

# **MEMORANDUM**

Project No.: 080190-004-04

July 14, 2009

**To:** Dave Shaw, Successor to Walker Chevrolet

Michael Bond, Gardner Bond Trabolsi, PLLC

cc: Al Notary, Brown & Caldwell

John Mullan, Zurich North American Insurance Co.

From: Doug Hillman, LHG

Principal Hydrogeologist

**Joe Morrice, LHG** Senior Hydrogeologist

**Re:** Site Conditions Summary

Former Walker Chevrolet Property in Tacoma, Washington

The purpose of this memorandum is to provide you and the Washington State Department of Ecology (Ecology) with a summary of current environmental conditions at the former Walker Chevrolet property (Property). We recommend submitting this memorandum to Ecology with enrollment materials for the Voluntary Cleanup Program (VCP). Once an Ecology site manager is assigned we should schedule a meeting with Ecology to discuss the findings of this memorandum and discuss potential follow-up actions prior to requesting an Ecology-issued opinion letter. Work conducted on this project is consistent with requirements of the Model Toxics Control Act (MTCA), Chapter 173-340 of the Washington Administrative Code (WAC) and is intended to support an Ecology-equivalent cleanup action at the site.

The Property is located at the intersection of Division Avenue and North First Street in Tacoma, Washington (Figure 1). For the purposes of this memorandum the "Property" refers to two tax parcels (Pierce County Assessor Parcel Numbers 2030120030 and 2030120040) with the associated street addresses 608 and 610 North First Street and 633 Division Street. Property boundaries are shown on Figure 2. The "Site", as used in this memorandum, includes the Property and any off-property soil or groundwater confirmed or suspected of being impacted by contaminant releases at the Property.

# **Site Description**

The Property contains two buildings (Figure 2), and all remaining surfaces are paved with asphalt or concrete. The larger building occupies approximately the southern two thirds of the Property and currently contains an auto body shop and a Thriftway grocery store. A smaller building located at the north corner of the Property contains office space for the grocery and Morrell's Dry Cleaning (Morrell's). Several retail businesses are located along Tacoma Avenue North and are separated from the Property by a narrow pedestrian walkway.

The larger building was constructed in 1925 and used as an auto dealership. Eight underground storage tanks (USTs) associated with this building were decommissioned in 1994. The building 401 Second Avenue S, Suite 201 Seattle, WA 98104 Tel: (206) 328-7443 Fax: (206) 838-5853 www.aspectconsulting.com

occupied by Morrell's has reportedly contained a dry cleaning operation since prior to 1930 (Bison Environmental, 1994a).

# Geologic and Hydrogeologic Conditions

This summary of area-wide and Site geologic and hydrogeologic conditions is based on review of geologic literature (e.g., Walters and Kimmell, 1968; Troost and Booth, in review) and soil and groundwater conditions observed during Site explorations. An area-wide geologic cross section, extending from south of the Site north to Commencement Bay is provided in Figure 3. Two hydrogeologic cross section extending south-north and west-east through the Site are provided in Figures 4 and 5.

# Area Geology

The Tacoma uplands is characterized by a series of Quaternary-age glacial and interglacial deposits. As shown on Figure 3, the general sequence in the vicinity of the Site consists of approximately 80 feet of Vashon Stade glacial till (Qvt) and advance outwash (Qva) deposits overlying earlier Olympia Bed interglacial deposits (Qob) and undifferentiated, pre-Fraser glacial and interglacial deposits (Qpf). Undifferentiated pre-Olympia glacial and interglacial deposits (Qpo) outcrop near Commencement Bay.

The glacial till (Qvt) in this area consists of very dense, glacially overridden mixture of gravel, sand, silt, and clay deposited beneath the advancing glaciers. This unit typically exhibits low hydraulic conductivity and generally acts as a barrier to groundwater flow or infiltration of water from the ground surface.

The underlying advance outwash (Qva) consists of sands and gravels with minor amounts of silt and clay deposited by meltwater streams ahead of the advancing glaciers. This unit typically exhibits moderate to high hydraulic conductivity, and where saturated, can yield significant quantities of water.

The older glacial and interglacial deposits (Qob, Qpf, and Qpo) include glacial till and outwash deposits and interglacial alluvial and lacustrine deposits. The till and lacustrine deposits are generally fine-grained and act as barriers to groundwater flow, while the outwash and alluvial deposits are generally coarse-grained and act as pathways for groundwater flow. Based on soils observed during drilling of well MW-8D, at least the upper 50 feet of these older deposits consist primarily of silt and silty sand and gravel with a limited thickness of clean (i.e., non-silty) sand.

# Site Hydrogeologic Conditions

Figure 4 and 5 depict hydrogeologic cross sections through the Site. Site soils consist of approximately 35 feet of silty sand and gravel, interpreted as glacial till, overlying approximately 30 feet of sand, interpreted as advance outwash. Underlying the outwash sand is a sequence consisting primarily of silt and silty sand, with a limited thickness of interbedded slightly silty sand. This sequence of silt, silty sand, and sand extends to at least 120 feet below ground surface (bgs), the maximum depth drilled at the Site.

Two water bearing zones were encountered at the Site. The upper water bearing zone occurs in the outwash sand, and extends from approximately 53 feet bgs to the base of the outwash at a depth of approximately 65 to 70 feet bgs. Eleven of the twelve Site wells are completed in the outwash sand. A deeper water bearing zone was encountered in a sand layer within the interbedded silt, silty sand, and sand at a depth of about 111 to 115 feet bgs. One Site well (MW-8D) is completed in the lower water bearing zone.

Five of the eleven wells completed in the outwash sand were dry. These dry wells are all located off-property along Tacoma Avenue North and North First Street. All wells completed on-property contained water. The boring for well MW-8D penetrated through the outwash sands (using a grouted conductor casing) and extended approximately 50 feet into the fine-grained underlying soils. The soils underlying the outwash were dry from near the base of the upper water bearing zone to the top of the lower water bearing zone. These observations indicate that the upper water bearing zone is perched on the underlying fine-grained soils and is not directly connected to the deeper water bearing zone. Additionally, the lateral extent of perched groundwater in the outwash sand is limited, and does not extend significantly off-property to the north or west. The lateral and vertical extent of the deeper water bearing zone could not be determined based on the available data.

Table 1 summarizes groundwater elevation measurements from all Site wells. Figure 6 presents groundwater elevation contours in the first water bearing zone based on the May 2009 groundwater level measurements. The groundwater elevation contours indicate the horizontal component of flow across the Property is to the northeast. Based on the perched nature of this upper water bearing zone a significant component of flow is expected to be vertically downward into the underlying fine-grained soils.

One possible explanation for the occurrence of the perched groundwater and the northward horizontal flow would be the presence of a localized area of increased groundwater recharge. The Site and most of the surrounding area is paved, with little landscaping or exposed surface soil. However, Wright Park, with approximately 30 acres of unpaved landscaping, is located immediately southwest of Site (Figure 1). It is likely that increased groundwater recharge from the park, through infiltration of precipitation and irrigation water used for landscaping, is contributing to the formation of perched groundwater conditions beneath the Site. Sewer and water utility lines in the area are also noted as a second potential source of localized recharge (sewer main lines are shown on Figure 2).

# Site Investigations and Remedial Actions

Several environmental investigations and UST decommissioning activities have occurred at the Site. Soil investigation results and documentation of UST removal were submitted to Ecology in 1994. Monitoring well construction logs and laboratory certificates of analyses for investigations completed by Aspect Consulting, LLC (Aspect) in 2009 are provided in Attachments A and B, respectively. Results of investigations completed by Stemen Environmental, Inc. (Stemen Environmental) between 2006 and 2008 were not formally documented and reported to Ecology. A package of figures and data tables provided by Stemen Environmental is reproduced in Attachment C.

The following summarizes the scope and results of these activities.

# UST Removal and Soil Investigation (1994)

In 1994, seven USTs and an associated pump island and product lines were removed and disposed off-site (Bison Environmental, 1994b). The USTs were located at the southwest corner of the Site (Figure 2). Reportedly three USTs contained gasoline, two contained oil or oily product, and two contained water at the time of removal.

Approximately 100 cubic yards of apparent petroleum-impacted soils were excavated from around and beneath the USTs and stockpiled for disposal. The excavation depth was reportedly about 10 feet bgs. Soil confirmation samples were collected from the excavation sidewalls and bottom and analyzed using the hydrocarbon identification (HCID) method. The HCID method does not quantify the concentration of TPH in soil, but instead indicates the presence or absence of specific ranges of TPH (i.e., gasoline, diesel, or oil). Samples collected beneath the gasoline USTs were also analyzed for gasoline-range total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and lead. Gasoline-range TPH (39 mg/kg), ethylbenzene (0.33 mg/kg), total xylenes (3.3 mg/kg), and lead (6 mg/kg) were detected in one soil confirmation; fuel constituents were not detected in any other confirmation sample.

An eighth UST, located beneath a paint booth near the west side of the former Walker Chevrolet building, was closed in-place in 1994 (Figure 2). This UST reportedly contained heating oil used as fuel for the building's boiler (Bison Environmental, 1994c). Two floor drains, approximately 2 feet in diameter and 2.5 and 4 feet deep, respectively were also cleaned-out and closed at that time. The floor drains and UST were then filled with concrete slurry.

A direct-push drill rig was used to collect soil samples adjacent to the floor drains and heating oil UST. Soil samples were collected at depths ranging from 2 to 10 feet bgs and analyzed for TPH by Method WTPH-418.1 or the HCID method. Method WTPH-418.1 does not distinguish between different ranges of TPH (e.g., gasoline-range versus oil-range), and instead provides the total concentration of all TPH ranges. Select soil samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8240. One sample was also analyzed for metals and a separate sample was analyzed for gasoline-range TPH.

The HCID analyses identified both gasoline- and oil-range hydrocarbons in soil and the WTPH-418.1 analyses detected concentrations of TPH of up to 8,000 mg/kg. Gasoline-range TPH was detected in the one sample analyzed at a concentration of 100 mg/kg. The WTPH-418.1 analytical results are not directly comparable to currently available MTCA cleanup levels; however, some detected concentrations exceeded cleanup levels applicable in 1994.

Several VOCs were detected in soil beneath the paint booth area. Detected VOCs and maximum detected concentrations include benzene (0.024 mg/kg), toluene (85 mg/kg), ethylbenzene (2.2 mg/kg), total xylenes (143 mg/kg), tetrachloroethene (0.21 mg/kg), and naphthalene (1.1 mg/kg).

The metals barium (43.8 mg/kg), cadmium (50.2 mg/kg), chromium (110 mg/kg), and lead (2,140 mg/kg) were detected in the one sample analyzed from the paint booth area.

# Groundwater and Soil Investigations (2006 through 2008)

Between August 2006 and April 2008 a series of soil, groundwater, soil vapor, and indoor air quality investigations were completed at the Site by Stemen Environmental. These investigations were completed as due diligence on behalf of a potential buyer of the property.

## **Soil Investigation Results**

Soil samples were collected at the Site between August and October 2006. Twenty-four soil samples were analyzed for gasoline-, diesel-, and oil-range TPH and 16 of these samples were also analyzed for BTEX compounds. Twenty-one soil samples were analyzed for VOCs. One soil sample from the former UST area was analyzed for polychlorinated biphenyls (PCBs) and semivolatile organic compounds (SVOCs).

Gasoline-range TPH was detected in two soil samples collected from the former UST excavation at depths of 15 feet bgs. Detected concentrations were 360 and 920 mg/kg. Benzene (6.1 mg/kg), toluene (4.1 mg/kg), ethylbenzene (6 mg/kg), and total xylenes (12 mg/kg) were also detected in one of these samples. SVOCs and PCBs were not detected in the one soil sample analyzed for these constituents from the former UST area.

Gasoline-range TPH was detected at a concentration of 30 mg/kg in a sample collected at depth of 8 feet in the paint booth area. A low concentration of total xylenes (0.13 mg/kg) was the only BTEX compound detected in the paint booth area soils. The chlorinated solvent PCE was detected in the paint booth area at a concentration of 0.16 mg/kg in soil samples collected at depths of 4 and 8 feet.

Four soil samples were collected from beneath the dry cleaners and two soil samples were collected beneath the adjacent Thriftway office. Sampling depths beneath the dry cleaners were not provided. Samples from beneath the Thriftway office were collected at depths of 0 to 2 feet and 2 to 3 feet. All samples were analyzed for VOCs. Beneath the dry cleaners PCE was detected in all four samples at concentrations ranging from 1.5 to 18 mg/kg. Low concentrations of TCE (0.28 to 0.85 mg/kg) and cis-1,2-DCE (0.06 mg/kg) were also detected in one or more of these samples. Beneath the Thriftway office PCE was detected in both samples at a concentration of 0.04 mg/kg.

## **Groundwater Investigation Results**

Three apparent groundwater grab samples were collected from beneath the dry cleaners and one groundwater sample was collected beneath the Thriftway office. These samples were analyzed for VOCs. Sampling depths beneath the dry cleaners were not provided. The sample from beneath the Thriftway office was collected at a depth of 6 inches. Chlorinated solvents were detected in all four groundwater grab samples. Detected chlorinated VOCs and maximum detected concentrations include PCE (13,000 µg/L), TCE (33 µg/L), and cis-1,2-DCE (24 µg/L).

A total of eight monitoring wells (MW-1 through MW-8 on Figure 2) were installed under the direction of Stemen Environmental between January 2007 and April 2008. Wells MW-1 through MW-7 were completed to depths of about 65 feet bgs, with 15 feet of screen. Well MW-8 was completed to a depth of 61 feet bgs with 10 feet of screen. Wells MW-3, MW-4, and MW-6,

located off-property along North First Street and Tacoma Avenue North, were dry. The other wells contained water at depths of about 52 to 53 feet bgs.

Monitoring wells MW-1 and MW-2 were sampled in August 2007 and January 2008; wells MW-5 and MW-7 were sampled twice in January 2008; and well MW-8 was sampled in April 2008. All samples were analyzed for VOCs. Results are summarized on Table 1.

Detected constituents include PCE and its degradation daughter products TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride. Chloroform and carbon tetrachloride were also detected in multiple wells. Chloroethane was detected in well MW-2 and benzene was detected once in well MW-1. Detected concentrations of PCE and its daughter products were highest at MW-2 and MW-8, located adjacent to Morrell's Dry Cleaners, with significantly lower concentrations at MW-5 and MW-7, located approximately 50 to 80 feet southwest and southeast of the dry cleaners, respectively.

# Soil Gas Investigation Results

Six soil gas samples (GV-1 through GV-6) were collected at the Property in May 2008. Samples GV-1 through GV-3 were apparently collected beneath the concrete slab in the paint booth area. These samples had detectable concentrations of PCE (110 to 1,000  $\mu$ g/m³), toluene (130 to 240  $\mu$ g/m³), and xylenes (150 to 230  $\mu$ g/m³).

Samples GV-4 through GV-6 were apparently collected beneath the concrete slab in the dry cleaners building. When Stemen Environmental attempted to collect these soil gas samples they encountered flooded conditions, apparently due to a water pipe break in the adjacent building to the northeast. It is unclear how the flooding may have influenced soil gas conditions during that sampling event. These samples had detectable concentrations of PCE (1,600 to 70,000  $\mu g/m^3$ ), TCE (2,700 to 7,800  $\mu g/m^3$ ), cis-1,2-DCE (320 to 16,000  $\mu g/m^3$ ), and vinyl chloride (one detection, 540  $\mu g/m^3$ ), benzene (140 to 390  $\mu g/m^3$ ), and toluene (100 to 270  $\mu g/m^3$ ).

## Sewer Evaluation and Soil Gas Sampling (2008)

In January 2009 Aspect completed a review of City of Tacoma utility records and directed a video inspection of the sewer line leading from Morrell's Dry Cleaners. Aspect also collected soil vapor samples along the path of the sewer line and adjacent to the Morrell's building (Aspect, 2009).

The video survey identified an apparent gap in the Morrell's sewer service connection near where it joins the sanitary sewer mainline. Soil gas samples were taken at four locations, including near the gap identified in the sewer line, immediately north and south of the dry cleaner building adjacent to the side sewer, and above the sewer mainline approximately 110 feet downstream of the side sewer connection. Soil gas samples were analyzed for VOCs.

The only chlorinated VOC detected was PCE. There were no detections in the soil vapor sample collected at the gap in the side sewer. The soil gas samples collected at the south and north side of the building had PCE concentrations of 200 and 6,500  $\mu$ g/m³, respectively. The soil gas sample collected adjacent to the sewer mainline had a PCE concentration of 400  $\mu$ g/m³.

# Additional Groundwater Investigation (2008 and 2009)

Aspect conducted additional groundwater investigations at the Site in October 2008 and May 2009. In October 2008, Aspect measured water levels and collected samples from the monitoring well network installed by Stemen Environmental. In May 2009 Aspect installed four new monitoring wells at the Site (MW-8D and MW-9 through MW-11 on Figure 2). Following well installation a round of groundwater sampling and groundwater elevation measurements was completed at all existing and new monitoring wells.

Well MW-8D is located between MW-8 and MW-2, the wells that previously contained the highest chlorinated VOC concentrations. This well was installed to a depth of 116 feet to assess potential impacts to deeper groundwater beneath the Site. To avoid the potential for contaminant carry-down from the known impacted groundwater at a depth of about 50 feet this well was installed using an 8-inch conductor casing advanced to a depth of approximately 70 feet. The conductor casing was then sealed with bentonite and allowed to cure overnight. Then a 6-inch casing was used inside the 8-inch conductor casing to drill to the total depth and install the 2-inch monitoring well.

Wells MW-9 and MW-10 were completed in North Tacoma Avenue, in the apparent downgradient direction from wells MW-2 and MW-8. These wells were completed at depths of about 70 feet bgs and were intended to tap the same water bearing zone as wells MW-2, MW-5, and MW-8. Well MW-11was installed in the paint booth area to a depth of 63 feet. The purpose of this well was to assess any impacts to groundwater from operations at the former Walker Chevrolet building.

Measured groundwater elevations at Site wells are summarized in Table 1. Consistent with previous observations, Stemen Environmental wells MW-3, MW-4, and MW-6 were dry in both October 2008 and May 2009. The two new wells added by Aspect and located on Tacoma Avenue North (MW-9 and MW-10) were also dry. Depth to water in the Aspect well MW-8D was about 60 feet deeper than in other Site wells containing water.

Groundwater samples were collected from Site wells in October 2008 and May 2009 and analyzed for VOCS. Laboratory certificates of analysis are provided in Attachment B and results are summarized in Table 2. Analytical results from well MW-1, MW-2, MW-5, MW-7, and MW-8 are consistent with previous groundwater sampling results. The groundwater sample from well MW-11, located in the paint booth area, contained low concentrations of TCE, carbon tetrachloride, and chloroform. The groundwater sample from deep well MW-8D contained low concentrations of cis-1,2-DCE and carbon tetrachloride.

# **Preliminary Conceptual Site Model**

This section presents the preliminary Conceptual Site Model (CSM), including identification of Chemicals of Potential Concern (COPCs) based on comparison of soil and groundwater analytical data to regulatory screening levels; the nature and extent of COPCs; and potential exposure pathways.

# Screening Levels

Under MTCA, cleanup levels are categorized as Method A, B, or C. Method A cleanup levels, which apply to soil and groundwater media, are applicable at sites where the cleanup is routine or involves relatively few hazardous substances. MTCA includes tables of Method A groundwater cleanup levels for potable groundwater and Method A soil cleanup levels for unrestricted (including residential) land use and industrial land use. Method A cleanup levels for soil and groundwater must be at least as restrictive as requirements under applicable state and federal laws. In addition, Method A soil cleanup levels must be protective of terrestrial ecological receptors, unless it can be demonstrated that such exposure is not of concern at the site.

Method B cleanup levels may be used for all media at any site. Under Method B, cleanup levels for individual hazardous substances are established using applicable state and federal laws and the risk equations and other requirements specified in the MTCA rules for each medium. In addition, Method B soil cleanup level must be protective of terrestrial ecological receptors.

Method C cleanup levels are intended for industrial sites where compliance with Method A or B cleanup levels may be impossible to achieve or may cause greater environmental harm. Site cleanups establishing Method C cleanup levels must have restrictions placed on the property (institutional controls) to ensure future protection of human health and the environment.

For the purposes of this memorandum, soil and groundwater screening levels were established using MTCA Method A soil and groundwater cleanup levels, where available, and using published MTCA Method B table values from the Washington State Department Ecology's (Ecology) Cleanup Level and Risk Calculation database where Method A cleanup levels are not available. Tables 3 and 4 summarizes the established screening levels for all contaminants detected to date in soil or groundwater on the Property.

#### Chemicals of Potential Concern

Chemicals of Potential Concern in soil and groundwater were identified based on a comparison of detected contaminant concentrations from previous investigations to the screening levels established above.

The comparisons of detected soil contaminant concentrations to screening levels are shown in Table 3. Contaminants in soil with concentrations exceeding the screening levels based on MTCA Method A unrestricted land use include:

- PCE
- TCE
- Benzene
- Toluene
- Total Xylenes
- Gasoline-range TPH

• Lead

The comparisons of detected groundwater contaminant concentrations to screening levels are shown in Table 4. Contaminants in groundwater with concentrations exceeding the screening levels based on potable groundwater use (MTCA Method A values) where available, or MTCA Method B values where no Method A value exists, include:

- PCE
- TCE
- Cis-1,2-DCE
- Vinyl Chloride
- Carbon Tetrachloride

## Nature and Extent of COPCs

The nature and extent of COPCs in soil is summarized for three areas at the Site, specifically Morrell's Dry Cleaners, the former USTs area at the south end of the Property, and the paint booth area. This summary of soil conditions is followed by a summary of the nature and extent of COPCs in groundwater beneath the Site.

## Morrell's Dry Cleaners Area

Soil beneath the dry cleaning building exceeds screening levels for PCE and TCE. The lateral extent and the depth of contamination beneath the building have not been fully delineated. One soil sample collected adjacent to the east side of the building at a depth of 8 feet did not contain detectable concentrations of PCE or TCE.

Based on the distribution of COPCs in groundwater, the soil beneath the dry cleaners building is likely acting as a source of PCE and TCE to groundwater in the upper water bearing zone.

#### **Former UST Area**

Soils remain in place in this area with concentrations of gasoline-range TPH, benzene, and total xylenes exceeding screening levels. During UST removal in 1994 contaminated soils in this area were excavated to a depth of about 10 feet bgs. Confirmation sampling at that time indicated that the sidewalls and bottom of the excavation did not contain TPH or BTEX compounds at concentrations exceeding cleanup levels. Subsequent soil sampling by Stemen Environmental in 2006 identified contaminated soils at a depth of 15 feet bgs. Based on these data TPH-, benzene-, and xylenes-impacted soil remains in place, but is limited to depths of greater than 10 feet bgs.

Groundwater samples from the Site have not been analyzed for TPH; however, analyses of groundwater samples for the more mobile BTEX compounds have not detected these constituents at concentrations exceeding screening levels. Based on this, the soil remaining in place in the former UST area is not acting as a source of COPCs to groundwater.

#### Paint Booth Area

Analysis of samples collected in 1994 in the paint booth area indicate the presence of toluene, PCE, and lead in soil at concentrations greater than current screening levels, based on this updated comparison. The 1994 TPH data did not differentiate between gasoline-, diesel-, and oil-range TPH; however, given the high total TPH concentration (8,000 mg/kg) in one sample from this area it is likely remaining soil would exceed screening levels for one or more of the TPH ranges.

Toluene is not a COPC in groundwater and PCE was not detected in groundwater from the monitoring well (MW-11) located in the paint booth area, indicating that the soil in this area is not acting as a source of these constituents to groundwater. The soil screening level for lead of 250 mg/kg is based on human exposure to lead in soil, not leaching of lead from soil to groundwater. Although groundwater at the Site has not been analyzed for lead, this metal typically exhibits low mobility and the soil in the paint booth area is likely not leaching lead to groundwater.

#### **COPCs in Groundwater**

The dry cleaning solvent PCE and its daughter products TCE, cis-1,2-DCE, and vinyl chloride exceed screening levels in wells MW-2 and MW-8, located adjacent to and immediately downgradient from the dry cleaner building. A significantly lower concentration of PCE, although still above screening levels, was detected in well MW-5, located immediately upgradient from the dry cleaner building. Based on this pattern of detections, it appears that the source of these constituents in groundwater is the PCE and TCE in soil beneath the dry cleaners building.

With the exception of a relatively low concentration of cis-1,2-DCE, PCE and its other daughter products were not detected in the deep well (MW-8D). These data indicate that the approximately 50 feet of unsaturated silt and silty sand underlying the upper water bearing zone is acting as an effective barrier to downward migration of these contaminants.

Carbon tetrachloride was detected one or more times in four of the six wells completed in the upper water bearing zone and the deep well (MW-8D) at concretions exceeding screening levels. The only wells where carbon tetrachloride has not been detected are MW-1 and MW-8, located at the former USTs and near the dry cleaners, respectively. A soil source for carbon tetrachloride in groundwater has not been identified, and the pattern of detected concentrations in groundwater does not imply a specific source area.

# **Exposure Pathways and Receptors**

An exposure pathway describes the mechanisms by which human or ecological exposure to site contaminants can occur under baseline site conditions, assuming no remedial action or protective control is in place. To be considered complete, an exposure pathway must have:

- An identified source of contaminants;
- A mechanism for contaminant release and transport from the source;
- An exposure route by which contact with the contaminant can occur; and

A receptor that can be exposed to the contaminant.

An exposure pathway is considered complete if a human or ecological receptor can be exposed to a contaminant via that pathway.

Contaminant sources include historical releases of fuel constituents to soil at the former USTs; historical releases of fuels, solvents, and metals to soil in the paint booth area; and historical releases of PCE to soil at the dry cleaners. The PCE and TCE in soil at the dry cleaners are acting as a secondary source of contamination of the upper water bearing zone in that area of the Site. Contaminants in soil elsewhere at the Site do not appear to be acting as secondary sources of groundwater contamination.

Potential exposure pathways and receptors for COPCs in soil and groundwater are summarized below.

#### Soil

Potential exposure pathways and receptors for COPCs in Site soils include:

- Workers contacting contaminated soils in the future (skin contact or incidental ingestion) during excavation or other construction-related activities, if no worker protection controls are in place. This pathway is applicable to all COPCs in soil;
- Humans in buildings inhaling indoor air contaminated via vapor intrusion by the volatilization of contaminated soils. This pathway is limited to volatile COPCs in soil (i.e., benzene, toluene, total xylenes, PCE, and TCE); and
- Terrestrial ecological receptors contacting contaminated soils in the future, if no controls are in place.

Areas of the Property with COPCs in soil are paved with asphalt or covered with buildings, limiting the potential for the human or ecological receptor direct contact pathways under current conditions. Any future construction activities in these areas that disturb the overlying pavement could result in completion of the human direct contact pathway, but could be effectively managed with suitable soil handling protocols. Soil vapor and indoor air monitoring results indicate that the vapor intrusion pathway may currently be complete at the dry cleaner building, although the measured concentrations of chlorinated solvents in indoor air may be attributed to proximity of the operating dry cleaner with a long history of solvent usage.

#### Groundwater

Potential exposure pathways and receptors for COPCs in groundwater include:

- Humans who drink contaminated groundwater in the future, if groundwater is brought to the surface for this purpose;
- Direct exposure for aquatic ecological receptors in Commencement Bay, if contaminants in groundwater discharge to surface water; and
- Humans consuming aquatic ecological receptors contaminated by discharges to surface water.

Based on the perched nature and limited lateral extent of the upper water bearing zone and the limited detection of CPOCs in the deeper water bearing zone, it is unlikely that contaminants in groundwater from this upper water bearing zone are discharging to surface water. As a result, the human consumption and direct exposure for aquatic ecological receptor pathways are likely not completed at this Site.

Groundwater from the upper water bearing zone is not currently used as a drinking water source. Based on the limited saturated thickness and lateral extent of this zone, it is unlikely to be used for drinking water purposes in the future. Therefore, human drinking water pathway is not currently complete, nor is it expected to be complete in the future.

## Recommendations

We recommend pursuing Site cleanup and closure through Ecology's Voluntary Cleanup Program (VCP). Specific recommended actions include:

- Submit this report and other relevant reports to Ecology with a completed VCP application packet.
- Schedule a meeting with the Ecology site manager to review findings to date and solicit input on the current Site Conceptual Model.
- Provide notice to other Potentially Liable Parties of work completed to date and potential cleanup actions, in accordance with MTCA provisions for private rights of action (Chapter 173-340-545 WAC).
- Prepare a Remedial Investigation and Focused Feasibility Study (RI/FFS) in accordance with MTCA based on the data summarized in this memorandum. The RI/FFS would assess the soil and groundwater conditions and evaluate presumptive remedial alternatives appropriate for the types of contaminants and planned land uses at the Property.
- The existing data are generally sufficient to assess the nature and extent of contaminated soil and groundwater at the Site. The RI/FFS will likely recommend additional investigation and/or pilot testing to address data gaps needed to finalize the Site Conceptual Model prior to selection of a remedial approach.
- Develop a Cleanup Action Plan (CAP). The CAP would describe the planned approach for remediation. The CAP and RI/FFS should be submitted to Ecology for review and comment prior to implementation to gain agency concurrence on the plan.

### Limitations

Work for this project was performed and this memorandum prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. It is intended for the use of Dave Shaw, Successor to Walker Chevrolet for specific application to the referenced property. This memo does not represent a legal opinion. No other warranty, expressed or implied, is made.

July 14, 2009

Project No.: 080190-004-04

# References

- Aspect Consulting, 2009, Sewer Evaluation Results and Work Plan for Additional Groundwater Investigation, Memorandum to Dave Shaw, Successor to Walker Chevrolet and Michael Bond, Gardner Bond Trabolsi, PLLC, February 2.
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- Bison Environmental Northwest, Inc., 1994b, Underground Storage Tank Removal Site Assessment and Independent Remedial Action Report for Walker Chevrolet, 633 Division Avenue, Tacoma, Washington, August 1994.
- Bison Environmental Northwest, Inc., 1994c, Phase 2B Subsurface Sampling, Walker Chevrolet Paint Booth, 633 Division Avenue, Tacoma, Washington, September 12.
- Troost, K.G., and Booth, D.B., in review, Geologic map of the Tacoma North 7. 5-minute quadrangle, Washington, U. S. Geological Survey, Miscellaneous Field Investigation, scale 1:24,000.
- Walters, K.L. and Kimmell, G.E., 1968, Ground-Water Occurrence and Stratigraphy of Unconsolidated Deposits, Central Pierce County, Washington, State of Washington Department of Water Resources Water Supply Bulletin No. 22.

**Attachments:** Table 1 – Groundwater Elevations

Table 2 – Groundwater Sampling Results

Table 3 – Soil Screening Levels

Table 4 – Groundwater Screening Levels

Figure 1 – Site Vicinity Map

Figure 2 – Well Location Plan

Figure 3 – Cross Section A-A'

Figure 4 – Cross Section B-B'

Figure 5 – Cross Section C-C'

Figure 6 – Groundwater Elevation Contour Map

Figure 7 – Groundwater Quality Data

Attachment A – Boring Logs

Attachment B – Laboratory Certificates of Analysis

Attachment C – Data Provided by Stemen Environmental, Inc.

V:\080190 Stadium Thriftway LLC\Deliverables\Current Conditions Memo\Final\Stadium Memo 7-14-09.doc

# **Table 1 - Groundwater Elevations**

Stadium Property, Tacoma, Washington

		TOC	Depth to	GW
Well ID	Date	Elev.	Water	Elev.
MW-1	2/27/2008	275.25	52.32	222.93
	10/2/2008		53.09	222.16
	5/11/2009		53.68	221.57
MW-2	2/27/2008	273.14	51.50	221.64
	10/2/2008		51.84	221.30
	5/12/2009		52.42	220.72
MW-3	2/27/2008	272.77	dry	dry
	10/2/2008		dry	dry
	5/11/2009		dry	dry
MW-4	2/27/2008	273.01	dry	dry
	10/2/2008		dry	dry
	5/11/2009		dry	dry
MW-5	2/27/2008	273.13	50.87	222.26
	10/2/2008		51.65	221.48
	5/11/2009		52.28	220.85
MW-6	2/27/2008	272.55	dry	dry
	10/2/2008		dry	dry
	5/11/2009		dry	dry
MW-7	2/27/2008	274.44	52.90	221.54
	10/2/2008		53.08	221.36
	5/11/2009		53.69	220.75
MW-8	10/2/2008	273.14	52.68	220.46
	5/12/2009		53.28	219.86
MW-8D	5/11/2009	273.11	112.56	160.55
MW-9	5/11/2009	273.78	dry	dry
MW-10	5/11/2009	274.45	dry	dry
MW-11	5/12/2009	273.52	52.20	221.32

All measurements are in feet.

**Table 2 - Groundwater Sampling Results** 

Stadium Property, Tacoma, Washington

									Carbon	
Well ID	Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroethane	Chloroform	Tetrachloride	Benzene
MW-1	08/28/07	1.3	<1	<1	<1	<0.2	<1	<1	<1	2.2
	01/30/08	<1	<1	<1	<1	<0.2	<1	<1	<1	<1
	10/02/08	<1	<1	<1	<1	<0.2	<1	<1	<1	<1
	05/11/09	<1	<1	<1	<1	<0.2	<1	<1	<1	<1
MW-2	08/28/07	2,900	(Note 1)	7,100	7.4	19	8.1	1	1.0	(Note 1)
	01/30/08	1,400	520	2,000	3	<0.2	<1	2.5	<1	<1
	10/02/08	1,900	880	2,300	5.3	3.1	1.0	3.5	1.0	<1
	05/12/09	1,600	930	2,400	5.7	2.7	<1	4.0	<1	<1
MW-5	01/22/08	67	3	13	<1	<0.2	<1	2.1	3.3	<1
	01/30/08	31	1.1	4.5	<1	<0.2	<1	1.8	2.0	<1
	10/02/08	75	3.2	17	<1	<0.2	<1	1.9	1.2	<1
	05/11/09	17	1.1	44	<1	<0.2	<1	<1	<1	<1
MW-7	01/22/08	6.6	<1	<1	<1	<0.2	<1	<1	<1	<1
	01/30/08	1.5	<1	<1	<1	<0.2	<1	<1	1.5	<1
	10/02/08	<1	<1	<1	<1	<0.2	<1	<1	1.5	<1
	05/11/09	1.1	<1	<1	<1	<0.2	<1	<1	2.0	<1
MW-8	04/22/08	1,300	780	2,400	6.3	0.2	<1	2.5	<1	<1
	10/02/08	680	390	3,600	7.6	6.9	<1	2.5	<1	<1
	05/12/09	780	370	2,600	3.7	2.0	<1	2.5	<1	<1
MW-8D	05/11/09	<1	<1	11	<1	<0.2	<1	<1	1.9	<1
MW-11	05/12/09	<1	2.3	<1	<1	<0.2	<1	1.9	1.4	<1

#### Notes:

1) For the sample collected from MW-2 on 8/28/07, the lab reported 1,800  $\mu$ g/L benzene and <1  $\mu$ g/L TCE. This is likely an error; apparently the gas chromatograph peak identified by the lab as benzene was actually a TCE peak.

