Limited Site Investigation

Taqueria El Rinconsito Restaurant
301 and 305 Central Avenue North & 215 East Smith Street
Kent, King County, Washington
King County Tax Parcel Nos. 917960-1735 and 917960-1745

November 20, 2013
Terracon Project No. 81137082
RIMS No. 10-1641-10

Prepared for:
Vivolo Family Trust LLC
c/o Union Bank, N.A. as Trustee
Orange, California

Prepared by:
Terracon Consultants, Inc.
Mountlake Terrace, Washington

Terracon

November 20, 2013

Vivolo Family Trust LLC
c/o Union Bank as Trustee
500 S Main Street, Suite 320
MC 4-450-320
Orange, California 92868

Attn: Ms. Cyndy Wagner
Mr. Ryan Marcos

Re: Limited Site Investigation
Taqueria El Rinconsito Restaurant
301 and 305 Central Avenue North & 215 East Smith Street
Kent, King County, Washington
Project No. 81137082
RIMS No. 10-1641-00

Dear Ms. Wagner and Mr. Marcos:

Terracon Consultants, Inc. (Terracon) is pleased to submit this Limited Site Investigation (LSI) for the above referenced site. This assessment was performed in accordance with the Master Environmental Services Agreement between Terracon and Union Bank, N.A. (UB) dated March 7, 2011; the RIMS on-line award dated September 27, 2013 and October 31, 2013; and with Terracon's Work Plan and Cost Estimate No. P81130257R, dated August 30, 2013, the Change Order to P81130257R dated October 21, 2013, and the Change Order to P81130257R dated October 25, 2013.

We appreciate the opportunity to perform these services for Vivolo Family Trust LLC c/o Union Bank as Trustee. Please contact us at (425) 771-3304 if you have questions regarding the information provided in the report.

Sincerely,

Terracon Consultants Inc.

Eric A. Dubcak
Project Manager

for:
Adam Stauffer
Field Geologist

for
Matt Wheaton, L.G., E.I.T.
Department Manager

TABLE OF CONTENTS

Page No.

APPENDICES

Limited Site Investigation
Taqueria El Rinconsito Restaurant
301 and 305 Central Avenue North & 215 East Smith Street
Kent, King County, Washington
Terracon Project No. 81137082
November 20, 2013

1.0 INTRODUCTION

1.1 Site Description

Site Name	Taqueria El Rinconsito Restaurant
Site Location/Address	301 and 305 Central Avenue North & 215 East Smith Street, Kent, King County, Washington (King County Tax Parcel Nos. 917960-1735 and 917960-1745)
Land Area	Approximately 0.31 acres
Site Improvements	The site is currently developed with an approximately 1,656-square foot commercial structure occupied by Taqueria El Rinconsito. The remainder of the site consists of paved parking areas, a drive-thru lane, and landscaping planters and lawn areas.

A topographic map indicating the approximate location of the site is included as Figure 1, and a detailed site plan with boring locations is included as Figure 2 of Appendix A. Details of exploratory excavation areas around the identified anomalies in the southern and northern portions of the site are included in Appendix A as Figures 3 and 4, respectively.

1.2 Project Background and Site History

The site consists of an approximately 0.31-acre tract of land comprised of two tax parcels (King County tax parcel Nos. 917960-1735 and 917960-1745) in Kent, King County, Washington. An approximately 1,656-square foot restaurant, Taqueria El Rinconsito, is located in the southeastern site portion. The remainder of the site consists of paved parking areas and a drive-thru lane south of the restaurant.

Terracon Consultants, Inc. (Terracon) reviewed a Phase I Environmental Site Assessment (ESA) prepared by Aerotech Environmental Consulting, Inc. (Aerotech). The Phase I ESA was prepared for a proposed purchaser and was provided by Union Bank for review. A copy of Aerotech's ESA is included in Appendix B. According to the ESA, a gas station was historically located in the eastern site portion from at least 1935 to 1953. According to Aerotech, the gas station was equipped with two 500-gallon underground storage tanks (USTs), a fuel pump

island and canopy, and a service bay with a "grease shed" and a hoist. In 1953 the original gas station building was demolished and replaced by a Wagner's Sav-way gas station. The new service building was reportedly built in the western central site portion.

Aerotech reported that historical assessor records indicated that the gas station constructed in 1953 was equipped with one 5,000-gallon UST and one 6,000-gallon UST, a fuel pump island, a service bay with a hydraulic hoist, and a car wash.

The historical gas station structures were apparently demolished in approximately 1972 and replaced with the existing site structure; however, the existing site structure appeared to have been remodeled sometime between 1972 and present. During Aerotech's site reconnaissance a concrete patch was observed to the north of the restaurant and two apparent UST fill ports were present within the limits of the patch. Aerotech concluded that USTs that were associated with the previous gas station were left in place; however, the site was not listed as a UST facility on the Washington State Department of Ecology's (Ecology) UST database. Aerotech identified the on-site USTs, the historical site use as gas stations, and potential for encountering additional USTs and a hoist with subsurface components associated with the historical on-site gas station, as recognized environmental conditions (RECs) and recommended further action.

Although not identified as RECs, Aerotech stated that historical and current adjoining facilities to the north, west, south and southeast may represent potential contaminant sources. Terracon infers that Aerotech's interpretation of these facilities was that there may be the potential for on-site impacts as a result of documented or undocumented releases from these facilities. Of these facilities, Aerotech specifically summarized available on-line information associated with the southern Jack-in-the Box/Strains Cascade Services and the western Burdic Feed, Inc. facilities. Both facilities were identified on the Contaminated or Suspected Contaminated Sites List (CSCSL) database. The Jack-in-the Box facility was also identified on Leaking Underground Storage Tank (LUST) database. Further discussion of these two off-site facilities is provided in Section 2.4 or this report.

Per the client's request Terracon prepared a Work Plan and Cost Estimate for Limited Subsurface Investigation (LSI) to investigate the above discussed site features and RECs. In addition to a proposed LSI, that included a geophysical survey, to assess RECs, Terracon also coordinated UST closure activities with a Washington State-licensed UST removal contractor and conducted a limited historical record review to supplement the information previously provided by Aerotech in their ESA.

1.3 Project Objectives

The main objective of this project was to investigate the RECs identified in the previous Phase I prepared by Aerotech. This included a supplemental review of historical resources and reports provided by the client. In addition, the project objective was to assess the configuration of the known USTs on the northern portion of the site and to assess for additional USTs or other anomalies that may represent USTs or associated features (e.g., piping, pits, etc.) through a geophysical survey and subsequent exploratory excavations. Concurrently, potential impacts to soil and/or groundwater at the site would be assessed during the LSI for undocumented releases from the existing and/or potentially present USTs. Finally, as requested by the client, Terracon would prepare for the decommissioning of the two known USTs and Geotechnical Monitoring and Testing to be implemented during the planned removal. As described in this report, the UST removal activities were placed on hold.

1.4 Scope of Work

Terracon's scope of work was conducted in accordance with the Master Environmental Services Agreement (MESA) between Terracon and Union Bank, N.A. (UB) dated March 7, 2011; the RIMS on-line awards dated September 27, 2013 and October 31, 2013; and, Terracon's Work Plan and Cost Estimate No. P81130257R, dated August 30, 2013, the Change Order to P81130257R dated October 21, 2013, and the Change Order to P81130257R dated October 25, 2013.

1.5 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Terracon makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These LSI services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal and were not restricted by ASTM E 1903-11.

1.6 Additional Scope Limitations

This report was intended to reduce, but not eliminate, uncertainty regarding the existence of recognized environmental conditions in connection with the subject site. Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of hazardous substances,

petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable or not present during these services, and we cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this LSI. Subsurface conditions may vary from those encountered or at specific borings or wells or during other surveys, tests, assessments, investigations or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services. If, during future site development, different subsurface conditions from those encountered during our explorations are observed or appear to be present, we must be advised promptly so that we can review these conditions and reconsider or modify our conclusions and recommendations where necessary.

1.7 Reliance

This report has been prepared for the exclusive use of Vivolo Family Trust LLC c/o Union Bank N.A. (Union Bank) as Trustee, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Vivolo Family Trust LLC c/o Union Bank as Trustee and Terracon. Any unauthorized distribution or reuse is at Vivolo Family Trust LLC c/o Union Bank as Trustee's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, LSI report, and Terracon's Agreement for Services. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to Vivolo Family Trust LLC c/o Union Bank as Trustee and all relying parties unless otherwise agreed in writing.

2.0 SUPPLEMENTAL HISTORICAL AND REGULATORY REVIEW

As described in Section 1.2., a Phase I ESA was prepared by Aerotech that identified the on-site USTs, suspect fill ports, the historical site use with two gas stations, and potential remaining USTs and hoist from the reported original on-site gas station as RECs. Additional historical documentation, including assessor records, detailed aerial photograph reviews, and a review of Ecology's off-site regulatory records for facilities to the west and south of the site were not initially included in Aerotech's Phase I ESA. Therefore, Terracon was requested to conduct a review of these records, as summarized in the following sections, in an effort to supplement the Aerotech ESA. In the interim, Aerotech completed the record review and an addendum letter was provided to the client.

2.1 Historical Assessor Records

Terracon requested historical assessor records for the site at the Puget Sound Archives (Archives) in Bellevue, Washington. Our requests were for the two on-site tax parcels as well

as for additional off-site tax parcels (in the event that the site tax parcel was historically split). The review did not identify any information on potential USTs on the site except for the Time Oil Co. as the owner of a car wash building built in 1963 in the southern central site portion. Although Aerotech reported that historical records indicated that a 5,000-gallon UST and a 6,000-gallon UST were historically located on-site, records provided to Terracon from Archives did not yield similar results. Furthermore, historical photographs in Aerotech's ESA that appear to have been copied from the Archives records were not identified in the records provided to Terracon. Copies of assessor records provided to Terracon for the site are attached in Appendix B.

