11/14	08/11/14	08/11/14
MTBE	5.0	nd		nd			
Benzene	1.0	nd	99%	550	110%	109%	0%
1,2-Dichloroethane(EDC)	1.0	nd		nd			
Toluene	1.0	nd	93%	2,600	99%	100%	1%
1,2-Dibromoethane (EDB)	1.0	nd		nd			
Ethylbenzene	1.0	nd		850			
Xylenes	1.0	nd		5,100			
Naphtahlene	1.0	nd		500			
Surrogate recoveries							
Toluene-d8		93%	91%	96%	96%	95%	
1,2-Dichloroethane-d4		90%	85%	89%	85%	87%	
4-Bromofluorobenzene		84%	82%	79%	85%	78%	

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
M - matrix interference
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

Advanced Analytical Laboratory
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AAL Job Number:	B40807-1
Client:	Aerotech Environmental
Project Manager:	Jim McDermott
Client Project Name:	CHJ, Inc
Client Project Number:	9506 19 Ave SE, Everett
Date received:	08/07/14

Analytical Results				Dupl	RPD
NWTPH-Gx		MTH BLK	B-4 (W)	B-4 (W)	B-4 (W)
Matrix	Water	Water	Water	Water	Water
Date analyzed	Reporting Limits	08/08/14	08/08/14	08/08/14	08/08/14
NWTPH-Gx, ug/L					
Mineral spirits/Stoddard	100	nd	nd	nd	
Gasoline	100	nd	39,000	37,000	5%
Surrogate recoveries:					
Trifluorotoluene		99%	105%	90%	
Bromofluorobenzene		112%	121%	117%	

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

Advanced Analytical Laboratory
(425) 497-0110, fax (425) 497-8089

AAL Job Number: B40807-1
Client: Aerotech Environmental
Project Manager: Jim McDermott
Client Project Name: CHJ, Inc
Client Project Number: 9506 19 Ave SE, Everett
Date received: 08/07/14

Analytical Results

NWTPH-Dx, mg/L		MTH BLK	B-4 (W)
Matrix	Water	Water	Water
Date extracted	Reporting	08/08/14	08/08/14
Date analyzed	Limits	08/08/14	08/08/14
Kerosene/Jet fuel	0.20	nd	nd
Diesel/Fuel oil	0.20	nd	nd
Heavy oil	0.50	nd	nd
Surrogate recoveries:			
Fluorobiphenyl		117%	126%
o-Terphenyl		130%	122%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

Advanced Analytical Laboratory
(425) 497-0110, fax (425) 497-8089

AAL Job Number: B40807-1
Client: Aerotech Environmental
Project Manager: Jim McDermott
Client Project Name: CHJ, Inc
Client Project Number: 9506 19 Ave SE, Everett
Date received: 08/07/14

Analytical Results

Metals Dissolved (7010), mg/l		MTH BLK	LCS	B-4 (W)	MS	MSD	RPD
Matrix	Water	Water	Water	Water	Water	Water	Water
Date extracted	Reporting	08/14/14	08/14/14	08/14/14	08/14/14	08/14/14	08/14/14
Date analyzed	Limits	08/14/14	08/14/14	08/14/14	08/14/14	08/14/14	08/14/14
Lead Dissolved (Pb)	0.002	nd	104%	nd	78%	83%	6%

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
na - not analyzed
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

- Chain of Custody

ADVANCED ANALYTICAL

Chain of Custody Record

Laboratory Job #: B408071

2821 152 Avenue NE
Redmond, WA 98052
(425) 497-0110 fax: (425) 497-8089
aachemlab@yahoo.com

Client: Aerotech

Project Manager: J. McDermott

Address: 19800 International Blvd, Ste 101

Phone: (360) 271-0724 Fax:

Project Name: CHJ, Inc. 9500 19th Ave SE Everett, WA

Project Number:

Collector: J McDermott

Date of collection: 6 Aug 2014

*1 – 1 jar glass, 1 40cc glass Terracore; *2 2-40cc, 1 amber, 1 plastic

#	Sample ID	Time	Matrix	Container type	8260 Volatiles (EVIS, ASP)	8021B Volatiles	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead	Lead (dissolved)	(total)		Notes, comments	# of containers
1	B-1 (8.5')	0930	Soil	*1				X		X											W Sidewall	
2	B-2 (9')	1015	↓	↓																	NW Sidewall	
3	B-3 (9')	1117	↓	↓																	NE Sidewall	
4	B-4 (14.5')	1210	↓	↓	Y			X		X						HC	~~X~~	X			Below E. Tank	
5	B-4 (W)	1225	H_2O	*2	Y			X		X							X				" "	
6	B-5 (13')	1350	Soil (organic)	*1				X	HC [illegible]												Below Cent. Tank	
7	B-6 (7')	1430	Soil	↓				X													South Sidewall	
8	B-7 (11.6')	1505	↓	↓																	SE Sidewall	
9	B-8 (7')	1550	↓	↓				X													East Sidewall	
10	B-9 (4')	1615	↓	↓																	SW pump island	
11	B-9 (6')	1622	↓	↓	X			X		X								X			" "	
12	B-10 (6')	1651	↓	↓				X		X											NW pump island	

Relinquished by:	Date/Time	Received by:	Date/Time
James McDermott	8/7/14 0950	V. [illegible]	08/07/14 0952
Relinquished by:	**Date/Time**	**Received by:**	**Date/Time**

Sample receipt info:

Total # of containers:

Condition (temp. °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day ○

24 hr ○

48 hr ○

Standard ☒

ADVANCED ANALYTICAL

Chain of Custody Record

(2)

Laboratory Job #: B408CZ·1

2821 152 Avenue NE
Redmond, WA 98052
(425) 497-0110 fax: (425) 497-8089
aachemlab@yahoo.com

Client: AEROTECH

Project Manager: J. McDERMOTT

Address: 19600 International Blvd, Ste 101

Phone: (360) 271-0724 Fax:

Project Name: CHJ, INC 9506 19TH Ave SE EVERETT, WA

Project Number:

Collector: J. MCDERMOTT

Date of collection: 6 Aug 2014

Container type: * 1 jar (4oz) 1 40ml (Fuel Anal.)

#	Sample ID	Time	Matrix	Container type	8260 Volatiles	8021B Volatiles	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs	8081 Pesticides	RCRA 8 Metals	Lead			Notes, comments	# of containers
1	B-11 (4')	1725	SOIL	x'				X												NE PUMP ISLANDS	
2	B-12 (6')	1745	↓	↓																E of [illegible] islands & product lines	
3	B-5 (17') Hmok	1400	SOIL	x'				X		X										BELOW CONT TANK	
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Relinquished by:	Date/Time	Received by:	Date/Time
James L McDermott	8/7/14 0950	[illegible]	08/07/14 0950
Relinquished by:	Date/Time	Received by:	Date/Time

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

Same day O

24 hr O

48 hr O

Standard ☒