PCE - tetrachloroethene

TCE - trichloroethene

cis-1,2-DCE - cis-1,2-dichloroethene

trans-1,2-DCE - trans-1,2-dichloroethene

BOLD signifies exceedence of groundwater screening levels (see Table 4)

**Table 3 - Soil Screening Levels** 

Stadium Property, Tacoma, Washington

	MTCA Method A	MTCA Method B	MTCA Method B	Selected Screening	Maximum Detected
Constituent	(Unrestricted Land Use)	(Carcinogen)	(Non-carcinogen)	Level	Concentration
Petroleum Hydrocarbons					
Gasoline-Range	30/100 <sup>1</sup>	NE	NE	30	920
Oil-Range	2,000	NE	NE	2,000	94
VOCs					
Benzene	0.03	18	320	0.03	6.1
Toluene	7	NE	6,400	7	85
Ethylbenzene	6	NE	8,000	6	6
Total Xylenes	9	NE	16,000	9	143
Naphthalene	5	NE	1,600	5	1.1
Tetrachloroethene	0.05	1.9	800	0.05	18
Trichloroethene	0.03	11	24	0.03	0.85
cis-1,2-Dichloroethene	NE	NE	800	800	0.06
Metals					
Barium	NE	NE	16,000	16,000	43.8
Cadmium	2	NE	80	2	50.2
Chromium <sup>2</sup>	2,000	NE	120,000	2,000	110
Lead	250	NE	NE	250	2,140

#### Notes:

All values are in units of mg/kg

 $\label{lighted} \mbox{Highlighted constituents} \ \mbox{- retained as Constituents of Potential Concern}$ 

NE- Not Established

<sup>&</sup>lt;sup>1</sup> MTCA Method A soil cleanup levels where detectable benzene is absent/present.

<sup>&</sup>lt;sup>2</sup> Cleanup levels are for the trivalent form of chromium.

**Table 4 - Groundwater Screening Levels** 

Stadium Property, Tacoma, Washington

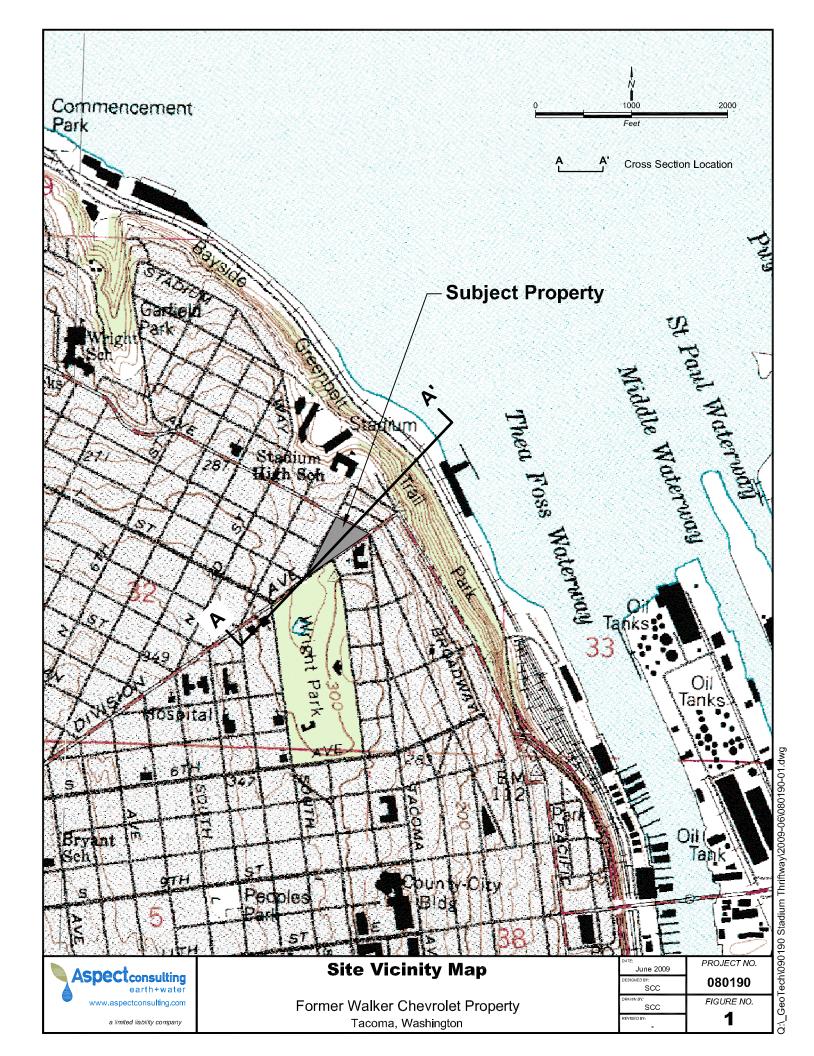
Constituent	MTCA Method A	MTCA Method B (Carcinogen)	MTCA Method B (Non-carcinogen)	Selected Screening Level	Maximum Detected Concentration
VOCs					
Benzene	5	0.8	32	5	2.2
Tetrachloroethene	5	0.081	80	5	2,900
Trichloroethene	5	0.49	2.4	5	930
cis-1,2-Dichloroethene	NE	NE	80	80	7,100
trans-1,2-Dichloroethene	NE	NE	160	160	7.4
Vinyl Chloride	0.2	0.029	24	0.2	19
Chloroethane	NE	NE	NE	NE	8.1
Chloroform	NE	7.2	80	7.2	4
Carbon Tetrachloride	NE	0.34	5.6	0.34	3.3

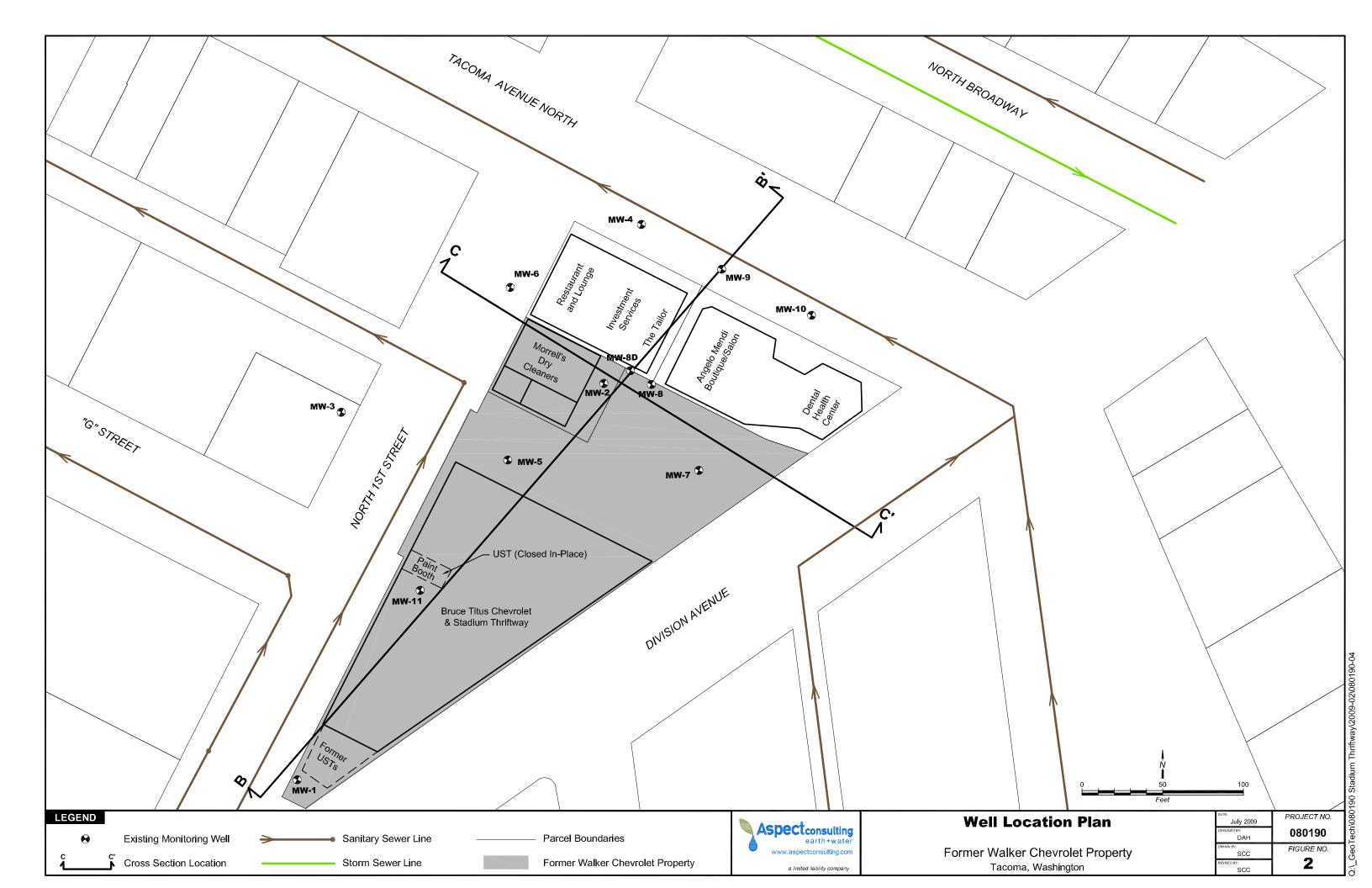
Notes:

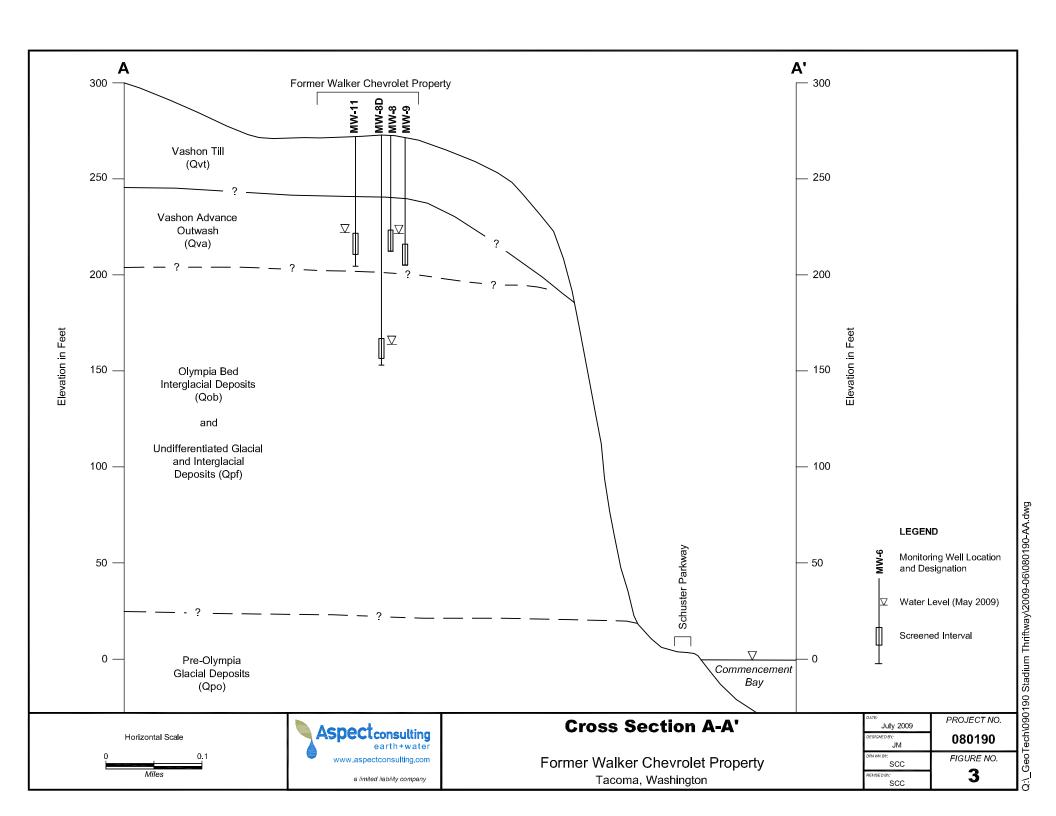
All values are in units of  $\mu g/L$ 

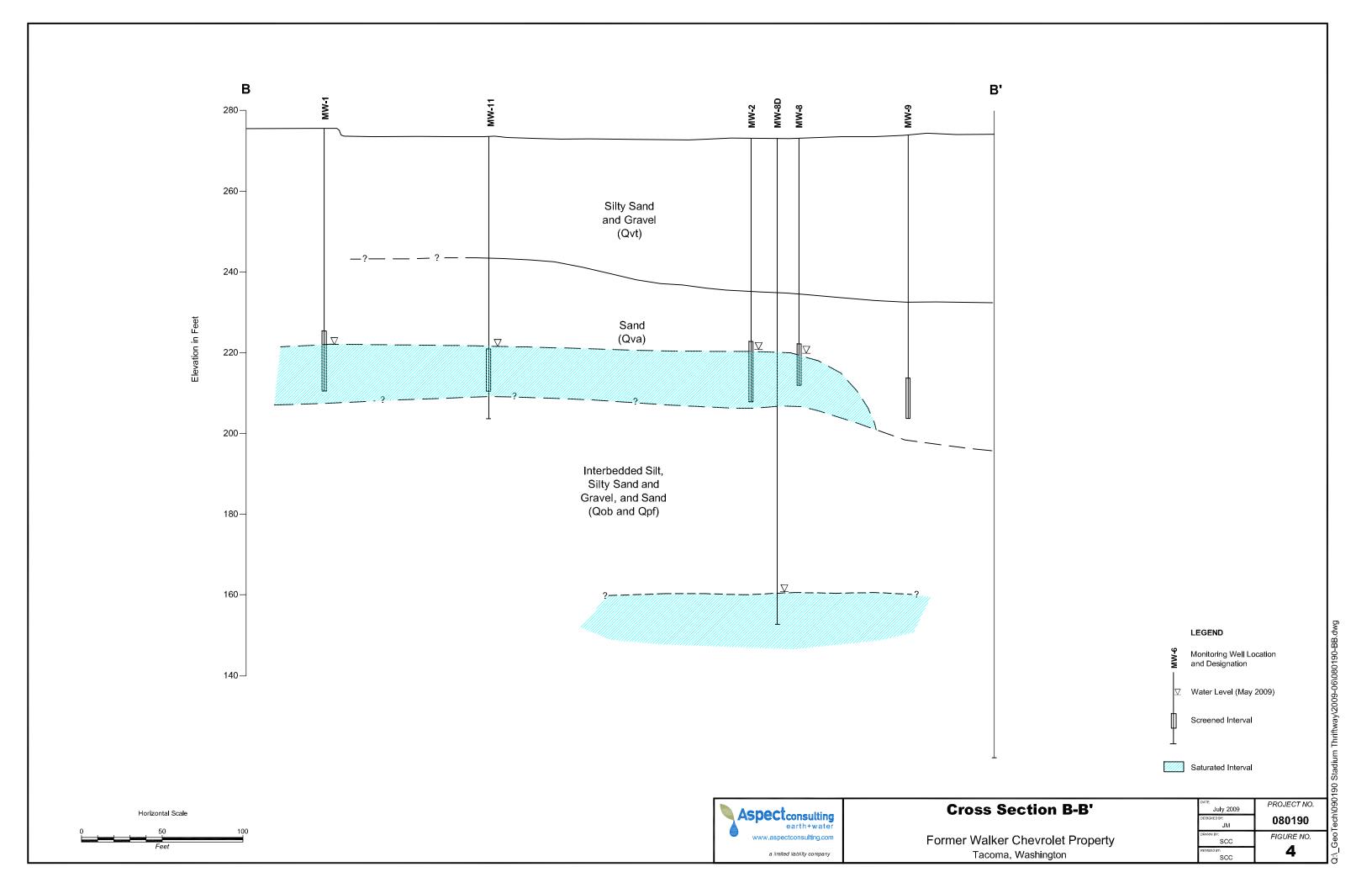
Highlighted constituents - retained as Constituents of Potential Concern

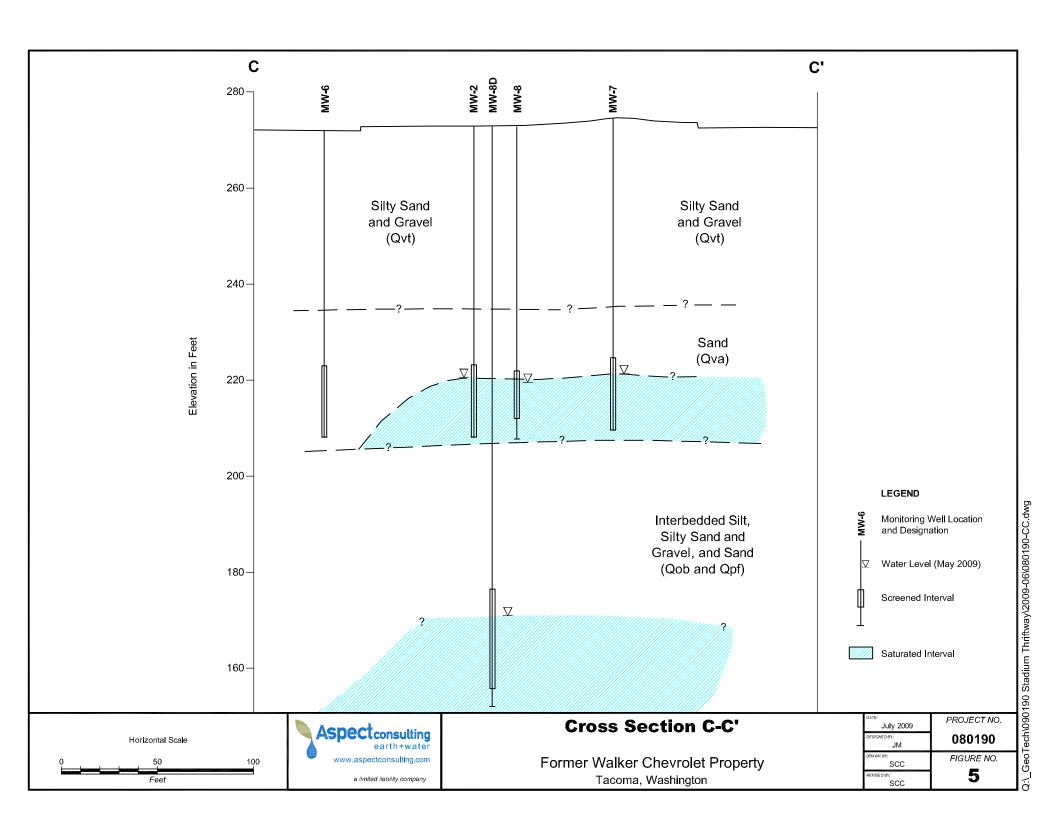
NE- Not Established

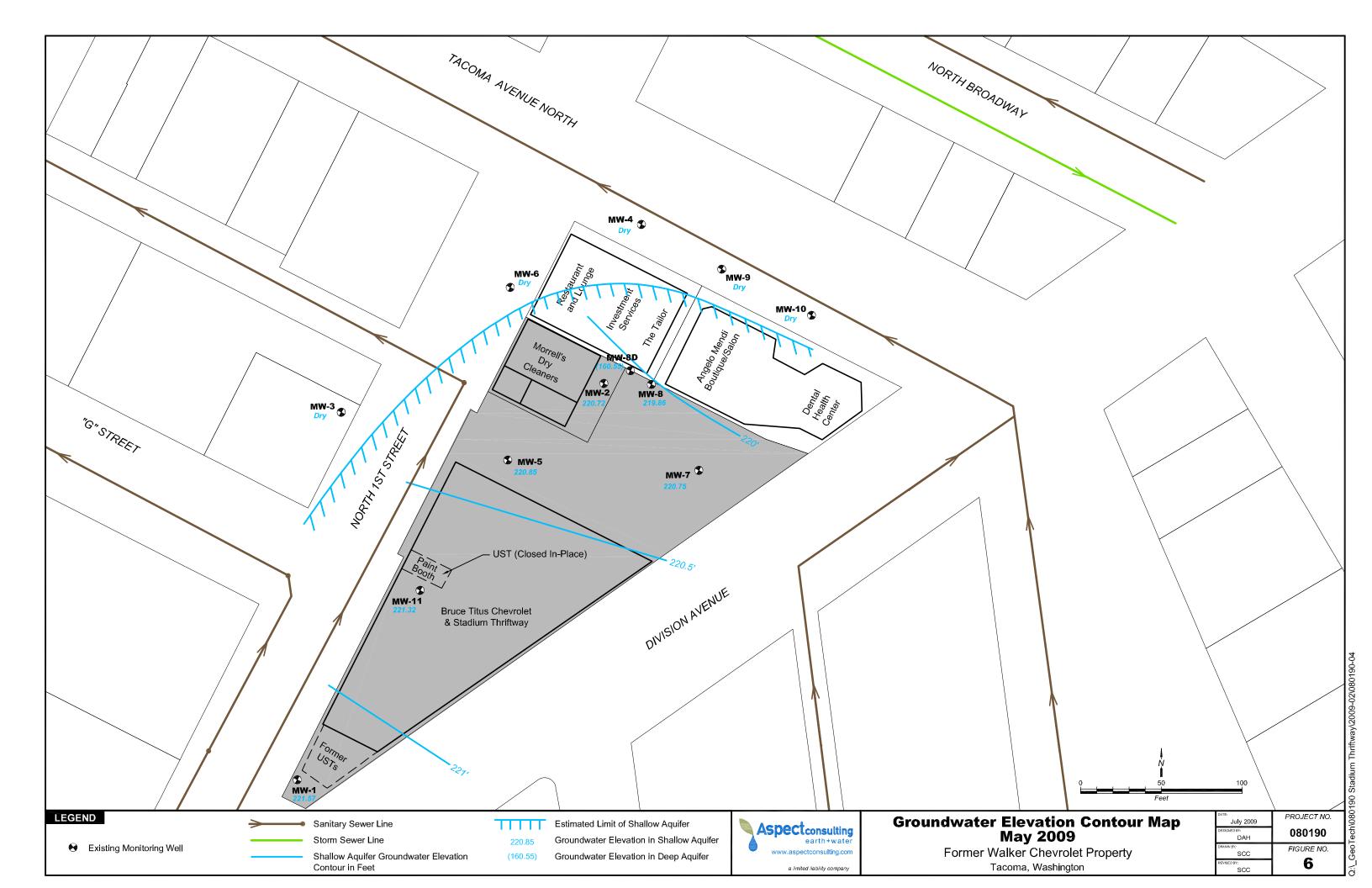


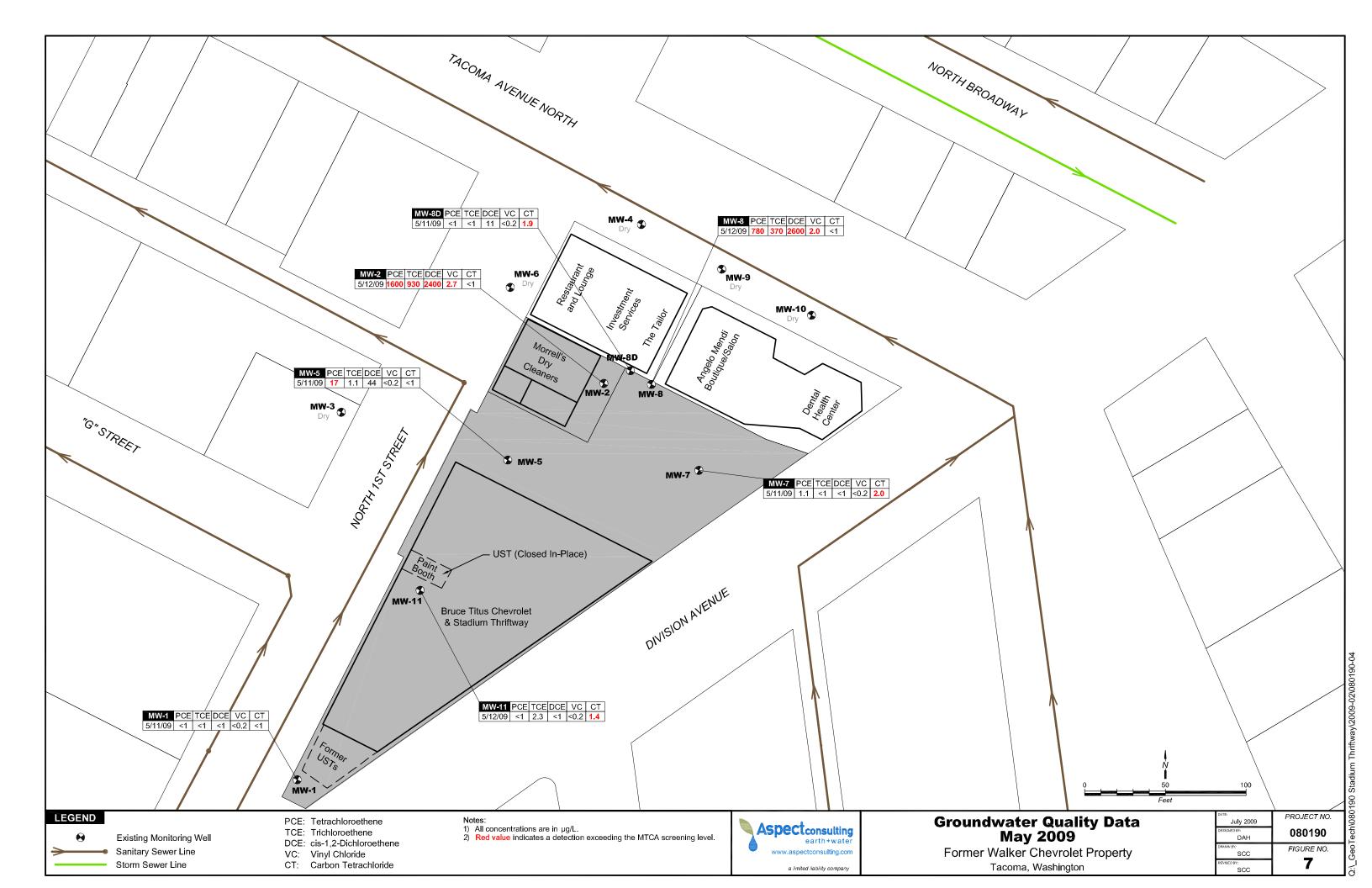












# **ATTACHMENT A**

**Boring Logs** 

l		7000	4			N	Nata Para	!h !
	Fraction	(5) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	GW	Well-graded gravel and gravel with sand, little to no fines	l erms L Coarse-	<u>Density</u> Very Loose	SPT <sup>(2)</sup> blows/foot 0 to 4	ity and Consistency
200 Sieve	50% <sup>(1)</sup> of Coarse on No. 4 Sieve	N2%   N2%	GP	Poorly-graded gravel and gravel with sand, little to no fines	Grained Soils	Loose Medium Dense Dense Very Dense	30 to 50 > 50	Test Symbols  G = Grain Size  M = Moisture Content
lined on No.		Fines (5)	GM	Silty gravel and silty gravel with sand	Fine- Grained Soils	Very Soft Soft Medium Stiff	SPT <sup>(2)</sup> blows/foot 0 to 2 2 to 4 4 to 8	A = Atterberg Limits C = Chemical DD = Dry Density K = Permeability
% <sup>(1)</sup> Reta	ravels - N	N 12%	GC	Clayey gravel and clayey gravel with sand		Stiff Very Stiff Hard	8 to 15 15 to 30 >30	
Coarse-Grained Soils - More than 50% <sup>(1)</sup> Retained on No.		nes (5)	sw	Well-graded sand and sand with gravel, little to no fines	Descriptive Tobbles	<u>Size R</u>	ponent Defin ange and Sieve N than 12" 2"	
ained Soils -	- 50% <sup>(1)</sup> or More of Coarse Fraction Passes No. 4 Sieve	≥5% 	SP	Poorly-graded sand and sand with gravel, little to no fines	Gravel Coarse Grav Fine Gravel Sand	vel 3" to 3 3/4" to No. 4 (	No. 4 (4.75 mm) (4.75 mm) to No. 200	
Coarse-Gra	50% <sup>(1)</sup> or More Passes No.	Fines <sup>(5)</sup>	SM	Silty sand and silty sand with gravel	Coarse San Medium Sar Fine Sand Silt and Clay	nd No. 10 No. 40	(4.75 mm) to No. 10 (2.00 mm) to No. 40 (0.425 mm) to No. 2 er than No. 200 (0.07	0 (0.425 mm) 200 (0.075 mm)
	Sands - 5	%91 <sub>2</sub> ////////////////////////////////////	SC	Clayey sand and clayey sand with gravel	(3) Estimate Percentage by Weight			Moisture Content Dry - Absence of moisture, dusty, dry to the touch
Sieve	s ian 50		ML	Silt, sandy silt, gravelly silt, silt with sand or gravel	< 5 5 to 15		e itly (sandy, silty, ey, gravelly)	Slightly Moist - Perceptible moisture Moist - Damp but no visible water
Passes No. 200 Sieve	Silts and Clays		CL	Clay of low to medium plasticity; silty, sandy, or gravelly clay, lean clay	15 to 30 30 to 49	Sand grave Very	ly, silty, clayey,	Very Moist - Water visible but not free draining Wet - Visible free water, usually from below water table
<b> </b>   @	Sil		OL	Organic clay or silt of low plasticity	Sampler Type \	Blows/6" or portion of 6"	Symbols	Cement grout surface seal
s - 50% <sup>(1)</sup> or	S More		МН	Elastic silt, clayey silt, silt with micaceous or diato- maceous fine sand or silt	2.0" OD Split-Spoon Sampler (SPT)	Des Continuous Pu		chips  Bentonite seal
Fine-Grained Soils - 50% <sup>(1)</sup> or Mo	Silts and Clays		СН	Clay of high plasticity, sandy or gravelly clay, fat clay with sand or gravel	Bulk sample Grab Sample	M	Spoon Ring Sample Vall Tube Sampler lby tube)	Filter pack with blank casing section  Screened casing or Hydrotip with filter pack
Fine-(	S		ОН	Organic clay or silt of medium to high plasticity	(1) Percentage by	Portion not rec  dry weight d Penetration Test	(5)	Combined USCS symbols used for fines between 5% and 15% as
Highly	Organic Soils		PT	Peat, muck and other highly organic soils	(ASTM D-1586 (3) In General Acc Standard Prac and Identifica	6) cordance with ctice for Descriptio tion of Soils (ASTM	n 1 D-2488)	estimated in General Accordance with Standard Practice for Description and Identification of Soils (ASTM D-2488)
					<sup>(4)</sup> Depth of grou		ATD = At time of drilli static water level (date	

Classifications of soils in this report are based on visual field and/or laboratory observations, which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field or laboratory testing unless presented herein. Visual-manual and/or laboratory classification methods of ASTM D-2487 and D-2488 were used as an identification guide for the Unified Soil Classification System.



# **Exploration Log Key**

MTE:	PROJECT NO.
ESIGNED BY:	
RAWN BY:	FIGURE NO.
REVISED BY:	A-1

	Aspectcon	aultis s			N	/lonit	oring Well Construction	on Log	
	A .	<b>sutting</b> arth + water		-	ct Numb 30190	er	Well Number MW-10	Sheet 1 of 2	
Project Name	Stadium Thr	iftway		- 00	30190		Ground Surface Elev	275	
ocation	Tacoma, WA	iitway					Top of Casing Elev.	274.45	
Driller/Method	Boart Longyear	/ Spider Sonic					Depth to Water	Dry - 5/11/2009	
Sampling Method							Start/Finish Date	5/7/2009	
	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Blows/	Material Type	Description		De (1
Depth / Elevation (feet)  1 -274 2 -273 3 -272 4 -271 5 -270 6 -269 7 -268 8 -267 9 -266 10 -265 11 -264 12 -263 13 -262 14 -261 15 -260 16 -259 17 -258 18 -257 19 -256 20 -255 21 -254 22 -253 23 -252 24 -251 25 -250 26 -249 27 -248 28 -247 29 -246 30 -245 31 -244 32 -243 33 -242 34 -241 35 -240 36 -239 37 -238 38 -237 39 -236 40 -235 41 -234 42 -233 43 -232 44 -231 45 -230 46 -229 47 -228 48 -227	Flushmount monument, lockable thermos cap  Quickrite portland cement, 0'-41'  2" diameter, schedule 40 PVC, threaded connections, 0'-60'	Sample Type/ID	Tests			Material Type	Nedium dense, wet, dark brown, gravelly SAND (SP); fine to coarse sand; subrounded.  Dry to slightly moist, brown to da Loose, moist, dark brown, slightly (SP); predominantly medium to c gravel, subrounded.  Medium dense, dry to slightly moist, yell or sandy SILT (ML); fine to coarse sand; subrounded.  Very dense, dry, gray purple bout Medium dense, slightlymoist, yell gravelly, very silty SAND (SM); fit to coarse gravel, subrounded.  Very stiff, dry to slightly moist, brown to sandy SILT (ML); fine to coarse gravel, subrounded.  Medium dense, slightlymoist, dargravelly SAND (SP); predominantly moist, davery gravelly SAND (SP); fine to coarse gravel, subrounded.  Medium dense, slightly moist, davery gravelly SAND (SP); predominantly medium to coarse gravel, subrounded.  Medium dense, dry to slightly moist, yell osilty, sandy GRAVEL (GM); fine to coarse gravel, subrounded.  Medium dense, dry to slightly moist, yell osilty, sandy GRAVEL (GM); fine to coarse gravel, subrounded, increase gravelly SAND (SP).  Loose, slightly moist, yellow-red, (SP), trace gravel; perdominantly medium dense, gravelly savelly gravelly gra	se sand; fine to coarse le, silty, very gravelly fine to coarse gravel, rk brown. y silty, gravelly SAND coarse sand; fine bist, fine to coarse lder. low-red to dark brown, ne to coarse sand; fine own, gravelly, very sand; fine to coarse rk brown, silty, very se sand; fine to coarse rk brown, slightly silty, ninantly medium to el, subrounded. ow-red to dark brown, to coarse sand; fine to coarse subrounded. omes slightly silty, //.	