2.2 Historical Aerial Photographs

Terracon reviewed selected historical aerial photographs from the King County Assessor IMAP application, the University of Washington's Suzzallo Library and Google Earth (years reviewed: 1936, 1944, 1966, 1970, 1988, 1990, 2002, and 2012) to obtain information concerning the history of development on and near the site. Evaluation of these aerials may be limited by a photo's quality and scale. Selected photographs are summarized below. Aerial photographs are also attached in Appendix B.

Year	Site Description
1936	The southeastern portion of the site is developed with an apparent gas station; the northeastern portion of the site is developed with a larger commercial structure; two smaller structures are located in the southwestern site portion
1944	Site structures appear to be present in the same configuration; however, the image quality is poor.
1966, 1970	Three structures are located in the western and central site portions. One structure may represent a gas station canopy. A feature that appears to be a pump island is located in the eastern site portion.
1988	All previously existing structures have been removed. The existing restaurant structure is present.
1990, 2002, 2012	The existing restaurant structure is present.

As previously identified by Aerotech, a gas station was present at the site from 1935 to 1953. From 1953 to 1972, a new gas station was located in the central and western site portions with a pump island present in the eastern site portion.

2.3 Regulatory Review

Terracon reviewed regulatory records provided by the client for the adjoining properties identified by Aerotech as potential off-site concerns. Information provided to Terracon was included as attachments in Aerotech's *Amendment to Phase I Assessment Dated August 16, 2013*. Terracon infers that Aerotech's amendment included all available Ecology records as attachments to their reports. A copy of the amendment is included in Appendix B.

Strains Cascade Facility/Jack in the Box

The existing Jack in the Box facility (aka Strains Cascade) is located approximately 75 feet south of the site across East Smith Street. During pre-redevelopment activities for the facility in 2011, a UST and hydraulic hoist were identified and removed. A subsequent subsurface investigation was performed, during which eight soil borings were advanced throughout the property to maximum depths of approximately 21.5 feet bgs. Groundwater was encountered between 5.5 and 7.5 feet bgs. Strong hydrocarbon odors and elevated photoionization detector readings were reportedly observed in four of the borings. Based on analytical results, soil and groundwater at the facility is impacted with benzene and gasoline-range total petroleum hydrocarbons (TPH) above Washington State Model Toxics Control Act (MTCA) Method A cleanup levels. Specifically, soil and groundwater concentrations at this facility were reported at concentrations as high as 29,000 mg/kg and 170,000 µg/l, respectively. Based on the inferred northwesterly groundwater migration direction, towards the site, and the detected concentration of groundwater impacts, there is the potential that impacts from this property have migrated or may be migrating towards the site. Further investigation at this property was recommended by Aerotech.

Based on a review of the provided information, it is Terracon's opinion that there is the potential for on-site impacts as a result of the reported off-site release at this potentially up-gradient facility.

Burdic Feed

The Burdic Feed property is located approximately 200 feet west of the site and was historically used as a feed mill with hazardous materials storage and pesticide storage and application. After initial surface soil sampling performed in 2000, which indicated that TPH concentrations in soil were above MTCA Method A cleanup levels, approximately 26 cubic yards of impacted soil were identified as contaminated and transported off the property. Based on confirmation soil sampling an area with soil impacts above cleanup levels remains along the western property boundary and potentially extends below the west adjacent railroad. Site specific soil cleanup levels were calculated and are reportedly not exceeded. Groundwater sampling from temporary groundwater sampling points was conducted and did not identify contaminants above cleanup levels, except for a dissolved arsenic concentration in one of the groundwater samples collected. The source of arsenic is unknown.

Since the property was redeveloped as part of the Kent Commuter Rail Station no further investigation was conducted. Although impacts above MTCA Method A cleanup levels were not identified in soil adjoining the site to the west, and the only soil and groundwater impacts were identified approximately 300 feet northwest, and down-gradient of the site, Aerotech concluded that there is the potential for on-site impacts from this facility and recommended further investigation.

Based on the limited areas of concern at this property, distance, the inferred down- to cross-gradient position, and the reported absence of impacts in groundwater immediately adjacent to the site, it is Terracon's opinion that the potential for on-site impacts from this property is considered low.

3.0 LIMITED SUBSURFACE INVESTIGATION

3.1 Methodology

Methods used to complete this report were developed based on information provided by the client, recommendations of the previous Phase I ESA by others, and from our experience on similar projects. A conceptual model of hydrogeologic and environmental conditions was developed based on site geology and hydrogeology. The conceptual model included the following key elements:

- Probable subsurface conditions would consist of alluvial deposits consisting mainly of pebble- to cobble-size gravel and sand, and medium to fine sand and silt according to the geologic map for the site vicinity. According to a subsurface investigation performed south of the site, soils in the site vicinity would mainly consists of loose to medium dense silty sand, silty sand with gravel, and silt, with the uppermost water table lying at depths of approximately 5 to 7 feet below ground surface (bgs).
- The probable location of potential on-site impaired media would be in the vicinity of the apparent and potentially present USTs to be identified by a geophysical survey. Additional areas of impacts may be located along the southern site boundary migrating towards the site from the south adjoining property.
- Potential contaminants would consist of gasoline-, diesel-, and oil-range TPH, VOCs, and lead in soil and groundwater.
- The inferred hydrogeologic gradient is to the northwest.

Based on these conceptual subsurface conditions, direct-push drilling methods were selected for completion of subsurface exploration activities. Subsurface investigation activities are described in the sections below. Investigation activities included the following tasks:

1. Work Plan and Health And Safety Plan preparation
2. Geophysical Survey to determine if additional USTs and/or related anomalies are present on-site
3. Completion of pre-mobilization and pre-task planning and public and private utility locates
4. Advancing seven borings at the site
5. Field screening of soils
6. Soil and groundwater sampling
7. Analytical laboratory testing
8. Quality Assurance / Quality Control
9. Exploratory Excavation
10. UST Decommissioning
11. Geotechnical Monitoring and Testing
12. Report preparation.

These investigation activities are summarized below.

3.2 Geophysical Survey

Terracon subcontracted GeoPotential of Brightwood, Oregon, to perform a geophysical survey to detect USTs, UST excavations, and other potential anomalies on the site. The survey included a magnetic survey to detect and map the locations of buried ferrous (iron-bearing) objects, and ground penetrating radar (GPR) to map both natural and man-made subsurface features such as USTs, utilities, backfilled excavations and similar features. The survey was performed utilizing a cesium vapor magnetometer, a GPR system with a 250-Mhz antenna, a magnetic gradiometer, and pipe and cable locators.

The survey was performed throughout the paved surfaces of the site unoccupied by the existing restaurant. The survey commenced with acquiring magnetic data in 5-foot sectioned traverses throughout the site. Magnetic data was downloaded to a computer, which processes and produces a contoured magnetic map. Buried ferrous objects will produce predominantly positive magnetic anomalies (shown in red on GeoPotential's Figure 3 in Appendix C). Three areas of magnetic anomalies that may represent buried objects were identified in the northeastern portion of the site north of the restaurant (MA-1), northeast of the restaurant (MA-3) and in the southern site portion south of the restaurant (MA-2). Following the magnetic survey the GPR survey was conducted by acquiring GPR profiles across the site to approximate depths of 6 to 10 feet bgs. Finally magnetic and electromagnetic scans were conducted to search for product piping. Based on GeoPotential's interpretation of the surveys and scans the following was determined:

Anomaly MA-1 north of the restaurant represents two USTs (labeled as Tanks 1 and 2 by GeoPotential). These USTs correlate with the previously identified and known USTs to the north of the structure. Approximate dimensions of the USTs could not be estimated due to structural reinforcement overlying the tanks. A vent line was detected to run from the USTs to the northwest portion of the restaurant.

Anomaly MA-2 south of the restaurant was interpreted to consist of three USTs. Two of the USTs were estimated to be approximately 6 x 9 foot in size (labeled as potential Tanks 6 and 7 by GeoPotential) and one UST was estimated to be approximately 12 x 7 foot in size (labeled as potential Tank 5). Tanks 5, 6 and 7 appear to be located south of the drive-thru lane partially below the lawn and below the right-of-way sidewalk. A product line was detected to run from Tank 5 to the southeast corner of the restaurant.

Anomaly MA-3 may represents two USTs or other related features (labeled as potential Tanks 3 and 4 by GeoPotential each with approximate dimensions of 5 x 6 feet). Radar data and handheld instruments suggested the presence of tanks; however, the magnetic map did not reflect the typical large positive anomaly normally produced from USTs.

Based on the findings of the geophysical survey, three additional borings to the initially proposed four borings were proposed in the areas of anomalies MA-2 and MA-3. GeoPotential's report and referenced figures are attached in Appendix C.

3.3 Subsurface Exploration

Terracon conducted the fieldwork under a health and safety plan developed in accordance with 29 CFR 1910.120 for this project. Work was performed using Occupational Safety and Health Administration (OSHA) Level D work attire consisting of hard hats, safety glasses, protective gloves, and protective boots. Terracon contacted the State of Washington Utility Notification Center and requested location and markings for all utilities that the service was responsible for before commencing intrusive activities at the site. In addition, Terracon subcontracted GeoPotential to locate and mark any potential private utilities which may have been present in the vicinity of the proposed boring locations.

Terracon field representative Adam Stauffer mobilized to the site on October 22, 2013, to oversee the drilling of seven soil borings (B-1 through B-7) using a truck-mounted direct-push drill rig owned and operated by Holocene Drilling Inc., a Washington State licensed driller. All borings were advanced using a direct-push sampler equipped with disposable acetate sample sleeves. Throughout the drilling operation, soil samples were obtained continuously (to the extent practical) from four-foot long pushes driven into the ground using 500-foot-pound percussion hammer. The steel sampling tube was extracted from the hole and the liners were removed and split open. Non-disposable sampling equipment was cleaned using an Alconox® wash and potable water prior to the beginning of the project.