	Aspect	Itina					oring Well Constructi		
ASPECt consulting earth + water					ct Numb	er	Well Number	Sheet	
				0	80190		MW-10	2 of 2	
Project Name	Stadium Thri	ftway					Ground Surface Elev	275	
ocation	Tacoma, WA	/0:1 0:					Top of Casing Elev.	274.45	
Oriller/Method	Boart Longyear		;				Depth to Water	Dry - 5/11/2009	
Sampling Metho	d Continuous Core				T		Start/Finish Date	5/7/2009	$\overline{}$
Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Blows/ 6"	Material Type	Description		Dep (fi
51 -224 52 -223 53 -222	Hydrated bentonite chips, 41'-56'11"						Loose, moist. perdominantly me	dium to coarse sand.	-5 <sup>2</sup>
54 -221 55 -220 56 -219	<u>∇</u> 5/7/2009						Medium dense, wet, trace grave medium sand; fine gravel.	el; predominantly	-54 -55
57 -218 58 -217 59 -216	10/20 sand filter pack, 56'11"-70'						Red-brown with black staining, s	slightly gravelly.	-57 -58 -59
60 -215 61 -214 62 -213							Black, fine to medium sand.  Loose to medium dense, very m SAND (SP); no silt, no gravel.	noist to wet, brown	-60 -61 -62
63 +212   64 +211   65 +210   66 +209   6	2" diameter, 10-slot, schedule 40 PVC screen, 60'-70'								-63 -64 -65
67 + 208 68 + 207 69 + 206							Medium dense, wet, red-brown, medium sand.	slightly clayey; fine to	-67 -68
0 -205 1 -204 2 -203	Threaded PVC endcap  Natural backfill, 70'-75'						Medium dense, wet, red-brown, SAND (SC); predominantly fine gravel.	to medium sand; fine	-70 -71 -72
73 +202 74 +201 75 +200							Medium dense, wet, dark brown (SM); fine to coarse sand; fine g subrounded.  Medium dense, wet, dark brown to see the coarse sand; fine g	to gray, slightly silty,	+7; ∫-74  -7!
76 +199 77 -198 78 +197							very sandy GRAVEL (GP); fine coarse gravel, subrounded. Boring terminated 75 ft BGS. Depth to water was 55 ft BGS A		-76 -77 -78
79 - 196 80 - 195 81 - 194							5/11/2009.		-79 -80
32 - 193 33 - 192 34 - 191									-82 -83 -84
85 <b>-</b> 190 86 <b>-</b> 189									-85 -86
87 +188 88 -187 89 -186									-87 -88 -89
90 <b>-</b> 185 91 <b>-</b> 184									-90 -91
92 +183 93 -182 94 -181									-92 -93 -94
95 <del>-</del> 180 96 <del>-</del> 179 97 <del>-</del> 178									-95 -96 -97
98 – 177 99 – 176									-98 -99
Sampler T		PID		ation Det	ector (H	eadspac	ce Measurement) Logged by:	JMS	
○ No Recovery  Continuous (				atic Wate ater Leve			Approved b	y:	
			- •		, -,		Figure No.	A -	

Aspectconsulting			N	<b>Monit</b>	oring Well Construction Log				
		sulting rth + water			ct Numb	oer	Well Number MW-11	Sheet 1 of 2	
Project Name	Stadium Thri		00	80190		Ground Surface Elev	274		
Location	Tacoma, WA	iitway					Top of Casing Elev.	273.52	
Driller/Method	Boart Longyear	/ Spider Soni	c				Depth to Water	52.20 - 5/12/2009	
Sampling Method		-					Start/Finish Date	5/8/2009	
	Borehole Completion	letion Sample Te:		PID (ppm)	Blows/	Material Type	Description		De (f
Elevation (feet)  1 -273 2 -272 3 -271 4 -270 5 -269 6 -268 7 -267 8 -266 9 -265 10 -264 11 -263 12 -262 13 -261 14 -260 15 -259 16 -258 17 -257 18 -256 19 -255 20 -254 21 -253 22 -252 23 -251 24 -250 25 -249 26 -248 27 -247 28 -246 29 -245 30 -244 31 -243 32 -242 33 -241 34 -240 35 -239 36 -238 37 -237 38 -236 39 -235 40 -234 41 -233 42 -232 43 -231 44 -230 45 -229 46 -228 47 -227	Flushmount monument, lockable thermos cap, concrete seal 0'-1'  2" diameter, schedule 40 PVC, threaded connections, 0'-53'  Hydrated bentonite chips, 1'-49'11"	Type/ID  Type/ID  Type/ID	Tests				Concrete. Wet, light brown, silty, very grave coarse gravel, subround to subate Slightly moist, very silty. Wet, grades to gravelly, very silt coarse sand. Very dense, very silty, very sand cobbles. Slightly moist, brown, silty, sand to coarse sand; fine to coarse gravely. Gray, very silty. Very moist, brown, silty, very sand coarse sand; fine to coarse gravely. Very hard, very moist, dark gray SAND (SM) with sandy silt intersection. Dry, gray, silty, very sandy GRA coarse sand; fine to coarse gravely. Brown. Dry, brown, trace to slightly silty (GP). Gray, sandy.  Moist, gray, sandy, very silty GRA brown, silty, very sandy.  Very moist, red-brown to dark be very silty SAND (SM).  Trace gravel.  Very moist, red-brown, very silt sandy SILT (SM/ML)  Very moist, red-brown, slightly strace gravel; fine to medium sand very silt is fine to medium.  Brown gray, silty SAND interbet (SM-ML). Dark brown, predominately medical silts and some predominately silts and	ty SAND (SM); fine to dy GRAVEL (GM); dy GRAVEL (GM); dy GRAVEL (GM); fine ravel.  AND AND AND GRAVEL  RAVEL (GM).  Town, slightly gravelly, or own, slightly, grav	

	<b>Aspect</b> cons	sulting		Prois	ect Numb		oring Well Constructi Well Number	on Log Sheet	
		rth + water		-	80190	) <del>C</del> I	MW-11	2 of 2	
Project Name	Stadium Thri	iftway	ļ				Ground Surface Elev	274	
Location	Tacoma, WA	•					Top of Casing Elev.	273.52	
Driller/Method	Boart Longyear	/ Spider Soni	С				Depth to Water	52.20 - 5/12/2009	
Sampling Method	Continuous Core	e				,	Start/Finish Date	5/8/2009	
Depth / Elevation (feet)	orehole Completion	Sample Type/ID	Tests	PID (ppm)	Blows/ 6"	Material Type	Description		Dept (ft)
51 –223	10/20 sand filter pack,						Wet.		-51
	<u>▼</u> 5/12/26009								<del>-52</del>
53 + 221							Gravelly.		-53
54 <del>-</del> 220 55 <del>-</del> 219 55 - 219	2" diameter, 10-slot,						Trace gravel to slightly gravelly.		+54 +55
56 +218	schedule 40 PVC						Wet, red-brown, interbedded sil	ty SAND and slightly	T 56
57 +217	screen, 53'-63'					$ \mathcal{U} $	silty SAND (SM).		-57
8-216									-58
59 - 215									-59
60 +214							Wet, brown, silty SAND (SM); fi		+60
61 +213									-61
32 +212 33 +211 33 +211							Wet, brown, slightly silty, gravel coarse sand.	ly SAND (SP); fine to	-62 -63
3 T211 4 - 210	Threaded PVC endcap						Slightly moist, gray, very sandy, (GM).	very silty GRAVEL	$\frac{763}{64}$
65 - 209						8,8,	<b>1</b>		-65
66 + 208							Moist, brown.  Slightly moist, light brown, sand	W	-66
67 +207							Slightly moist, light brown, sand	у.	-67
8+206							Grades to slightly moist, gray, s	lightly sandy, gravelly	<del> </del> 68
69 - 205	Natural backfill, 63'-70'						SILT (ML); with wood.	,,, g	-69
70 - 204							Boring terminated 70 ft BGS. De	epth to water was 52.20	<del>+</del> 70
71 <del> </del> 203   72 <del> </del> 202							ft BGS on 5/12/2009.		+71 +72
72 T202 73 T201									73
4-200									-74
75 - 199									-75
6 + 198									<del>-</del> 76
7 - 197									<del> </del> 77
8 + 196									<del>-</del> 78
9 + 195									<del>-</del> 79
0 194									-80
1 +193									<del>-81</del>
32+192 33+191									-82 -83
34 <del>-</del> 190									84
35 <del>-</del> 189									-85
36 - 188									-86
37 + 187									-87
88 – 186									-88
89 + 185									-89
90 + 184									<del> </del> 90
91 +183									<del>-</del> 91
92 + 182									<del>-92</del>
93 <del> </del> 181   94 <del> </del> 180									-93 -94
95 +179									95
96 - 178									-96
97 – 177									-97
98 + 176									-98
99 - 175									-99
Sampler Ty	pe:	PID	- Photoioniza	ation Det	ector (H	eadspa	ce Measurement) Logged by:	JTL	
No Recovery				atic Wate	er Level		Approved b	ıv:	
Continuous Co	ore		∑ Wa	ater Leve	l (ATD)		лрргочей и	· ·	
							Figure No.	A -	

	Aspectcons	sultina			Monit	oring Well Construct		
		rth + water		ect Num 80190		Well Number MW-8D	Sheet 1 of 3	
Project Na	ame Stadium Thri	iftway				Ground Surface Elev	273.5	
Location	Tacoma, WA					Top of Casing Elev.	273.11	
Driller/Met	hod Boart Longyear	/ Spider Sonic				Depth to Water	112.56 - 5/11/2009	
Sampling	Method Continuous Cor	е				Start/Finish Date	5/4/2009-5/6/2009	
Depth / Elevation	Borehole Completion	Sample Test	s PID (ppm)	Blows/	Materia	I Description		De
(feet) 273	Flushmount	Type/ID	(ррпі)	0	Туре	Blacktop and concrete.		/ (1
1 + 272	monument, lockable					Vacuumed to 3'.		<del>-</del> ′† ′
2 + 271	thermos cap, concrete seal 0'-1'							+ 3
3 + <sub>270</sub> 4 +	Soci o 1					Very hard, slightly moist, light b		<del> </del>
$\begin{array}{c} 4 \\ 5 \end{array} + \begin{array}{c} 269 \end{array}$						gravelly SILT (ML); fine sand; of subrounded.	coarse to fine gravel,	Ţ
6 + 268						odbrodridod.		+
7 + 267								ļ.
B + 266						One de la comple		+ ;
$9 + \frac{265}{204}$						Grades to sandy.		+ :
$0 + \frac{264}{263}$	2" diameter, schedule	$\blacksquare$						+1
$1 + \frac{203}{262}$	40 PVC, threaded connections, 0'-96'					Very hard, brown, slightly grave	elly silty SAND (SM):	+
2+ 261	Connections, 0-30					fine gravel, rounded.	ony, only of the (onl),	+1
3+260						· 		†
4+								+1
5 + 258								+1
6+						·]		+:
7 + <sub>256</sub>								+,
255						1		Į.
254	Hydrated bentonite							-2
1 + 253	chips, 1'-92'					]		+2
$2 + \frac{252}{}$						Gravelly.		+2
3 + 251								+2
4 + 250						Slightly gravelly.		+2
$5 + \frac{249}{248}$		H				Slightly gravelly.		+2
5+ 247						:		+2
7+ 246								+2
245						.]		+2
244						Hard, brown, slightly gravelly, v	ery sandy SILT (ML);	+2
1 + 243						fine gravel, rounded.		+3 +3
242								+3
3 - 241								+3
1 + <sup>240</sup>						Hard, brown, slightly gravelly, v	very silty SAND (SM);	-3
239		$\blacksquare$				fine gravel, rounded.		+3
3 + 238 237						-		+3
7+								+3
8+ 235						Moist, red-brown, slightly silty sand.	SAND (SP); medium	+3
9+ 234						Sand.		+3
233						Trace gravel.		+4
1 + 232								-2
2+ 3+ <sup>231</sup>						:		
$4 + \frac{230}{}$								12
5 + 229		H						<u> </u>
$6 + \frac{228}{1}$						:		+4
$7 + \frac{227}{1}$						•		+4
$8 + \frac{226}{225}$								+4
$19 + \frac{225}{224}$								+4
	npler Type:	PID - Photoi	onization Det	ector (H	leadsna	ce Measurement) Logged by	: DFR	
_	covery	<u>▼</u>	Static Wate		очиора	oo mododiomonij – Eoggod by		
_	uous Core	Ā				Approved	by:	
-		<del></del>	Water Leve	n (AID)		Figure No.	A -	
						riquie No.	Λ -	

	Aspectcon	sultina					oring Well Constructi		
Ì	A *	arth + water			ct Numb 80190	er	Well Number MW-8D	Sheet 2 of 3	
Project Name	Stadium Thr	iftway		0	00190		Ground Surface Elev	273.5	
_ocation	Tacoma, WA	iitway					Top of Casing Elev.	273.11	
Driller/Method	Boart Longyear	/ Spider Sonic	;				Depth to Water	112.56 - 5/11/2009	
Sampling Metho							Start/Finish Date	5/4/2009-5/6/2009	
	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Blows/	Material Type	Description		Dep (ft
(feet) 223		Турель		(PP)		1,700			+
51 + 222									-5° -52
52 + 221 53 + 221									-52 -53
54 + 220									-54
55 + 219	∑5/4/2009	H					Wet.		-55
56 <del>- 218</del> 217							vvet.		-56
57+ 216									-57
58+									-58
59 + 214 60 +		Ш							+59 +60
61 <del>-</del> 213									-6
62 + 212									-62
63 + 211		9							-63
64 - 210									-64
65+	10/20 sand filter pack, 92'-120'						Brown.		-65
66+	92-120					9190	Very hard, moist, brown, sandy	, silty GRAVEL (GM);	+66
67 + <sub>206</sub>						200	non-plastic.		-68 -68
69 + 205									-69
70 + 204		Ц				8 8			-70
$71 + \frac{203}{303}$									<del> </del> 71
$72 + \frac{202}{201}$									<del>-</del> 72
73+ 200							Brown, slightly gravelly, very sil	ty SAND (SM);	<del></del> 73
74+							non-plastic.		+74 -74
75 + <sub>198</sub> 76 +									+75 +76
77 + 197							5 111 1111 1 0117		+77
78 + 196							Dark blue, slightly sandy SILT (	ML); trace gravel.	-78
$79 + \frac{195}{194}$									-79
80 + 193									-80
81 + 192									-81
82 + <sub>191</sub> 83 +							Dry, gray, silty, very gravelly SA	ND (SM); fine sand.	
84 - 190									84
85 + 189									-85
86 + 188									-86
87 + 187							Trace cobbles, subrounded.		-87
88 + 185							Trade cobbice, cabreariaea.		-88
89 + 184									-89
90 + 183 91 + 183									+90 -91
92 - 182									-92
93 + 181   1	2" diameter, 10-slot,						Vary bard dry blue gray sand	, vory city CDAVEL	<del>-</del> 93
94 + 180   179	schedule 40 PVC screen, 96'-106'						Very hard, dry, blue gray, sandy (GM).	, very silly GRAVEL	-94
95 <del> </del> <sub>178</sub>  ∷    ∶						KIN			-95
96 + 177   1									<del>-96</del>
97 + 176 98 + 176						H	Loose, slightly moist, brown, gra	avelly, very silty SAND	
99 + 175   -							(SM).	2.5.1, vory only orang	-99
Sampler	∴l Type:	PID	- Photoioniz	ation Det	ector (H	eadsna	Logged by:	DFR	
No Recover		ו וט	_	atic Wate		Judopai	,		
Continuous			$\Box$	ater Leve			Approved b	by:	
			- vv:	alei Leve	i (A I D)		Figure No.	۸	

	Acnost		Monitoring Well Construction Log							
	Aspect consulting  earth + water			Project Number 080190			Well Number MW-8D	Sheet 3 of 3		
Project Name Stadium Thriftway					00.00		Ground Surface Elev	273.5		
Location	Tacoma, WA						Top of Casing Elev.	273.11		
Driller/Method	Boart Longyear	/ Spider Sonic					Depth to Water	112.56 - 5/11/2009		
Sampling Method	d Continuous Core	Э					Start/Finish Date	5/4/2009-5/6/2009		
Depth / Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Blows/ 6"	Material Type	Description		Dep (ft	
T 173									10	
101+ 172 102+ 102+ 102+ 102+ 102+ 102+ 102+ 102									10	
103+ <sup>171</sup>   ·     · ·							Hard, dry, dark blue gray, grave	elly, sandy SILT (ML).	10	
104									10	
105† <sub>168</sub>   .										
106 <del> </del> <sub>167</sub>   :     : :	.]						Hard, dry, light gray, silty, very of fine sand; fine to coarse gravel.	gravelly SAND (SM);	10	
107							into saria, fino to obarse graver.		10	
165									-10 -10	
110	<u> </u>								11	
ı11+ <sup>163</sup>  - ⊟-:	:						Lagar wat brown alightly silty	CAND (CD), fine cond	11	
112	.▼5/11/2009						Loose, wet, brown, slightly silty	SAND (SP); fine sand.	11	
113+ 161	2.571.72000								11	
114+ 159	:								<del>-</del> 11	
15	. Threaded PVC endcap						Hard, dry, light gray, silty, very	gravelly SAND (SM);	—11 -11	
157	. Threaded FVC endcap						fine sand.		11	
18									-11	
19									11	
120	<u>:</u>						Boring terminated 120 ft BGS. [	Depth to perched water	<del> </del> 12	
121+							was 55 ft BGS ATD. Depth to w	ater table at 112.56 ft	-12	
122 <del> </del>							BGS on 5/11/2009.		12	
123-150 124-									-12 -12	
125									12	
126   148									12	
127									12	
128 <del> </del>									-12	
29- <sup>145</sup> <sub>144</sub> <sub>30-</sub>									-12 -13	
131-									13	
132+ 142									13	
133   141									<del>-</del> 13	
34 <del>-</del> 140									<del> </del> 13	
35+ 138									13	
136 137 137									-13 -13	
136 138									13	
39+ 135									13	
40 134									14	
41- 133									14	
142+									14	
143 <del> </del>   <sub>130</sub>									14	
144 <del>+</del> 145 <del>+</del>									-14 -14	
145									14	
147 <del>-</del>									-14	
148   <sup>126</sup>									14	
149									14	
Sampler T	ype:	PID - F	hotoioniza	tion Det	ector (H	leadspa	Logged by:	DFR		
No Recovery		A norman all	N/2							
Continuous C	Core		<u> </u>	ter Leve	l (ATD)		Approved b	y.		
							Figure No.	Δ -		

	Aspectconsulting				Monitoring Well Construction Log						
Project Name Stadium Thriftway			Project Number 080190			'			eet		
			060190				MW-9 ound Surface Elev	1 of 2 274.5			
Location Tacoma, WA						<del></del>	o of Casing Elev.	273.78			
Oriller/Method Boart Longyear /	Spider Sonic						pth to Water	Dry - 5/11/2009			
Sampling Method Continuous Core	-						art/Finish Date	5/5/2009			
Depth / Borehole Completion	Sample	Tests	PID	Blows/	Materia		Description		De		
(feet) 274	Type/ID		(ppm)	6"	Type		and concrete.		/		
1 + 273 Flushmount monument, lockable						Vacuumed	d to 5'.				
3 + 272 thermos cap									1		
4 + 271									+.		
$5 + \frac{270}{269}$	П					Slightly me	oist, gray blue, gravel	lv. sandv SILT (ML).	+		
6 + 268							, , , , , ,		t		
7 + <sub>267</sub> 8 +									Ţ		
$9 + {}^{266} \bigcirc$						Dur. Barbath	.		+		
0 + 265 Quickrite portland	H					וטן, iighiiy	/ brown, very gravelly.	•	+		
1+ 263 Cernent, 0-30						Brown, sli	ghtly moist, gravelly, s	silty SAND (SM).	+		
2+ 262								. , ,	ļ		
3+ 4+ 261									ļ		
5 + 260	H								+		
$6 + \frac{259}{258}$						Dry, light o	grav.		+		
7+ 257						],g §	9		t		
8+ 9+ <sup>256</sup>									1		
0 + 255 2" diameter, schedule									Į.		
40 PVC, threaded									+		
253 252 connections, 0'-60'						   Very dens	e, slightly moist, gray	blue	+		
23+						. Very derio	o, ongritty moiot, gray	bido.	+		
250									Ţ		
25 + 249 26 + 249									#		
27 + 248						Dry, dark	gray blue, sandy SILT	(ML), trace gravel.	+:		
$28 + \frac{247}{246}$						Slightly me	oist, brown, gravelly, v	very silty SAND (SM);	+		
29 + 245						fine to me	dium sand, predomina	antly fine.	t		
30 + <sup>244</sup> 31 + <sup>244</sup>									ļ		
32 + 243							tura e auranal		+		
33 + <sub>241</sub>						Grades to	trace gravel.		+		
$34 + \frac{241}{240}$						Moist.			+		
Hydrated bentonite									t		
66 + 238 67 +									ļ		
38 + 237						)  -  -	olls.		+		
39 + <sup>236</sup> 235						Very grave	elly.		+		
0 + 234	H					Trace grav	vel.		+		
11 + <sub>233</sub> 12 +											
$13 + \frac{232}{3}$						Loose, mo	oist, dark brown-red S dium sand, predomina	AND (SP), trace gravel	;		
14 + 231						subrounde		antily fille, fille graver,	+		
$45 + \frac{230}{229}$	H								+		
46 + 228						:			+		
47 + <sub>227</sub>   48 +						Grades to	slightly silty.		<u> </u>		
49 + 226						·-			+		
Sampler Type:	PID - Pł	hotoionizat	L tion Det	L ector (H	eadsn:	:   ace Measure	ment) Logged by:	DFR			
No Recovery	וו פוי.	_	tic Wate		- adopt		,				
Continuous Core		$\Box$	er Leve				Approved b	py:			
							Figure No.	A -			

Project Name Location Driller/Method Sampling Method Depth /	Stadium Thri	rth + water			ct Numb	er	Well Number	Sheet	
Location  Driller/Method  Sampling Method  Depth /									
ocation  Oriller/Method  Gampling Method  Depth /					80190		MW-9	2 of 2	
riller/Method ampling Metho		ttway					Ground Surface Elev	274.5	
ampling Metho	Tacoma, WA						Top of Casing Elev.	273.78	
Depth /	Boart Longyear		<u> </u>				Depth to Water	Dry - 5/11/2009	
Depth /	od Continuous Core	e 				1	Start/Finish Date	5/5/2009	
Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Blows/ 6"	Material Type	Description		De (t
224									+,
51 + 223 52 + 223	Hydrated bentonite								+5 +5
53 - 222	chips, 30'-57'						Grades to gravelly.		-5
54 - 221	∑5/5/2009								+5
55+220		Н					Wet.		-5
$6 + {}^{219}$									-5
7 218	-						No grovel		-5
B + 217	10/20 sand filter pack,						No gravel.		-5
$9 + \frac{216}{215} \left  \begin{array}{c} . \\ . \\ . \\ . \end{array} \right $	57'-70'								<del> </del> 5
0+213		H							+6
1 + 214   1	Z.								+6
<sup>2</sup> † <sub>212</sub>  ::  =:	: ]								-6
3† <sub>211</sub> [: [=]									+6
4† 210	2" diameter, 10-slot, schedule 40 PVC								+6
5+209	screen, 60'-70'								+6
6+208									+6
7 + 207	: : :								+6
3+206									+6
9+ 205	Threaded PVC endcap								$-\frac{\epsilon}{7}$
0+204	Threaded FVC endcap						Boring terminted 70' BGS. Depth	to water was 54 ft	′
2 + 203							BGS ATD. Well was dry on 5/11	/2009.	- <sub>7</sub>
3 + 202									<u>-</u> 7
4 + 201									-7
5 + 200									<del> </del> 7
6+199									-7
7 + 198									<del> </del> 7
3 + 197 3 + 196									-7
9 + 196   195									<del> </del> 7
0 + 194									-8
1 + 193									-8
2+ 192									-8
3+ 191									-8
190									-8
5 <del> </del> 189   6 <del> </del>									-8 -8
7 188									
8 - 187									-8
9 + 186									-8
0 + 185									-6
1 + 184									-5
2 + 183									-6
3 + <sup>182</sup>									-5
$4 + \frac{181}{180}$									-6
$95 + \frac{180}{179}$									-9
6 + 179									-9
$7 + \frac{178}{177}$									-9
<sup>18</sup> + <sub>176</sub>									-9
9+ 175									-9
Sampler <sup>-</sup>		PID	- Photoioniz	ation Det	ector (He	eadspac	ce Measurement) Logged by:	DFR	
No Recover			_	atic Wate		,	,		
Continuous			$\overline{}$	ater Leve			Approved by	y:	
					· · · — /				

# **ATTACHMENT B**

**Laboratory Certificates of Analysis** 

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

May 19, 2009

Joe Morrice, Project Manager Aspect Consulting 401 2<sup>nd</sup> Ave S, Suite 201 Seattle, WA 98104

Dear Mr. Morrice:

Included are the results from the testing of material submitted on May 12, 2009 from the 080190 Stadium Property, F&BI 905099 project. There are 15 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures ASP0519R.DOC

# FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

### CASE NARRATIVE

This case narrative encompasses samples received on May 12, 2009 by Friedman & Bruya, Inc. from the Aspect Consulting 080190 Stadium Property, F&BI 905099 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	<b>Aspect Consulting</b>
905099-01	MW-8D-comp
905099-02	MW-9-comp
905099-03	MW-10-comp
905099-04	MW-11-comp
905099-05	MW-8D-051109
905099-06	MW-1-051109
905099-07	MW-7-051109
905099-08	MW-5-051109

All quality control requirements were acceptable.

#### **ENVIRONMENTAL CHEMISTS**

# Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-8D-051109 Client: Aspect Consulting

Date Received: 05/12/09 Project: 080190 Stadium Property, F&BI 905099

Date Extracted:05/13/09Lab ID:905099-05Date Analyzed:05/13/09Data File:051311.DMatrix:WaterInstrument:GCMS4Units:ug/L (ppb)Operator:MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	94	63	127
Toluene-d8	100	60	129
4-Bromofluorobenzene	94	51	145

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	<1
Vinyl chloride	< 0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	11	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	1.9	tert-Butylbenzene	<1
Benzene	<1	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<1
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

#### **ENVIRONMENTAL CHEMISTS**

# Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-1-051109 Client: Aspect Consulting

Date Received: 05/12/09 Project: 080190 Stadium Property, F&BI 905099

Date Extracted:05/13/09Lab ID:905099-06Date Analyzed:05/13/09Data File:051312.DMatrix:WaterInstrument:GCMS4Units:ug/L (ppb)Operator:MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	101	63	127
Toluene-d8	104	60	129
4-Bromofluorobenzene	98	51	145

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	<1
Vinyl chloride	< 0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<1	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<1
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

#### **ENVIRONMENTAL CHEMISTS**

# Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-7-051109 Client: Aspect Consulting

Date Received: 05/12/09 Project: 080190 Stadium Property, F&BI 905099

Date Extracted:05/13/09Lab ID:905099-07Date Analyzed:05/13/09Data File:051313.DMatrix:WaterInstrument:GCMS4Units:ug/L (ppb)Operator:MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	97	63	127
Toluene-d8	103	60	129
4-Bromofluorobenzene	99	51	145

	Concentration		Concentration
Compounds:	ug/L (ppb)	Compounds:	ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	1.1
Vinyl chloride	< 0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	2.0	tert-Butylbenzene	<1
Benzene	<1	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<1
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

#### **ENVIRONMENTAL CHEMISTS**

# Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-5-051109 Client: Aspect Consulting

Date Received: 05/12/09 Project: 080190 Stadium Property, F&BI 905099

Date Extracted:05/13/09Lab ID:905099-08Date Analyzed:05/13/09Data File:051314.DMatrix:WaterInstrument:GCMS4Units:ug/L (ppb)Operator:MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	101	63	127
Toluene-d8	106	60	129
4-Bromofluorobenzene	98	51	145

	Concentration		Concentration
Compounds:	ug/L (ppb)	Compounds:	ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	17
Vinyl chloride	< 0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	44	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<1	1,2,4-Trimethylbenzene	<1
Trichloroethene	1.1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<1
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

#### **ENVIRONMENTAL CHEMISTS**

# Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Method Blank Client: Aspect Consulting

Date Received: Not Applicable Project: 080190 Stadium Property, F&BI 905099

Date Extracted:05/13/09Lab ID:090633 mbDate Analyzed:05/13/09Data File:051305.DMatrix:WaterInstrument:GCMS4Units:ug/L (ppb)Operator:MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	101	63	127
Toluene-d8	103	60	129
4-Bromofluorobenzene	98	51	145

	Concentration		Concentration
Compounds:	ug/L (ppb)	Compounds:	ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	<1
Vinyl chloride	< 0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<1	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<1
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

#### **ENVIRONMENTAL CHEMISTS**

# Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-8D-comp Client: Aspect Consulting

Date Received: 05/12/09 Project: 080190 Stadium Property, F&BI 905099

Date Extracted:05/12/09Lab ID:905099-01Date Analyzed:05/12/09Data File:051209.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	90	42	152
Toluene-d8	86	36	149
4-Bromofluorobenzene	100	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.05	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.05
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.05
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

# Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-9-comp Client: Aspect Consulting

Date Received: 05/12/09 Project: 080190 Stadium Property, F&BI 905099

Date Extracted:05/12/09Lab ID:905099-02Date Analyzed:05/12/09Data File:051211.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	44	42	152
Toluene-d8	43	36	149
4-Bromofluorobenzene	52	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.05	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.05
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.05
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

# Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-10-comp Client: Aspect Consulting

Date Received: 05/12/09 Project: 080190 Stadium Property, F&BI 905099

Date Extracted:05/12/09Lab ID:905099-03Date Analyzed:05/12/09Data File:051212.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	134	42	152
Toluene-d8	130	36	149
4-Bromofluorobenzene	140	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.05	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.05
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.05
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

# Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW-11-comp Client: Aspect Consulting

Date Received: 05/12/09 Project: 080190 Stadium Property, F&BI 905099

Date Extracted:05/12/09Lab ID:905099-04Date Analyzed:05/12/09Data File:051213.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	96	42	152
Toluene-d8	96	36	149
4-Bromofluorobenzene	108	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.05	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.05
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.05
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

# Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Method Blank Client: Aspect Consulting

Date Received: Not Applicable Project: 080190 Stadium Property, F&BI 905099

Date Extracted:05/12/09Lab ID:090632 mbDate Analyzed:05/12/09Data File:051205.DMatrix:SoilInstrument:GCMS5Units:mg/kg (ppm)Operator:MB

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	93	42	152
Toluene-d8	96	36	149
4-Bromofluorobenzene	118	50	150

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.05	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Methylene chloride	< 0.5	o-Xylene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Styrene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Isopropylbenzene	< 0.05
1,1-Dichloroethane	< 0.05	Bromoform	< 0.05
2,2-Dichloropropane	< 0.05	n-Propylbenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	Bromobenzene	< 0.05
Chloroform	< 0.05	1,3,5-Trimethylbenzene	< 0.05
2-Butanone (MEK)	< 0.5	1,1,2,2-Tetrachloroethane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	1,2,3-Trichloropropane	< 0.05
1,1,1-Trichloroethane	< 0.05	2-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	4-Chlorotoluene	< 0.05
Carbon tetrachloride	< 0.05	tert-Butylbenzene	< 0.05
Benzene	< 0.03	1,2,4-Trimethylbenzene	< 0.05
Trichloroethene	< 0.03	sec-Butylbenzene	< 0.05
1,2-Dichloropropane	< 0.05	p-Isopropyltoluene	< 0.05
Bromodichloromethane	< 0.05	1,3-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,4-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dichlorobenzene	< 0.05
cis-1,3-Dichloropropene	< 0.05	1,2-Dibromo-3-chloropropane	< 0.05
Toluene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Hexachlorobutadiene	< 0.25
1,1,2-Trichloroethane	< 0.05	Naphthalene	< 0.05
2-Hexanone	< 0.5	1,2,3-Trichlorobenzene	< 0.25

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 05/19/09 Date Received: 05/12/09

Project: 080190 Stadium Property, F&BI 905099

#### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

	D	C-41	Percent	Percent	A	RPD
Analyte	Reporting Units	Spike Level	Recovery LCS	Recovery LCSD	Acceptance Criteria	(Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	89	94	51-142	5
Chloromethane	ug/L (ppb)	50	101	96	65-134	5
Vinyl chloride	ug/L (ppb)	50	98	87	64-134	12
Bromomethane	ug/L (ppb)	50	99	89	66-137	11
Chloroethane	ug/L (ppb)	50	100	91	58-146	9
Trichlorofluoromethane	ug/L (ppb)	50	112	104	50-150	7
Acetone 1.1-Dichloroethene	ug/L (ppb)	50 50	96 105	91 97	60-155 70-132	5 8
Methylene chloride	ug/L (ppb) ug/L (ppb)	50 50	106	99	70-132	7
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	120	111	80-127	8
trans-1,2-Dichloroethene	ug/L (ppb)	50	109	101	81-122	8
1,1-Dichloroethane	ug/L (ppb)	50	110	103	85-118	7
2,2-Dichloropropane	ug/L (ppb)	50	130	120	73-144	8
cis-1,2-Dichloroethene	ug/L (ppb)	50	113	107	82-122	5
Chloroform	ug/L (ppb)	50	106	100	84-122	6
2-Butanone (MEK)	ug/L (ppb)	50	96	85	58-145	12
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	111	105	82-127	6
1,1,1-Trichloroethane	ug/L (ppb)	50	119	112	85-130	6
1,1-Dichloropropene	ug/L (ppb)	50	121	113	82-123	7
Carbon tetrachloride Benzene	ug/L (ppb) ug/L (ppb)	50 50	119 103	114 97	77-145 79-125	4 6
Trichloroethene	ug/L (ppb)	50 50	112	107	84-119	5
1,2-Dichloropropane	ug/L (ppb)	50	111	106	82-122	5
Bromodichloromethane	ug/L (ppb)	50	111	107	81-133	4
Dibromomethane	ug/L (ppb)	50	111	105	82-125	6
4-Methyl-2-pentanone	ug/L (ppb)	50	98	91	70-140	7
cis-1,3-Dichloropropene	ug/L (ppb)	50	117	111	83-129	5
Toluene	ug/L (ppb)	50	107	103	81-123	4
trans-1,3-Dichloropropene	ug/L (ppb)	50	111	107	80-131	4
1,1,2-Trichloroethane	ug/L (ppb)	50	100	98	75-124	2
2-Hexanone	ug/L (ppb)	50	98	95	70-135	3
1,3-Dichloropropane	ug/L (ppb)	50	104 117	100 111	77-126 83-119	4 5
Tetrachloroethene Dibromochloromethane	ug/L (ppb) ug/L (ppb)	50 50	112	109	84-133	3
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	106	100	82-125	6
Chlorobenzene	ug/L (ppb)	50	106	101	85-121	5
Ethylbenzene	ug/L (ppb)	50	111	106	83-121	5
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	109	105	85-128	4
m,p-Xylene	ug/L (ppb)	100	112	107	82-122	5
o-Xylene	ug/L (ppb)	50	117	111	86-121	5
Styrene	ug/L (ppb)	50	113	108	85-127	5
Isopropylbenzene	ug/L (ppb)	50	116	111	87-122	4
Bromoform	ug/L (ppb)	50 50	113 109	112 104	78-129 76-127	1 5
n-Propylbenzene Bromobenzene	ug/L (ppb) ug/L (ppb)	50 50	106	102	86-117	4
1,3,5-Trimethylbenzene	ug/L (ppb)	50	113	102	80-117	5
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	90	87	66-126	3
1,2,3-Trichloropropane	ug/L (ppb)	50	92	89	67-124	3
2-Chlorotoluene	ug/L (ppb)	50	108	103	77-127	5
4-Chlorotoluene	ug/L (ppb)	50	109	104	78-128	5
tert-Butylbenzene	ug/L (ppb)	50	113	108	85-122	5
1,2,4-Trimethylbenzene	ug/L (ppb)	50	110	105	82-125	5
sec-Butylbenzene	ug/L (ppb)	50	113	108	80-125	5
p-Isopropyltoluene 1.3-Dichlorobenzene	ug/L (ppb)	50	119 106	113 101	82-127	5
1,3-Dichlorobenzene 1,4-Dichlorobenzene	ug/L (ppb) ug/L (ppb)	50 50	106 100	101 95	85-119 84-121	5 5
1,4-Dichlorobenzene 1,2-Dichlorobenzene	ug/L (ppb) ug/L (ppb)	50 50	100	95 100	84-121 85-116	5 6
1,2-Dictrior oberizene 1,2-Dibromo-3-chloropropane	ug/L (ppb) ug/L (ppb)	50 50	105	98	57-141	7
1,2,4-Trichlorobenzene	ug/L (ppb)	50	113	105	79-128	7
Hexachlorobutadiene	ug/L (ppb)	50	124	115	81-130	8
Naphthalene	ug/L (ppb)	50	114	106	64-133	7
1,2,3-Trichlorobenzene	ug/L (ppb)	50	113	106	77-124	6

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 05/19/09 Date Received: 05/12/09

Project: 080190 Stadium Property, F&BI 905099

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

Laboratory Code: 905099-01 (Duplicate)

Dichloroftliusromethane	Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Chloromethane    mg/kg (ppm)	Dichlorodifluoromethane	mg/kg (ppm)	< 0.5	< 0.5	nm
Vinyl chloride         migks (ppm)         <0.05         <0.05         nm           Bromomethane         migks (ppm)         <0.5					
Bromomethane					
Chlorechane    mg/kg (ppm)					
Titchlorofuloromethane    mg/kg (ppm)					
Acetone mg/kg (ppm)					
1.1 Dichloroethene					
Methylene chloride					
Eluty  alcoho  (TBA)					
Methyl Lebutyl ether (MTBE)   mg/kg (ppm)   <0.05   <0.05   mm   mmxns-1,2-Ditchloroethene   mg/kg (ppm)   <0.05   <0.05   mm   <0.05   <0.05   mm   <0.05   <0.05   mm					
trans 1, 2-Dichloroechene Dissporpoyl ether (DIPE) mg/kg (ppm)					
Disopropyl ether (DIFE)   mg/kg (ppm)   <0.05   <0.05   mm					
1.1-Dichloropropane					
Ethyl tehufy ether (ETBE)  mg/kg (ppm)  cs. 1,2 Dichloropropane  mg/kg (ppm)  cs. 1,3 Dichloropropane  mg/kg (ppm)  cs. 1,1 Dichloropropane  mg/kg (ppm)  cs. 1,2 Dichloropropane  mg/kg (ppm)  cs. 1,2 Dichloropropane  mg/kg (ppm)  cs. 1,3 Dichloropropene  mg/kg					
2.2-Dichloropropane					
cis-1,2-Dichlorochene   mg/kg (ppm)   0.05   0.05   nm					
Chloroform					
2-Butanone (MEK)					
1-Anyl methyl ether (TAME) mg/kg (ppm)					
1.2 Dichloroethane (EDC)	2-Butanone (MEK)	mg/kg (ppm)	< 0.5	< 0.5	nm
1,1,1-Trichloroethane	t-Amyl methyl ether (TAME)	mg/kg (ppm)	< 0.05	< 0.05	nm
1.1-Dichloropropene	1,2-Dichloroethane (EDC)	mg/kg (ppm)	< 0.05	< 0.05	nm
1.1-Dichloropropene					nm
Carbon tetrachloride  mg/kg (ppm)  c) 0.05  c) 0.05  mm Recreee  mg/kg (ppm)  c) 0.03  c) 0.03  mm Trichloroethene  mg/kg (ppm)  c) 0.03  c) 0.03  mm Trichloropropane  mg/kg (ppm)  c) 0.05  c) 0.05  mm Recondichloromethane  mg/kg (ppm)  c) 0.05  c) 0.05  mm Recondichloropropene  mg/kg (ppm)  c) 0.05  c) 0.05					
Benzene					nm
Trichloroethene					
1.2 Dichloropropane					
Bromodichloromethane					
Dibromoethane					
4-Methyl-2-pentanone					
cis-1,3-Dichloropropene         mg/kg (ppm)         < 0.05         < 0.05         nm           Toluene         mg/kg (ppm)         < 0.05					
Toluene mg/kg (ppm)					
trans-1,3-Dichloropropene         mg/kg (ppm)         < 0.05         < 0.05         nm           1,1,2-Trichloroethane         mg/kg (ppm)         < 0.5					
1,1,2-Trichloroethane					
2-Hexanone mg/kg (ppm)					
1,3-Dichloropropane mg/kg (ppm)					
Tetrachloroethene         mg/kg (ppm)         <0.025         <0.025         nm           Dibromochloromethane         mg/kg (ppm)         <0.05					nm
Dibromochloromethane         mg/kg (ppm)         <0.05         <0.05         nm           1,2-Dibromoethane (EDB)         mg/kg (ppm)         <0.05		mg/kg (ppm)			nm
1,2-Dibromoethane (EDB)       mg/kg (ppm)       <0.05	Tetrachloroethene	mg/kg (ppm)	< 0.025	< 0.025	nm
Chlorobenzene mg/kg (ppm)					nm
Ethylbenzene         mg/kg (ppm)         <0.05         <0.05         nm           1,1,1,2-Tetrachloroethane         mg/kg (ppm)         <0.05	1,2-Dibromoethane (EDB)	mg/kg (ppm)	< 0.05	< 0.05	nm
1,1,1,2-Tetrachloroethane       mg/kg (ppm)       <0.05	Chlorobenzene	mg/kg (ppm)	< 0.05	< 0.05	nm
1,1,1,2-Tetrachloroethane       mg/kg (ppm)       <0.05	Ethylbenzene	mg/kg (ppm)	< 0.05	< 0.05	nm
m.pVylene         mg/kg (ppm)         < 0.1         < 0.1         nm           o-Xylene         mg/kg (ppm)         < 0.05	1,1,1,2-Tetrachloroethane	mg/kg (ppm)	< 0.05	< 0.05	nm
o-Xylene	m.p-Xvlene		< 0.1	< 0.1	nm
Styrene         mg/kg (ppm)         <0.05         <0.05         nm           Isopropylbenzene         mg/kg (ppm)         <0.05					
Supropylbenzene   mg/kg (ppm)   <0.05   <0.05   nm					
Bromoform					
n-Propylbenzene mg/kg (ppm) <0.05 <0.05 nm Bromobenzene mg/kg (ppm) <0.05 <0.05 nm 1,3,5-Trimethylbenzene mg/kg (ppm) <0.05 <0.05 nm 1,1,2,2-Tetrachloroethane mg/kg (ppm) <0.05 <0.05 nm 1,2,3-Trichloropropane mg/kg (ppm) <0.05 <0.05 nm 2-Chlorotoluene mg/kg (ppm) <0.05 <0.05 nm 2-Chlorotoluene mg/kg (ppm) <0.05 <0.05 nm 4-Chlorotoluene mg/kg (ppm) <0.05 <0.05 nm 1,2,4-Trimethylbenzene mg/kg (ppm) <0.05 <0.05 nm 1,2-Dichlorobenzene mg/kg (ppm) <0.05 <0.05 nm 1,3-Dichlorobenzene mg/kg (ppm) <0.05 <0.05 nm 1,3-Dichlorobenzene mg/kg (ppm) <0.05 <0.05 nm 1,2-Dichlorobenzene mg/kg (ppm) <0.05 <0.05 nm 1,2-Dichlorobenzene mg/kg (ppm) <0.05 <0.05 nm 1,2-Dichlorobenzene mg/kg (ppm) <0.05 <0.05 nm 1,2-Trichlorobenzene mg/kg (ppm) <0.05 <0					
Bromobenzene         mg/kg (ppm)         <0.05         <0.05         nm           1,3,5-Trimethylbenzene         mg/kg (ppm)         <0.05					
1,3,5-Trimethylbenzene       mg/kg (ppm)       <0.05					
1,1,2,2-Tetrachloroethane					
1,2,3-Trichloropropane					
2-Chlorotoluene       mg/kg (ppm)       <0.05					
4-Chlorotoluene mg/kg (ppm) <0.05 <0.05 nm tert-Butylbenzene mg/kg (ppm) <0.05 <0.05 nm tert-Butylbenzene mg/kg (ppm) <0.05 <0.05 nm sec-Butylbenzene mg/kg (ppm) <0.05 <0.05 nm sec-Butylbenzene mg/kg (ppm) <0.05 <0.05 nm p-Isopropyltoluene mg/kg (ppm) <0.05 <0.05 nm sec-Butylbenzene mg/kg (ppm) <0.1 <0.1 nm sec-Butylbenzene mg/kg (ppm) <0.1 <0.1 nm sec-Butylbenzene mg/kg (ppm) <0.05 <0.05 nm sec-Butylbenzene mg/kg (ppm) <0.01 <0.1 nm sec-Butylbenzene mg/kg (ppm) <0.05 <0.05 nm sec-Butylbenzene mg/kg (					
tert-Butylbenzene					
1,2,4-Trimethylbenzene       mg/kg (ppm)       <0.05					
sec-Butylbenzene         mg/kg (ppm)         <0.05         <0.05         nm           p-Isopropyltoluene         mg/kg (ppm)         <0.05					
p-Isopropyltoluene mg/kg (ppm) <0.05 <0.05 nm   1,3-Dichlorobenzene mg/kg (ppm) <0.05 <0.05 nm   1,4-Dichlorobenzene mg/kg (ppm) <0.05 <0.05 nm   1,2-Dichlorobenzene mg/kg (ppm) <0.05 <0.05 nm   1,2-Dichlorobenzene mg/kg (ppm) <0.05 <0.05 nm   1,2-Dibromo-3-chloropropane mg/kg (ppm) <0.05 <0.05 nm   1,2-Trichlorobenzene mg/kg (ppm) <0.05 <0.05 nm   1,2-Hichlorobenzene mg/kg (ppm) <0.05 <0.05 nm   1,2-Hichlorobenzene mg/kg (ppm) <0.1 <0.1 nm   1,2-Hichlorobenzene mg/kg (ppm) <0.1 <0.1 nm   1,2-Hichlorobenzene mg/kg (ppm) <0.05 <0.05 nm   1,2-Hichlorobenzene mg/kg (ppm) <0.01 <0.1 nm   1,2-Hichlorobenzene mg/kg (ppm) <0.05 <0.05 nm   1,2-Hichlorobenzene mg/kg (ppm) <0.05 n					nm
1,3-Dichlorobenzene     mg/kg (ppm)     <0.05		mg/kg (ppm)	< 0.05	< 0.05	nm
1,4-Dichlorobenzene     mg/kg (ppm)     <0.05		mg/kg (ppm)	< 0.05	< 0.05	nm
1,4-Dichlorobenzene     mg/kg (ppm)     <0.05	1,3-Dichlorobenzene		< 0.05	< 0.05	nm
1,2-Dichlorobenzene     mg/kg (ppm)     <0.05					nm
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					
Hexachlorobutadiene $mg/kg$ (ppm) $<0.1$ $<0.1$ nm Naphthalene $mg/kg$ (ppm) $<0.05$ $<0.05$ nm					
Naphthalene mg/kg (ppm) <0.05 <0.05 nm					
1,2,3-1 FICHIOFOURIZERE mg/kg (ppm) <0.1 <0.1 nm					
	1, z, 3-1 richlorobenzene	mg/kg (ppm)	<0.1	<0.1	nm

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 05/19/09 Date Received: 05/12/09

Project: 080190 Stadium Property, F&BI 905099

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

Dorcont

Laboratory Code: Laboratory Control Sample

· ·	-		Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	87	84	25-133	4
Chloromethane	mg/kg (ppm)	2.5 2.5	80 94	77 88	48-121 57-125	4 7
Vinyl chloride	mg/kg (ppm)					22 vo
Bromomethane Chloroethane	mg/kg (ppm) mg/kg (ppm)	2.5 2.5	128 205 vo	103 127	55-141 43-152	47 vo
Trichlorofluoromethane	mg/kg (ppm)	2.5	203 V0 88	86	37-158	47 VO 2
Acetone	mg/kg (ppm)	2.5	90	92	69-129	2
1,1-Dichloroethene	mg/kg (ppm)	2.5	93	97	60-123	4
Methylene chloride	mg/kg (ppm)	2.5	84	88	57-130	5
t-Butyl alcohol (TBA)	mg/kg (ppm)	12.5	96	103	70-121	7
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	102	99	82-112	3
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	102	95	78-118	7
Diisopropyl ether (DIPE)	mg/kg (ppm)	2.5	110	100	85-117	10
1,1-Dichloroethane	mg/kg (ppm)	2.5	101	99	81-116	2
Ethyl t-butyl ether (ETBE)	mg/kg (ppm)	2.5	111	107	84-117	4
2,2-Dichloropropane	mg/kg (ppm)	2.5	116	111	74-122	4
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	102	96	82-118	6
Chloroform 2-Butanone (MEK)	mg/kg (ppm)	2.5 2.5	105 110	101 103	80-117 63-146	4 7
t-Amyl methyl ether (TAME)	mg/kg (ppm) mg/kg (ppm)	2.5	110	105	84-118	5
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	102	99	82-120	3
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	110	104	79-120	6
1,1-Dichloropropene	mg/kg (ppm)	2.5	103	99	76-122	4
Carbon tetrachloride	mg/kg (ppm)	2.5	99	93	70-125	6
Benzene	mg/kg (ppm)	2.5	97	95	80-112	2
Trichloroethene	mg/kg (ppm)	2.5	100	97	79-115	3
1,2-Dichloropropane	mg/kg (ppm)	2.5	104	100	84-119	4
Bromodichloromethane	mg/kg (ppm)	2.5	116	114	87-122	2
Dibromomethane	mg/kg (ppm)	2.5	106	103	87-118	3
4-Methyl-2-pentanone	mg/kg (ppm)	2.5	108	106	88-124	2
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	114	112	84-125	2
Toluene	mg/kg (ppm)	2.5	111	108	80-116	3
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	134 vo	129	84-129	4
1,1,2-Trichloroethane 2-Hexanone	mg/kg (ppm) mg/kg (ppm)	2.5 2.5	119 vo 127	116 125	85-117 88-129	3 2
1,3-Dichloropropane	mg/kg (ppm)	2.5	118	116	84-119	2
Tetrachloroethene	mg/kg (ppm)	2.5	109	104	79-119	5
Dibromochloromethane	mg/kg (ppm)	2.5	110	107	76-123	3
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	117	114	86-120	3
Chlorobenzene	mg/kg (ppm)	2.5	110	107	81-111	3
Ethylbenzene	mg/kg (ppm)	2.5	115	111	81-115	4
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	129 vo	124 vo	82-121	4
m,p-Xylene	mg/kg (ppm)	5	111	108	80-118	3
o-Xylene	mg/kg (ppm)	2.5	113	109	78-122	4
Styrene	mg/kg (ppm)	2.5	116	112	84-121	4
Isopropylbenzene	mg/kg (ppm)	2.5	114	109	79-124	4 3
Bromoform n-Propylbenzene	mg/kg (ppm) mg/kg (ppm)	2.5 2.5	110 120	107 118	73-111 80-123	2
Bromobenzene	mg/kg (ppm)	2.5	123 vo	121 vo	83-117	2
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	121	118	81-122	3
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	126 vo	125 vo	82-119	1
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	125 vo	123 vo	82-116	2
2-Chlorotoluene	mg/kg (ppm)	2.5	119	118	78-120	1
4-Chlorotoluene	mg/kg (ppm)	2.5	118	116	81-119	2
tert-Butylbenzene	mg/kg (ppm)	2.5	118	115	79-124	3
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	121	119	81-123	2
sec-Butylbenzene	mg/kg (ppm)	2.5	120	117	79-124	3
p-Isopropyltoluene	mg/kg (ppm)	2.5	122	118	82-125	3
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	113	110	80-116	3
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	110	109	59-133	1 3
1,2-Dichlorobenzene 1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5 2.5	113 118	110 113	82-116 74-126	3 4
1,2,4-Trichlorobenzene	mg/kg (ppm) mg/kg (ppm)	2.5	116	109	73-124	6
Hexachlorobutadiene	mg/kg (ppm)	2.5	116	110	74-128	5
Naphthalene	mg/kg (ppm)	2.5	118	113	70-122	4
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	113	109	76-125	4
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#### **ENVIRONMENTAL CHEMISTS**

#### **Data Qualifiers & Definitions**

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probability.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb The analyte indicated was found in the method blank. The result should be considered an estimate.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht The sample was extracted outside of holding time. Results should be considered estimates.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The result is below normal reporting limits. The value reported is an estimate.
- $\boldsymbol{J}$  The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- $\operatorname{pr}$  The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve The value reported exceeded the calibration range established for the analyte. The reported concentration should be considered an estimate.
- vo The value reported fell outside the control limits established for this analyte.
- x The pattern of peaks present is not indicative of diesel.
- y The pattern of peaks present is not indicative of motor oil.



Received By:

CCI Analytical Laboratories 8620 Holly Drive Everett, WA 98208

905099

# Chain Of Custody/ Laboratory Analysis Request

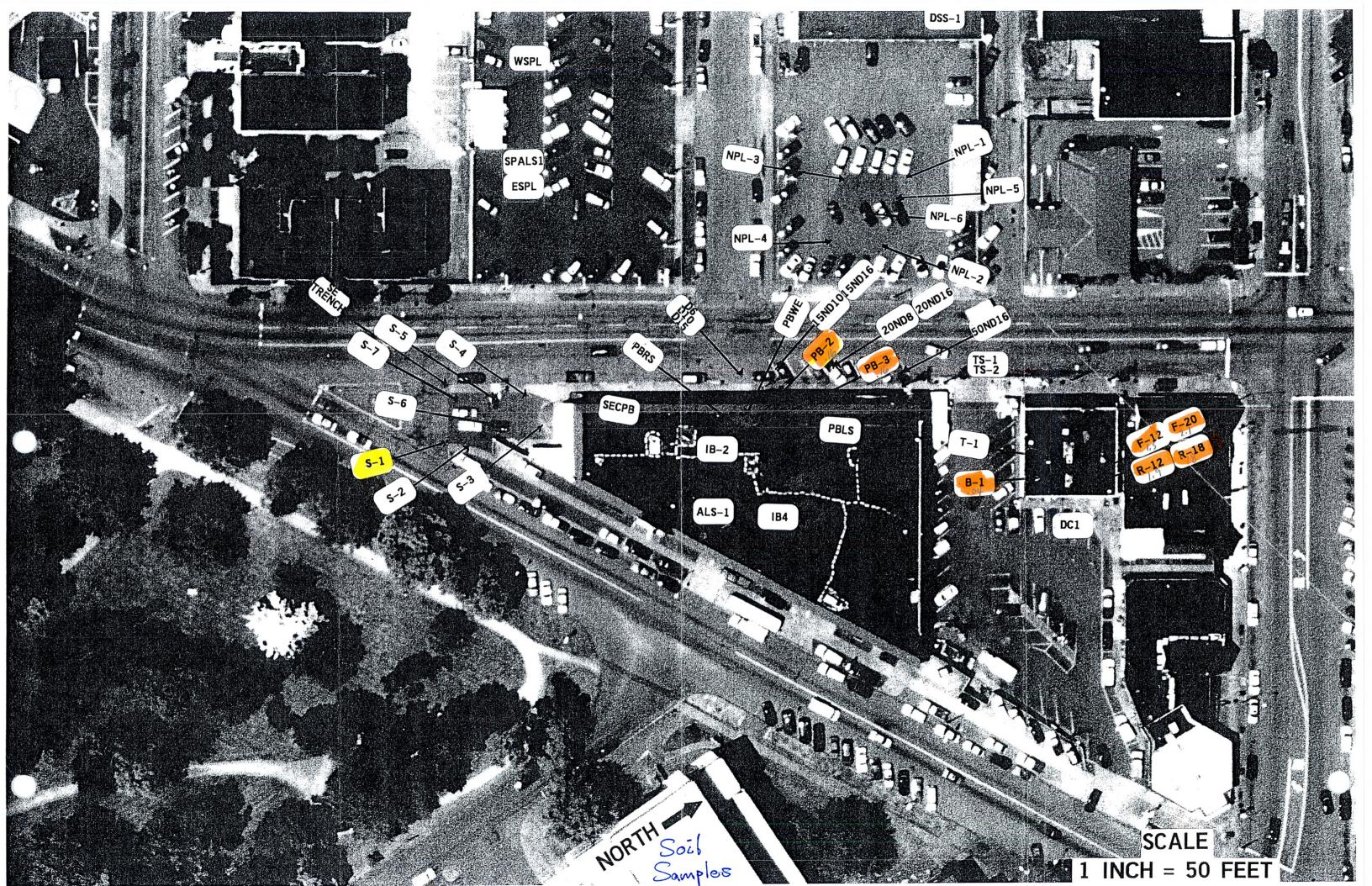
ME 5/12/09 VS1/V2/CT2

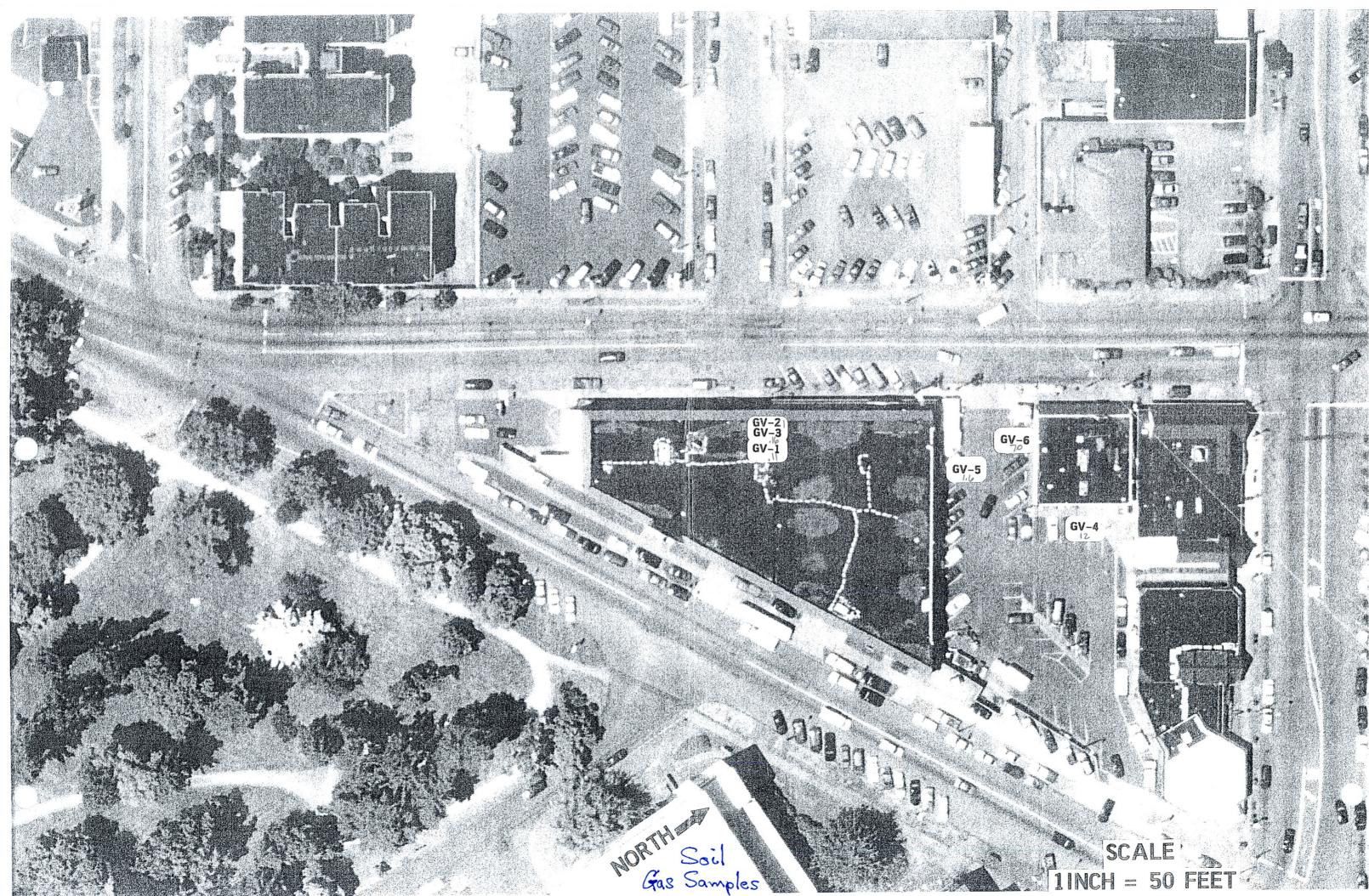
\* Turnaround request less than standard may incur Rush Charges

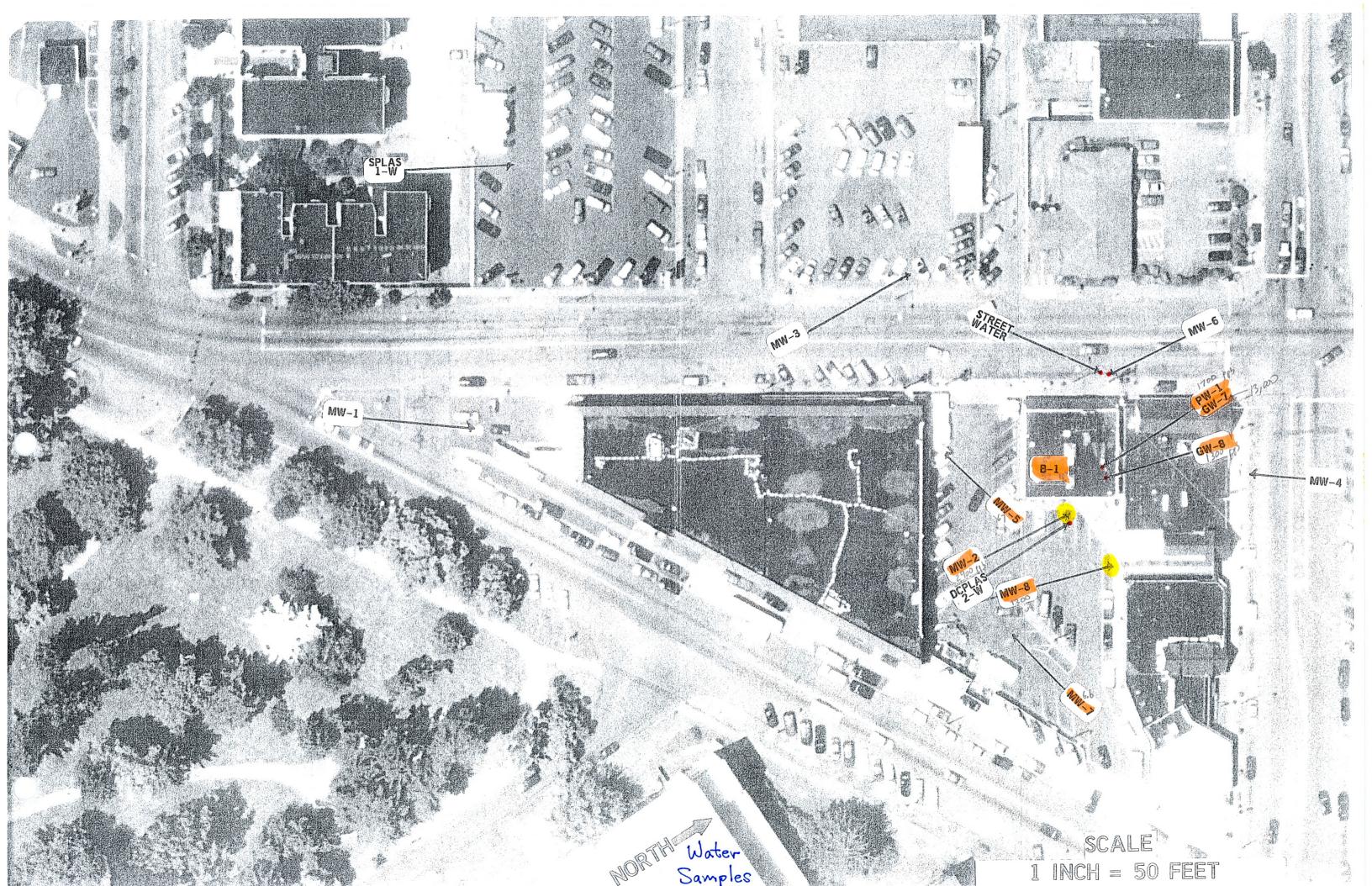
Phone (425) 356-2600 (206) 292-9059 Seattle	Labui	alu	ı y <i>1</i>	Allai	ySi	<b>Э</b> Г	160	lue	;5L	i	-			//	10	<u>/                                    </u>		/		1/	<u> </u>	CI
(425) 356-2626 Fax http://www.ccilabs.com	· · · · · · · · · · · · · · · · · · ·									٠		Date		•		Page	) 			Of		
PROJECT ID: 080190 Stadium Prope	rty A	NALYS	SIS R	EQUE	STE	)											(Spe	cify)				
COMPANY: A spect Consulting LL												1				1						
PROJECT JOE MORPICE							1			SIN			.			-					1	
ADDRESS: 401 2nd Aue 5, Ste	201			3		8			Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270	082	.물		TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐								
Seattle WA 90104	·				0	EPA 8260			by EP	) by EF	by EPA 8081/8082	□ Pri Pol □ TAL		Pest								RECEIVED IN GOOD CONDITION?
PHONE: 206 - 838- 6581 FAX:				BTEX by EPA-8021 ☐ EPA-8260 ☐	4 8260	by El	ater)		spun	s (PAH	EPA 8	<u>.</u>	l I	_lo√		Ì					EHS.	DNO.
PO. NUMBER: E-MAIL: MOTTICE	aspecteons	, ,		EPA-	oy EP/	spuno	Mi	soll)	ошь	carbon	□ by	3A-8	į	Semi		-				.   .	N N	S.
COMPANY:		ton	^	21  21  2	Halogenated Volatiles by EPA	Volatile Organic Compounds by	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soll)	anic C	Hydro		Metals-MTCA-5 ☐ RCRA-8	ecify)	0A□							CONTAINERS	
ATTENTION:		ارا		BTEX by EPA-8021 MTBE by EPA-802	NoV b	au au	y EPA	y EPA	e Org	omatic	☐ Pesticides	3A-5[	Metals Other (Specify)	\ \ \ \		}				1		≧ O
ADDRESS:	LAB# <b>2</b> ()	NWTPH-DX	NWTPH-GX	by El	genate	lle Org	2 2 3 3	EDC	volatil	/clic Ar	<u>п</u>	s-MT(	s Oth	-Metal		.					NUMBER OF	
SAMPLE I.D. DATE TIME TYPI	LAB#Zn	NWT	NWT	MTB	Halog	Volat	ED8/	EDB/	Semi	Polycy	PCB	Metal	Metal	TCLP				•			) N	띭
1. MW-8D-comp 5/5/09 1600 Soil	- 01 A-D					X															U	
2 MM - 9 - COMP   5/6/09/1300   SOL	100 A-D			35		X															4	
3 MW-10-COMP 5/7/89 13:00 50.7	1 N2 M	'   '				4								-							4	
4 MW-11-Comp 5/8/09 19:50 Soil	OY A	2-				X													$\top$		3	
5 MW-8D-051109 5/1/19 16:55 Wat	05 A					Y		-		;						7	r .			*	3	
3. MW-10-COMP 5/7/89 13:00 56.] 4. MW-11-COMP 5/8/09 19:50 Soil 5. MW-8D-05/109 5/1/19 16:55 Wab 6. MW-1-05/109 5/1/09 14:00 Water						X													1		3	,
7MW-7-051109 5/11/04 12:30 Water		_			+-,	X											1		+		3	,
8. MW - 5 -051109 5/11/09 11:15 Wak	- 08A-		-		-	<b>y</b>											_		+	-	3	-1 -1
8. 11W - 3 (191104) 111.19 Wak		_			-							ļ	-			-	$\dashv$	+	$\dashv$		7	+
9.		-		#	-							ļ				-	$\rightarrow$	+	$\dashv$	-	+-	
10.		<u>;</u>										<u> </u>										
SPECIAL INSTRUCTIONS			· ·				·															<del>.                                    </del>
CCI Analytical Laboratories, Inc accepts and processes this reques	t on the terms and	condit	ions s	et forth	on the	e reve	erse s	ide. I	By its												onditio	ons.
SIGNATURES (Name Company, Date, Time):  1. Relinquished By: \$-12-60	09:00			4	Org	anic,	Met	als &	& Inc					n=(	QUES	IED	រប មប		HER			
Received By: Howard 5/12	109 10:	00	A		P		5	3	]	2	1		AME DAY		Sp	ecify:	:			<del></del>		
2. Relinquished By:	<del></del>			₹ `*	7	Fuel	s_&	Hydr	ocar	bon	Ans	alysis	3							<del></del>		<del></del>

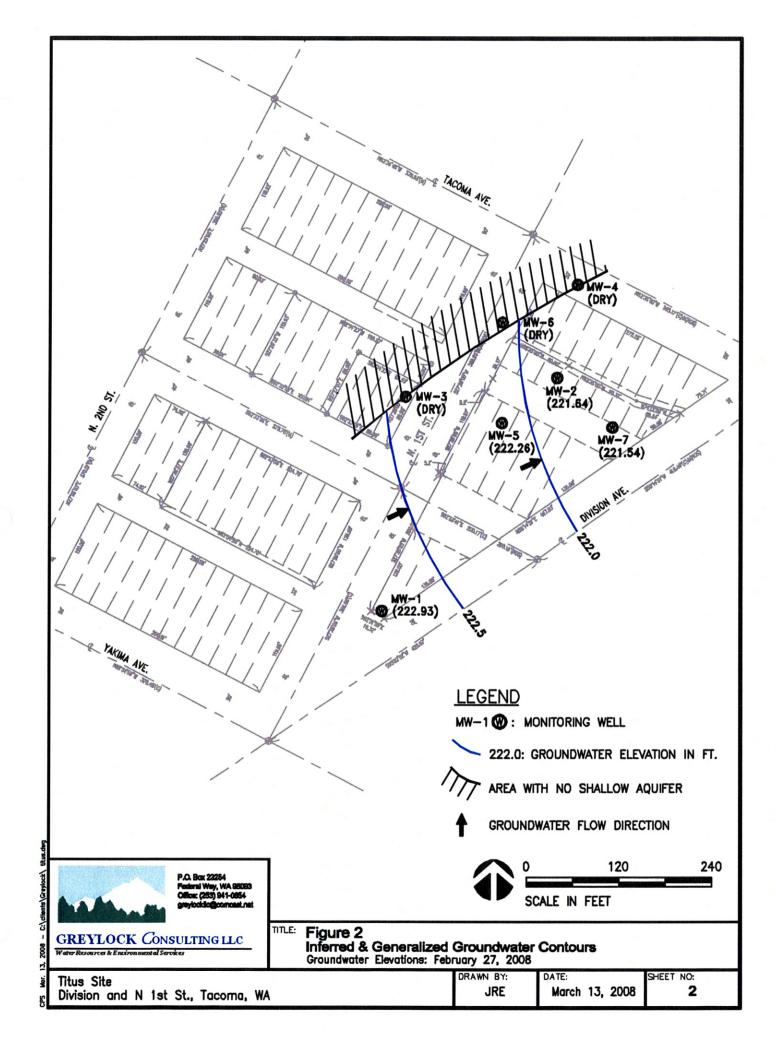
# **ATTACHMENT C**

Data Provided by Stemen Environmental, Inc.