Borings were advanced to a maximum depth of approximately 12 feet below the ground surface (bgs). Figure 2 – Site Features Diagram indicates the approximate locations of the borings/wells in relation to general site boundaries (Appendix A). Details of exploratory excavation areas around the identified anomalies in the southern and northern portions of the site are included in Appendix A as Figures 3 and 4, respectively.

A field log of each boring was maintained, including the thickness and depth of each soil unit encountered and the depth to the uppermost water table. Soil samples were observed to document soil lithology, color, and moisture content. Soils were logged in general accordance with American Society for Testing and Materials (ASTM) Practice Designation D-2488, *Standard Practice for Description of Soils (Visual-Manual Procedure)*. Boring logs are included in Appendix D.

Investigation-derived waste (IDW) consisting of soil cores, temporary groundwater monitoring well development groundwater, and equipment decon water generated during the field activities were placed in Department of Transportation (DOT) approved, 55-gallon steel drums, sealed and appropriately labeled with project-specific information and initial accumulation date. Two 55-gallon drums of IDW were staged on-site and will be properly disposed at a later date.

3.4 Field Screening

Soil samples from select depths were field-screened using a photoionization detector (PID). Samples were screened by first segregating, at a minimum, one ounce of soil into a sealed plastic bag. The sealed bag was set aside to allow potential volatilization from the sample to accumulate. Headspace analysis was performed by subsequently puncturing each plastic bag with the probe of the PID to estimate the concentration, in parts per million (ppm), of volatile components partitioned into the atmosphere ("headspace") within the plastic bag.

The PID was calibrated with isobutylene gas (100 ppm). The highest digital readout value displayed by the instrument was recorded for each sample (the results are integrated into the boring logs in Appendix D). The value recorded for the PID indicates the total vapor concentration of volatilized organic compounds (VOCs) with ionization potentials less than the energy produced by the ionizing radiation source (ultraviolet lamp) of the PID. These compounds include numerous volatile constituents of petroleum hydrocarbons. However, the PID is not capable of determining the species of these compounds or their concentrations in the soil samples. Consequently, the PID is considered merely a screening tool that aids in detecting the presence of volatile soil contaminants.

Elevated PID readings were identified in the soil samples S-1 and S-2 collected from boring B-6. Field screening indicated samples S-1 and S-2 contained volatile contaminants at approximately 88 and 230 ppm, respectively.

3.5 Soil Sampling

A total of 14 soil samples, two from each boring, were submitted for laboratory analysis. Soil samples exhibiting the highest PID readings were submitted for laboratory analyses; however, it should be noted that the two detectable PID readings were reported at 88 and 230 ppm in the samples collected from boring B-6 at depths of approximately 6.5 - 7.5 and 8.5 - 9.5 feet bgs. Petroleum odor was observed in boring B-6 at approximately one foot bgs and again between approximately four and 10 feet bgs. In the absence of elevated PID readings and/or observed impacts, soil samples were collected from either the capillary fringe zone, intervals exhibiting a change in lithology, and/or from the interface of fill and native materials and submitted for analysis. Depths of the submitted sampled ranged from approximately 3 to 12 feet bgs.

Soil samples were extracted by hand from the disposable acetate sleeve sampler using disposable gloves and placed directly into laboratory supplied glassware. Soil samples for volatile analytes were collected with a plug sampler according to EPA Method 5035A.

Each sample container was labeled with the project number, date, time, boring number and sample number. Sample containers were placed in a chilled cooler immediately after sampling, and subsequently transported to the analytical laboratory by Terracon under strict chain-of-custody procedures.

3.6 Groundwater Sampling

Temporary groundwater monitoring wells were installed in each boring. Each temporary groundwater monitoring well consisted of a ¾-inch inside diameter, schedule 40, flush-threaded PVC pipe. Temporary groundwater monitoring wells were equipped with a 10-foot section of 0.010-inch slotted screen mated to an appropriate length section of blank riser, which extended to the surface. Approximately three temporary well volumes (one gallon) of groundwater was purged from each well before sample collection. Groundwater was encountered during drilling at approximately 6 to 7 feet bgs.

A total of seven groundwater samples, one from each of the temporary well locations, were submitted for laboratory analysis. Purging was performed in an effort to obtain samples relatively free of sediment; however, water production rates within the temporary wells required sampling of groundwater still containing some sediment. Samples collected for metals analysis were field filtered in order to avoid analytical bias caused by suspended sediment. Groundwater samples were collected from each sample point using a peristaltic pump utilizing low flow sampling techniques and dedicated tubing. Discharge from the peristaltic pump was directed into laboratory provided glassware.

Each sample container was labeled with the project number, date, time, boring number, and sample number. Sample containers were placed in a chilled cooler immediately after sampling, and subsequently expedited to the analytical laboratory by Terracon under strict chain-of-custody procedures.

3.7 Analytical Laboratory Testing

Fourteen soil samples and seven groundwater samples were submitted for chemical analysis by Environmental Science Corporation (ESC), a Washington State accredited laboratory. The soil and groundwater samples were analyzed for the following:

- Gasoline-range TPH using Northwest Method NWTPH-Gx;
- Diesel- and heavier than diesel-range TPH using Northwest Method NWTPH-Dx;
- Volatile Organic Compounds (VOCs) using EPA Method 8260B; and
- Total lead using EPA Method 6010B.

The executed chain-of-custody forms and laboratory analytical certificates are provided in Appendix E. All analyses were completed using standard turnaround times.

Data packages were checked for completeness immediately upon receipt from the laboratory to ensure that data and QA/QC information requested were present. Data quality was assessed by considering holding times, surrogate recovery, method blanks, matrix spike and matrix spike duplicate recovery, and detection limits.

4.0 LIMITED SITE INVESTIGATION RESULTS

4.1 Subsurface Conditions

Specific conditions encountered at each boring location are noted on the individual investigation boring logs (Appendix D). Stratification boundaries on the boring logs represent the approximate location of changes in soil types; in-situ, the transition between materials may be gradual.

In general, subsurface soil conditions at the site consisted of silty fine to medium sands and poorly sorted sands with silt and gravel. Soils were generally found to be in a moist to saturated condition. The uppermost water table was encountered during drilling at a depth of approximately 6 to 7 feet bgs.

4.2 Analytical Laboratory Results

Complete laboratory reports and copies of chain-of-custody documents are included in Appendix E. Additional discussion and interpretation of analytical results relative to applicable cleanup levels is included in Section 4. The maximum allowable contaminant levels in the State of Washington are defined in the Model Toxics Control Act (WAC 173-340), referred to as MTCA. Applicable cleanup levels under MTCA can be developed using either Method A tabulated values or using Method B and Method C risk-based formulations. Method A and Method B cleanup levels allow for unrestricted land use, including residential use. Method C cleanup levels apply only to industrial properties as defined in WAC 173-340-745. We have compared the analytical results to the Method A cleanup levels for the purposes of this report.

Soil Quality

A total of seven soil borings were advanced on-site and 14 soil samples were analyzed for gasoline-, diesel-, oil-range TPH, VOCs, and total lead. Samples were collected from each boring between approximately 3 and 12 feet bgs. The analytical results for soil are summarized in Table 1.

Terracon

Table 1: Summarized Soil Analytical Results

Sample Number	Sample Depth (ft)	Date of collection	Total Petroleum Hydrocarbons (mg/kg)			Metals (mg/kg)				
			Gasoline-Range	Diesel-Range	Oil-Range	Lead	Benzene	Toluene	Ethylbenzene	Xylenes
B-1 S-1	5 ½ - 6 ½	10/23/13	ND (<0.14)	ND (<5.4)	9.1 J	87	0.0012 J	ND (<0.0068)	ND (<0.0014)	ND (<0.0041)
B-1 S-2	11 – 12	10/23/13	0.050 J	ND (<5.2)	ND (<13.)	1.8	0.00044 J	ND (<0.0065)	ND (<0.0013)	ND (<0.0039)
B-2 S-1	6 - 7	10/23/13	ND (<0.11)	ND (<4.4)	ND (<11.)	12.	ND (<0.0011)	ND (<0.0056)	ND (<0.0011)	ND (<0.0033)
B-2 S-2	11 – 17	10/23/13	0.35 J	ND (<5.2)	5.8 J	4.7	0.0042	0.0018 J	ND (<0.0013)	0.0010J
B-3 S-1	8 - 9	10/23/13	2.4	6.7	6.8 J	10.	ND (<0.0013)	ND (<0.0064)	0.0017	ND (<0.0039)
B-3 S-2	10 – 11	10/23/13	0.78	ND (<5.2)	ND (<13.)	16.	0.00057 J	ND (<0.0065)	ND (<0.0013)	ND (<0.0039)
B-4 S-1	3 – 4	10/23/13	0.040 J	ND (<4.8)	5.4 J	2.1	0.0011 J	ND (<0.0060)	ND (<0.0012)	ND (<0.0036)
B-4 S-2	7 – 8	10/23/13	0.049	ND (<5.6)	ND (<14.)	3.3	0.00099 J	ND (<0.0070)	ND (<0.0014)	ND (<0.0042)
B-5 S-1	5 – 6	10/23/13	ND (<0.13)	ND (<5.2)	4.5 J	1.4	0.0012 J	ND (<0.0066)	ND (<0.0013)	ND (<0.0039)
B-5 S-2	7 – 8	10/23/13	ND (<0.15)	ND (<5.6)	ND (<14.)	1.8	0.0014 J	ND (<0.0072)	ND (<0.0014)	ND (<0.0043)
B-6 S-1	6 ½ - 7 ½	10/23/13	**1,200**	150	8.7 J	3.3	ND (<0.23)	ND (<1.2)	0.57	ND (<0.70)
B-6 S-2	8 ½ - 9 ½	10/23/13	**3,400**	240	5.5 J	2.0	ND (<0.34)	0.13 J	**8.6**	0.29 J
B-7 S-1	7 – 8	10/23/13	0.12 J	ND (<4.9)	6.4 J	1.8	0.00038 J	ND (<0.0063)	ND (<0.0012)	ND (<0.0038)
B-7 S-2	11 – 12	10/23/13	1.4	ND (<5.0)	23.	1.3	0.0012 J	ND (<0.0063)	ND (<0.0013)	ND (<0.0038)
MTCA Method A Cleanup Level			**100**	**2,000**	**2,000**	**250**	**0.03**	7	**6**	**9**

mg/kg: milligrams per kilogram (parts-per-million); NA: Analyte not analyzed for this sample;
J: Estimated value below the lowest calibration point. Confidence correlates with concentration.
[A]: only those VOCs detected in at least one sample are included in the table
[B]: These values do not have an established MTCA Method A value; therefore the Method B values are listed for reference
NE: These compounds do not have established MTCA A, B, or C cleanup levels