# STEMEN ENVIRONMENTAL, INC.

P.O.BOX 3644 LACEY, WASHINGTON 98509-3644 CONTR. LIC. #STEMEEI081J9

WELL#	<u>WELL LOG DATE</u> Telephone 360-438-9521 Fax 360-412-1225
MW-1	1/22/07 (ALM at top of well data column)
MW-2	1/23/07 (ALM -169 at top of well data column)
MW-3	2/1/07
MW-4	1/9/08
MW-5	1/11/08
MW-6	1/16/08
MW-7	1/18/08
かしっと	1111/08

# Holt Drilling A Division of Boart Longyear Company

# Resource Protection Well Report

Project Name Beoca TIT	US CHEU Date_	1-22-07
Well Identification # ALIM-	O6식 County_	PIEZCE SE 1/4 5E 1/4
Drilling Method SOALIC	6 Section	32 T 21N R 3E
OrillerKen Phil	lips Street A	ddress 630 57401UM WY
License #		rd R-70639
	Consulti	ing Firm STEMEN ENU.
AS-BUILT	WELL DATA	FORMATION DESCRIPTION
	ALWA-  - MONUMENT: 8" FLUSH  - CONCRETE SURFACE SEAL:  2 FT  - RISER: 2 × 60 '  - BACKFILL: FT  TYPE: 3/9 CHUPS	B-15 FT  BROWN SILTY SAND +  GRAVEL FILL 26-30/3  SHAP FIMES  FT
	- SCREEN: 2"x 15"  TYPE: PVC  SLOT SIZE: .020  - SAND PACK: /"  MATERIAL: /0x20 SILLER  - WELL DEPTH: /65'	MEDIUM DENSE TO DENSE! WET & 54 TORNING GREAT IN COLOZO GO FT

Signature KANLEZ

# Holt Drilling A Division of Boart Longyear Company Resource Protection Well Report

Project Name Beace TI	TUS CHEU	Date 1-22-07
Well Identification #ALM-		County PIERCE SE 1/4 SE 1/4
Drilling Method 50~1C	<u> 6''</u>	Section 32 T 21N R 3E
DrillerKen Ph		Street Address 630 STADIUM WY
License # 265		Start Card
		Consulting Firm STEMEN ENV.
, ' AS-BUILT	WELL DATA	FORMATION DESCRPITION
T	ALM-169	
	- MONUMENT: 8"	BROWN SILTY SAMO +
	_2	FI SAND FINES
		FT GREY 51LTY SANO 70
	— SCREEN: 2 "x  TYPE: PUC  SLOT SIZE: . 0	IN COLOR & GC'FT
	— SAND PACK:	20 SILLEA REMARKS

Signature <u>KLOUE</u>

### Stemen - Titus Job No. 0353

Boring/Well Log for Location Number 4

Date Drilled: 2/1/07 Driller: Boart-Longyear

Geologist: Suzanne Dudziak, Greylock Consulting LLC

Method: Sonic

Borehole diam: about 4.5 in.

# Depth (in ft): Description (assume dry unless otherwise noted)

0-1.5 ft	Gravelly SAND, brown, loose
1.5 – 4.0	same as above
4 – 7	same as above
7 – 8	Gravelly SILT, brown, loose
8 – 10	Gravelly SILT, brown, compact, moist
10 - 12.5	Gravelly SAND, tan, loose, dry
12.5 – 15.5	Clayey SILT w/minor gravel, yellow-brown, compact, slightly moist
15.5 – 18	SILT w/minor gravel, lt. brown w/some green, compact
18 - 20	SILT w/minor gravel, brown/green, very compact
20 - 23	same as above
23 - 25	SAND w/minor gravel, lt. brown, loose
25 – 26	same as above
26 – 28	SILT w/minor gravel, brown, very compact
28 – 30	Sandy SILT, brown, compact
30 - 32	SAND (med grained), lt. brown, compact
32 - 34	same as above

34 - 37	Silty SAND, brown, very compact
37 – 40	same as above
40 – 43	SILT, brown, very compact
45 – 47	same as above
47 – 50	Sandy SILT transitioning, brown, compact
50 – 54	same as above
55	SAND w/minor Silt, fine grained, brown (Driller says there's a change)
56 – 58	WET SAND, orange-brown, med grained (I think water is at about 56 ft)
58 – 61	same as above
61 – 64	SAND (not as wet, would call it moist), brown
64 – 67	SILT, brown, DRY, very compacted
67	Bottom of hole

### Well Construction:

15 feet of 0.02 slot PVC screen. One foot sump on bottom. Screened interval is 51 ft to 66 ft below ground. Silica sand pack around screen and 2 ft above. Moistened bentonite above sand. (I didn't not stay for the concrete, but typically its 18 inches from surface. We should get that information from the driller).

# Holt Drilling A Division of Boart Longyear Company (1994) - 3 Resource Protection Well Report

Well Identification # ALM-068 County PIERCE SE 1/4.  Drilling Method SCALC 6" Section 32 T 21 NI R 3	< <u>-</u>
	7/4
	3 <u>=</u>
Driller Ken Phillips Street Address 633 Sivision	
License # 2652 Start Card R 70 639	•
	41ENTAL
AS-BUILT WELL DATA . FORMATION DESCRITION	<del>-</del>
MONUMENT: 8' FLOSHY  CONCRETE SURFACE SEAL:  CONCRETE SURFACE SEAL:  FILE  CONCRETE SURFACE SEAL:  FILE  FILE  FILE  BACKFILL: 48 FT  TYPE: 36 CHIPS  CHIPS  SOLUTION OF AN OUNT OF A SECOND MINIOUS OF A SECO	FINE BENUT

Signature 44a

# BOART LONGYEAR E & I

Resource Protection Well Report

Project Name Stadium 7	•	Date 1-16-08
Well Identification # BAM	167	County Pierce , NW 1/4 5E 1/4
Drilling Method 5011,7	··	Section 32 T. 2/ N R. 3E
Driller Thomas Cre	ener	Street Address N 12# + N Tocomp Ave
License # <u>2409</u>		Start Card <u>R 70822</u>
		Consulting Firm Stenien Env.
AS-BUILT	" WELLDATA	), FORMATION DESCRIPTION
-1.5' -43' -47'	MONUMENT TYPE:	Asphalt-Road Base  1 - 60 = 1  Compact sand  Grue med Bru  V. Dense  Med - DK Bru  Sand  15  REMARKS
		Signature Momas W. Care

# Holt Drilling A Division of Boart Longyear Company Resource Protection Well Report

Project Name STADIUM THRIFTWAY Date 1.78-08  Well Identification # BAM - III County PIERCE NW 114 SE 1  Drilling Method SONIC HX 6" Section 32 T 2 N R 3E  Driller Ken Phillips Street Address N . 1 St St St Tac M  Consulting Firm STEMEN ENVIORNMENT AS-BUILT WELL DATA FORMATION DESCRIPTION  AS-BUILT WELL DATA FORMATION DESCRIPTION  CONCRETE SURFACE SEAL: AND GROWEL RUAD DASE  FI 1-50 FT  BROWN SILTY SAND WITH	_
Driller Ken Phillips  Street Address N. 15t 5t Tac A  License # 2652  Start Card R 708 22  Consulting Firm STEMEN ENVIORNMENT  AS-BUILT WELL DATA FORMATION DESCRIPTION  BAM - 111  MONUMENT: 8" FLUSH ASPHALT + BEAUM SAND AND GROUEL RUND DASE  2 FT 1-50 FT	14.
Driller Ken Phillips  Street Address N. 15t 5t 4 Tac A  License # 2652  Start Card A 708 A 2  Consulting Firm STEMEN ENVIORNMEN  AS-BUILT WELL DATA FORMATION DESCRPTION  BAM - 111  MONUMENT: 8" FUSH  ASPHALT + BEAUM SAND  CONCRETE SURFACE SEAL: AND GRAVEL RUAD DASE  2 FT 1-50 FT	_
AS-BUILT WELL DATA FORMATION DESCRIPTION  WELL DATA FORMATION DESCRIPTION  MONUMENT: 8 FLUSH ASPHALT + BEAUM SAND AND GRAVEL RUND DASE  J FT 1-50 FT	يص
AS-BUILT WELL DATA FORMATION DESCRIPTION  BAM - 111  MONUMENT: 8" FLUSH  ASPHALT + BEAUM SAND AND GRAVEL RUND DASE  J FT 1-50 FT	<b>-</b>
CONCRETE SURFACE SEAL:  ASPHALT + BEQUAL SAND AND GRAVEL RUAD DASE  1-50 FT	140
MONUMENT: 8 FLUSH  ASPHALT + BEQUAL SAND  AND GRAVEL RUND DASE  J-50 FT  1-50 FT	-
CONCRETE SURFACE SEAL:  ASPHALT + BEOWN SAND  AND GRAVEL RUND DASE  1-50 FT	
CONCRETE SURFACE SEAL: AMO GRAVEL RUND DASE	
2 FI 1-50 FT	_
N N	
RISER: 2 "x 50 . BROWN SILTY SAND WITH	
LARGE GRAVELS VERY DENSE	
BACKFILL: FT (TILL) FT	-
TYPE: 3/4 CHIPS	
11PE: 77 CTIVES	
50-65 FI	
BROWN OXIDIZED SAND	-
MEOIUM WET @ 55'	
<u>FT</u>	
SCREEN: 2 "x 15 '	-
TYPE: FACTORY FULSIN FT	
SLOT SIZE: 1020	
÷	-
SAND PACK: 18	
MATERIAL: 10x20 SICICA REMARKS	
- WELL DEPTH: 65'	
	•

Signature KL Mules

### **BOART LONGYEAR**

Resource Protection Well Report Project Name Titus
Well Identification # BAD078 County Du V 8 12 14 Drilling Method Son Te Section 32 T 21N B 38 Driller Driven Occurens Street Address NIST N Ta Come he Start Card R 70843 License #\_ Consulting Firm\_\_ WELL DATA AS-SUILT FORMATION DESCRIPTION MONUMENT TYPE. flush BROWN SILLY SAND + CRANKLY FIH CONCRETE SURFACE SEAL PVC BLANK 55 "X Z 1 GREY SILTY SANDS INTERMITED IN 18 40 IN 1704 MEDIUM / LANGE GAMALI PVG SCREEN /0 TX Z SLOT SIZE: \_\_\_\_ 1 0 TYPE: PUC RUST /BANNIN COURTS SAND NEDIUM DENSE/DENSE, WET GRAVEL PACK 49 ft. MATERIAL: 5/1ca Found AT 54YLPT. <u>REMARKS</u> -62

# BOART LONGYEAR E & I

Mw.y

Resource Protection Well Report

Froject Name Staden Thi		Date 1/9/08
Well Identification # BA M	164	County Pince NUX SE 1/4
Drilling Method Sonic		Section <u>32 T. 2/№ F. 3 €</u>
Driller Thomas W.	Croney	Street Address NIST N Tracanna Ave
License # 2409		Start Card <u> </u>
, i		Consulting Firm Stemen ENV
AS-BUILT	" WELLOATA	FORMATION DESCRIPTION
j ř		
	MONUMENT TYPE:  CONGRETE SURFACE  SUC BLANK & 'Y'  FLO SCIESE: LIW!  SLOT SIDE LO  TIPE FLOSH  MATERIALLO 2 O	your Dense Sond Lt bond gravite  Let 65 -  Campact gray tell  thered  silent
63.7	WELL DEFT (1)	REMARKS
		Signature Thomas W. Curry

# BOART LONGYEAR E & I

Resource Protection Well Report

Project Name Stadium Thrif	tway	Date 1-11-08
Well Identification # 13AW 1	68/	County Pierce NW 1/2 5E 1/4
Drilling Method Soit / 4		Section 32 T. 21 N R. 3E
Driller Thomas Cran	ey	Street Address N. 12 ST & N. Tacoma AVE
License #	<u>.                                    </u>	Start Card R 70822
		Consulting Firm <u>5Ternen</u> Env.
AS-BUILT	" WELLDATA	i' I. FORMATION DESCRIPTION
<b>I</b>		
753/1 1 525		
	_ MONUMENTTYPE: <b>f/</b> U; h	
		E4L med Bru consocidates
13	3	med Brn consolidated -
		30 42 =
	_ =VC BL+NX & "Y (	med-dk Brn
		Course sand uet
44	_ BACKFIL 44/_	<u>.                                    </u>
47' -	TIPE Bentonito	
		med Bras Till
	_ =v.c sc===: <u> </u>	<u>.5</u>
	SLOT SIZE 10	
	- FE flush Thu	read 37.63 =
	GEAVEL FACK	med Bru course
+	MATERIAL DE J	<del></del>
	MAY CHARACTER	
		63 - 65 ft med Bry 774
+   日		REMARKS
	WELL DEFTH <u> 6.5°</u>	"
5 <u>L</u>		1 . 1 0
		Signature Thomas Wh Crans



# Atmospheric Analysis & Consulting, Inc.

CLIENT

Stemen Environmental

PROJECT NAME

: Mike's Office/Bakery

AAC PROJECT NO. :

070531

REPORT DATE

: 05/24/07

On May 23, 2007, Atmospheric Analysis & Consulting, Inc. received four (4) Six-Liter Summa Canisters for Volatile Organic Compounds analysis by EPA method TO-15. Upon receipt the samples were assigned unique Laboratory ID numbers as follows:

Client ID	Lab ID	Initial Pressure
Mike's Office can #1	070531-25768	646.6
Mike's Office can #2	070531-25769	685.8
Mike's Bakery can #3	070531-25770	668.3
Mike's Bakery can #4	070531-25771	629.5

An initial reading of the canister's vacuum was taken and recorded. Subsequently, the canisters were brought to positive pressure using UHP-He and the final pressure was also recorded.

TO-15 Analysis - Up to a 500 ml aliquot of samples is concentrated, put through a water and CO2 management system, cryofocused and injected into the GC/MS (full scan mode) for analysis following EPA Method TO-15 as specified in the SOW.

No problems were encountered during receiving, preparation and/ or analysis of these samples. The test results included in this report meet all requirements of the NELAC Standards and/or AAC SOP# AACI-TO-15. Estimated uncertainty of the test results will be provided upon request.

I certify that this data is technically accurate, complete and in compliance with the terms and conditions of the contract. The Laboratory Director or his designee, as verified by the following signature, has authorized the release of the data contained in this hardcopy data package.

If you have any questions or require further explanation of data results, please contact the undersigned.

Sucha S. Parmar, PhD

Technical Director

This report consists of \_\_\_\_\_13 pages.





# Atmospheric Analysis & Consulting, Inc.

#### Laboratory Analysis Report

CLIENT PROJECT NO

: Stemen Environmental

MATRIX UNITS

: 070531

: AIR : PPB (v/v)

DATE RECEIVED DATE REPORTED

: 05/23/07

: 05/24/07

### VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID AAC ID Date Sampled Date Analyzed	Mik	Mike's Office can #1 070531-25768 5/22/2007 5/23/2007			Mike's Office can #2 070531-25769 5/22/2007 5/23/2007			Sample Reporting Limit	Method Reporting
Can Dilution Factor									
	Result	Qualifier	Dil. Fac.	(RLxDF's)	Result	1,46 Oualifier	T 50 5	(RLxDF's)	Limit
Benzene	- ND	Ü	1.0	1.5	ND	Usmier	Dil. Fac.		
Carbon Tetrachloride	ND	Ü	1.0	1.5	ND	<del>                                     </del>	1.0	1.5	1.0
Cyclohexane	ND	Ū	1.0	1.5	ND		1.0	1.5	1.0
1,2-Dichloropropane	ND	Ŭ	1.0	1.5	ND	Ü	1.0	1,5	1.0
Bromodichloromethane	ND	Ŭ	1.0	1.5	ND	U	1.0	1.5	1.0
1,4-Droxane	ND	Ū	1.0	1.5	ND	U	1.0	1.5	1.0
Trichloroethene	2.2		1.0	1.5		U	1.0	1.5	1.0
2,2,4-Trimethylpentane	ND	Ú	1.0	1.5	3.5 ND	<del>                                     </del>	1.0	1.5	1.0
Hentaite	ND		1.0	1.5	ND ND	Ü	1.0	1.5	0.1
cis: Dichloropropene	ND	Ü	1.0	I.5		U	1.0	1.5	1.0
4-Mediyl-2-Pentanone (MiBK)	ND	<del>- Ü</del>	1.0	1.5	ND	· U	1.0	1.5	1.0
t-1,3-Dichloropropene	ND	U	1.0		ND	U	1.0	1.5	1.0
1,1,2-Trichloroethane	ND I	<del>- U</del>	1.0	1.5	ND	U U	1.0	1.5	1.0
Toluene	2.0		1.0	1.5	ND	U	1.0	1.5	1.0
2-Hesinone	ND	Ü		1.5	1.6		1.0	1.5	1.0
Dilliomochloromethane	ND	U	1.0	1.5	ND	U	1.0	1.5	1.0
1,24 diffromoethane	ND	U		1.5	ND	U	1.0	1.5	1.0
Tetrreilloroethylene	153		1.0	1.5	ND	U	1.0	1.5	1.0
Chlorobenzene	ND	U	10.0	15.5	217		10.0	14.6	1.0
Ethylbenzene	ND	$\frac{\sigma}{\sigma}$	1.0	1.5	ND	U	1.0	1.5	1.0
m- & p-Xylenes	ND	<del>- U</del>	1.0	1.5	ND	U	1.0	1.5	1.0
Bromoform	ND I	<del>- u</del>	1.0	3.1	ND	U	1.0	2.9	2.0
Styrene	ND IND		1.0	4.6	ND	U	1.0	4.4	3.0
1,1,2,2-Tetrachloroethane	ND	U	1.0	1.5	ND	U	1.0	1.5	1.0
o-Xylene	ND		1.0	1.5	ND	U	1.0	1.5	1.0
4-Ethyltoluene	ND	<u>U</u>	1.0	1.5	ND	U	1.0	1.5	1.0
1,3,5-Trimethylbenzene		Ū	1.0	I.5	ND_	U	1.0	1.5	1.0
1,2,4-Trimethylbenzene	ND	U	1.0	1.5	ND	U	1.0	1.5	0.1
Benzyl Chloride	ND T	Ü	1.0	1.5	ND	U	1.0	1.5	1.0
1,3-Dichlorobenzene	ND	U	1.0	7.7	ND	U	1.0	7.3	5.0
1,4-Dichlorobenzene	ND	U	1.0	1.5	ND	U	1.0	1.5	1.0
1,2-Dichlorobenzene	ND	U	1.0	1.5	ND	U	1.0	1.5	1.0
	ND	U	1.0	.1,5	ND	Ü	1.0	1.5	1.0
1,2,4-Trichlorobenzene	ND	U	1.0	1.5	ND	Ŭ	1.0	1.5	
lexachlorobutadiene	ND	UI	1.0	1.5	. ND	<del>- ĭi - l</del>	10	1.5	1.0 I.0
FB-Surrogate Std. % Recovery 96%  Analyte was detected. However the analyte concentration is an estimated value, which is between the Method								1.2	70-130%

Detection Limit (MDL) and the Reporting Limit (RL).

E - Estimated value, result outside linear range of instrument.

U - Compound was analyzed for, but was not detected.

To convert ppb to mg/m3:

TCE

cis-1,2-100E

Page 3

1534 Eastman Avenue • Suite A • Ventura, California 93003

3.83 4.41

(805) 650-1642 • FAX (805) 650-1644

Technical Director



# Atmospheric Analysis & Consulting, Inc.

### Laboratory Analysis Report

CLIENT PROJECT NO MATRIX

UNITS

: Stemen Environmental : 070531

DATE RECEIVED DATE REPORTED

: 05/23/07 : 05/24/07

: AIR : : PPB (v/v)

# VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client ID	Mike's Office can #1 070531-25768 5/22/2007 5/23/2007 1.55			Sample Reporting Limit (RLxDF's)	Mil	ke's Office o	·		
AACID					Mike's Office can #2 070531-25769			Sample	Method Reporting Limit
Date Sampled						5/22/2007			
Date Analyzed					5/23/2007 1.46			Reporting Limit	
Can Dilution Factor									
Chlorodifluoromethane	Result	Qualifier	Dil. Fac.	(KLIDE 8)	Result	Qualifier	Dil. Fac.	(RLxDF's)	CHINE
	ND	U	1.0	1.5	1.5	- ARWITTET	1.0	<del>                                     </del>	
Propylene Dichlorodifluoromethane	Z E	U	1.0	1.5	ND	U	1.0	1.5	1.0
Chloromethane	ND	Ū	1.0	1.5	ND	บี	1.0	1.5	1.0
	ND	U	1.0	1.5	ND	<del>- ŭ -</del>	1.0	1.5	1.0
1,2-Dichloro-1,1,2,2-Tetrafluoroethane	ND	U	1.0	1.5	ND	Ŭ		1,5	0.1
Vinyl Chloride	ND	U	1.0	1.5	ND	17	1.0	1.5	1.0
Methanol	31.4		1.0	7.7	37.8	<del>  '</del>	1.0	1.5	1.0
1,3-Butadiene	ND	Ū	1.0	1.5	ND	- T.	1.0	7.3	5.0
Bromomethane	ND	Ū	1.0	1.5	ND ND	<u>n</u>	1.0	1.5	1,0
Chloroethane	ND	Ŭ	1.0	1.5	ND ND	U	1.0	1.5	1.0
Dichlorofluoromethane	ND	TT TT	1.0	1.5		Ū	1.0	1.5	. 1.0
Ethanol	741		10.0	31.0	ND	Ü	1.0	1.5	1.0
Vinyl Bromide	6.8		1.0	1.5	1150		20.0	58,4	2.0
Acetone	7.0		1.0	3.1	ND	U	1.0	1,5	1.0
Trichlorofluoromethane	ND	Ū	1.0	1.5	10.2		1.0	2.9	2.0
Isopropyl Alcohol	ND	ŭ	1.0	3.1	ND	Ŭ.	1.0	1.5	1.0
Acrylonitrile	ND	Ü	0.1	1.5	ND	U	1.0	2.9	2.0
1,1-Dichloroethylene	ND	<del>- ŭ</del>	1.0	1.5	ND	U	1.0	1.5	0.1
Methylene Chloride	ND	<del>Ŭ</del>	1.0	1.5	ND	U	1.0	1.5	1.0
Allyl Chloride (Chloroprene)	ND	Ū	1.0	1.5	ND	U	1.0	1,5	1.0
Carbon Disulfide	ND	<del>U</del>	1.0	1.5	ND	U	1.0	1.5	1.0
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	<del></del>	1.0	1.5	ND	U	1.0	1.5	1.0
t-1,2-Dichloroethylene	ND	Ü	I.0		ND	U	1.0	1.5	1.0
1,1-Dichloroethane	ND	<del>- U</del>	1.0	1.5	ND	U	1.0	1.5	1.0
MTBE	ND	Ü	1.0	1.5	ND	U	1.0	1.5	1.0
Vinyl Acetate	ND	U U		1.5	ND	U	1.0	1.5	1.0
2-Butarione (MEK)	ND	<del>U</del>	1.0	1.5	ND	U	1.0	1.5	1.0
cis-1,2- Dichloroethene	2.5		1.0	1.5	ND	U	0.1	1.5	1.0
Hexane	ND	U -	1.0	1.5	4.5		1.0	1.5	1.0
Chloroform	ND	U -	1.0	1.5	ND	U	1.0	1,5	1.0
Ethyl Acetate	ND	<del>- 8 -</del> 1	1.0	1.5	ND	Ü	1.0	1.5	1.0
Tetrahydrofuran	ND ND	<del>- U -  </del>	1.0	1.5	ND	U	1.0	1.5	1.0
1,2-Dichloroethane	ND	<del>- U</del>	1.0	1.5	ND	U	1.0	1.5	1.0
1,1,1-Trichloroethane	ND	- 11	1.0	1.5	ND	Ü	1.0	1.5	1.0
	NU		1.0	1.5	ND	U	1.0	1.5	1.0



# Laboratory Analysis Report

CLIENT PROJECT NO

: Stemen Environmental : 070531

MATRIX UNITS

: AIR : PPB (v/v) DATE RECEIVED DATE REPORTED

: 05/23/07

: 05/24/07

# VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client (D) AAC (D)	Mike	's Bakery ca 170531-2577	ın #3	. Sample	Mik	e's Bakery c	an #4	T			
Date Sampled		5/22/2007	<del>''</del>			<u>0</u> 70531-2577	1	Sample	Method		
Date Analyzed		5/23/2007		Reporting	ļ <u></u>	5/22/2007		Reporting			
Can Dilution Factor	<del>-</del>	1.51			Limit 5/23/2007		Limit	Reporting			
	Result	Ouglifier	Tha To	(RLxDF's)		1.59		(RLxDF's)	Limit		
Chlorodifluoromethane	4.2	Quantier	Dil Fac,	<u> </u>	Result	Qualifier	Dil Fac.	(KULUI S)			
Propylene	ND	Ú	1.0	1.5	6.3		1.0	1.6	1.0		
Dichlorodifluoromethane	ND	Ü	1.0	1.5	ND	Ü	1.0	1.6	1,0		
Chloromethane	ND	U	1.0	1.5	ND	U	1.0	1.6	1.0		
1,2-Distiloro-1,1,2,2-Tetrafluoroethane	ND	Ü	1.0	1.5 1.5	ND	Ü	1.0	1.6	1.0		
Vinyl Chloride	ND	<u> </u>	1.0		ND	Ū	1.0	1.6	1.0		
Methanol	51.4		1.0	1.5	ND	Ŭ	0.1	1.6	1.0		
1,3-Batadiene	ND	Ū	1.0	7.6 1.5	50.2	ļ	1.0	7.9	5.0		
Broppemethane	ND	Ü	1.0	1.5	ND	U	1.0	1.6	1.0		
Chleroethane	ND	Ü	1.0	1.5	ND	Ŭ	1.0	1.6	1.0		
Dictiorofluoromethane	ND	Ū	1.0	1.5	ND	Ü	1.0	1.6	1.0		
Ethanol	1730		25.0	75.5	ND 1790	U	1.0	1.6	1.0		
Vinyl Bromide	ND	U	1.0	1.5	ND		25.0	79.5	2.0		
Acetone	11.2		1.0	3.0	10.1	Ü	1.0	1.6	1.0		
Trielfarofluoromethane	ND	Ū	1.0	1.5	ND ND	<del></del>	1.0	3.2	2.0		
Isopropyl Alcohol	ND	Ü	1.0	3.0	6.5	U	1.0	1.6	1.0		
Acrykonitrile	ND	Ü	1.0	1.5	ND ND		1.0	3.2	2.0		
1,1-Dichloroethylene	ND	Ű	1.0	1.5	ND ND	U	1.0	1.6	1.0		
Methylene Chloride	ND ·	Ū	1.0	1.5	ND ND	U	1.0	1.6	1,0		
Allyl Chloride (Chloroprene)	ND	Ü	1.0	1.5		U	1.0	1.6	1.0		
Carbon Disulfide	ND	<del>- ŭ</del>	1.0	1.5	ND	Ü	1.0	1.6	1.0		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	<del>- ŭ -</del>	1.0	1.5	ND	U	1.0	1.6	1.0		
1-1,2-Dichloroethylene	ND	<del>- ŭ</del>	1.0	1.5	ND	U	1.0	1.6	1.0		
1,1-Dichloroethane	ND	<del>- ŭ -</del> l	1.0	1.5	ND	U	1.0	1.6	1.0		
MTBE	ND	Ü	1.0	1.5	ND ND	Ü	1,0	1.6	1.0		
Vinyl Acetate	ND	<del>U</del>	1.0	1.5		U	1.0	1.6	1.0		
2-Butanone (MEK)	ND	<del>- ŭ -</del>	1.0	1.5	ND	U	1.0	1.6	1.0		
is-1,2- Dichloroethene	ND	Ŭ	1.0	1.5	ND ND	U	1.0	1.6	1,0		
lexane	ND	<del>- ŭ -</del>	1.0	1.5		U	1.0	1.6	1.0		
Chloroform	ND	<del></del>	1.0	1.5	ND ND	υ	1.0	16	1.0		
Ethyl Acetate	ND	<del>- ŭ -</del>	1.0	1.5		Ü	1.0	1.6	1.0		
ctrahydrofuran	ND	<del>- 5 - 1</del>	1.0	1.5	ND	Ü	1.0	1.6	1.0		
,2-Dichloroethane	ND	<del>- ŏ -</del>	1.0	1.5	ND	U	1.0	1.6	1.0		
,1,1-Trichloroethane	ND	<del>- ö -  </del>	1.0	1.5	ND	Ü	1.0	1.6	1.0		
		<del></del>	1.0	1,5	ND	U	1.0	1.6	1.0		



### Laboratory Analysis Report

CLIENT PROJECT NO : Stemen Environmental

MATRIX UNITS

: 070531

: AIR : PPB (v/v) DATE RECEIVED

: 05/23/07

DATE REPORTED : 05/24/07

VOLATILE ORGANIC COMPOUNDS BY EPA TO-15

Client TD AAC ID Date Sampled	Mike	e's Bakery ca 170531-2577	un #3 0	Sample	Mik	e's Bakery c	an #4	C-, -1.	
Date Sampled		5/22/2007	·	Reporting	ļ	070531-2577 5/22/2007	Sample	Method	
Date Analyzed	:	5/23/2007		Limit	5/23/2007			Reporting	Reporting
Can Dilution Factor		1.51	<del></del>	(RLxDF's)		1.59	Limit	Limit	
	Result	Qualifier	Dil Fac.	(KTZDE.2)	Result	Qualifier		(RLxDF's)	LARK
Веплене	ND	Ü	1.0	1.5	ND	Unaither	Dil. Fac.	<u> </u>	
Carbon Tetrachloride	ND	Ü	1.0	1.5	ND	<del>  U</del>	1.0	1.6	1.0
Cyclohexane	ND	Ū	1.0	1.5	ND	<del>                                     </del>	1.0	1.6	1.0
1,2-Dichloropropane	ND	Ū	1.0	1.5	ND	<del>                                     </del>	1.0	1.6	1.0
Bromodichloromethane	ND	Ū	1.0	1,5	ND	<del>                                     </del>	1.0	1.6	1.0
1,4-Dioxane	ND	U	1.0	1.5	ND	T T	1.0	1.6	1.0
Trichloroethene	2.4		1.0	I.5	ND	<del></del> -	1.0	1.6	1.6
2,2,4-Trimethylpentane	ND	Ū	1.0	1.5	ND ND	U	1.0	1.6	1.0
Hemile	ND	Ŭ	1.0	1.5		U	1.0	1.6	1.0
cis 3-Dichloropropene	ND	Ŭ	1.0	. 1.5	ND	U	1.0	1.6	1.0
4-Methyl-2-Pentanone (MiBK)	ND	Ü	1.0		ND	Ü	1.0	1.6	1.0
t-1,3-Dichloropropene	ND	Ü	1.0	1,5	ND	Ū	1.0	1.6	1.0
1,1,2-Trichloroethane	ND	<del>- U</del> -	1.0	1.5	ND	U	1.0	1.6	1.0
Tohene	ND	U	1.0	1.5	ND	U	1.0	1.6	1.0
2-Hesanone	ND	<del>- ŭ</del>	1.0	1.5	ND	Ü	1.0	1.6	1.0
Dibasmochloromethane	ND	$-\ddot{\mathbf{U}}$	1.0	1.5	ND	Ü	1.0	1.6	1,0
1,2-Dibromoethane	ND	Ü	0.1	1.5	ND	Ŭ	1.0	1.6	1,0
Tetrachloroethylene	303	—— <u> </u>	10.0	1.5	ND	U	1.0	1.6	1.0
Chlorobenzene	ND	Ü	1.0	15.1	399	<u> </u>	10.0	15.9	1.0
Ethylbenzene	ND	U		1.5	ND ND	U	I.0	1.6	1.0
m- & p-Xylenes	ND	U	1.0	1.5	ND	U	1.0	1.6	1.0
Bromoform	ND	<del>U</del>	1.0	3.0′	ND	U	1.0	3.2	2,0
Styreno	ND	U	1.0	4/5	ND	U	1.0	4.8	3.0
1,1,2,2-Tetrachloroethane	ND	<del>- 1</del>	1.0	1.5	ND	U	1.0	1.6	1.0
o-Xylene	ND ND		1.0	/1.5	ND	Ü	1.0	1.6	1.0
4-Ethyltoluene	ND	U	1.0	/ 1.5	ДN	U	1.0	1.6	1.0
1,3,5-Trimethylbenzene	ND	U U	1.0	/ 1.5	ND	U	1.0	1.6	1.0
1,2,4-Trimethylbenzene	ND	<del>U</del>	1.0	1.5	ND	U	1.0	1.6	1.0
Benzyl Chloride	ND		1.0	1,5	ND	Ū	1.0	1.6	1.0
1,3-Dichlorobenzene	ND	U	1.0 7	7.6	ND	Ū	1.0	7.9	5.0
1,4-Dichlorobenzene		U	1.0 /	1.5	ND	Ü	1.0	1.6	1.0
1,2-Dichlorobenzene	ND	U	1.0/	1.5	ND	U	1.0	1.6	1.0
1,2,4-Trichlorobenzene	ND	U	1.0	1.5	ND	<del>- ŭ -</del>  -	1.0	1.6	1.0
Hexachlorobutadiene	ND	Ü	1/.0	1.5	ND	Ü	1.0	1.6	1.0
REP. Cymogete Ctd. 0/ D	ND	Ü	1,0	1.5	ЙD	Ü	1.0	1.6	1.0
- Analyte was detected. However the analyte cone		98%	<u>/                                      </u>			98%	-1.17		70-130%

Detection Limit (MDL) and the Reporting Limit (RL).

!! - Estimated

399 ppb \* 6.89 = 2,750 mg/m3 PCE

Sucha S. Parmar, PhD Technical Director

E - Estimated value, result outside linear range of instrument.

U - Compound was analyzed for, but was not detected.



ANALYSIS DATE : 05/23/07

INSTRUMENT ID

: GC/MS-01

ANALYST

: JJG

OI OTS

: PS040407-01

# VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-14/TO-15

Continuing Calibration Verification of the 05/03/07 Calibration

Сатронная	Conc	Daily Conc	XREC
4-BFB (surrogate standard)***	20	20.19	101
Chlorodifluoromethane*	10	9.05	91
Propylene*	- 10	9.58	96
DiCIDIFMethane*	10	8.79	88
CHLOROMETHANE*	10	8.69	87
1,2 DiCl-1,1,2,2-TetraFEthane*	10	8.15	82
VINYL CHLORIDE*	01	9.11	91
Methanol*	10	8.88	89
1,3-Butadiene*	10	9.18	92
BROMOMETHANE*	10	9.09	91
CHLOROETHANE*	10	9.47	95
Dichlorofluoromethane*	10	9.17	92
Ethanol*	10	9.26	93
Vinyl Bromide*	10	9.68	97
Acetone*	10	8.66	87
TRICHLOROFLUOROMETHANE*	10	10.08	101
[sopropanol*	10	10.11	101
Acrylonitrile*	-10	10.76	108
1,1 DICHLOROETHENE*	10	10.80	108
METHYLENE CHLORIDE*	10	9.94	99
Allyl CHLORIDE*	10	11.82	118
Carbon disulfide*	10	10.94	109
1,1,2-TRICHLORO-1,2,2-TRIFLUO	10	9,93	99
trans-1,2- DICHLOROETHYLENE*	10	10.89	109
I,1- DICHLOROETHANE*	10	10.65	107
МТВЕ*	10	9.83	98
Vinyl Acetate*	10	9.39	94
MEK*	10 ·	10.35	104
is-1,2- DICHLOROETHYLENE*	10	11.50	115
Hexane*	10	10.30	103
CHLOROFORM*	10	10.59	103
Ethyl Acetnte*	10	10.39	105
Tetrahydrofuran*	10	9.44	94
,2-DICHLOROETHANE*	10	11.06	111
,1,1-TRICHLOROETHANE®	10		
	10	11.25	113



ANALYSIS DATE : 05/23/07

ANALYST : JJG

INSTRUMENT ID

: GC/MS-01

STD ID

: PS040407-01

### VOLATILE ORGANIC COMPOUNDS BY EPA METHOD TO-14/TO-15

Continuing Calibration Verification of the 05/03/07 Calibration

Сатромназ	Conc	Daily Cone	MARC
BENZENE**	10	11.32	113
CARBON TETRACHLORIDE**	10.	11.09	111
Cyclohexane**	10	10.91	109
1,2-DICHLOROPROPANE**	10	11.18	112
Bromodichloromethane**	10	11.37	114
1,4-Dioxane**	10	11.17	112
TRICHLOROETHENE**	10	10.89	109
2,2,4-Trimethylpentene**	10	11.16	112
Heptane**	10	11.51	115
cis- 1,3 DICHLOROPROPENE**	10	9.70	97
MiBK**	10	10.83	108
trans 1,3 DICHLOROPROPENE**	10	9.41	94
1,1,2-TRICHLOROETHANE**	10	10.97	110
TOLUENE**	- 10	9.87	99
2-Hexanone**	10	11.40	114
Dibromochloromethane**	10	11.75	118
1,2 DIBROMOETHANE**	10	11.32	113
TETRACHLOROETHYLENE**	10	11,38	114
CHLOROBENZENE***	10	10.88	109
ETHYLBENZENE***	10	10.75	108
m-, & p- XYLENES***	20	20.28	101
Bromoform***	10	9.98	100
STYRENE***	10	9.93	99
1,1,2,2-TETRACHLORETHANE**	10	10.75	108
o- XYLENE***	10	10.15	102
Ethyltoluene***	10	10.87	109
I,3,5-TRIMETHYLBENZENE***	10	10.27	103
1,2,4-TRIMETHYLBENZENE***	10	9.99	100
Benzyl Chloride***	10	9.94	99
1,3- DICHLOROBENZENE***	l0	11,22	112
1,4- DICHLOROBENZENE***	10	[1,53	115
1,2-DICHLOROBENZENE***	10	11.64	116
1,2,4-TRICHLOROBENZENE***	10	11.88	119
HEXACHLOROBUTADIENE***	10	12.50	125

\* Internal std calculation IS1 : Bromochloromethane

\*\* Internal std calculation IS2: 1,4-Diffuorobenzene

\*\*\* Internal std calculation IS3 : Chlorobenzenc-d5

%REC should be 70-130%

!! Compound failed criteria and results should be considered estimated.

Sucha S. Parmar, PhD

Technical Director



# Quality Control/Quality Assurance Report

CLIENT ID

: Laboratory Control Spike

DATE ANALYZED

: 05/23/07

AAC ID

: LCS/LCSD

DATE REPORTED

: 05/23/07

**MEDIA** 

: Air

. UNITS

: ppbv

# TO-14/15 Laboratory Control Spike Recovery

Compound	Sample	Spike	Spike	Dup Spike	Spike	Spike Dup	RPD**
Compound	Conc.	Added	Res	Res	% Rec *	% Rec *	%
1,1-DICHLOROETHYLENE	0.0	10.00	10.80	11.10	108	111	2.7
ETHYLENE CHLORIDE	0,0	10.00	9.94	10.07	99	101	1.3
BENZENE	0.0	10.00	11.32	12.07	113	121	6.4
TRICHLOROETHENE	0.0	10.00	10.89	11.29	109	113	3.6
OLUENE	0.0	10.00	9.87	10.55	99	105	6.7
TETRACHLOROETHYLENE	0,0	10.00	11.38	11.95	114	119	4.9
CHLOROBENZENE	0.0	10.00	10.88	11.38	109	114	4.5
ETHYLBENZENE	0,0	10.00	10.75	11.28	107	113	4.8
m-, & p- XYLENES	0.0	20.00	20.28	21.24	101	106	4.6
o- XYLENE	0.0	10.00	10.15	10.63	101	106	4.6

<sup>\*</sup> Must be 70-130%

Sucha S. Parmar, PhD

Technical Director

<sup>\*\*</sup> Must be < 25%



# Method Blank Analysis Report

MATRIX UNITS : AIR : ppbv

ANALYSIS DATE REPORT DATE : 05/23/07 : 05/23/07

VOLATILE ORGANIC COMPOUNDS BY EPA TO-14/TO-15

Client ID	Method Blank	RL			
AACD	MB-052307				
Chlorodifluoromethane*	≺RL	1.0			
Propylene*	<rl< td=""><td>1.0</td></rl<>	1.0			
DiCIDIFMethane*	<rl< td=""><td>1.0</td></rl<>	1.0			
CHLOROMETHANE*	<rl< td=""><td>1.0</td></rl<>	1.0			
I,2 DiCl-1,1,2,2-TetraFEthane*	<rl< td=""><td>1.0</td></rl<>	1.0			
VINYL CHLORIDE*	<rl< td=""><td>1.0</td></rl<>	1.0			
Methanol*	<rl.< td=""><td>5.0</td></rl.<>	5.0			
1,3-Butadiene*	<rl< td=""><td>1.0</td></rl<>	1.0			
BROMOMETHANE*	<rl< td=""><td>1.0</td></rl<>	1.0			
CHLOROETHANE*	<rl< td=""><td>1.0</td></rl<>	1.0			
Dichlorofluoromethane	<rl< td=""><td>1.0</td></rl<>	1.0			
Ethanol*	<rl< td=""><td>2.0</td></rl<>	2.0			
Vinyl Bromide*	<rl< td=""><td>1.0</td></rl<>	1.0			
Acetone*	<rl< td=""><td>2.0</td></rl<>	2.0			
TRICHLOROFLUOROMETHANE*	<rl< td=""><td>1.0</td></rl<>	1.0			
Isopropyl Alcohol*	<rl< td=""><td>2.0</td></rl<>	2.0			
Acrylonitrile*	<rl< td=""><td>1.0</td></rl<>	1.0			
1,1 DICHLOROETHENE®	<rl< td=""><td>1.0</td></rl<>	1.0			
METHYLENE CHLORIDE*	<rl.< td=""><td>1.0</td></rl.<>	1.0			
Allyi CHLORIDE*	≺RL	1.0			
Carbon disulfide*	<rl< td=""><td>1.0</td></rl<>	1.0			
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE*	<rl< td=""><td>1.0</td></rl<>	1.0			
trans-1,2- DICHLOROETHYLENE*	<rl< td=""><td>1.0</td></rl<>	1.0			
1,1- DICHLOROETHANE*	<rl< td=""><td>1.0</td></rl<>	1.0			
MTBE*	<rl< td=""><td>1.0</td></rl<>	1.0			
Vinyl Acetate*	<rl< td=""><td>1.0</td></rl<>	1.0			
MEK+	<rl< td=""><td>1.0</td></rl<>	1.0			
cis-1,2- DICHLOROETHYLENE*	≺RL	1.0			
Hexane*	<rl< td=""><td>1.0</td></rl<>	1.0			
CHLOROFORM*	≺RL	1.0			
Ethyl Acetate*	<rl< td=""><td>1.0</td></rl<>	1.0			
Tetrahydrofuran*	<rl< td=""><td>1.0</td></rl<>	1.0			
1,2-DICHLOROETHANE*	<rl< td=""><td>1.0</td></rl<>	1.0			
1,1,1-TRICHLOROETHANE*	- RL	1.0			
BENZENE**	₹RL	1.0			
CARBON TETRACHLORIDE**	<rl< td=""><td>1.0</td></rl<>	1.0			
Cyclohexane**	≺RL	1.0			
1,2-DICHLOROPROPANE**	- RL				
Bromodichloromethane**	- RL	1.0			
1.4-Dioxane**	≺RL	1.0			
TRICHLOROETHENE**	- KL	1.0			
2,2,4-Trimethylpentane**	- ⟨RL	1.0			
Heptane**	<rl< td=""><td>· - · · · · · · · · · · · · · · · · · ·</td></rl<>	· - · · · · · · · · · · · · · · · · · ·			
11chatie		1.0			



### Method Blank Analysis Report

- MATRIX UNITS

: AIR : ppbv ANALYSIS DATE REPORT DATE

: 05/23/07 : 05/23/07

VOLATILE ORGANIC COMPOUNDS BY EPA TO-14/TO-15

Method Blank	D.I
MB 052307	RL
<rl< td=""><td>1.0</td></rl<>	1.0
· <rl< td=""><td>1.0</td></rl<>	1.0
<rl< td=""><td>1.0</td></rl<>	1.0
<rl< td=""><td>1.0</td></rl<>	1.0
<rl< td=""><td>0.1</td></rl<>	0.1
<rl< td=""><td>1.0</td></rl<>	1.0
<rl< td=""><td>2.0</td></rl<>	2.0
<rl.< td=""><td>3.0</td></rl.<>	3.0
<rl< td=""><td>1.0</td></rl<>	1.0
<rl< td=""><td>1.0</td></rl<>	1.0
. <rl< td=""><td>1,0</td></rl<>	1,0
<rl< td=""><td>1.0</td></rl<>	1.0
<rl< td=""><td>1.0</td></rl<>	1.0
<rl< td=""><td>1.0</td></rl<>	1.0
<rl< td=""><td>5.0</td></rl<>	5.0
<rl< td=""><td>1.0</td></rl<>	1.0
. <rl< td=""><td>1.0</td></rl<>	1.0
ompounds	
91%	
	MB 052307

RL - Reporting Limit

Sucha S. Parmar, PhD Technical Director



# Quality Control/Quality Assurance Report

AAC ID

: 070528-25759

DATE ANALYZED

: 05/23/07

MATRIX : Air

DATE REPORTED

: 05/23/07

UNITS

: ppbv

# TO-14/TO-15 Duplicate Analysis

Compound	Semple	Duplicate	% RPD
Chlorodifluoromethene*	Cone	Cone 1.9	
Propylene*	- ₹RL	- RL	1.I
DiCIDIFMethene*		- ⟨RL	0.0
CHLOROMETHANE*	-   -	- ⟨RL	
1,2 DiCl-1,1,2,2-TetraFEthane*	→ <del>QRL</del>	\\ \delta \text{RL}	0.0
VINYL CHLORIDE*	-   -	⟨RL	0.0
Methanol*	10.5	10.4	0.0
1,3-Butadiene*	- RL	10.4   <rl< td=""><td>1.0</td></rl<>	1.0
BROMOMETHANE*	≺RL	≺RL	0.0
CHLOROETHANE*	≺RL	≺RL.	0.0
Dichlorofluoromethane	→ RL	≺RL ≺RL	0.0
Rihanol*	5,5	5,5	0.0
Vinyl Bromide*	√RIL	- 3.3 <rl< td=""><td>0.9</td></rl<>	0.9
Acetone*	4.0	4.1	0.0
TRICHLOROFLUOROMETHANE*		4.1 <rl< td=""><td>1.2</td></rl<>	1.2
Isopropyl Alcohol*	<rl< td=""><td>₹RL</td><td>0.0</td></rl<>	₹RL	0.0
Acrylonitrile*		- RL	0.0
I,1 DICHLOROETHENE*		₹RL	0.0
METHYLENE CHLORIDE*	- RL		
Allyl CHLORIDE*	₹RL	≺RL	0,0
Carbon disulfide*	₹Ł	≺RL	0.0
.1,2-TRICHLORO-1,22-TRIFLUOROSTHANE*	₹RL	√RL	0.0
rans-1,2- DICHLOROETHYLENE*	₹RL	≺RL ≺RL	0.0 ′
,1- DICHLOROBTHANE*	<rl< td=""><td>≺RL</td><td>0.0</td></rl<>	≺RL	0.0
MTBE*		≺RL.	0.0
Vinyl Acetate*	⟨RL	≺RL	0.0
MEK*	- RL	√RL ≪RL	0.0
is-1,2- DICHLOROETHYLENE*	· <rl< td=""><td>≺RL ≺RL</td><td>0.0</td></rl<>	≺RL ≺RL	0.0
-lexane*	- RL	√RL √RL	0.0
CHLOROFORM*	- <del>\Q</del> RL	⟨RL	0.0
Sthyl Acetate*	→ RL	₹RL	
Cetrahydrofuran*	₹RL	≺RL ·	0,0
,2-DICHLOROETHANE*	- RL	- RL	0.0
,I,I-TRICHLOROBIHANE*	≺RL.	- RL	0.0
BENZENE**			0.0
ARBON TETRACHLORIDE**	- ⟨RL	<rl< td=""><td>0.0</td></rl<>	0.0
		\KL	0.0



### Quality Control/Quality Assurance Report

AAC ID

: 070528-25759

DATE ANALYZED DATE REPORTED : 05/23/07

MATRIX

: Air DATE I UNITS : 05/23/07 : ppby

### TO-14/TO-15 Duplicate Analysis

Compound	Sample Cone	Duplicate Cone	% RPD
Cyclohexane**	≪RL	⊲RL	0.0
1,2-DICHLOROPROPANE**	≺RL	≺RL	0.0
Bromodichiloromethene**	⟨RL	≺RL	0.0
1,4-Dioxane**	⊲RL	<rl< td=""><td>0.0</td></rl<>	0.0
TRICHLOROETHENE**	<rl< td=""><td><rl< td=""><td>0.0</td></rl<></td></rl<>	<rl< td=""><td>0.0</td></rl<>	0.0
2,2,4-Trimethylpentane**	<rl< td=""><td>⊲RL</td><td>0.0</td></rl<>	⊲RL	0.0
Heptane**	<rl< td=""><td>≺RL</td><td>0.0</td></rl<>	≺RL	0.0
cis- 1,3 DICHLÖROPROPENE**	<rl< td=""><td><rl< td=""><td>0.0</td></rl<></td></rl<>	<rl< td=""><td>0.0</td></rl<>	0.0
MiBK**	<rl< td=""><td><rl< td=""><td>0.0</td></rl<></td></rl<>	<rl< td=""><td>0.0</td></rl<>	0.0
trans 1,3 DICELOROPROPENE**	<rl< td=""><td><rl< td=""><td>0.0</td></rl<></td></rl<>	<rl< td=""><td>0.0</td></rl<>	0.0
1,1,2-TRICHLORORTHANE**	<rl< td=""><td>⊲RL</td><td>0.0</td></rl<>	⊲RL	0.0
TOLUBNE**	<rl< td=""><td><rl .<="" td=""><td>0.0</td></rl></td></rl<>	<rl .<="" td=""><td>0.0</td></rl>	0.0
2-Hexanone**	<rl< td=""><td>≺RL</td><td>0.0</td></rl<>	≺RL	0.0
Dibromochleromethene**	≺RL	⊲RĹ	0.0
1,2 DIBROMOETHANE**	<\RL	≺RL	0.0
TETRACHLOROETHYLENE**	<rl .<="" td=""><td>≺RL</td><td>0.0</td></rl>	≺RL	0.0
CHLOROBENZENE***	<rl td="" ·<=""><td>⊲RL</td><td>0.0</td></rl>	⊲RL	0.0
ETHYLBENZENH***	<rl td="" ·<=""><td><rl< td=""><td>0,0</td></rl<></td></rl>	<rl< td=""><td>0,0</td></rl<>	0,0
m-, & p- XYEENES***	≺RL	<rl< td=""><td>0.0</td></rl<>	0.0
Bromoform***	<\RL	<rl< td=""><td>0.0</td></rl<>	0.0
alakkne***	₹RL	<rl< td=""><td>0.0</td></rl<>	0.0
1,1,2,2-TETRACHLORETHANE***	<rl.< td=""><td><rl< td=""><td>0.0</td></rl<></td></rl.<>	<rl< td=""><td>0.0</td></rl<>	0.0
o- XYLENE***	<rl< td=""><td><rl< td=""><td>0.0</td></rl<></td></rl<>	<rl< td=""><td>0.0</td></rl<>	0.0
Ethyltoluene***	<rl< td=""><td><rl< td=""><td>0.0</td></rl<></td></rl<>	<rl< td=""><td>0.0</td></rl<>	0.0
1,3,5- TRIMBTHYLBENZENE***	<rl< td=""><td><rl< td=""><td>0.0</td></rl<></td></rl<>	<rl< td=""><td>0.0</td></rl<>	0.0
1,2,4- TRIMETHYLBENZENE***	<rl< td=""><td><rl< td=""><td>0.0</td></rl<></td></rl<>	<rl< td=""><td>0.0</td></rl<>	0.0
Benzyl Chloride***	≺RL	<rl< td=""><td>0.0</td></rl<>	0.0
1,3- DICHLOROBENZENE***	<rl< td=""><td>≺RL</td><td>9.0</td></rl<>	≺RL	9.0
1,4- DICHLOROBENZENE***	≺RL	≺RL	0.0
1,2-DICHLOROBENZENE***	<rl< td=""><td><rl< td=""><td>0.0</td></rl<></td></rl<>	<rl< td=""><td>0.0</td></rl<>	0.0
1,2,4 TRICHLOROBENZENE***	≺RL	<rl< td=""><td>0.0</td></rl<>	0.0
Hexachlorobutadiene***	₹RL	<rl< td=""><td>0.0</td></rl<>	0.0
System 1	Aunitoring Compo	ınds	
BFB-Surrogate Std. % Recovery	98%	96%	2.4
RL - Reporting Limit			

Sucha S. Parmar, Ph

Technical Director





# ATMOSPHERIC ANALYSIS & CONSULTING, INC. 1534 Eastman Avenue, Suite A Ventura, Gallfornia 9303 Phone (805),650+1642 Fax(805)-850-1644 E-mail: aactab@earthlink.net

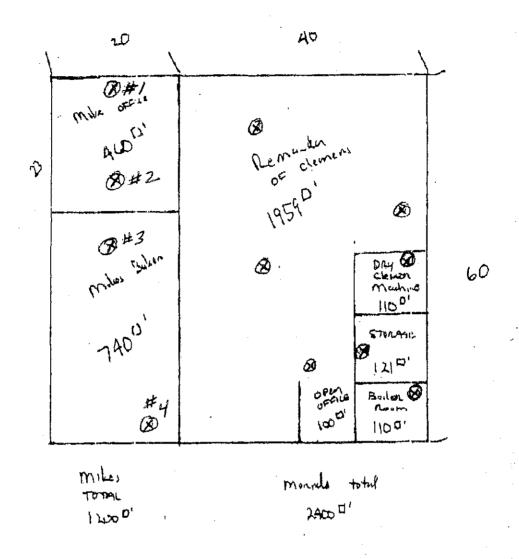
AAC Project No. 01053

Page 13

Reinquished by (Signature): Print Name:	Firm Normal	Religions to Compare 1.							7577 1 5/22/07 8 Kr A:1 M.	257870 S/22/07 8kg A:c Mi	25769 Stato 8kg Air M.	25768 5/12/07 8 hr Air M	to. Sampled Sampled Type		Faul Stemen NA Sampler's Name (Pint Name)  Faul Stemen		nontal
	Dete/Thie								Mikes Bakery can #4 Summe	Mike's Baker Cunts Syppost	Mithe's Office Can #2 Suppose	Mike's Office can't some	Client Sample:ID/Description Type/No. of Containers	u e	ui•	ui •	Mikes Defice / Bakery roject Number NA Sampler's signature
Received by (signature):	Received by (signature):								X 407	× × × × × × × × × × × × × × × × × × ×	× sar	Х 394	To	- 15	-15	-15	Analysis requested
Print Name	Print Name 512				Special instructions/remarks:	Other (Specify)	5 Day Normal	Turnaround Time 24-Hr 48-Hr X	P.O. #	Affn:	Same as above	Send invoice to:	Phone#: 360- 438-9521	Attn: Paul Stenen	Attn: Paul Stenen	ST24 Puget Brack Road, NE Olympia, WA 98576 Attn: Paul Stenen	202.3.

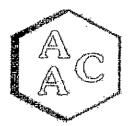
PAGE 31

125 2536276637



@ Suggested Sampling Location





Page 2 of 2 Price Quote# 07-063

Sampling Location	Area (Ft <sup>2</sup> )	Number of Samples
Mike's Office	460	2 (8-hour average)
Mike's Bakery	740	3 (8-hour average)
Drycleaning Machine	110	2 (Grab samples when machine is in operation)
Storage Room	121	2 grab samples or 1 hour sample
Boiler Room	110	2 grab samples or 1 hour sample
Remainder of cleaning facility where employees work most of the time.	1,959	4 (8-hour average)

Suggested sample collection points in various rooms are marked on the facility map you provided (see attached). Please call me if I can be of any further help.

Our standard turnaround is 10 business days. Rush analysis is available upon request in writing and is subject to a surcharge.

I trust that this price quotation is commensurate with your needs at this time. Should you have additional questions, please do not hesitate to call me at (805) 650-1642.

Thank you for your consideration.

Regards.

Dr. Sucha S. Parmar

President SSP/jlg

Client Signature

Date

1534 Eastman Avenue, Suite A, Ventura, CA 93003 (805) 650 1642 (805) 650 1644 fax



/ ALYSES OF AIR FOR SPECIFIC F	ÍALOGENA	TELY	<del> </del>		-	<del></del> -		<u> </u>
h. DROCARBONS BY EPA 8260 ?	IALOOLIVA	1111	not the	A.C.A		1		
, DITT 0200		C NOU!	may Jose	,				
SAMPLE-NUMBER		. BACK						
		BACK	-L	BACK		•		*-
SAMPLE DATE		•••		Y OFFICE			<u>:</u>	· · · · · · · · · · · · · · · · ·
ONWINEL DATE	ALD	2/8/08	2/8/08	2/8/08	•	į.	:	-
<del>.</del>	AIR			-		,		V.
	REPORTING LIMITS		malm					
DICHLORODIFLUOROMETHANE	1	mg/m ND	mg/m ND	mg/m				
CHLOROMETHANE	1	ND	ND	ND	Ē	•		
VINYL CHLORIDE	0.2	ND		ND .		:	•	
BROMOMETHANE	1	: .	ND	: ND	•			-
CHLOROETHANE	!  1	ND	ND ND	ND I			i	
TRICHLOROFLUOROMETHANE	. 1	ND ND	ND	ND				
ACETONE	10	'	ND	ND :				-
METHYLENE CHLORIDE	10	. ND	ND	ND		! :	:	
1,1 DICHLOROETHENE	. 10	ND	ND	. ND			i	
METHYL-T-BUTYL ETHER (MTBE)	. 1	ND	ND	ND				
TRANS-1,2-DICHLOROETHENE	. ! 	ND	ND	ND		:		
1,1 DICHLOROETHANE		ND	ND ND	ND			.1	
2-BUTANONE (MEK)	; I	ND	ND	ND		1	:	
CIS-1,2 DICHLOROETHENE	10	ND	. ND	ND :	•	i		
2,2-DICHLOROPROPANE		ND	ND	ND :			: .	
CHLOROFORM	l a	ND	ND	ND				
BROMOCHLOROMETHANE	1	ND	ND .	ND			÷ .	
1,1,1- TRICHLOROETHANE	: 1	ND	ND	ЙD				
1,2 DICHLOROETHANE (EDC)	1	ND	ND	ND :			. :	
The state of the s	1	ND	ND	ND			•	
1,1-DICHLOROPROPENE CARBON TETRACHLORIDE	1	ND	ND	ND				
BENZENE	1	ND	ND .	ND		:		
the second of th	1	0.38	ND	ND		i		
TRICHLOROETHENE (TCE)	1	ND	ND.	ND				
1,2-DICHLOROPROPANE	1	ND.	ND	ND ·				
DIBROMOMETHANE	. 1	ND	ND	ND				
BROMODICHLOROMETHANE	1	ND	ND .	ND			•	
4-METHYL-2-PENTANONE (MIBK)	. 1	ND	ND	ND			•	
CIS-1,3-DICHLOROPROPENE	1	ND.	ND	ND				
TRANS-1,3-DICHLOROPROPENE	1	. ND	ND	ND	-	•	-	
TOULENE	1	0.19	ND	ND		-		- 1
TRANS-1,3-DICHLOROPROPENE	1	ЙD	ND	ND				
1,1,2,-TRICHLOROETHANE	1	. ND	ND	ND	•	•	•	
2-HEXANONE								

ALYSES OF AIR FOR SPECIFIC I	HALOGENA'	TED.	-	<del>-</del>		<del></del> -		
H r DROCARBONS BY EPA 8260	11 12 0 0 D1 1,1 1	1111				ı.		
						:		
SAMPLE-NUMBER		BACK	FRONT	BACK	•	•		
SAMPLE DATE		2/8/08	BAKERY 2/8/08	· · ·				
	AIR	2/0/00	2/0/00	2/8/08		•		
	REPORTING	3	**	• •		***	ŧ	
	LIMITS	mg/m	mg/m	mg/m				
1,3-DICHLOROPROPANE	1	, ND	ND	ND		:	:	
DIBROMOCHLOROMETHANE	1	ND	ND	ND	. A AL	hy by 1,000 by to prog	30 72	
TETRACHLOROETHENE (PCE)	1	0.65	6.7	2.5	Mully		1 2	
1,2-DIBROMOETHANE	0.1	ND	ND	ND	power	to the pres.	m	
CHLOROBENZENE	1	ND	ND	ND	0,1.4	1 7	•	
1,1,1,2-TETRACHLOROETHANE	1 1	ND	ND	ND				
ETHYLBENZENE	1	ND	ND	ND .		1	•	
XYLENES	1	0.19	ND	ND		7	•	٠
STYRENE	1	ND	ND	ND :				
BROMOFORM	1	ND	ND	ND	,	<u>.</u>		J
1,1,2,2-TETRACHLOROETHANE	4	ND	. ND	ND '	•	!	:	
ISOPROPYLBENZENE	1	ND	ND	ND :		‡ -	-	
,2,3-TRICHCHLOROPROPANE	1	ND	ND	ND	•	ī.		
BROMOBENZENE	1	ND	ND			i	:	
N-PROPYLBENZE	, <u> </u>	ND	ND	ND		: :		
2-CHLOROTOLUENE	1	ND	ND	ND	·	i i		
4-CHLORODOLUENE	1	ND	ND	ND	-	-		
1,3,5-TRIMETHYLBENZE	1	ND	ND .	ND	•	!		
TERT-BUTYLBENZENE	1	ND	ND	, ND				
1,2,4-TRIMETHYBENZENE	· 1	ND	ND	ND				
SEC-BUTYLBENZENE	1	ND	ND	ND				
1,3-DICHLOROBENZENE	1	ND	ND	ND				-
1,4-DICHLOROBENZENE	1	ND	ND	ND ;	- 1	i		,
ISOPROPYLTOULENE	. 1	ND	ND	ND :	:			•
1,2-DICHLOROBENZENE	1	ND .	ND	ND				
N-BUTYLBENZENE	1	ND	ND	ND				
1,2-DIBROMO-3-CHLOROPROPANE	1	ND	ND	ND	٠			
1,2,4-TRICHLOROBENZENE	1	ND	ND	ND				
NAPHTHALENE	1	ND	ND .	ND	•			
HEXACHLORO-1,3-BUTADIENE	1	ND	ND					
1,2,3-TRICHLOROBENZENE	 1	ND	ND	ND ND	-			

AIR ANALYSES OF M	ETHANE BY E	EPA METHOD	8015 IN AIR		<u> </u>
- · ···	,				-
SAMPLE	•	METHANE			
NUMBER	DATE		-		•.
		ppmv		: ,	
BACK BAKERY FRONT BAKERY	2/8/08 2/8/08	3.9 5.5	·		
FRONT OFFICE	2/8/08	6.6			
. ,					
			. v .		
			•		-
		-	•		
			- :	1	:
· · · · · · · · · · · · · · · · · · ·			. · .	· · · · · · · · · · · · · · · · · · ·	
!	, ,	·			j

# Feb 2008 Air Sampling Locations

	20	AD	
		\	_
❖	MINE OFFICE  BACK X OFFICE  FRONT  BAKERY  TSWEEN  Miles	Remarkant Clemens 1959 1959 Dry clemon making	60
		11001	
	74012	STORAGE	
	<b>,</b>	121 <sup>121</sup>	
	Back X Bakery	open Boiler room	_
	Mikes TOTAL 1200'	monrels total	

\* PERISTALAC PUMP AIR QUALITY TESTING LOCATION

 $|L = 1,000 \text{ cm}^3$   $|W^3 = (100 \text{ cm}^3 = 1,000 0,000 \text{ cm}^3 = 1,000 \text{ L}$ TITUS/THRIFTWAY

: Multiply mg/L by 1,000 to get my/m3.