VOCs[A] (mg/kg)										
Acetone	n-Butylbenzene	Sec-Butylbenzene	Tert-Butylbenzene	Isopropyl-benzene (cumene)	p-isopropyl-toluene	Naphthalenes	1,2-Dichloro-ethane	2-Butanone (MEK)	n-Propyl-benzene	1,2,3-Trimethyl-benzene
0.041 J	ND (<0.0014)	ND (<0.0014)	ND (<0.0014)	ND (<0.0014)	ND (<0.0014)	ND (<0.0068)	ND (<0.0014)	ND (<0.014)	ND (<0.0014)	ND (<0.0014)
0.018 J	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0065)	ND (<0.0013)	ND (<0.013)	ND (<0.0013)	ND (<0.0013)
ND (>0.056)	ND (<0.0011)	ND (<0.0011)	ND (<0.0011)	ND (<0.0011)	ND (<0.0011)	ND (<0.0056)	ND (<0.0011)	ND (<0.011)	ND (<0.0011)	ND (<0.0011)
0.089 J	ND (<0.0013)	0.00059 J	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0066)	0.00080 J	0.013	ND (<0.0013)	0.0059
0.030 J	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	0.0024	ND (<0.0013)	ND (<0.013)	0.00054 J	ND (<0.0013)
0.030 J	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0065)	ND (<0.0013)	ND (<0.013)	ND (<0.0013)	ND (<0.0013)
0.018 J	ND (<0.0012)	ND (<0.0012)	ND (<0.0012)	ND (<0.0012)	ND (<0.0012)	ND (<0.0060)	ND (<0.0012)	ND (<0.012)	ND (<0.0012)	ND (<0.0012)
0.024 J	ND (<0.0014)	ND (<0.0014)	ND (<0.0014)	ND (<0.0014)	ND (<0.0014)	ND (<0.0070)	ND (<0.0014)	ND (<0.014)	ND (<0.0014)	ND (<0.0014)
0.035 J	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0013)	ND (<0.0066)	ND (<0.0013)	ND (<0.013)	ND (<0.0013)	ND (<0.0013)
0.067 J	ND (<0.0014)	ND (<0.0014)	ND (<0.0014)	ND (<0.0014)	ND (<0.0014)	ND (<0.0072)	ND (<0.0014)	0.0077 J	ND (<0.0014)	ND (<0.0014)
ND (<12.)	0.98	0.86	0.057 J	1.8	0.15 J	1.8	ND (<0.23)	ND (<2.3)	2.4	8.9
ND (<13.)	2.0	1.6	0.11 J	4.0	0.64	5.2	ND (<0.34)	ND (<3.4)	5.4	18.
0.018 J	ND (<0.0012)	ND (<0.0012)	ND (<0.0012)	ND (<0.0012)	ND (<0.0012)	ND (<0.0063)	ND (<0.0012)	ND (<0.012)	ND (<0.0012)	0.00068 J
0.044 J	ND (<0.0013)	0.00067 J	ND (<0.0013)	0.00068 J	ND (<0.0013)	ND (<0.0063)	ND (<0.0013)	ND (<0.013)	ND (<0.0013)	ND (<0.0013)
72,000[2]	**NE**	**NE**	**NE**	**8,000**	**NE**	**5**	**11[2]**	**48,000[2]**	**8,000[2]**	**NE**

14B

Groundwater Quality

A total of seven groundwater samples were analyzed for gasoline-, diesel-, oil-range TPH, VOCs, and total lead. The analytical results for groundwater are summarized in Table 2.

Table 2: Summarized Groundwater Analytical Results

Sample Number	Total Petroleum Hydrocarbons (µg/l)			Metals (µg/l)	VOCs (µg/l)			
	Gasoline-Range	Diesel-Range	Oil-Range	Lead	Benzene	Toluene	Ethylbenzene	Xylenes
TMW-1	52. J	310	160 J	ND (<5.0)	ND (<1.0)	ND (<5.0)	ND (<1.0)	ND (<3.0)
TMW-2	ND (<100)	120	260	ND (<5.0)	ND (<1.0)	ND (<5.0)	ND (<1.0)	ND (<3.0)
TMW-3	ND (<100)	120	440	ND (<5.0)	ND (<1.0)	ND (<5.0)	ND (<1.0)	ND (<3.0)
TMW-4	ND (<100)	100	130 J	ND (<5.0)	ND (<1.0)	ND (<5.0)	1.8	ND (<3.0)
TMW-5	ND (<100)	59. J	140 J	ND (<5.0)	ND (<1.0)	ND (<5.0)	ND (<1.0)	ND (<3.0)
TMW-6	**6,600**	**910**	300	ND (<5.0)	**6.0 J**	ND (<50.)	360	23.
TMW-7	ND (<100)	470	150J	ND (<5.0)	ND (<1.0)	ND (<5.0)	ND (<1.0)	ND (<3.0)
MTCA Method A Cleanup Level	**800**	**500**	**500**	**15**	**5**	**1,000**	**700**	**1,000**

Sample Number	VOCs (µg/l)									
	n-Propyl-benzene	n-Butyl-benzene	Sec-Butyl-benzene	1,3-Dichloro-benzene	Isopropyl-benzene	p-Isopropyl-toluene	1,2,3-Trichloro-benzene	1,2,4-Trichloro-benzene	1,2,3-Trimethyl-benzene	Naphthalenes
TMW-1	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<5.0)
TMW-2	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<5.0)
TMW-3	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<5.0)
TMW-4	0.60 J	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<5.0)
TMW-5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<5.0)
TMW-6	**110**	**14.**	17.	3.0 J	110	6.0	2.5	**2.6**	540	**240**
TMW-7	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	0.47 J	ND (<5.0)
MTCA Method A Cleanup Level	**800[B]**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**1.5**	**NE**	**160**

ug/L: micrograms per liter (parts-per-million); NA: Analyte not analyzed for this sample;
J: Estimated value below the lowest calibration point. Confidence correlates with concentration.
NE: These compounds do not have established MTCA A, B, or C cleanup levels

4.3 Quality Assurance/Quality Control Results

The analytical results for the current investigation were checked for completeness immediately upon receipt from the laboratory to ensure that data and QA/QC information requested were present. Data quality was assessed by considering hold times, surrogate recovery, method blanks, matrix spike and matrix spike duplicate (MS/MSD) recovery, and detection limits. QA/QC review was completed using guidance described in *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (Draft Final, USEPA, 2005). Our evaluation assumes that the QA/QC is correct as reported by the laboratory, and merely provides an interpretation of the QA/QC results.

Hold Times: All analyses were completed within specified hold times.

Surrogate Recoveries: All surrogate recoveries were within laboratory limits.

Method Blanks: Analytes were not detected in any of the laboratory method blanks.

MS/MSD Results: MS and MSD recoveries were all within laboratory limits, and Relative Percent Differences (RPDs) between MS and MSD recoveries were all within laboratory limits.

Laboratory Reporting Limits: Reporting limits were below relevant MTCA cleanup levels except for methylene chloride and vinyl chloride in groundwater sample TMW-6. Due to a dilution factor applied to the sample, the reporting detection limit (RDL) was increased; however, concentrations were not detected and based on the absence of documented use of chlorinated solvents at the site, the elevated RDLs for these compounds do not affect our interpretation of the data.

The laboratory reported the analytical results with respect to both the method detection limit (MDL) and the RDL. The MDL is defined as the lowest concentration that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The presence of the analyte is confirmed, but the precise concentration cannot be reliably measured. The RDL is the lowest concentration that can be reliably measured within specified limits of precision and accuracy. Analytical results reported between the MDL and the RDL are flagged with a "J".

The analytical results for several soil and groundwater samples were J-flagged, and thus the reported concentrations are estimated values that lie between the MDL and the RDL. This flag has no effect on our interpretation of the data, because the RDLs were below the applicable MTCA cleanup levels (except for in sample TMW-6 discussed above).

Based upon our interpretation of quality control information provided by the laboratories, it is our opinion that the overall dataset is useable as qualified for the purposes of this LSI.

5.0 EXPLORATORY EXCAVATIONS

In an attempt further assess the anomalies identified during the geophysical survey, and in accordance with the client's request, Terracon completed exploratory excavations in the vicinity of these anomalies. In particular, there were three areas of anomalies identified on-site (MA-1, MA-2, and MA-3). MA-1 and MA-3 were located on the eastern portion of the site and MA-2 was located along the southern site boundary and extended beneath the City of Kent concrete right-of-way sidewalk. MA-1 represents the observed on-site USTs and fill ports associated with the gas station built on-site in the 1950s.

Based on the findings of the geophysical survey, Terracon completed exploratory excavations in the vicinity of the identified anomalies MA-2 south of the restaurant along the southern site boundary and MA-3 northeast of the restaurant in the eastern site portion. See Appendix A, Figure 3 – MA-2 Exploratory Excavation and Figure 4 – MA-3 Exploratory Excavation.