'ALYSES OF SOIL GAS VAPORS I	OR SPECI	FIC HAL	OGENIATI	?D	<u> </u>	-	
LI DROCARBONS BY EPA 8260	OIL DI LCI	ICHAL	OGENATE	?D	÷ -		
			• •	•	-		
SAMPLE-NUMBER	•	GV-1	GV-2	GV-3	GV-4	GV-5	GV-6
		· · · ·	***		:	. 00-0	. GV-0
SAMPLE DATE	SOIL GAS	5/8/08	5/8/08	5/8/08	5/8/08	5/8/08	5/8/08
	VAPORS		•			3/0/00	3/6/08
	REPORTING	3	•			:- :	!
DIGUE OR OPERATOR AS A STATE OF THE STATE OF	LIMITS	ug/L	ug/L	ug/L	ug/L	: : ug/L	ug/L
DICHLORODIFLUOROMETHANE	0.1	ND	ND	ND	ND	ND	. ND
CHLOROMETHANE	0.1	, ND	ND	ND	ND	ND	ND
VINYL CHLORIDE	0.2	ND	ND	ND	0.54	ND	ND
BROMOMETHANE	0.1	ND	ND :	ND	ND	ND	ND
CHLOROETHANE	0.1	ND	ND	ND	ND.	ND	ND
TRICHLOROFLUOROMETHANE	0.1	ND	ND	ND	ND	ND .	ND
ACETONE	.1	ND	ND	ND	ND .	ND I	ND
METHYLENE CHLORIDE	. 1	ND	ND	ND	ND	ND .	ND
1,1 DICHLOROETHENE	0.1	ND	ND	ND :	ND	ND .	ND
METHYL-T-BUTYL ETHER (MTBE)	0.1	ND	ND	ND	ND	ND I	ND
TRANS-1,2-DICHLOROETHENE	0.05	ND	ND	ND	ND	ND .	ND
1,1 DICHLOROETHANE	0.1	ND .	ND :	ND.	ND	ND .	ND
2-BUTANONE (MEK)	0.1	ND	ND	ND ,	ND :	ND :	ND
CIS-1,2 DICHLOROETHENE	0.05	ND	ND	ND	16	0.32	2.5
2,2-DICHLOROPROPANE	0.1	ND :	ND	ND I	ND	ND .	ND
CHLOROFORM	0.05	ND	ND	ND :	ND :	ND :	ND
BROMOCHLOROMETHANE	0.1	ND :	ND	ND .	ND	ND -	ND
1,1,1- TRICHLOROETHANE	0.1	ND :	ND	ND	ND .	ND .	ND
1,2 DICHLOROETHANE (EDC)	0.1	ND	ND	ND	ND	ND .	
1,1-DICHLOROPROPENE	0.1	ND	ND	ND	ND	ND	ND
CARBON TETRACHLORIDE	0.1	ND	ND	ND	ND	ND :	ND
BENZENE	0.02	ND	ND	ND	0.14		ND
TRICHLOROETHENE (TCE)	0.02	ND	ND	. ND	ND	0.39	0.23
1,2-DICHLOROPROPANE	0.1	ND	ND	ND		2.7	7.8
DIBROMOMETHANE	0.1	ND	ND	ND	ND .	ND	ND
BROMODICHLOROMETHANE	0.1	ND	ND .		ND	ND	ND
4-METHYL-2-PENTANONE (MIBK)	0.1	ND	ND :	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPENE	0.1	ND		ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPENE	0.1	ND	ND :	ND	ND	ND	ND
TOULENE	0.1	0.13	ND 0.24	ND	ND	ND	ND.
TRANS-1,3-DICHLOROPROPENE	0.1	0.13 ND	0.24	0.16	0.1	0.27	0.2
1,1,2,-TRICHLOROETHANE	0.1		ND	ND	ND	ND	ND
2-HEXANONE	0.1	ND	ND	ND	ND	ND	ND
	<u> </u>	ND	ND	ND	ND	ND	ND

' 'ALYSES OF SOIL GAS VAPORS I	FOR SPEC	IFIC HALO	OGENATE	ED	<del></del>	:	<u> </u>
h. DROCARBONS BY EPA 8260						•	
SAMPLE-NÜMBER	:		· · · · · · · · · · · · · · · · · · ·	i mengija i en		:	
SAMPLE-NOMBER		GV-1	_GV-2	GV-3	GV-4	GV-5	GV-6
SAMPLE DATE	SOIL GAS	5/8/08	5/8/08	5/8/08	5/8/08	; . · 5/8/08	5/8/08
	VAPORS				370700	. 3/0/00	5/0/08
	REPORTIN				-	:	
1,3-DICHLOROPROPANE	LIMITS	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
DIBROMOCHLOROMETHANE	0.1	, ND	ND _	ND .	ND	ND	ND
TETRACHLOROETHENE (PCE)	0.1	ND	ND .	. <u>. N</u> D	ND.	· ND	ND
1,2-DIBROMOETHANE	0.02	0.11	. 1	0.16	12	1.6	70
CHLOROBENZENE	0.1	: ND	ND	ND	ND	ND	ND
1,1,1,2-TETRACHLOROETHANE	0.1	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	0.1	ND	ND	йД	ND	ND	ND
XYLENES	0.1	ND	ND	ND .	ND	ND :	ND
STYRENE	0.1	ND	0.15	0.23	ND	ND	ND
BROMOFORM	0.1	ND	ND	ND	ND	ND	.ND
1,1,2,2-TETRACHLOROETHANE	0.1	ND ·	ND	ND	ND	ND	ΝĎ
ISOPROPYLBENZENE	0.1	ND	ND	ND	ND	ND į	ND
,2,3-TRICHCHLOROPROPANE	0.1	ND	ND	ND	ND	ND	ND
BROMOBENZENE	0.1	ND	ND	ND	ND	ND :	ND
N-PROPYLBENZE	0.1	ND	ND	ND	ND	ND	ND
2-CHLOROTOLUENE	0.1	ND	ND	ND .	ЙD	ND :	ND
4-CHLORODOLUENE	0.1	ND	ND	ND	ND	ND	ND
1,3,5-TRIMETHYLBENZE	0.1	ND .	ND	ND	ND	ND .	ND
TERT-BUTYLBENZENE	0.1	ND	ND .	ND i	ND ;	ND	ND
1,2,4-TRIMETHYBENZENE	0.1	ND	ND	ND	ND	ND :	ND
SEC-BUTYLBENZENE	0.1	ND	ND	ND	ND	ND	ND
1,3-DICHLOROBENZENE	0.1	ND	ND	ND	ND	ND	ND
1,4-DICHLOROBENZENE	0.1	ND	ND	ND	ND	ND	ND
ISOPROPYLTOULENE	0.1	ND	ND	ND	ND `	ND	ND
1,2-DICHLOROBENZENE	0.1	ND	ND	ND	ND .	ND	ND
N-BUTYLBENZENE	0.1	ND	ND	ND	ND .	ND -	ND
1,2-DIBROMO-3-CHLOROPROPANE	0.1	ND	ND	ND	ND .	ND	ND
· - · · · · · · · · · · · · · · · · · ·	0.1	ND	ND	ND .	ND :	ND	ND
1,2,4-TRICHLOROBENZENE	0.1	ND	ŃD	ND	ND ,	ND :	ND
NAPHTHALENE	0.1	ND	ND	ND.	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	0.1	ND	ND	ND	ND	ND	ND
1,2,3-TRICHLOROBENZENE	0.1	ND	ND	ND	ND	ND	ND

SOIL SEMI-VOLATILE ORGANIC COI	MPOUNDS I	BY METHOD 8270	
		- ME1110D 0210	·
SAMPLE-NUMBER	S-1-15	SOIL	
		REPORTING	
SAMPLE DATE	8/31/06	LIMITS	
DEPTHS	 15		
2 22 1110	IJ		-
	mg/kg	mg/kg	
ACENAPHTHENE	ND	0.1	*
ACENAPHTHYLENE	ND	0.1	
ANTHRACENE	ND	0.1	•
BENZO(a)ANTHRACENE	ND	0.1	•
BENZO(a)PYRENE	ND	0.1	
BENZO(ghi)PERYLENE	ND	0.1	
BENZO(k)FLUORANTHENE	ND	0.1	-
CHRYSENE	, ND	0.1	• .
DIBENZO(a,h)ANTHRACENE	ND	0.1	
FLUORENE	ND	0.1	
FLUORANTHENE	ND	0.1	
INDENO(1,2,3-cd PYRENE	ND	0.1	
ANPHTHALENE	ND	0.1	
1-METHYLNAPTHALENE	ND	0.1	
2-METHYLNAPTHALENE	ND	0.1	
PHENANTHRENE	ND .		
PYRENE		0.1	
I TRENE	ND	0.1	
-			
<del>- "</del>			
SOIL PCB ANALYSES EPA METI	IOD 0000	•	
SOIL FCB ANAL 1 SES EPA METI	300 8082		
CANADI E NI MADED			
SAMPLE-NUMBER	S-1-15		
CAMPLE DATE			
SAMPLE DATE	8/31/06		
DEDMITO			
DEPTHS	15'	•	
<u> </u>	•	MDL	_
PCB-1016	ND	0.2	
PCB-1221	ND	0.2	
PCB-1232	ND	0.1	
PCB-1242	ND	0.1	ĺ
PCB-1248	ND	0.1	
PCB-1254	ND	0.1	ŀ
PCB-1260	ND	0.1	1
I CD-1200	<u> </u>	0.1	

ANALYSES OF SOIL FOR SPECIF	IC HALOGEN	ATED	···		
HYDROCARBONS BY EPA 8260 C			<del>-</del>		• .
DITTO OF THE OTHER DITTO COUNTY	TILONINATEL				
SAMPLE-NUMBER		PB-3-8	S-1-15	DDO 4	504.0
The state of the s		L D-2-0	S-1-15	PB2-4	DC:1-8
SAMPLE DATE		8/31/06	8/31/06	8/31/06	0104100
		0/3//00	0/3//00	0/3/1/06	8/31/06
DEPTH		8'	15'	4'	8'
	SOIL	. ~.	, 10	-1	O
` `	REPORTING	• • • • •			
	LIMITS	mg/kg	mg/kg	mg/kg	mg/kg
DICHLORODIFLUOROMETHANE	0.05	ND	ND .	ND	ND ,
CHLOROMETHANE	0.05	ND	ND	ND	ND
VINYL CHLORIDE	0.01	ND	ND .	NĎ	ND
BROMOMETHANE	0.05	ND	ND	ND	ND
CHLOROETHANE	0.05	ND	ND	ND	ND ND
TRICHLORÖFLÜOROMETHANE	0.05	ND	ND	ND .	
ACETONE	0.5	ND	ND .	ND .	ND
METHYLENE CHLORIDE	0.5	ND	ND		ND
METHYL-T-BUTY ETHER (MTBE)	0.05	ND	ND	ND	ND
TRANS 1,1 DICHLOROETHENE	0.05	ND	ND	ND ND	ND
1,1 DICHLOROETHENE	0.5	ND .	ND		ND
TRANS-1,2-DICHLOROETHENE	0.05	ND .	ND	ND ·	ND
1,1 DICHLOROETHANE	0.05	ND :		ND .	ND
CIS-1,2 DICHLOROETHENE	0.05	ND .	ND	ND	ND
2,2-DICHLOROPROPANE	0.05	ND	ND	ND	ND
CHLOROFORM	0.05	ND	ND :	ND	ND
BROMOCHLOROMETHANE	0.05	ND	ND ND	ND	ND
1,1,1- TRICHLOROETHANE	0.05	ND .	ND -	ND	ND
1,2 DICHLOROETHANE	0.05	ND :		ND	ND
1,1-DICHLOROPROPENE	0.05	ND	ND	ND	ND
CARBON TETRACHLORIDE	0.05		ND	ND	ND
BENZENE	0.03	ND	ND	ND	ND
TRICHLOROETHENE (TCE)	0.02	ND	ND	ND	ND
1,2-DICHLOROPROPANE	0.02	ND ND	ND	ND	ND
DIBROMOMETHANE		ND.	ND	ND	ND .
BROMODICHLOROMETHANE	0.05	ND	ND	ND	ND
4-METHYL-2-PENANONE	0.05	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPENE	0.05	ND	ND	ND	ND
TOULENE	0.05	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPENE	0.05	ND	ND	ND	ND
1,1,2,-TRICHLOROPHOPENE	0.05	ND	ND	ND	ND
2-HEXANONE	0.05	ND	ND	ND	ND
1,3-DICHLOROPROPANE	0.05	ND	ND	ND	ND
	0.05	ND	NĎ	ND	ND
DIBROMOCHLOROMETHANE	0.05	ND	ND	ND	ND
TETRACHLOROETHENE (PCE)	0.02	0.16	ND	0.16	ND
1,2-DIBROMOETHANE (EDB)(*)	0.01	ND	ND	ND	ND
.CHLOROBENZENE	0.05	ND	ND	ЙD	ND
1,1,1,2-TETRACHLOROETHANE	0.05	ND	ND	ЙD	ND .
ETHYLBENZENE	0.05	ND	ND	ND	ND
XYLENES	0.05	0.13	5.7	0.12	0.16

ANALYSES OF SOIL FOR SPECIF	IC HALOGENA	ATED	<del></del>		<del></del> -
HYDROCARBONS BY EPA 8260 C					
SAMPLE-NUMBER	•	PB-3-8	S-1-15	PB2-4	DC1-8
	-		, T. 1 . I I		:
SAMPLE DATE		8/31/06	8/31/06	8/31/06	8/31/06
DEDTU					
DEPTH	2011	8'	15'	4'	8'
	SOIL				·
	REPORTING	n.'			
STYRENE	LIMITS	mg/kg	mg/kg	mg/kg	mg/kg
BROMOFORM	0.05	ND	ND	ND	ND
	0.05	ND	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE	0.05	ЙD	ND	ND	ND
ISOPROPYLBENZENE	0.05	ND	5	ND .	ND
1,2,3-TRICHCHLOROPROPANE	0.05	ND	ND	ND	ND
BROMOBENZENE	0.05	ND	ND	ND	ND
n-PROPYLBENZENE	0.05	ND	14	ND '	ND
2-CHLOROTOLUENE	0.05	ND	ND	ND	ND
4-CHLORODOLUENE	0.05	ND.	ND	ND	ND
1,3,5-TRIMETHYLBENZENE	0.05	ND	37	ND	ND
TERT-BUTYLBENZENE	0.05	ND [	ND "	ND .	ND
1,2,4-TRIMETHYLBENZENE	0.05	ND	71	ND	NĎ
SEC-BUTYLBENZENE	0.05	ND	ND	ND	ND
1,3-DICHLOROBENZENE	0.05	ND	ND :	ND	ND
1,4-DICHLOROBENZENE	0.05	ND .	ND	ND :	ND
ISOPROPYLTOLUENE	0.05	ND	2.3	ND	ND
1,2-DICHLOROBENZENE	0.05	ND	ND	ND	ND
n-BUTYLBENZENE	0.05	ND	6.2	ND	ND
1,2-DIBROMO-3-CHLOROPROPANE	0.05	ND	ND	ND .	ND
1,2,4-TRICHLOROBENZENE	0.05	ND	ND	ND .	ND
NAPHTHALENE	0.05	ND	ND	ND .	ND
HEXACHLORO-1,3-BUTADIENE	0.05	ND	ND	ND	ND
1,2,3-TRICHLOROBENZENE	0.05	ND	ND	ND	ND I

ANALYSES OF SOIL FOR SPECIF	IC HALOGENA	ATED		<u> </u>
HYDROCARBONS BY EPA 8260 C	HLORINATED	) D.L.	(2)	
		Daks	ery (?)	
SAMPLE-NUMBER		B-1 0'-2'	B-1 2'-3'	T-1 0'-1.75'
SAMPLE DATE		6/29/07	6/29/07	6/29/07
DEPTH ·		0'-2'	2'-3'	 0'-1.75
	SOIL		•	
	REPORTING			-
DICHI OBODIELLIODOMETIANE	LIMITS	mg/kg ု	mg/kg	mg/kg
DICHLORODIFLUOROMETHANE	0.05	ND	ND	ND
CHLOROMETHANE VINYL CHLORIDE	0.05	ND	ND	ND
CHLOROETHANE	0.01	ND	ND	ND
TRICHLOROFLUOROMETHANE	0.05	ND	ND	ND
METHYLENE CHLORIDE	0.05	ND	ND	ND
1,1 DICHLOROETHENE	0.05	ND	· ND	ND
TRANS-1,2-DICHLOROETHENE	0.5	ND .	ND	ND
1,1 DICHLOROETHANE	0.05	ND	ND	ND
CIS-1,2 DICHLOROETHENE	0.05	ND	ND	ND
2,2-DICHLOROPROPANE	0.05	ND	ND	ND
CHLOROFORM	0.05	ND	ЙD	ND
BROMOCHLOROMETHANE	0.05	ND	ND	ND
1,1,1-TRICHLOROETHANE	0.05	ND	ND	ND
1,2 DICHLOROETHANE	0.05 0.05	ND	ND	ND '
1,1-DICHLOROPROPENE	0.05	ND :	ND	ND
CARBON TETRACHLORIDE	0.05	ND ND	ND	ND
TRICHLOROETHENE (TCE)	0.03		ND	ND
1,2-DICHLOROPROPANE	0.05	ND ND	ND ND	ND
BROMODICHLOROMETHANE	0.05	ND	ND	ND
CIS-1,3-DICHLOROPROPENE	0.05	ND	ND .	ND
TRANS-1,3-DICHLOROPROPENE	0.05	ND	ND ND	ND
1,1,2,-TRICHLOROETHANE	0.05	ND	ND	ND ND
1,3-DICHLOROPROPANE	0.05	ND	ND	ND
DIBROMOCHLOROMETHANE	0.05	ND	ND	ND
TETRACHLOROETHENE (PCE)	0.02	0.04	0.04	0.04
CHLOROBENZENE	0.05	ND	ND	ND
1,1,1,2-TETRACHLOROETHANE	0.05	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE	0.05	ND	ND	
1,2,3-TRICHCHLOROPROPANE	0.05	ND	ND .	ND ND
2-CHLOROTOLUENE	0.05	ND	ND	ND ND
4-CHLORODOLUENE	0.05	NĎ	ND	ND ND
1,3-DICHLOROBENZENE	0.05	ND	ND	ND ND
1,4-DICHLOROBENZENE	0.05	ND	ND	ND
1,2-DICHLOROBENZENE	0.05	ND	ND	ND
1,2-DIBROMO-3-CHLOROPROPANE	0.05	ND	ND	ND
1,2,4-TRICHLOROBENZENE	0.05	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	0.05	NĎ	ND	ND
1,2,3-TRICHLOROBENZENE	0.05	ND	ND	ND

								,						1	:	******		- Linguis - Lit	140 111 4 111			1		; ;		:	-	#					
		MINERAI	: ::	mg/kg Cin		E	2		Q N	Q	N		R	 Q			ON	Ŋ	<u>Q</u>		R	R		N	Q		ON E	R	QN	ΩN	40		ooa h
	TENDED	0.10		mg/kg ND	}	2	2	- <del>Q</del>	Q Z	<u> </u>	E. E.			ND	NON	R	Q.	NO	R	94	2			2	87	Q.	Q	220	R	R	40		0007
-	.Dx/Dx EX	DIESEL		mg/kg UN	2 E	2	2	QN :	<u>2</u>	Q N	<u>Q</u>		Q L	QN.			2		Q.	2	Q E	· · ·	2	£	£	R		Q.			30		Sew
	EPA METHOD NWTPH-D	GASOLINE		mg/kg 920		360	Q R		ΩN	ΩN	30	ΩX	ΩZ	S	ON N	S	OZ.	ON.		Q.	QZ	QN	Q Z	Q Z	ND	Q.	N	Q.	QN.	S	10		30
1 VVA Y	EPA METH	TOTAL		mg/kg 12		- ! .			2	OZ.	***	ΩN	ND	- R		NO.	ND	ON.		NO.	DZ.	******	· · · · · · · ·	*	*	꾟	. <del>X</del>	**	*	*	0.05		
TINDS/INKI	YDROCARBONS	ETHYL- BENZENE		mg/kg	N		ON.			ON.	**	OZ.	S	ND	QZ	QX.	QN	QN.	N N	QZ.	ON.		**************************************	¥.	*	<del>10</del>	*	**	*	*	0.05		
		TOLUENE	5 E	mg/kg 4 1		- -	, E	QZ	N ON	QN	*	ΩN	ΩZ	ΕΩΖ :		ΩZ	ΩZ		R	OZ.	QN	<del>*</del>	**************************************	×	. <del>*</del>	*	**	×	÷ ₩	*	0.05		
	ETROLEUN	BENZENE	: ; ;	mg/kg 6.1		•	ND	N ON	Q Q	ON.	妆		ΩN			ΩN	ΩN		QN.	ΩN	N ON	*	*	*	*	*	* '	*	*	*	0.02		
	TOTAL	DEPTH	٠	15'	15'	16'	15'	15,	13.	-∞	∞	20,	24	20,	21	19'	19'	19,	. 707	.9		23.5'	18.5-20'	09	24"	24"	36"	32"	36"	30"			
	F SOIL FOR	SAMPLE	. :	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	9/18/06	9/18/06	10/20/06	10/20/06	10/20/06	10/20/06	10/20/06	10/20/06	10/20/06		-0	
	ANALYSES OF SOIL FOR TOTAL PETROLEUM H	SAMPLE		S-1-15	S-2-15	S-7-15	S-3-15	S-4-15	S-5-15	S-6-8	PB-3-8	NPL-6-20	ESPL-24	WSPL-20	NPL-1-21	NPL-2-19	NPL-3-19	NPL-4-19	NPL-5-20	IB2-6	SECPB-8	S PALS-1	DC PLAS-2	IB4	PBWE	PBLS-24	PBLS-36	ALS-1	DSS-1	PBRS	MDL	* = Not analyzed	
											-	_	_																				

^ ALYSES OF SOIL FOR SPECIFIC	HALOGE	NATED	<del> </del>				
1. DROCARBONS BY EPA 8260			·· ·		** *	##=	
SAMPLE-NUMBER		D-6	D-15	 15ND-10	D 10	<u>-</u>	
	•	00	D-13 .	10140-10	D-10	:	÷ ,
SAMPLE DATE		2/3-9/08	2/3-9/08	2/3-9/08	2/3-9/08		
	SOIL				3.00		
	REPORTIN	G	• •		-	: :	
DICTH OF OPTIMIZED OF STREET	LIMITS	mg/kg	mg/kg	mg/kg	mg/kg		•
DICHLORODIFLUOROMETHANE	1	ND	ND	ND	ND	:	
CHLOROMETHANE	1	ND	ND :	ND	ND	  - 	
VINYL CHLORIDE	0.2	ND	ND	ND	ND	T -	
BROMOMETHANE	1	ND	ND -	ND	ND		
CHLOROETHANE	. 1	, ND	ND	ND	ND	Ī	
TRICHLOROFLUOROMETHANE	1	ND	ND	ND	ND		
ACETONE	10	ND	ND .	ND	ND		
METHYLENE CHLORIDE	10	ND	ND	ND	ND .		-
1,1 DICHLOROETHENE	1	ND	ND :	ND	ND ;		
METHYL-T-BUTYL ETHER (MTBE)	1	ND	ND	ND	ND	* **	
TRANS-1,2-DICHLOROETHENE	1	ND	ND	ND .	ND		-
1,1 DICHLOROETHANE	. 1	ND	ND	ND	ND		
2-BUTANONE (MEK)	. 10	ND	ND	ND	ND	:	*
CIS-1,2 DICHLOROETHENE	1	ND :	ND -	ND	ND !		-
2,2-DICHLOROPROPANE	1	ND	ND	ND	ND	:	
CHLOROFORM	. 1	ND	ND	ND	ND		•
BROMOCHLOROMETHANE	1	ND	ND	ND	ND !	:	
1,1,1-TRICHLOROETHANE	` 1 ·	ND .	ND	ND .	ND .	-	
1,2 DICHLOROETHANE (EDC)	1	ND	ND	ND	ND .		
1,1-DICHLOROPROPENE	1	ND	ND	ND	ND		
CARBON TETRACHLORIDE	1	ND	ND	ND	ND		
BENZENE	1.	ND	ND :	ND	ND	• •	
TRICHLOROETHENE (TCE)	1	ND	ND	ND	ND		
1,2-DICHLOROPROPANE	1	ND	ND	ND	ND		
DIBROMOMETHANE	1	ND	ND	ND	ND :		
BROMODICHLOROMETHANE	1	- ND	ND	ND	ND		
4-METHYL-2-PENTANONE (MIBK)	1	ND	ND	ND	ND		
CIS-1,3-DICHLOROPROPENE	1	ND	ND	ND	ND ,	-	
TRANS-1,3-DICHLOROPROPENE	1 .	ND	ND	ND	ND	•	÷ •
TOULENE	1	ND	ND	ND .	ND	•	
TRANS-1,3-DICHLOROPROPENE	1	ND	ND	ND	ND.	•	
1,1,2,-TRICHLOROETHANE	1	ND	ND	ND	ND		
2-HEXANONE	1	ND	ND	ND	ND		ł

L. DROCARBONS BY EPA 8260						:	-
SAMPLE-NUMBER		D-6	D-15	15ND-10	D-10		
DATE		2/3-9/08	2/3-9/08	2/3-9/08	2/3-9/08	<del>-</del>	
**************************************	SOIL	. 213, 7700	213-7100	213-7100	213-9108		
· · · · · · · · · · · · · · · · · · ·	REPORTIN	G .				,	
1.2 DICHT OR ORDOR 1.3 D	LIMITS	mg/kg	mg/kg	mg/kg	mg/kg		
1,3-DICHLOROPROPANE	1	ND	ND	ND	ND		
DIBROMOCHLOROMETHANE	1	ND	ND	ND .	ND		-
TETRACHLOROETHENE (PCE)	1	ND	ND_	ND	ND		
1,2-DIBROMOETHANE	0.1	ND	ND	ND	ND !		
CHLOROBENZENE	. 1	ND	ND	ND	ND	ī	
1,1,1,2-TETRACHLOROETHANE	1.	, ND	ND	ND	ND	•	
ETHYLBENZENE	1	ND	ND	ND	ND	•	
XYLENES	1	ND	ND	ND	ND		•
STYRENE	1	ND	ND	ND	ND ;		
BROMOFORM	1 :	ND	ND :	ND	ND		
1,1,2,2-TETRACHLOROETHANE	1 1	ND :	ND	ND	ND :	į	
ISOPROPYLBENZENE	1	ND	ND	ND	ND :	:	••
,2,3-TRICHCHLOROPROPANE	1 .	ND	ND	ND	ND	-	
BROMOBENZENE	1 !	ND	ND	ND	ND .	•	
N-PROPYLBENZE	1	ND	ND	ND	ND		
2-CHLOROTOLUENE	1 !	ND	ND	ND	ND :	-	
4-CHLORODOLUENE	1 .	ND	ND	ND	ND :		
1,3,5-TRIMETHYLBENZE	1	ND	ND	ND	ND .		
TERT-BUTYLBENZENE	1	ND	ND .	ND	!	· <u>i</u>	
1,2,4-TRIMETHYBENZENE	1	ND	ND ND	ND	ND .		
SEC-BUTYLBENZENE	1	ND	ND	ND	ND .		
1,3-DICHLOROBENZENE	1	ND	ND		ND :		
1,4-DICHLOROBENZENE	' . 1	ND		ND :	ND :	•	
ISOPROPYLTOULENE	1	ND	ND .	ND	ND :		
1,2-DICHLOROBENZENE	1		ND	ND	ND		
N-BUTYLBENZENE	- ! 1	ND	ND	ND	ND		
2-DIBROMO-3-CHLOROPROPANE	! -{	ND	ND	ND	ND		
1,2,4-TRICHLOROBENZENE	. !	ND	ND	ND	ND .		
NAPHTHALENE	 	ND	ЙD	ND	ND		
HEXACHLORO-1,3-BUTADIENE	1	ND	ND	ND	ND		
1,2,3-TRICHLOROBENZENE	. 1	ND	ИD	ND	ND		
1,4,J-1,MCDLOKOBENZENE	1 .	ND	ND	ND	ND		
					-		
					•		

' 'ALYSES OF SOIL FOR SPECIFIC	HAI OGENIA	TED		<del></del>	<del>_</del>	<del> </del>	<u> </u>
PLI DROCARBONS BY EPA-8260	TIVEOORIA	11517	· -			•	
						•	
SAMPLE-NUMBER		TS-1	TS-2	50ND-16	15ND-16	20ND-8	20ND-16
SAMPLE DATE							•
SAMPLE DATE		7/24/07	7/24/07	2/3-9/08	2/3-9/08	2/3-9/08	2/3-9/08
·	SOIL	-				. <del>-</del>	
	REPORTING LIMITS	malka					
DICHLORODIFLUOROMETHANE	1	mg/kg ND	mg/kg ND	mg/kg	mg/kg	mg/kg	mg/kg
CHLOROMETHANE	1	ND ND	: ND	ND	ND	ND	ND
VINYL CHLORIDE	0.2	ND	ND	ND	ND	ND	ND
BROMOMETHANE	0.2 1	ND		ND	ND	ND	ND
CHLOROETHANE	1	ND	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	· '	ND	ND	ND	_ ND	ND :	ND
ACETONE	. 10	ND	ND	ND :	ND	. ND	ND
METHYLENE CHLORIDE	10	ND	ND	ND	ND	ND	ND
1,1 DICHLOROETHENE	10 .	ND	ND	ND	ND	ND '	ND
METHYL-T-BUTYL ETHER (MTBE)	1		ND .	ND	ND	ND :	ND
TRANS-1,2-DICHLOROETHENE	1	ND	ND	ND	ND	ND :	ND
1,1 DICHLOROETHANE	·	ND ND	ND ·	ND :	ND	ND	ND
2-BUTANONE (MEK)	. ' 10	ND	ND	ND :	ND .	ND	ND
CIS-1,2 DICHLOROETHENE	. 10	ND	ND	ND :	ND :	ND	ND
2,2-DICHLOROPROPANE	. ! ,	ND	ND .	ND .	ND :	ND	ND
CHLOROFORM	1	ND	ND	ND	ND	ND :	ND
BROMOCHLOROMETHANE	1.	ND	ND ND	ND	ND	ND -	ND
1,1,1-TRICHLOROETHANE	' . ;	. ND		ND	ND	ND	ND
1,2 DICHLOROETHANE (EDC)	1	ND	ND ND	ND	ND	ND .	ND
1,1-DICHLOROPROPENE	1	ND		ND	ND	ND -	ND 
CARBON TETRACHLORIDE	1	ND	ND ND	ND	ND	ND	ND
BENZENE	1	ND	ND	ND	ND	ND	ND
TRICHLOROETHENE (TCE)	1	ND	ND	ND .	ND	ND	ND
1,2-DICHLOROPROPANE	1	ND	ND	ND	ND	ND	ND
DIBROMOMETHANE	' . 1	ND	ND	ND	ND	ND	ND
BROMODICHLOROMETHANE	: 1	ND	ND	ND .	ND	ND	ND
4-METHYL-2-PENTANONE (MIBK)	' . 1	ND	ND	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPENE	1	ND		ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPENE	1	ND ND	ND	ND	ND	ND :	ND
TOULENE	1	ND ND	ND	ND	ND	ND .	ND
TRANS-1,3-DICHLOROPROPENE	- 1	ND	ND	ND	ND	ND	ND
1,1,2,-TRICHLOROETHANE	1		ND .	ND	ND	ND	ND
2-HEXANONE	۱ 	ND ·	ND	ND	ND	ND .	ND
~ 11DXXXII 4 O 1 4 1.	<u> </u>	ND .	ND	ND	ND	ND	ND

SAMPLE-NUMBER	-				<b>*</b>		
JAMIFLE-NUMBER	•	TS-1	TS-2	.50ND-16	15ND-16	20ND-8	20ND-1
SAMPLE DATE		7/24/07	7/24/07	2/3-9/08	2/3-9/08	2/3-9/08	2/3-9/0
——————————————————————————————————————	SOIL			: · · · · · · · · · · · · · · · · · · ·	_,_,_,,,,,	2/3 //00	2013 710
	REPORTING					· · · · · · · · · · · · · · · · · · ·	
1,3-DICHLOROPROPANE	LIMITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
DIBROMOCHLOROMETHANE		ND	ND	ND	ND	ND	ND
TETRACHLOROETHENE (PCE)	. 1	ND	ND	ND	МD	ND	ND
1,2-DIBROMOETHANE	. 1	ND	ND	ND :	ND	ND	ND
CHLOROBENZENE	0.1	ND	ND	ND	ND	ND	ND
1,1,1,2-TETRACHLOROETHANE	1	ND	ND	ND	ND	ND :	ND
ETHYLBENZENE	1	ND <sub>.</sub>	ND	ND -	ND	ND ;	ND
XYLENES	1	ND	ND	ND	ND ·	ND	ND
STYRENE	1	ND	ND	ND	ND	ND :	ND
the contract of the contract o	1	ND	ND '	ND	ND	ND	ND
BROMOFORM	1	ND	ND.	ND	ND	ND .	ND
1,1,2,2-TETRACHLOROETHANE	1	ND	ND	ND	ND :	ND ,	ND
ISOPROPYLBENZENE	1	ND	ND	ND	ND .	ND :	ND
,2,3-TRICHCHLOROPROPANE	1	ND	ND .	ND	ND	ND	ND
BROMOBENZENE	1	ND.	ND	ND	ND :	ND [	ND
N-PROPYLBENZE	1	ND	ND	ND	ND	ND .	ND
2-CHLOROTOLUENE	1	ND	ND .	ND	ND	ND į	ND
4-CHLORODOLUENE	1	ND ·	ND	ND	ND	ND	ND
1,3,5-TRIMETHYLBENZE	1 .	ND	ND	ND	ND	ND	ND
TERT-BUTYLBENZENE	1	ND	ND	ND	ND	ND	ND
1,2,4-TRIMETHYBENZENE	1	ND ,	ND	ND	ND	ND	ND
SEC-BUTYLBENZENE	1 .:	ND	ND	ND	ND	ND	ND
1,3-DICHLOROBENZENE	1	ND	ND :	ND	ND	ND	ND
1,4-DICHLOROBENZENE	1 .	ND	ND	ND	ND	ND .	ND
ISOPROPYLTOULENE	1	ND	ND	ND	ND	ND	ND
1,2-DICHLOROBENZENE	1	ND	ND	ND	ND	ND	ND
N-BUTYLBENZENE	1	ND	ND	ND	ND .	ND	ND
2-DIBROMO-3-CHLOROPROPANE	1	ND	ND	ND .	ND	ND .	ND
1,2,4-TRICHLOROBENZENE	1	ND	ND	ND	ND	ND	ND
NAPHTHALENE	1	ND :	ND	ND	ND	ND	ND
HEXACHLORO-1,3-BUTADIENE	1	ND	ND	ND	ND	ND .	ND
1,2,3-TRICHLOROBENZENE	1	ND	ND	ND	ND	ND	ND