On November 6, 2012 Terracon representative, Adam Stauffer mobilized to the site to coordinate, observe, and document the exploratory excavations completed by Filco Company Inc. The excavation activities began on anomaly MA-3 located on the eastern portion of the site. Two subsurface features had been identified as part of this anomaly (labeled by GeoPotential as potential Tanks 3 and 4). After the asphalt surface was removed, an approximately 1.5x5 foot excavation was advanced to approximately 5 feet bgs within the anomaly of potential Tank 4. Subsurface features indicative of USTs or UST piping was not encountered. A 4-foot long slide probe was also used to investigate east of the excavation wall. The additional probing activities did not identify any subsurface features to the east of the excavation.

A trench approximately 1.5x5 feet was excavated to an approximate depth of 1.5 to 2.5 feet bgs in the area of potential Tank 3. With the exception of a rusted approximate 2-inch diameter steel pipe located in an east to west orientation and identified at approximately 1 ½ feet bgs in the trench, subsurface features indicative of USTs were not identified in this area. Terracon infers that the 2-inch piping may be remnant distribution piping that extended from the USTs to historical fuel pump(s) that may have been present near the eastern site boundary.

The excavation for anomaly MA-2 located along the southern site boundary was completed between the concrete city sidewalk and the asphalt drive-thru south of the restaurant. Three subsurface features had been identified as part of this anomaly (labeled by GeoPotential as potential Tanks 5, 6, and 7). Excavation activities were advanced from east to west. In the area labeled as potential Tank 7, a steel tank was encountered at a depth of approximately two feet bgs. The tank fill port was exposed and the tank estimated to be approximately 38 inches in diameter, as measured through the fill port. Approximately 13-inches of water was measured

within the tank. The tank extended to the south beneath the sidewalk; therefore, additional tank dimensions could not be established.

In the area labeled as potential Tank 6 a second steel tank of approximately 38 inches in diameter was discovered at approximately two feet bgs. A fill port was not located on the exposed portion of the tank; therefore, verification of liquids within the tank could not be obtained. The tank extended to the south beneath the sidewalk; therefore, additional tank dimensions could not be established.

In the excavation advanced in the area of potential Tank 5, a steel pipe was observed at a depth of approximately 1.5 feet bgs. The steel pipe was approximately 1.5 inches in diameter and transected excavation in a northeast to southwest orientation. Based on the observation in this area, a tank associated with the observed steel pipe may be located beneath the sidewalk.

Soils encountered in the excavations consisted of silty sand with gravel. Indications of petroleum impacts were not identified with any of the soils associated with the exploratory excavations. All excavations were backfilled with excavated soils generated during this excavation activity. After backfilling the surface in area MA-3 was completed with a cold patch asphalt material. The areas excavated in area MA-2 were covered with previously removed grass sod.

6.0 FINDINGS AND DISCUSSION

Terracon performed a supplemental historical and regulatory review for the site. Following the review, as part of the LSI performed at the site, Terracon provided oversight of a geophysical survey and subsequently advanced a total of seven borings at the site. The borings were completed with temporary groundwater monitoring wells. A total of 14 soil samples and seven groundwater samples were analyzed for gasoline-, diesel-, oil-range TPH, VOCs, and total lead. Subsequently, exploratory excavations were performed in two areas of the site to further assess identified anomalies. The summary of findings associated with each of these activities is as follows:

Supplemental Historical and Regulatory Review

Terracon's supplemental historical review did not identify additional information with regards to the historical on-site gas stations. During Terracon's regulatory review, the Jack in the Box property located approximately 75 feet south of the site across East Smith Way, was identified as a potential off-site source for on-site impacts. Soil and groundwater at this property have been confirmed to be impacted with benzene and gasoline-range TPH above MTCA Method A cleanup levels. Extents of these impacts north of the property have not been delineated. Due to the apparent up-gradient position and proximity to the site, there is the potential that groundwater impacts from this property have migrated or may be migrating towards the site.

Geophysical Survey:

- Three areas of anomalies that may represent USTs or other subsurface features were identified in the northeastern portion of the site, north of the restaurant (MA-1 and MA-3) and in the southeastern site portion, south of the restaurant (MA-2).
    - Anomaly MA-1 north of the restaurant represents the two USTs observed at the site. Approximate dimensions of the USTs could not be estimated due to structural reinforcement overlying the tanks. A product line was detected to run from the USTs to the northwest portion of the restaurant. Based on site observations and previous historical research, these tanks are most likely associated with the later on-site historical gas station and are assumed consist of 5,000- to 6,000-gallon capacity USTs.
    - Anomaly MA-2 south of the restaurant was interpreted to consist of three USTs. The tanks appear to be located south of the drive-thru lane partially below the lawn and below the sidewalk. A product line was detected to run from one of USTs to the southeast corner of the restaurant.
    - Anomaly MA-3 may represent two USTs or other related features (labeled as Tanks 3 and 4 by GeoPotential with approximately dimension of 5 x 6 feet). Radar data and handheld instruments suggested the presence of tanks; however, the magnetic map did not reflect the typical large positive anomaly normally produced from USTs. Based on comparisons with historical aerial photographs, Terracon infers that the feature(s) represent a former fuel island.

Soil Sampling:

- Gasoline-range TPH were identified at concentrations of 1,200 mg/kg and 3,400 mg/kg in the two soil samples collected from boring B-6. These concentrations are above the MTCA Method A cleanup level of 100 mg/kg.
- Gasoline-range TPH were not identified above laboratory reporting limits in samples B-1 S-1, B-2 S-1 and both samples collected from boring B-5. Very low concentrations of gasoline-range TPH well below MTCA Method A cleanup levels were identified in the remaining soil samples collected.
- Diesel-range TPH were not detected above laboratory reporting limits in soil samples collected from borings B-1, B-2, B-4, B-5, and B-7.
- A diesel-range concentration of 6.7 mg/kg was detected in sample B-3 S-1, which is well below the MTCA Method A cleanup level of 2,000 mg/kg. Detectable diesel-range TPH concentrations were also identified in the soil samples collected from boring B-6 at 150 mg/kg and 240 mg/kg; however, these concentrations were also below the established cleanup level.

- Detectable oil-range TPH were identified in most of the soil samples in very low concentrations. The highest concentration was detected at 23 mg/kg in sample B-7 S-2, which is well below the MTCA Method A cleanup level of 2,000 mg/kg.
- Lead was identified at concentrations between 1.3 mg/kg and 87 mg/kg in all soil samples collected. These concentrations are below the established MTCA Method A cleanup level of 250 mg/kg for lead.
- Several VOCs were detected in very low concentrations well below the applicable cleanup levels in most of the soil samples collected.
- The only VOCs detected above their respective MTCA Method A cleanup level were ethylbenzene and naphthalenes, both detected in sample B-6 S-2 collected from Boring B-6 at 8 ½ to 9 ½ feet bgs. Ethylbenzene was detected at a concentration of 8.6 mg/kg (MTCA Method A cleanup level established at 6 mg/kg) and naphthalenes were detected at a concentration of 5.2 mg/kg (MTCA Method A cleanup level established at 5 mg/kg).

Based on the analytical results, soil impacts identified above MTCA Method A cleanup levels were detected in samples collected from Boring B-6 advanced in the southeastern portion of the site. Soil impacts above cleanup levels consist of gasoline-range TPH, ethylbenzene and naphthalenes.

Groundwater Sampling:

- Gasoline-range TPH were identified at a concentration of 6,600 µg/l in groundwater sample TMW-6 collected from boring B-6. This concentration is above the MTCA Method A cleanup level of 800 µg/l.
- Gasoline-range TPH were identified at a concentration of 52 µg/l in groundwater sample TMW-1 collected from boring B-1, which is well below the established MTCA Method A cleanup level.
- Gasoline-range TPH were not identified above laboratory reporting limits in groundwater samples collected from borings B-2, B-3, B-4, B-5, and B-7.
- Diesel-range TPH were detected above laboratory reporting limits all groundwater samples collected; however, only the groundwater sample TMW-6 collected from boring B-6 exhibited concentrations above MTCA Method A cleanup levels. The detected concentrations ranged from 59 µg/l (TMW-5) to 910 µg/l (TMW-6). TMW-7 exhibited a concentration of 470 µg/l, just below the established Method A cleanup level of 500 µg/l.
- Detectable oil-range TPH were identified in all groundwater samples at concentrations between 130 µg/l (TMW-4) and 440 µg/l (TMW-3). All concentrations were below the MTCA Method A cleanup level of 500 µg/l.
- Lead was not identified above laboratory reporting limits in any of the groundwater samples collected.

- VOCs were not detected above laboratory reporting limits in groundwater samples collected from borings B-1, B-2, B-3, and B-5.
- Very low concentrations of ethylbenzene were detected in groundwater sample TMW-4, which was well below the respective cleanup level.
- 1,2,3-Trimethyl-benzene was detected in the groundwater sample collected from boring B-7. A cleanup level for this compound has not been established.
- Several VOCs were detected in groundwater sample TMW-6 collected from boring B-6; however, only the benzene concentration (6.0 µg/l) was above the MTCA Method A cleanup level established at 5 µg/l.

Based on the analytical results, groundwater impacts identified above MTCA Method A cleanup levels were detected in the groundwater sample collected from Boring B-6 advanced in the southeastern portion of the site. Groundwater impacts above cleanup levels consist of gasoline- and diesel-range TPH and benzene.