ANALYSES OF SOIL FOR SPECIFIC HALOGENATED													
HYDROCARBONS BY EPA 826			 i										
			: ====================================	·	<u> </u>								
SAMPLE-NUMBER		F-12	F-20	R-12	D 40								
- " Crawn EE TYOURDETY			F-20	K-1Z	R-18								
SAMPLE DATE		7/31/07	7/31/07	7/31/07	7/31/07								
	· · · · · · · · · · · · · · · · · · ·		1101/01	1131101	. (131101								
	SOIL	•											
F	REPORTIN	G	~										
	LIMITS	mg/kg	mg/kg	mg/kg	mg/kg								
DICHLORODIFLUOROMETHANE	0.05	ND	ND .	ND .	ND ND								
CHLOROMETHANE	0.05	ND	ND	ND	ND								
VINYL CHLORIDE	0.01	. ND	ND	ND	ND ND								
CHLOROETHANE	0.05	ND	ND	ND	ND -								
TRICHLOROFLUOROMETHANE	0.05	ND	ND	ND	ND .								
METHYLENE CHLORIDE	0.05	ND	ND	ND	ND								
1,1 DICHLOROETHENE	0.5	ND	ND	ND	ND								
TRANS-1,2-DICHLOROETHENE	0.05	. ND	ND	ND .	ND								
1,1 DICHLOROETHANE	0.05	ND ·	ND	ND	ND								
CIS-1,2 DICHLOROETHENE	0.05	ND	, ND	0.06	ND ND								
2,2-DICHLOROPROPANE	0.05	ND	ND	ND.	ND								
CHLOROFORM	0.05	ND	ND	ND	ND.								
BROMOCHLOROMETHANE	0.05	ND	ND	ND	ND								
1,1,1- TRICHLOROETHANE	0.05	ND	ND	ND	ND								
1,2 DICHLOROETHANE	0.05	ND	ND	ND	ND								
1,1-DICHLOROPROPENE	0.05	ND	ND :	ND	ND								
CARBON TETRACHLORIDE	0.05	ND	ND	ND	ND								
TRICHLOROETHENE (TCE)	0.02	ND	ND	0.28	0.85								
1,2-DICHLOROPROPANE	0.05	ND	ND	ŇĎ	ND								
BROMODICHLOROMETHANE	0.05	ND	ND	ND	ND								
4-METHYL-2-PENTANONE (MIBK)	0.05	ND :	ND	ND	ND								
CIS-1,3-DICHLOROPROPENE	0.05	ND	ND	ND	ND								
TRANS-1,3-DICHLOROPROPENE	0.05	ND	ND	ND	ND								
1,1,2,-TRICHLOROETHANE	0.05	ND	ND	ND	ЙD								
1,3-DICHLOROPROPANE	0.05	ND	ND	ND :	NÖ								
DIBROMOCHLOROMETHANE	0.05	ND :	ND	ND É	ND								
TETRACHLOROETHENE (PCE)	0.02	1.5	2.1	1.9	18								
CHLOROBENZENE	0.05	ND	ND	NĎ	ND								
1,1,1,2-TETRACHLORÖETHANE	0.05	ND	ND	ND	ND								
1,1,2,2-TETRACHLOROETHANE	0.05	ND .	ND	ND	ND								
1,2,3-TRICHCHLOROPROPANE	0.05	ND	ND	ND	ND								
2-CHLOROTOLUENE	0.05	ND	ND	ND	ND								
4-CHLORODOLUENE	0.05	NĎ	ND	ND	ND								
1,3-DICHLOROBENZENE	0.05	ND	ND	ND	ND -								
1,4-DICHLOROBENZENE	0.05	NĎ	ND	ND	ND								
1,2-DICHLOROBENZENE	0.05	ND	ND	ND	ND								
1,2-DIBROMO-3-CHLOROPROPANE	0.05	ND	ND	ND	ND								
1,2,4-TRICHLOROBENZENE	0.05	ND	ND	ND	ND								
HEXACHLORO-1,3-BUTADIENE	0.05	ND	ND	ND	ND								
1,2,3-TRICHLOROBENZENE	0.05	ND	ND	ND	ND								

ANALYSES OF WATER FOR SPE	CIFIC HALOGE	ENATED		<u> </u>
HYDROCARBONS BY EPA 8260 (				
Living of the office of the first of the office of the off		Bakery		
CAMPI E MUMPED		0		
SAMPLE-NUMBER		B-1		:
SAMPLE DATE		4,00,00		
SAMFLE DATE		4/29/07		
DEPTH		0-6"	<del></del>	
	WATER	0-6	1/2	
-,	REPORTING			u <u>d</u> .
	LIMITS	ug/L -		:
DICHLORODIFLUOROMETHANE	1	ND :		
CHLOROMETHANE	1	ND	-	-
VINYL CHLORIDE	0.2	ND	•	
CHLOROETHANE	1	ND		•
TRICHLOROFLUOROMETHANE	i	ND		;
METHYLENE CHLORIDE	10	ND		•
1,1 DICHLOROETHENE	1	ND		7
TRANS-1,2-DICHLOROETHENE	1	ND		
1,1 DICHLOROETHANE	· 1	ND		<u> </u>
CIS-1,2 DICHLOROETHENE	. 1	8.7		
2,2-DICHLOROPROPANE	1	ND	•	1
CHLOROFORM	1	30		
BROMOCHLOROMETHANE	1	ND		. :
1,1,1- TRICHLOROETHANE	1	ND		
1,2 DICHLOROETHANE	· 1	ND		
1,1-DICHLOROPROPENE	1 .	ND .		
CARBON TETRACHLORIDE	· 1	ND		; • .
TRICHLOROETHENE (TCE)	1	5.6		
1,2-DICHLOROPROPANE	1	ND		
BROMODICHLOROMETHANE	1	1.5		•
CIS-1,3-DICHLOROPROPENE	1	ND	•	•
TRANS-1,3-DICHLOROPROPENE	1	ND		
1,1,2,-TRICHLOROETHANE	; · 1	ND		•
1,3-DICHLOROPROPANE	1	ND	,	
DIBROMOCHLOROMETHANE	1	ND	•	
TETRACHLOROETHENE (PCE)	1	52		:
CHLOROBENZENE	1	ND		
1,1,1,2-TETRACHLOROETHANE	_ 1	ND		
1,1,2,2-TETRACHLOROETHANE	1	ND		
1,2,3-TRICHCHLOROPROPANE	1	ND		
2-CHLOROTOLUENE	1	ND		
4-CHLORODOLUENE	1	ND		
1,3-DICHLOROBENZENE	1	ND .		
1,4-DICHLOROBENZENE	1	ND		
1,2-DICHLOROBENZENE	1	ND		•
1,2-DIBROMO-3-CHLOROPROPANE	1	ND		•
1,2,4-TRICHLOROBENZENE	· 1	ND		
HEXACHLORO-1,3-BUTADIENE	1	ND		
1,2,3-TRICHLOROBENZENE	1 ·	ND		

ANALYSES OF WATER FOR S	SPECIFIC	HALOGE	MATED		
			NATED		
HYDROCARBONS BY EPA 820	50 CHLOR	INATED			
SAMPLE-NUMBER		PW-1	STREET		
		•	WATER		-
SAMPLE DATE		7/11/07	7/12/07		-
		1111701	1712107		
ľ	WATER	'	•		
	REPORTING	 G			
	LIMITS				· -
DICHLORODIFLUOROMETHANE	THAILIO	ug/L	ug/L		
CHLOROMETHANE	!	ND	ND		
VINYL CHLORIDE	. 1	ND	ND		
CHLOROETHANE	0.2	0.51	ND		
	1	ND	ND		
TRICHLOROFLUOROMETHANE	1	ND	ND		
METHYLENE CHLORIDE	. 10	ND	ND		• •
1,1 DICHLOROETHENE	1	ND	ND		• •
TRANS-1,2-DICHLOROETHENE	1	ND	ND	-	
1,1 DICHLOROETHANE	. 1	ND	ND		•
CIS-1,2 DICHLOROETHENE	1	24	ND		
2,2-DICHLOROPROPANE	1	ND	ND	•	•
CHLOROFORM	1	48	20		· · · · · -
BROMOCHLOROMETHANE	1	ND	ND		• •
1,1,1- TRICHLOROETHANE	1	ND	ND		
1,2 DICHLOROETHANE	1	ND	ND	-	•
1,1-DICHLOROPROPENE	1	ND	ND		• •
CARBON TETRACHLORIDE	1 1	ND	ND ND		
TRICHLOROETHENE (TCE)	- ' :	17			
1,2-DICHLOROPROPANE	1	-	ND		
BROMODICHLOROMETHANE	. 1	ND	ND		
4-METHYL-2-PENTANONE (MIBK)		2.3	ND		
CIS-1,3-DICHLOROPROPENE	. 1	No	4.8		
TRANS 1.3 DIGHT OF OFFICE	1	ND	ND		
TRANS-1,3-DICHLOROPROPENE	1	ND	, ND		İ
1,1,2,-TRICHLOROETHANE	1	ND	, ND		
1,3-DICHLOROPROPANE	1	ND	ND		·
DIBROMOCHLOROMETHANE	1	ND	ND		
TETRACHLOROETHENE (PCE)	. 1	1,700	ND		•
CHLOROBENZENE	1	ND	NÖ		•••
1,1,1,2-TETRACHLOROETHANE	1	ND	ND		·
,1,2,2-TETRACHLOROETHANE	1	ND	ND		
1,2,3-TRICHCHLOROPROPANE	1				
2-CHÏOROTOLUENE	i	ND	ND		
· · · · · · · · · · · · · · · · · · ·	1	ND	ND		
4-CHLORODOLUENE	1	ND	ND		Ì
1,3-DICHLOROBENZENE	1	ND	ND		1
1,4-DICHLOROBENZENE	1	ND	ИD		·
1,2-DICHLOROBENZENE	1	ND	ND		Ţ
1,2-DIBROMO-3-CHLOROPROPANE	1	ND	ND		
1,2,4-TRICHLOROBENZENE	1	ND	ND		
HEXACHLORO-1,3-BUTADIENE	1	ND	ND		
1,2,3-TRICHLOROBENZENE	1	ND	ND		
• •	•		110		·
	···	<del>.</del>	<del></del>	_	

	WATER ANALYSE METHOD NWTPH	-	•		BONS	<del></del>	
	SAMPLE NUMBER	SAMPLE DATE	P DEATH	GASOLINE	DIESEL	OIL	MINERAL OIL
-	S PLAS-1-2-W DC PLAS-2-W MDL	9/18/08 9/18/08	50' 49'	ug/L ND ND 100	ug/L ND ND 200	ug/L ND ND 400	ug/L ND ND 400
	WATER HEAVY	Y METALS E	EPA-7000 S.	ERIES			
	SAMPLE	:	6	METHOD SW846 741 DISSOLVED	METHOD EPA 200.7		:
	NUMBER	DATE	DEATH	LEAD	LEAD		
	S PLAS-1-2-W	9/18/08	50'	ug/L <1	ug/L 1800	ı	:
	DC PLAS-2-W	9/18/08	49'	<1	1000		

LEAD WA	TER ANALY	SES BY EPA	A 239.2		<del></del> -			
	SAMPLE DATE				:			
	4/1/08 4/1/08	<1 <1			<u>.</u> .			
				•				
	:	. :				·		
				:		<u>:</u>	·	
:				•				

		\L		: . <u>!</u>						!	- •	•				:				1							•			-			
		MINER-	OIL	mg/kg	Ŕ		QN	Q.	QN	QN QN	<u>8</u>	Q			2	Q Z	QN		2		<u>: Q</u>	Q.	R	QN	N	2	Q			R	ND	40	
TENDED			OIL	mg/kg		R	Q N		Q Z	Ω̈́	Q	2 R	Q	<u>Q</u>	2	N		Q.	E R	2	94	Ω	S	: QN :	8	87	Q	2	220	R	R	40	
Dv/Dv FV	\$1 \$1 \$1 		DIESEL	mg/kg	N N	NON	N	ON.	Q N		NON	2	- QN	Q	R	ND		Q Z	ΩN	<u>N</u>	2		- -2		2	R	- CZ	R	Q	Q.	, ON	30	
FPA METHOD NW/TPH-IN-/N- EX			GASOLINE	mg/kg	920	A Z	360	Q.		QX	Q Z	30	N N		NO	QX	Ω	ΩZ	QN	QN	ND ND	QX	Q.	Q Z	Q Z	ND		ΩN	ND	QN.		10	e de la companya de l
FPA METH	777 TOTAK X 7 TOTA	TOTAL	XYLENES	mg/kg	12	ON ON		OZ	OZ.	R	QN	*	L QN	QZ	QN	Q Z		QZ	QN.	ND	QX.	QN	*	: : : : *	*	*	*	: . *	: : !*	*	*	0.05	
HYDROCARBONS		ETHYL-	BENZENE	mg/kg	9	QN		ON			Q.	· *	: QX	QZ :	QX	QN		S	CN CN	QN	QN	ON ON	*	<del>X</del>	*	*	*	• • <del>*</del>	· *	* * * * * * * * * * * * * * * * * * *	*	0.05	
<u> </u>	٦.		TOLUENE	mg/kg	4.1	R		ND	N N	N	ΩN	*	NO.	N	QN			S	QN N	Q N	R	QN	*	*	: : :	*	*	*	, <del>X</del>	*	: ※	0.05	
PETROLEUM			BENZENE	mg/kg	6.1	ND		ΩN	N Q N	ΩZ	Q Q	*	NO ON	QN	ND	ND	ΩZ	QN		QN	ON ON	ΩN	*	*	*	*	*	*	· *	*	*	0.02	
TOTAL			DEPTH		15'	15'	16'	15'	15'	13'	∞	∞	20,	24	20'	21,	19'	19'	19'	20,	,9	∞	23.5'	18.5-20	09	24"	24"	36"	32"	36"	30"		
F SOIL FOR		SAMPLE	DATE		8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	8/31/06	9/18/06	9/18/06	10/20/06	10/20/06	10/20/06	10/20/06	10/20/06	10/20/06	10/20/06	•	þe
ANALYSES OF SOIL FOR TOTAL PETROLEIN	¥	SAMPLE	NOMBER		S-1-15	S-2-15	S-7-15	S-3-15	S-4-15	S-5-15	S-9-S	PB-3-8	NPL-6-20	ESPL-24	WSPL-20	NPL-1-21	NPL-2-19	NPL-3-19	NPL-4-19	NPL-5-20	IB2-6	SECPB-8	S PALS-1	DC PLAS-2	IB4	PBWE	PBLS-24	PBLS-36	ALS-1	DSS-1	PBRS		* = Not analyzed
								-																			<u> </u>			-			

ALYSES OF WATER FOR SPECIF HYDROCARBONS BY EPA 8260	IC HALOGE	NATED				
		-				
SAMPLE-NUMBER		GW-7	_GW-8	•	Ş	
SAMPLE DATE		5/8/08	5/8/08			•
<del></del>	1444 T 🜣 🕏					
	WATER REPORTING					
	LIMITS	ug/L	, ug/L		•	
DICHLORODIFLUOROMETHANE	1	ND	ND	•	:	
CHLOROMETHANE	1	ND	ND	:		
VINYL CHLORIDE	0.2	ND	ND.			
BROMOMETHANE	1	ND	ND		. :	
CHLOROETHANE	1	ND		<u>.</u>		•
TRICHLOROFLUOROMETHANE	. ' 1	ND	ND .			
ACETONE	<u>.</u> 10		: ND	•	:	
METHYLENE CHLORIDE	10	ND	. ND		:	
1,1 DICHLOROETHENE	. 10 ,	ND	ND:			
METHYL-T-BUTYL ETHER (MTBE)		ND	ND	·	:	· :
TRANS-1,2-DICHLOROETHENE	1	ND	ND			- 1
1,1 DICHLOROETHANE	i .	ND	ND		# #	· . i .
2-BUTANONE (MEK)	l	. ND	ND			
CIS-1,2 DICHLOROETHENE	10	ND	ND		1	e e e e e e e e e e e e e e e e e e e
2,2-DICHLOROPROPANE	۱ .	ND	7.9		•	# * *
CHLOROFORM	. I	ND	ND :-			•
BROMOCHLOROMETHANE	1	ND :	ND	•		• •
1,1,1- TRICHLOROETHANE	l A	ND .	ND			:
1,2 DICHLOROETHANE (EDC)	1	ND .	ND	4 4	:	
1,1-DICHLOROPROPENE	1	ND	ЙD			
CARBON TETRACHLORIDE	1	ND	ND	•		
BENZENE	1	ND	ND		;	
	1	ND	ND			
TRICHLOROETHENE (TCE)	1	33	21	. •		
1,2-DICHLOROPROPANE	1	ND .	ND			
DIBROMOMETHANE	1 .	ИD	ND			
BROMODICHLOROMETHANE	1	ND	ND	•		•
4-METHYL-2-PENTANONE (MIBK)	1	ND	ND			
CIS-1,3-DICHLOROPROPENE	1	ND	ЙD			
TRANS-1,3-DICHLOROPROPENE	1	ND	ND		-	
TOULENE	1	ND	ND			
TRANS-1,3-DICHLOROPROPENE	1	ND	ND			
1,1,2,-TRICHLOROETHANE	1	ND	ND			
2-HEXANONE	1_	ND "	ND	•		•

/ ALYSES OF WATER FOR SPECIF	IC HALOGE	VATED	<del>- :</del>		<del> , , , , , , , , , , , , , , , , , ,</del>		
HYDROCARBONS BY EPA 8260	• •			·		•	
			• -				
SAMPLE-NUMBER		GW-7	GW-8				
SAMPLE DATE			- 12 .2-12			•	•
SAMPLE DATE		5/8/08	5/8/08				
	WATER			-			
	REPORTING	• •				:	
	LIMITS	ug/L_	ug/L			-,	
1,3-DICHLOROPROPANE	1	ND	ND			:	
DIBROMOCHLOROMETHANE	1	ИD	ND		_		
TETRACHLOROETHENE (PCE)	1	13,000	1,300				
1,2-DIBROMOETHANE	0.1	ND	. ND			į	·
CHLOROBENZENE	. 1	ND	ND	·			
1,1,1,2-TETRACHLOROETHANE	. 1	ND	ND	•		-	
ETHYLBENZENE	1 .	ND	ND				Ē
XYLENES	. 1	ND	ND		•	:	± .
STYRENE	1	ND	ND	•		•	
BROMOFORM	. 1	ND	ND				
1,1,2,2-TETRACHLOROETHANE	1	ND	, ND		•		
ISOPROPYLBENZENE	1	ND	ND	• • • • • • • • • • • • • • • • • • • •		:	. "
1,2,3-TRICHCHLOROPROPANE	1	ND	ND	- -		:	
BROMOBENZENE .	1	ND	ND			•	•
N-PROPYLBENZE	1	ND	· ND			i	-
2-CHLOROTOLUENE	1	ND	ND				•
4-CHLORODOLUENE	1	ND	ND	:			
1,3,5-TRIMETHYLBENZE	1	ND	ND	:		1	· · · · · · · · · · · · · · · · · · ·
TERT-BUTYLBENZENE	1	ND	ND				
1,2,4-TRIMETHYBENZENE	1	ND	ND	•			
SEC-BUTYLBENZENE	1	ND	ND			-	•
1,3-DICHLOROBENZENE	1	ND	ND			:	
1,4-DICHLOROBENZENE	1	ND	ND	:			•
ISOPROPYLTOULENE	1	ND	ND	•		•	
1,2-DICHLOROBENZENE	1	ND	ND			•	
N-BUTYLBENZENE	1	ND	ND			٠.	
1,2-DIBROMO-3-CHLOROPROPANE	1	ND	ND				
1,2,4-TRICHLOROBENZENE	1	ND	ND			:	
NAPHTHALENE	1	ND -	ND .				
HEXACHLORO-1,3-BUTADIENE	: - 1	ND	ND				
1,2,3-TRICHLOROBENZENE	1	ND	ND			•	
,— y =	·	IND	אט	. =			

				-	*			
SAMPLE-NUMBER	:	MW-1	MW-2	MW-5	MW-7	÷		
SAMPLE DATE		8/28/07	8/28/07	1/22/08	1/22/08	3		
	WATER							
	REPORTING							
	LIMITS	ug/L	ug/L	ug/L	ug/L			
DICHLORODIFLUOROMETHANE	1 .	ND	ND	ND	ND	•		
CHLOROMETHANE	1	ND	ND	ND	ND			٠
VINYL CHLORIDE	0.2	ND	. 19	ND .	ND	:	2	
BROMOMETHANE	1	ND	ND	- ND	ND			
CHLOROETHANE	1	ND	8.1	ND	ND	÷	ŧ	
TRICHLOROFLUOROMETHANE	1	ND	ND	ND	ND		•	
ACETONE	10	ND	ND	ND	ND			-
METHYLENE CHLORIDE	10	ND	. ND	ND	ND			
1,1 DICHLOROETHENE	1	ND	ND	ND	ND		1	
METHYL-T-BUTYL ETHER (MTBE)	1	ND	: ND	ND	ND			İ
TRANS-1,2-DICHLOROETHENE	1	ND	7.4	ND	ND			1
1,1 DICHLOROETHANE	1	ND	ND	ND :	ND	:		
2-BUTANONE (MEK)	10	ND	ND	ND	ND	ž	:	
CIS-1,2 DICHLOROETHENE	1	ND	7,100	13	ND		• •	
2,2-DICHLOROPROPANE	1	ND	ND	ND :	ND	<u>:</u>	:	
CHLOROFORM	1	ND .	ND	2.1	ND	:	-	
BROMOCHLOROMETHANE	1	ND	. ND	ND	ND			
1,1,1- TRICHLOROETHANE	1	ND .	ND	ND	ND	÷		
1,2 DICHLOROETHANE (EDC)	1	ND	ND	ND	ND			
1,1-DICHLOROPROPENE	1	ND	ND	ND :	ND	***	:	
CARBON TETRACHLORIDE	1	ND	ND	3.3	ND -			
BENZENE	1	2.2	1,800	ND	ND v	11	tta	not!
TRICHLOROETHENE (TCE)	1	ND	( ND )-	3	ND ,	These or consistent sampling into consistent of consistent of consistent of the consistency of the consisten		1/30/
1,2-DICHLOROPROPANE	1	ND .	ND	ND	ND C	consistent	/ Www	1 All
DIBROMOMETHANE	1	ND	ND	ND	ND /	sampling.	our	v. /\_
BROMODICHLOROMETHANE	1	ND	ND	ND	אוט אט	1	ita	with 1
4-METHYL-2-PENTANONE (MIBK)	1	ND	ND	ND	ND ,	now was	Ino	n-date
CIS-1,3-DICHLOROPROPENE	1	ND	ND	ND	ND	[LCE]	ACM	
TRANS-1,3-DICHLOROPROPENE	1	ND	ND			TEX.		
TOULENE	1	ND ND		ND	ND			
TRANS-1,3-DICHLOROPROPENE	, 1	ND	(ND)	ND	ND	-		
1,1,2,-TRICHLOROETHANE	1		ND	ND	ND			
2-HEXANONE	i .	ND ND	ND ND	ND ND	ND ŅD			

^ VALYSES OF WATER FOR SPECIF	<del></del> -	<u> </u>		:				
DROCARBONS BY EPA 8260	10 111 12 O O D I	WILLD	•					
SAMPLE-NUMBER		MW-1	MW-2	MW-5	MW-7			
SAMPLE DATE		8/28/07	- 8/28/07	4100100	1/00/00==			
		0/20/07	0/20/07	1/22/08	1/22/2008		-	
	WATER	•	•					
	REPORTING LIMITS							
1,3-DICHLOROPROPANE	LIIVII I S	ug/L	ug/L	ug/L	ug/L			
DIBROMOCHLOROMETHANE		ND ND	ND	ND	" ND		ē	
TETRACHLOROETHENE (PCE)	1		ND	ND	ND			
1,2-DIBROMOETHANE	0.1	1.3	2,900	67	6.6			
CHLOROBENZENE	1	ПИ	ND	ND	ND		**	
1,1,1,2-TETRACHLOROETHANE	1	ND	ND .	ND	ND			Ċ
ETHYLBENZENE	1	ND	ND	ND	ND			
XYLENES	1	ND	ND	ND	ND			
STYRENE	1 .	ND	ND/	ND	ND -		i	
BROMOFORM		ND .	ND	ND :	ND .		•	
1,1,2,2-TETRACHLOROETHANE	1	ND ND	ND	ND -	ND			
ISOPROPYLBENZENE	. ' 1	ND	ND .	ND	ND			
.,2,3-TRICHCHLOROPROPANE	, 1	ND	ND	ND	ND			
BROMOBENZENE	1	ND .	ND	ND	ND			
N-PROPYLBENZE	1	ND :	ND ND	ND	ND :			
2-CHLOROTOLUENE	1	ND	ND :	ND	ND			
4-CHLORODOLUENE	1	ND	ND .	ND ND	ND ;			
1,3,5-TRIMETHYLBENZE	. ' 1	ND	ND	ND ND	ND			
TERT-BUTYLBENZENE	1	ND	ND	ND	ND	÷		
1,2,4-TRIMETHYBENZENE	1	ND	ND	-	ND ND			
SEC-BUTYLBENZENE	1	ND	ND	ND	ND			
1,3-DICHLOROBENZENE	1	ND	ND	ND ND	ND ND			
1,4-DICHLOROBENZENE	1	ND	_ ND	ND				4
ISOPROPYLTOULENE	1	ND	ND	ND	ND			
1,2-DICHLOROBENZENE	1	ND	ND	ND	ND ND			
N-BUTYLBENZENE	1	ND	ND	ND	ND			
1,2-DIBROMO-3-CHLOROPROPANE	1	ND	ND	ND	ND ND			
1,2,4-TRICHLOROBENZENE	1	ND	ND	ND				
NAPHTHALENE	1	ND	ND	ND	ND ND			
HEXACHLORO-1,3-BUTADIENE	1	ND	ND	ND	ND ND			
1,2,3-TRICHLOROBENZENE	1	ND	ND	ЙD	ND .			
				- IÀD	140			

ALYSES OF WATER FOR SPECIAL	FIC HALOC	ENATE	)	-		<del></del>	<del></del>
larDROCARBONS BY EPA 8260	-			e.			
SAMPLE-NUMBER	· · · · · ·		MW-2	MW-5	MW-7	MW-8	
SAMPLE DATE		1/30/08	1/30/08	1/30/08	1/30/08	4/22/08	 : .
	WATER						-
	REPORTING LIMITS		uall.				
DICHLORODIFLUOROMETHANE	1	ug/L, ND	ug/L ND	ug/L ND	ug/L	ug/L	
CHLOROMETHANE	' 1	,ND ND	ND	ND	ND	ND	
VINYL CHLORIDE	0.2	ND	ND	ND	ND	. ND	
BROMOMETHANE	1	ND	ND	ND	ND	: ND	
CHLOROETHANE	1	ND	ND	ND	ND	ND	-
TRICHLOROFLUOROMETHANE	· · · · · · · · · · · · · · · · · · ·	ND	. ND	ND .	ND	. ND	
ACETONE	10	ND	: ND.	. ND	ND	ND	
METHYLENE CHLORIDE	10	ND	. ND	ND	ND ND	, ND .	
1,1 DICHLOROETHENE	1	ND	ND	ND	ND	ND ;	
METHYL-T-BUTYL ETHER (MTBE)	· : 1	ND	ND	ND .	ND ND	ND .	
TRANS-1,2-DICHLOROETHENE	1	ND	3	ND	ND ND		•
1,1 DICHLOROETHANE	1 .	ND	ND .	ND		6.3 ND	
2-BUTANONE (MEK)	10	ND	ND	ND	ND ND	ND .	
CIS-1,2 DICHLOROETHENE	1	ND	2,000	4.5	ND ND	. 2,400	
2,2-DICHLOROPROPANE	1	ND	ND	ND	ND .	2,400 ND	
CHLOROFORM	1	ND	2.5	1.8	ND ND	2.5	
BROMOCHLOROMETHANE	1	ND	ND	ND	ND	ND	
1,1,1- TRICHLOROETHANE	1	ND	ND	ND	ND -	ND ;	
1,2 DICHLOROETHANE (EDC)	1	ND	ND	ND	ND	ND :	
1,1-DICHLOROPROPENE	1	ND	ND	ND	ND	ND	
CARBON TETRACHLORIDE	1	ND	ND	2	1.5	ND	
BENZENE	1	ND	ND	.~. ND	ND ·	ND	
TRICHLOROETHENE (TCE)	1	ND	520	1.1	ND	780	••
1,2-DICHLOROPROPANE	1	ND	ND	ND .	ND	ND	
DIBROMOMETHANE	1	ND	ND	ND .	ND	ND	
BROMODICHLOROMETHANE	1	ND	ND	ND	ND	ND	
4-METHYL-2-PENTANONE (MIBK)	1	ND	ND	ND	ND .	ND	
CIS-1,3-DICHLOROPROPENE	1	ND	ND	ND	ND	ND	
TRANS-1,3-DICHLOROPROPENE	1	ND ·	ND	ND	ND	ND	•
TOULENE	1	ND	ND	ND		ND ND	
TRANS-1,3-DICHLOROPROPENE	1	ND	ND ND	ND	ND ND		
1,1,2,-TRICHLOROETHANE	1	ND	ND	ND	**	ND	
2-HEXANONE	1	ND	ND	ND	ND	ND	
	<del></del>	140	IND	עא	ND ND	ND	

ALYSES OF WATER FOR SPECIFIC HALOGENATED									
HYDROCARBONS BY EPA 8260	•				÷				
SAMPLE-NUMBER		MW-1	MW-2	MW-5	MW-7	MW-8			
SAMPLE DATE		1/30/08	1/30/08	1/30/08	1/30/08	4/22/08			
	WATER REPORTIN	G	:			•			
	LIMITS	ug/L	ug/L	ug/L	ug/L	ug/L	•		
1,3-DICHLOROPROPANE	1	ND	ND	ND	ND	ND			
DIBROMOCHLOROMETHANE	. 1	ND	ND	ND	ND	ND			
TETRACHLOROETHENE (PCE)	1	ND	1,400	31	1.5	1,300	-		
1,2-DIBROMOETHANE	0.1	ND	ND	ND	ND	ND	• •		
CHLOROBENZENE	1	ND	ND	ND	ND	: ND	•		
1,1,1,2-TETRACHLOROETHANE	1	ND	ND .	ND	ND	, , ND ,			
ETHYLBENZENE	1	ND	ND	ND	ND	ND :			
XYLENES	1	ND	ND .	ND	ND	ND			
STYRENE	1	ND	ND	ND	ND	ND .			
BROMOFORM	1	ND	ND	ND	ND	. ND			
1,1,2,2-TETRACHLOROETHANE	1	ND	ND '	ND	ND	! ND ¦			
ISOPROPYLBENZENE	1	ND	ND	ND .	ND	ND .	· ·		
1,2,3-TRICHCHLOROPROPANE	1	ND	ND	ND	ND	ND			
BROMOBENZENE	1	ND	ND	ND	ND	ND	•		
N-PROPYLBENZE	1	ND -	ND	ND	ND	ND			
2-CHLOROTOLUENE	1	ND	ND	ND	ND	. ND			
4-CHLORODOLUENE	1	· ND	ND	ND	ND	ND -			
1,3,5-TRIMETHYLBENZE	1	ND	ND	ND	ND	ND :			
TERT-BUTYLBENZENE	1	ND	ND	ND	ND	ND			
1,2,4-TRIMETHYBENZENE	1	ND	ND	ND	ND	ND			
SEC-BUTYLBENZENE	1	ND	ND :	ND	ND	ND			
1,3-DICHLOROBENZENE	1	ND .	ND	ND	ND	ND			
1,4-DICHLOROBENZENE	1	ND .	ND .	ND	ND	ND			
ISOPROPYLTOULENE	1	ND	ND	ND	ND.	ND			
1,2-DICHLOROBENZENE	1	ND	ND	ND	ND ,	ND			
N-BUTYLBENZENE	1	ND	ND	ND	ND	ND			
1,2-DIBROMO-3-CHLOROPROPANE	1	ND	ND	ND	ND	ND			
1,2,4-TRICHLOROBENZENE	1	ND	ND	ND	ND	ND ND			
NAPHTHALENE	1	ND	ND	ND	ND	ND			
HEXACHLORO-1,3-BUTADIENE	1	ND	ND	ND	ND	ND ND			
1,2,3-TRICHLOROBENZENE	1	ND	ND	ND	ND	ND .			