Exploratory Excavations:

- Tanks were not discovered in the eastern site portion in anomaly MA-3 (labeled as potential Tanks 3 and 4). A rusted steel pipe of approximately two inches in diameter located in an east to west orientation was identified at approximately 1 ½ feet bgs in the trench excavated in the vicinity of potential Tank 3.
- Two tanks of approximately 38 inches in diameter were discovered in the area of potential Tanks 6 and 7 in the area of anomaly MA-2. Inside Tank 7 approximately 13 inches of water was detected. A tank was not identified in the area of potential Tank 5; however, an approximately 1.5-inch diameter steel pipe was observed at a depth of approximately 1.5 feet in a northeast to southwest orientation.

Terracon's subsequent exploratory excavations confirmed that USTs are not present in the vicinity of anomaly MA-3 that would require removal. Although a third UST was not identified in the vicinity of anomaly MA-2, there is the potential that a third UST is present to the west of the two identified USTs in this area, but beneath the sidewalk.

UST removal activities and Geotechnical Monitoring and Testing were originally proposed to be completed in conjunction with the above mentioned tasks; however, additional USTs identified on-site by the geophysical survey could not be removed concurrently with the USTs located north of the restaurant due to permitting delays associated with City of Kent requirements. Therefore, UST removal was placed on hold by the client. Terracon is currently preparing a proposal for the removal of all on-site tanks at one time in an attempt to minimize the on-site tenant disruptions. The proposal will be provided under separate cover.

7.0 CONCLUSIONS AND RECOMMENDATIONS

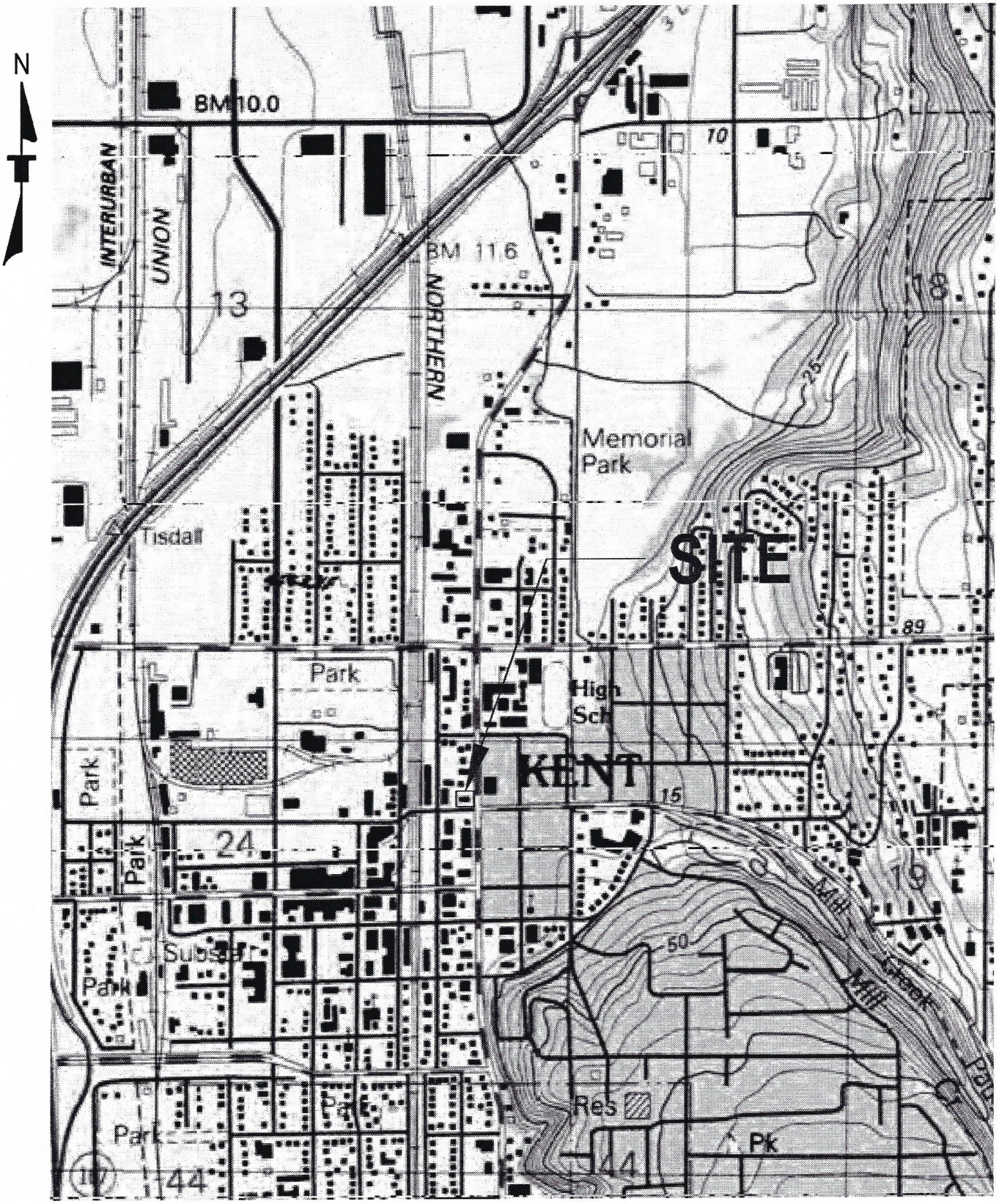
Based on the information discussed above and in this report, a minimum of four USTs have been identified at the site. Terracon recommends that all USTs be decommissioned according to Washington State Underground Storage Tank Regulations per Chapter 173-360 WAC. Furthermore, Terracon recommends that further subsurface characterization be performed in an effort to delineate soil and groundwater impacted with petroleum hydrocarbons near the southern USTs. Specifically, the installation of groundwater monitoring wells may be necessary in an attempt to investigate the extents of the existing groundwater impacts and/or whether the impacts may be a result of migration from the south adjoining property. Based on the results of the samples collected from boring B-7, approximately 25 feet to the west of B-6, it appears the impacts are limited to the west due to the reported concentrations below cleanup levels. Although concentrations were not detected above cleanup levels in boring B-3, approximately 60 feet north of B-6, the limits of impacts between these two borings is undetermined at this time. Furthermore, the limits of impacts to the east of B-6 is also undetermined; however, boring B-5, approximately 50 feet to the north-northeast, was not reported with concentrations above cleanup levels.

Section 173-340-300(2)(a) of the Model Toxics Control Act states that: "*Any owner or operator who has information that a hazardous substance has been released to the environment at the owner or operator's facility and may be a threat to human health or the environment shall report such information to the department within ninety days of discovery. Releases from underground storage tanks shall be reported by the owner or operator of the underground storage tank within twenty-four hours of release confirmation*."

At this time, the release on the southern portion of the site cannot be directly correlated with the USTs. Regardless, Terracon recommends that the on-site impacts to soil and groundwater that exceed MTCA Method A cleanup levels be reported to Ecology.

APPENDIX A

FIGURES

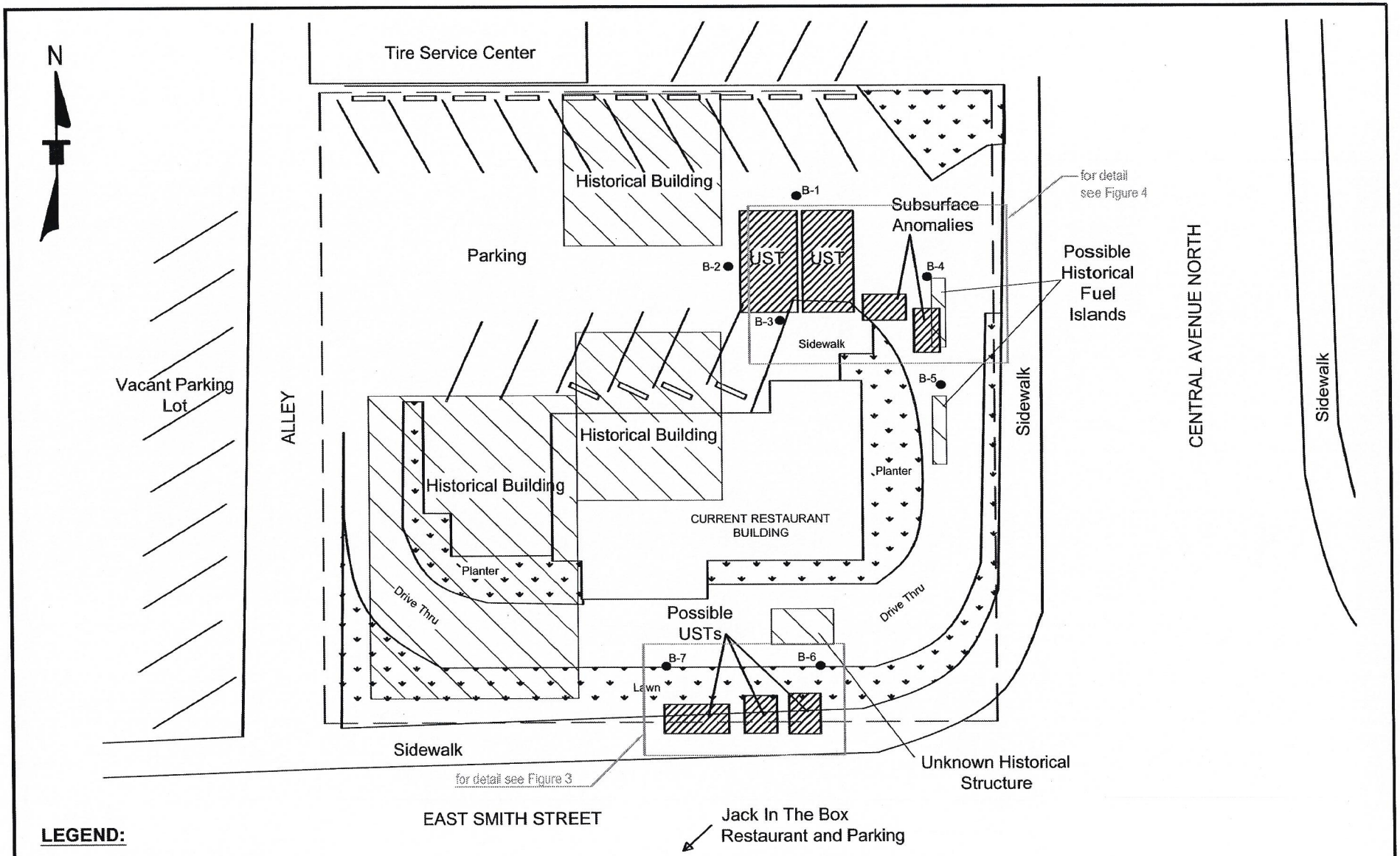


LEGEND:

——— Approximate site boundary

USGS Topographic Map,Renton Quadrangle, 1994

Project Mngr: EAD	Project No. 81137082	Terracon Consulting Engineers and Scientists	**TOPOGRAPHIC MAP**	FIG. No.
Drawn By: SAB	Scale: Not to scale	21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043	El Rinconsito Restaurant	1
Checked By: TAH	File No.	PH. (425) 771-3304 FAX. (425) 771-3549	301 Central Avenue North	
Approved By: MYW	Date: November 2013		Kent, King County, Washington	



LEGEND:

Approximate site boundary

Historical Structures

B-1 Proposed Boring Location and Boring Number

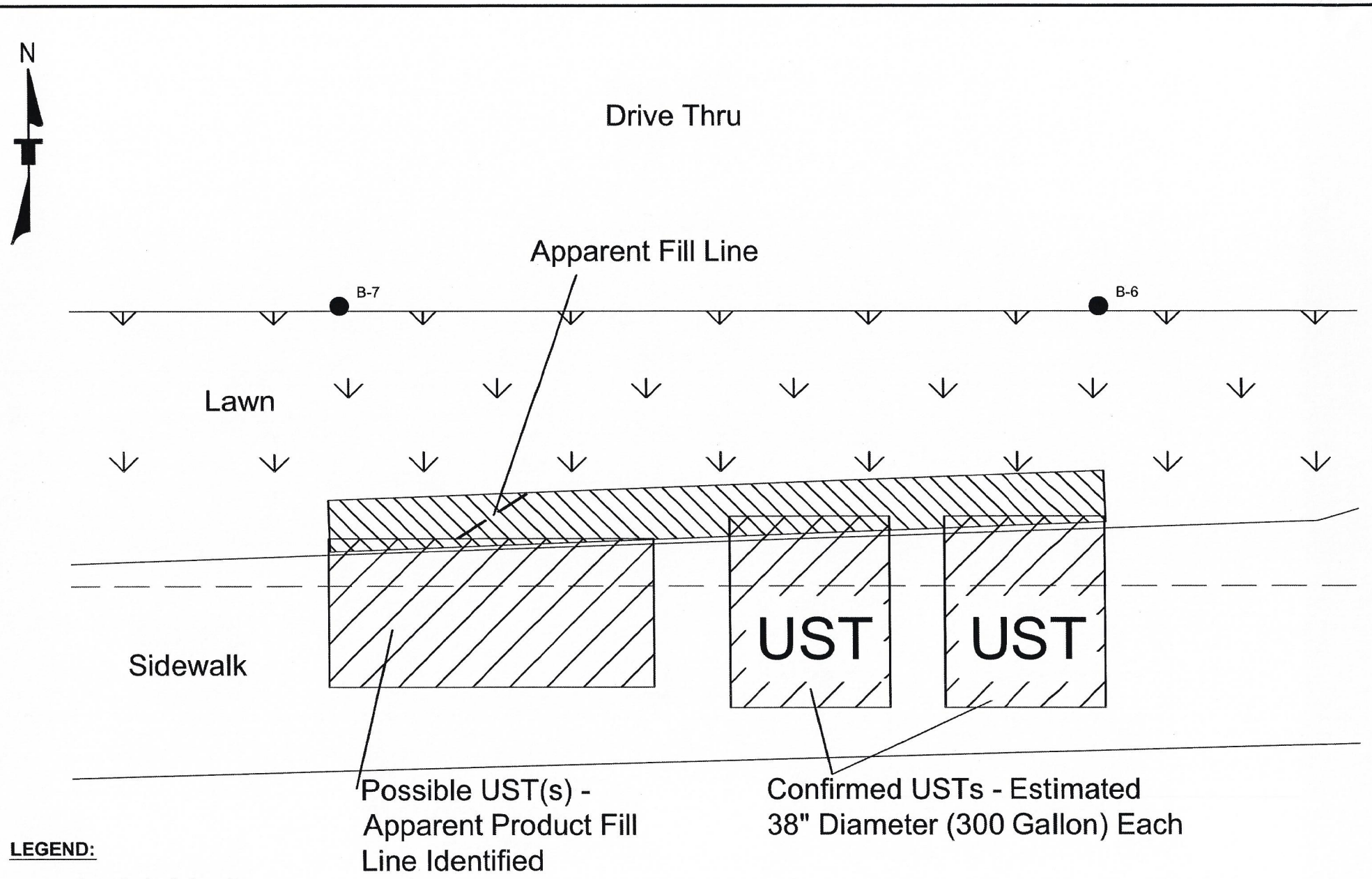
Project Mngr: EAD	Project No. 81137082
Drawn By: AAS	Scale: Not to scale
Checked By: EAD	File No. .dwg
Approved By: MYW	Date: November 2013

Terracon
Consulting Engineers and Scientists
21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043
PH. (425) 771-3304 FAX. (425) 771-3549

Site Features Diagram

301 Central Avenue North
Kent, King County, Washington
Vivolo Family Trust, LLC

FIG. No. 2



LEGEND:

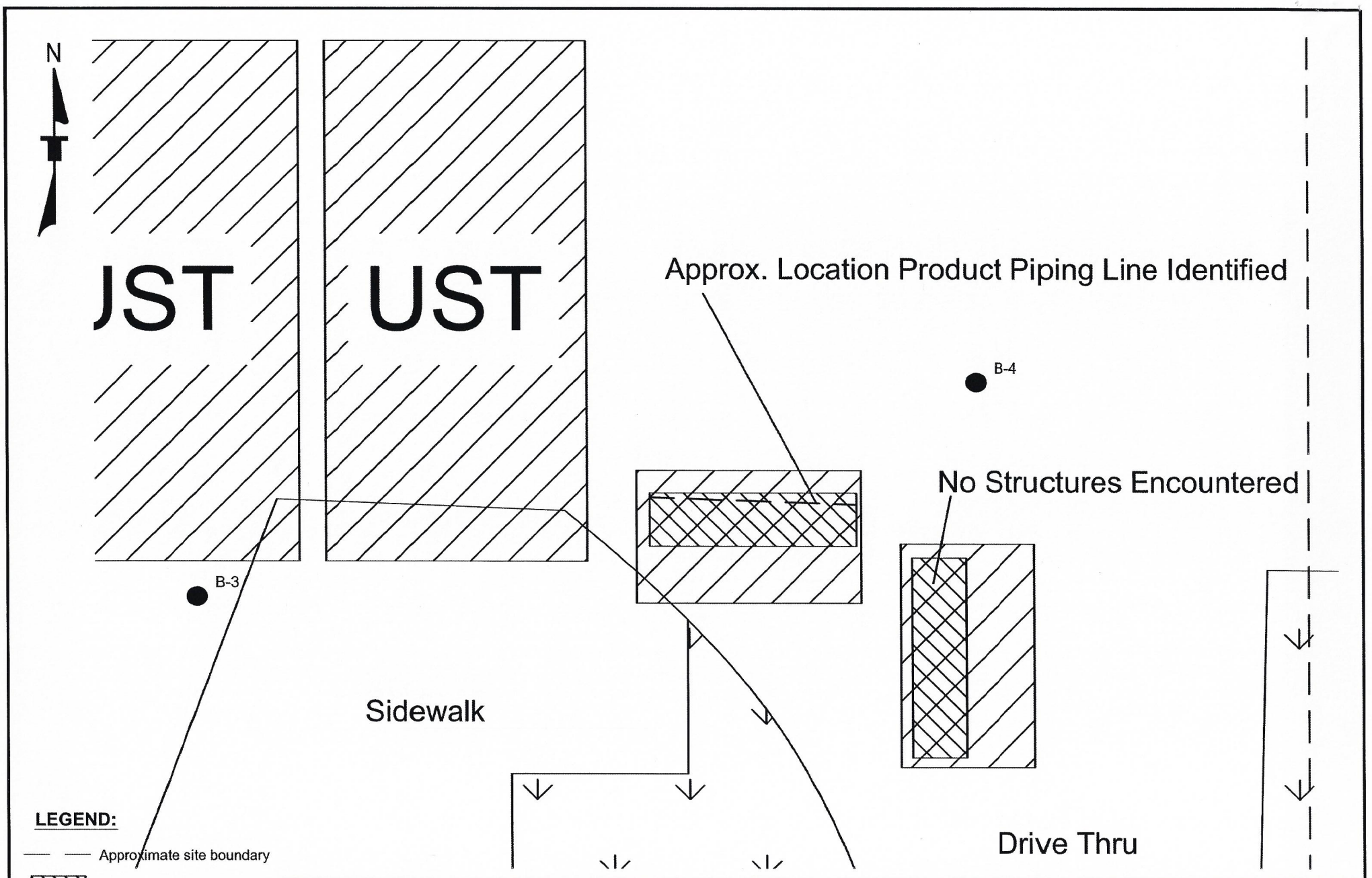
- Approximate site boundary
- Approx. Excavation Extents
- Approx. UST or Anomaly Extents
- B-1 Approx. Boring Location and Boring Number

Project Mngr:	EAD
Drawn By:	AAS
Checked By:	EAD
Approved By:	MYW
Project No.	81137082
Scale:	Not to scale
File No.	.dwg
Date:	November 2013

Terracon
Consulting Engineers and Scientists
21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043
PH. (425) 771-3304 FAX. (425) 771-3549

MA-2 - Exploratory Excavation
301 Central Avenue North
Kent, King County, Washington
Vivolo Family Trust, LLC

FIG. No. 3



Project Mngr:	EAD
Drawn By:	AAS
Checked By:	EAD
Approved By:	MYW
Project No.	81137082
Scale:	Not to scale
File No.	.dwg
Date:	November 2013

Terracon
Consulting Engineers and Scientists
21905 64th Avenue W., Ste 100 Mountlake Terrace, WA 98043
PH. (425) 771-3304 FAX. (425) 771-3549

MA-3 - Exploratory Excavation

301 Central Avenue North
Kent, King County, Washington
Vivolo Family Trust, LLC

FIG. No. 4

APPENDIX B

Historical Documentation

BORING LOG NO. B-1

PROJECT: Taqueria El Rinconsito

CLIENT: Union Bank, N.A.
Orange, California

SITE: 301 Central Avenue North
Kent, Washington

LOCATION North of UST Tank Hold - see Figure 2

DEPTH	GRAPHIC LOG		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	Sample ID
0.3		**ASPHALT CONCRETE**, black, 2" asphalt w/gravel base course					
		SILTY SAND (SP-SM), brown, moist					
6.5			5	▽	X	B-1 S-1 PID=0.0ppm	B-1 S-1 @ 5.5-6.5 feet
		SILTY SAND (SP-SM), brown, wet-saturated					
8.0							
		SILTY SAND (SP-SM), gray, saturated	10		X	B-1 S-2 PID=0.0ppm	B-1 S-2 @ 11-12 feet
12.0							
		Boring Terminated at 12 Feet					

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
2" DP

Abandonment Method:
Borings backfilled with bentonite chips upon completion

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater encountered during drilling*

Terracon
21905 64th Ave. W, Suite 100
Mountlake Terrace, Washington

Boring Started: 10/22/2013	Boring Completed: 10/22/2013
Drill Rig: GeoProbe	Driller: Holocene Drilling
Project No.: 81137082	Exhibit:

BORING LOG NO. B-2

PROJECT: Taqueria El Rinconsito

CLIENT: Union Bank, N.A.
Orange, California

SITE: 301 Central Avenue North
Kent, Washington

LOCATION West of UST Tank Hold - see Figure 2

DEPTH	GRAPHIC LOG		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	Sample ID
0.3		**ASPHALT CONCRETE**, black, with gravel base course					
		SAND (SP-SM), with silt, brown, moist					
			5				
				▽		B-2 S-1 PID=0.0ppm	B-2 S-1 @ 6-7 feet
7.5							
		SILTY SAND (SM), gray, saturated					
			10				
						B-2 S-2 PID=0.0ppm	B-2 S-2 @ 11-12 feet
12.0							
		Boring Terminated at 12 Feet					

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
2" DP

Abandonment Method:
Borings backfilled with bentonite chips upon completion

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater encountered during drilling*

Terracon
21905 64th Ave. W, Suite 100
Mountlake Terrace, Washington

Boring Started: 10/22/2013	Boring Completed: 10/22/2013
Drill Rig: GeoProbe	Driller: Holocene Drilling
Project No.: 81137082	Exhibit:

BORING LOG NO. B-3

PROJECT: Taqueria El Rinconsito

CLIENT: Union Bank, N.A.
Orange, California

SITE: 301 Central Avenue North
Kent, Washington

LOCATION South of UST Tank Hold - see Figure 2

GRAPHIC LOG	DEPTH		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	Sample ID
	0.3	**ASPHALT CONCRETE**, black, with gravel base course					
		SAND WITH GRAVEL (SP-SM), trace silt, brown, moist					
	4.0	No Recovery	5	▽			
	8.0	**SILTY SAND WITH GRAVEL (SM)**, brown, saturated			X	B-3 S-1 PID=0.0ppm	B-3 S-1 @ 8-9 feet
	10.0	**SILTY SAND (SM)**, gray, saturated	10		X	B-3 S-2 PID=0.0ppm	B-3 S-2 @ 10-11 feet
	12.0	***Boring Terminated at 12 Feet***					

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
2" DP

Abandonment Method:
Borings backfilled with bentonite chips upon completion

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater encountered during drilling*

Terracon
21905 64th Ave. W, Suite 100
Mountlake Terrace, Washington

Boring Started: 10/22/2013	Boring Completed: 10/22/2013
Drill Rig: GeoProbe	Driller: Holocene Drilling
Project No.: 81137082	Exhibit:

BORING LOG NO. B-4

PROJECT: Taqueria El Rinconsito

CLIENT: Union Bank, N.A.
Orange, California

SITE: 301 Central Avenue North
Kent, Washington

GRAPHIC LOG	LOCATION East of UST Tank Hold - see Figure 2 DEPTH	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	Sample ID
	0.3 **ASPHALT CONCRETE**, black, with gravel base course					
	SILTY SAND WITH GRAVEL (SM), brown, moist					
	2.0 **SAND WITH SILT (SP-SM)**, brown, moist-wet					
				X	B-4 S-1 PID=0.0ppm	B-4 S-1 @ 3-4 feet
	4.0 **SAND WITH SILT (SP-SM)**, gray, saturated	5	▽			
				X	B-4 S-2 PID=0.0ppm	B-4 S-2 @ 7-8 feet
	8.0 No Recovery	10				
	12.0 ***Boring Terminated at 12 Feet***					

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
2" DP

Abandonment Method:
Borings backfilled with bentonite chips upon completion

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater encountered during drilling*

Terracon
21905 64th Ave. W, Suite 100
Mountlake Terrace, Washington

Boring Started: 10/22/2013	Boring Completed: 10/22/2013
Drill Rig: GeoProbe	Driller: Holocene Drilling
Project No.: 81137082	Exhibit:

BORING LOG NO. B-5

PROJECT: Taqueria El Rinconsito

CLIENT: Union Bank, N.A.
Orange, California

SITE: 301 Central Avenue North
Kent, Washington

LOCATION North of MA-3 - see Figure 2

DEPTH	GRAPHIC LOG		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	Sample ID
0.3		**ASPHALT CONCRETE**, black, with gravel base course					
		SAND WITH SILT AND GRAVEL (SP-SM), brown, moist					
1.0		**SAND WITH SILT (SP-SM)**, brown, moist-wet					
4.5		**SAND WITH SILT (SP-SM)**, gray, saturated, bottom 2 feet sluffed from sampler	5	▽	X	B-5 S-1 PID=0.0ppm	B-5 S-1 @ 5-6 feet
					X	B-5 S-2 PID=0.0ppm	B-5 S-2 @ 7-8 feet
8.0		***Boring Terminated at 8 Feet***					

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
2" DP

Abandonment Method:
Borings backfilled with bentonite chips upon completion

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater encountered during drilling*

Terracon
21905 64th Ave. W, Suite 100
Mountlake Terrace, Washington

Boring Started: 10/22/2013	Boring Completed: 10/22/2013
Drill Rig: GeoProbe	Driller: Holocene Drilling
Project No.: 81137082	Exhibit:

BORING LOG NO. B-6

PROJECT: Taqueria El Rinconsito

CLIENT: Union Bank, N.A.
Orange, California

SITE: 301 Central Avenue North
Kent, Washington

GRAPHIC LOG	LOCATION South of MA-3 - see Figure 2 DEPTH	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	Sample ID
	0.3 **ASPHALT CONCRETE**, black, with gravel base course					
	SAND WITH SILT AND GRAVEL (SP-SM), brown, moist, slight petroleum odor at 3 feet					
	3.5 **SAND WITH SILT (SP-SM)**, gray, moist transitioning to saturated at approx. 6 feet, petroleum odor and groundwater in soil sample has sheen	5	▽		B-6 S-1 PID=88ppm	B-6 S-1 @ 6.5-7.5 feet
					B-6 S-2 PID=230ppm	B-6 S-2 @ 8.5-9.5 feet
		10				
	12.0 ***Boring Terminated at 12 Feet***					

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
2" DP

Abandonment Method:
Borings backfilled with bentonite chips upon completion

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater encountered during drilling*

Terracon
21905 64th Ave. W, Suite 100
Mountlake Terrace, Washington

Boring Started: 10/22/2013	Boring Completed: 10/22/2013
Drill Rig: GeoProbe	Driller: Holocene Drilling
Project No.: 81137082	Exhibit:

BORING LOG NO. B-7

PROJECT: Taqueria El Rinconsito

CLIENT: Union Bank, N.A.
Orange, California

SITE: 301 Central Avenue North
Kent, Washington

LOCATION North of MA-2, East End - see Figure 2

GRAPHIC LOG	DEPTH		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	Sample ID
		TOPSOIL, silty, dark brown, Grass over organic laden topsoil					
	1.0	**SILTY SAND WITH GRAVEL (SM)**, brown to dark brown, moist					
	4.0	**SAND WITH SILT (SP-SM)**, gray brown, moist-wet	5	▽			
	8.0					B-7 S-1 PID=0.0ppm	B-7 S-1 @ 7-8 feet
		SAND WITH SILT (SP-SM), gray brown, saturated, 1 foot layer of decomposing wood at 10 feet	10				
	12.0					B-7 S-2 PID=0.0ppm	B-7 S-2 @ 11-12 feet
		Boring Terminated at 12 Feet					

Stratification lines are approximate. In-situ, the transition may be gradual.

Advancement Method:
2" DP

Abandonment Method:
Borings backfilled with bentonite chips upon completion

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater encountered during drilling*

Terracon
21905 64th Ave. W, Suite 100
Mountlake Terrace, Washington

Boring Started: 10/22/2013	Boring Completed: 10/22/2013
Drill Rig: GeoProbe	Driller: Holocene Drilling
Project No.: 81137082	Exhibit: