MEMORANDUM

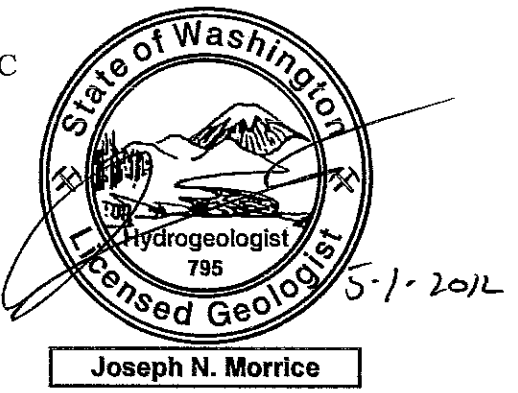
Project No.: 080190-004

May 1, 2012

To: Dave Shaw, Successor to Walker Chevrolet

Michael Bond, Gardner Bond Trabolsi, PLLC

From: **Doug Hillman, LHG**
Principal Hydrogeologist



Joe Morrice, LHG
Associate Hydrogeologist

Re: **Data Gaps Investigation**
Former Walker Chevrolet and Morrell's Dry Cleaners, VCP Site SW1039

This memorandum presents results of a data gaps investigation at the Morrell's Dry Cleaners (Morrell's) in Tacoma, Washington. The subject property (Property) is defined by Pierce County tax parcel number 2030120030 owned by the former Walker Chevrolet Company and includes street addresses 608 and 610 North First Street in the City of Tacoma (Figure 1). Morrell's operates a retail dry cleaners in space leased at 608 North First Street. The Morrell's Dry Cleaners Site (Site) includes the Property and any off-property soil or groundwater confirmed or suspected of being impacted by contaminant releases at the Property. The environmental investigations described in this memorandum are being completed through the Voluntary Cleanup Program (VCP) administrated by the Department of Ecology (Ecology). The Site was accepted into the Voluntary Cleanup Program (VCP) by Ecology in June 2009 and assigned identification number SW1039.

The Site has been the subject of environmental investigations to delineate the nature and extent of a chlorinated solvent release from the dry cleaning operation. Results of soil and groundwater investigations were reported to Ecology in a Remediation Investigation (RI) report (Aspect Consulting, 2011a). Ecology provided an opinion letter dated September 26, 2011 identifying data gaps in the delineation of solvent impacts to soil, groundwater, and indoor air quality, providing comments on selection of soil and groundwater cleanup levels, and requesting additional investigation to address the data gaps before proceeding to a Focused Feasibility Study (FFS) to develop a remedial action for the Site. A scope of work for data gaps investigations was presented to Ecology in a letter dated November 29, 2011. This memorandum presents results of the completed scope of work.

The following sections provide a summary of hydrogeologic conditions at the Site, findings based on work presented in this memorandum, a summary of the completed scope of work, results of the data

gap investigation, and revised cleanup levels and identification of constituents of concern (COCs) planned for use in the FFS.

Hydrogeologic Conditions

This section summarizes hydrogeologic conditions at the Site to provide context for investigation results presented in this memorandum. Groundwater at the Site occurs in perched, coarser-grained water bearing zones interbedded with finer grained silts. An upper perched water bearing zone occurs in sands between approximately 55 and 70 feet below ground surface (bgs). The upper water bearing zone appears to be laterally continuous across the southern and central portions of the Site, but disappears before reaching Tacoma Avenue North and North First Street. Deeper water bearing zones occur in sand layers between depths of about 110 and 145 feet bgs. Soils in between the two water bearing zones were generally described as dry during drilling, indicating that the upper water bearing zone is perched on underlying fine-grained soils and is not directly connected to the deeper water bearing zones.

Groundwater flow direction in the upper water bearing zone is generally southwest to northeast across the Site. The wells tapping the deeper water bearing zone are screened at different elevations, with deeper wells showing lower water levels, making interpretation of flow directions in this zone less certain. Groundwater flow direction in the deeper water bearing zone is expected to be generally to the north toward Commencement Bay. Water level data indicate downward hydraulic gradients between the upper and deeper water bearing zones and within the deeper water bearing zone, although water quality data indicate that downward contaminant migration is limited.

Findings and Recommendations

Based on the results of the data gaps investigation described in this memorandum and previous Site characterization investigations we make the following findings and recommendations:

- The silt and silty sand unit on which the upper water bearing zone is perched is effective at limiting migration of chlorinated volatile organic compounds (VOCs) to deeper water bearing zones. This conclusion is based on the two to three order of magnitude decrease in VOC concentrations between upper water bearing zone wells MW-2 and MW-8 and the deeper wells.
- With the installation of new deep well MW-14D the deeper water bearing zone is now sufficiently characterized for the purpose of understanding the nature and extent of contamination at the Site and for proceeding with the FFS.
- The soil to indoor air pathway for volatilization of PCE and TCE is likely complete and will be addressed as part of the FFS. The soil vapor data indicate that PCE and TCE in soil may be acting as a source, impacting indoor air at Morrell's and the Thriftway office and could also be impacting indoor air at the building to the north. Additional indoor air sampling will likely be required to assess whether indoor air at the adjacent building is affected.
- Interpreting the indoor air data from Morrell's and the Thriftway office is complicated by the historic use of chlorinated solvents at Morrell's. Although we understand that chlorinated solvents use by Morrell's was discontinued in 2009, PCE and TCE from the

previous use of chlorinated solvents may be present in building materials and could be degassing and contributing to the exceedances of indoor air cleanup levels. Regardless, soil vapor is likely a significant contributor to the indoor air quality and will need to be addressed in the FFS.

- Lead is not retained as a COC for the Site. Lead was not detected in groundwater and only low concentrations of lead, well below applicable cleanup level, were detected in soil.
- Groundwater cleanup levels are established based on Model Toxics Control Act (MTCA) Method A cleanup levels and, where Method A values are not established, on Federal drinking water maximum contaminant levels (MCLs). With this change, the applicable cleanup level for carbon tetrachloride is 5 micrograms per liter (µg/L), based on the MCL. All detections of carbon tetrachloride in groundwater at the Site are less than 5 µg/L and this constituent is no longer included as a COC.
- The remaining unaddressed data gap is the vertical extent of PCE- and TCE-impacted soil beneath the building housing Morrell's. Limited access and the developed nature of the property limits assessment activities at this time; this data gap will be addressed during implementation of remedial measures developed through the FFS.

We recommend proceeding with the FFS to address COCs in soil, groundwater, and air.

Completed Scope of Work

This section describes the scope of work completed to address identified data gaps at the Site. The scope of work was described in the Aspect proposal dated December 14, 2011 and developed based on Ecology's September 2011 opinion letter requesting further action and agreed to in the response letter to Ecology dated November 29, 2011.

Install Deep Well to Further Define Lower Water Bearing Zone

Between January 30 and February 2, 2012 Aspect Consulting oversaw the installation of one deep monitoring well (MW-14D) in the City of Tacoma right-of-way on North First Street (Figure 1). The purpose of this well was to better characterize water quality in the lower water bearing zone west-northwest of well MW-8D.

Drilling and well construction work was performed by Major Drilling of Pacific, Washington using sonic drilling methods. The well boring was advanced to a total depth of 145 feet bgs. An Aspect Consulting geologist logged soil descriptions and determined at what depth to screen the well. The well was constructed with 20 feet of 2-inch-diameter schedule 40 PVC screen between depths of about 123 and 143 feet bgs, with a 2-inch-diameter schedule 40 PVC riser extending from the top of the screen to near ground surface. The well was completed with a flush mount surface monument and lockable well cap. The well drilling and construction log is provided in Attachment A.

Soils encountered during drilling were similar to those from other Site borings, consisting of about 33 feet of silty sand and gravel (interpreted as till) overlying about 45 feet of predominantly sand and gravel (interpreted as advance outwash). Underlying the outwash was a sequence of primarily silt and silty sand, with limited thicknesses of sands and gravels. Water in the lower water bearing zone was encountered at a depth of about 130 feet bgs at time of drilling; following well construction the

water level stabilized at a depth of about 134 feet bgs. The well was developed with a Waterra pump until water turbidity was minimized.

Groundwater Sampling for VOCs and Lead

On February 6, 2012 Aspect Consulting collected groundwater samples from five wells tapping the upper water bearing zone (MW-1, MW-2, MW-5, MW-7, and MW-8) and four wells tapping the lower water bearing zone (MW-8D, MW-12D, MW-13D, and MW-14D). All samples were analyzed for lead by EPA Method 200.8 and VOCs by EPA Method 8260C by Freidman and Bruya of Seattle, Washington. Laboratory certificates of analysis are provided in Attachment B. The purposes of this sampling and analysis were to:

- Confirm results of previous rounds of groundwater quality sampling for VOCs;
- Characterize water quality in the lower water bearing zone tapped by new well MW-14D; and
- Assess whether a previous detection of lead in a groundwater grab sample from soil boring DC PLAS-2-W (located near well MW-2) reflects groundwater conditions at the Site.

Recent previous groundwater sampling rounds were preformed with passive diffusion bags to minimize production of well purge water requiring disposal. However, because groundwater samples from the current sampling round were also analyzed for lead, active pumping methods were required. Groundwater samples were collected using a bladder pump with disposable bladders and tubing; non-disposable pump components were decontaminated between wells.

Although originally planned for sampling, well MW-11 was not sampled this round. This well is located in a walk-in food storage cooler in the Thriftway grocery store, upgradient from the Morrell's site. We decided not to sample this well using the bladder pump due to the potential hazard of handling purge water in a food storage area.

Shallow Soil Sampling for VOCs and Lead

On March 8, 2012 eight shallow soil borings (DP-10 through DP-17) were advanced near the east and south boundaries of the Morrell's parcel and in the Thriftway parking lot (Figure 2). Soil samples from the borings were analyzed for total lead by EPA Method 200.8. Samples from the borings near Morrell's (DP-10, DP-12, DP-13, and DP-14) were also analyzed for VOCs by EPA Method 8260C.

The purposes of the shallow soil boring sampling and analysis were to:

- Provide additional soil quality data on chlorinated VOCs near Morrell's;
- Delineate a naphthalene detection in soil at boring DP-08; and
- Assess whether soil has been impacted by lead.

The borings were drilled with a direct-push drill rig operated by Major Drilling. An Aspect Consulting geologist logged soil descriptions and collected samples for laboratory analysis. Boring depths ranged from 7 to 10 feet bgs. Soil boring logs are provided in Attachment A.

Indoor Air and Soil Vapor Sampling

Indoor air and soil vapor sampling were performed to assess whether indoor air at the building housing Morrell's has been impacted by chlorinated VOCs and whether chlorinated VOCs in soil vapor could adversely impact indoor air in the adjacent building to the north.

Indoor air samples were collected from Morrell's and the Thriftway office using six liter Summa canisters equipped with 8-hour flow controllers to provide a time-averaged sample. A background air sample was also collected using a Summa canister placed in the parking lot across North First Avenue.

Soil vapor samples (VP-1 through VP-3) were collected from below the pavement in the alleyway between Morrell's and the retail building to the north (Figure 2). Location VP-2 was at the "hotspot" outside the door form Morrell's to the alley previously identified in a Gore Sorber® survey. Locations VP-1 and VP-3 were about 20 feet northwest and southeast of VP-2, respectively. Soil vapor samples were collected from beneath the concrete slab in the alley using stainless steel vapor sampling points installed to a depth of about 12 inches. Samples were collected from beneath a shroud filled with a known concentration of helium gas to test for leakage of air into the sampling assembly and ensure the collected samples are representative of soil vapor conditions. Helium was not detected in two of the samples; the detected helium concentration in the third sample was less than 2 percent of the concentration beneath the shroud, indicating no significant leakage.

Soil vapor and indoor air samples were analyzed by Air Toxics, Ltd. of Folsom, California for PCE, TCE, DCE, vinyl chloride, benzene, toluene, ethylbenzene, xylenes, and naphthalene by modified EPA Method TO-15. Laboratory certificates of analysis are provided in Attachment B.

Investigation Results

This section summarizes results of the data gaps investigation, including groundwater elevations, soil and groundwater quality, and indoor air and soil vapor quality.

Groundwater Level Data

Water level data measured at Site wells during the data gaps investigation and previous investigations are summarized on Table 1. Data from wells tapping the upper, perched water bearing zone are contoured on Figure 3. The water levels are relatively steady throughout the year, with a maximum variation over time of less than 2 feet. Groundwater flow direction in the upper water bearing zone also varies little, with flow predominantly to the northeast.

Depth to water in the deeper wells (MW-8D, MW-12D, MW-13D, and MW-14D) is highly dependent on the total well depth, with lower water levels measured in deeper wells. This relationship between well depth and water level is consistent with a downward hydraulic gradient. Because the deeper wells are screened at different depths (total depths range from 116 to 145 feet bgs, as shown on Table 1) it is not reasonable to contour these data to evaluate flow direction in the deeper water bearing zones. It is worth noting that for the two wells screened at nearly identical depths (MW-13D and MW-14D) the water level in MW-14D, located further south, is higher by about 4 feet. This implies a generally northward flow, although any eastward or westward component of flow is uncertain.

Groundwater Quality Data

Groundwater quality results are summarized on Table 2 and shown on Figure 1 with previously reported groundwater quality data. Results are consistent with previous data, with the highest concentrations of chlorinated VOCs in the uppermost water bearing unit at MW-2 and MW-8, near the Morrell's dry cleaners. PCE, TCE, and *cis*-1,2-DCE were detected at concentrations below cleanup levels in the new deep well MW-14D. These constituents were either not detected or detected at concentrations below cleanup levels at deep wells MW-12D and MW-13D; in December 2010 PCE was detected in these wells at concentrations slightly exceeding the cleanup level.

Lead was not detected in groundwater indicating the historical detection in a groundwater grab sample from soil boring DC PLAS-2-W does not represent groundwater conditions at the Site.

Soil Quality Data

Soil quality results are summarized on Table 3 and shown on Figure 2 with previously reported soil quality data. PCE was detected in soil at a concentration exceeding the cleanup level at one location (DP-10) immediately south of Morrell's. Chlorinated VOCs were not detected in any other soil samples collected during this investigation.

Very low concentrations of lead, consistent with natural background, were detected in soil. The maximum concentration was 2.8 mg/kg, well below the cleanup level of 250 mg/kg.

Naphthalene was not detected in any of the soil samples from the current investigation. Based on these data and data from prior investigations the area of soil impacted with naphthalene is limited to the upper 3 to 4 feet of soil in the immediate vicinity of exploration DP-08.

Indoor Air and Soil Vapor Data

Indoor air sample results from Morrell's and the Thriftway office are summarized on Table 4 and soil vapor sample results from the alley north of Morrell's are summarized on Table 5. Indoor air sample results were corrected for background concentrations by subtracting the concentration detected in the background sample from the indoor air samples. Concentrations of PCE and TCE in both indoor air samples exceed MTCA Method B cleanup levels for indoor air. Vinyl chloride, *cis*-1,2,-DCE, and *trans*-1,2-DCE were not detected in indoor air.

The BTEX compounds were detected in indoor air at concentrations below cleanup levels. The achievable detection limit for naphthalene exceeded the indoor air cleanup level; however, given the limited extent of naphthalene detected in soil it is expected that naphthalene is not adversely affecting indoor air.

Soil vapor data should not be compared directly to indoor air cleanup levels. Instead, following Ecology's vapor intrusion guidance (Ecology, 2009) soil vapor data were compared to screening levels equal to ten times the indoor air cleanup level, conservatively assuming a 10 fold attenuation of vapor concentrations across the building slab. The PCE soil vapor concentrations exceed the screening level at the three vapor sampling points. Detected concentrations of TCE also exceeded the screening level at locations VP-1 and VP-3. The sample from VP-2 needed to be diluted by the lab due to the high concentration of PCE. As a result the detection limits for TCE, *cis*-1,2-DCE, vinyl chloride, benzene, and naphthalene for this sample exceeded their respective screening levels. Based

on the lack of detections of *cis*-1,2-DCE, vinyl chloride, and benzene in soil samples and the other soil vapor samples, and the limited extent of naphthalene-impacted soil it is unlikely that concentrations of these constituents in soil vapor at VP-2 exceed screening levels for protection of indoor air quality.

Cleanup Levels and Selection of COCs

Soil and groundwater screening levels based on MTCA Method A and Method B cleanup levels were presented in the RI Report. In Ecology's Further Action letter it was noted that mixing of Method A and Method B cleanup levels within a given medium (e.g., groundwater) is not allowed. The Further Action letter further stated that applicable Method A cleanup levels should be used, and where no Method A cleanup level has been established that existing Applicable or Relevant and Appropriate Requirements (ARARs) are to be used. This section provides a summary of proposed cleanup levels for use in the FFS and identifies constituents of concern (COCs) based on those constituents detected at the Site at concentrations exceeding cleanup levels.

MTCA Method A soil cleanup levels for unrestricted land use for constituents detected at the Site are summarized in Table 6. Method A soil cleanup levels are not available for *cis*-1,2-DCE, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, p-isopropyltoluene, tert-butylbenzene, and sec-butylbenzene; no ARARs for these constituents in soil were identified.

Method A groundwater cleanup levels for constituents detected at the Site are summarized in Table 7. Method A groundwater cleanup levels are not available for *cis*-1,2-DCE, *trans*-1,2-DCE, chloroethane, chloroform, acetone, and carbon tetrachloride. Federal MCLs are established ARARs for *cis*-1,2-dichloroethene, *trans*-1,2-dichloroethene, chloroform, and carbon tetrachloride and will be applied as the groundwater cleanup levels for these constituents (see Table 7).

Indoor air cleanup levels are summarized in Table 8. These were selected as the more stringent value of the MTCA Method B carcinogen or non-carcinogen air cleanup levels.

COCs in soil, groundwater, and air were identified based on a comparison of detected contaminant concentrations from environmental investigations to the cleanup levels. The comparisons of detected soil contaminant concentrations to cleanup levels are shown in Table 6. Contaminants in soil with concentrations exceeding the cleanup levels include:

- PCE
- TCE
- Naphthalene

The comparisons of detected groundwater contaminant concentrations to cleanup levels are shown in Table 7. Contaminants in groundwater with concentrations exceeding the cleanup levels include:

- PCE
- TCE
- *cis*-1,2-DCE

- Vinyl Chloride

The comparisons of detected indoor air contaminant concentrations to cleanup levels are shown in Table 8. Contaminants in air with concentrations exceeding the cleanup levels include:

- PCE
- TCE

With completion of this scope of work, Site data gaps are essentially addressed and the Site characterization data are suitable for proceeding to a FFS to address the identified COCs.

References

Aspect Consulting, 2011a, Remedial Investigation Report, Morrell's Dry Cleaners, Prepared for David Shaw, Successor to Walker Chevrolet, February 18, 2011.

Aspect Consulting, 2011b, Morrell's Dry Cleaners, Further Action Letter Response, VCP SW1039. November 29, 2011.

Ecology, 2009, Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action, Review Draft, Publication No. 09-09-047, October 2009.

Ecology, 2011, Further Action at the following Site: Morrell's Dry Cleaners, September 26, 2011.

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 exclusive use of David Shaw, Successor to Walker Chevrolet for specific application to the referenced property. This memorandum does not represent a legal opinion. No other warranty, expressed or implied, is made.

Attachments:

Table 1 – Groundwater Elevation Data
Table 2 – Groundwater Sample Results
Table 3 – Soil Sample Results
Table 4 – Indoor Air Sample Results
Table 5 – Sub-Slab Vapor Sample Results
Table 6 – Soil Cleanup Levels
Table 7 – Groundwater Cleanup Levels
Table 8 – Indoor Air Cleanup Levels
Figure 1 – Groundwater Quality Data
Figure 2 – PCE Concentrations in Soil
Figure 3 – Groundwater Elevation Contour Map, February 2012
Attachment A – Well Construction and Boring Logs
Attachment B – Laboratory Certificates of Analysis

Table 1 - Groundwater Elevation Data

Morrell's Dry Cleaner, Former Walker Chevrolet Property, Tacoma, Washington

Well ID	Date	Screened Interval in Feet bgs	Top of Casing Elevation	Depth to Water	Groundwater Elevation
MW-1	2/27/2008	50 to 65	275.25	52.32	222.93
	10/2/2008			53.09	222.16
	5/11/2009			53.68	221.57
	12/22/2010			53.61	221.64
	2/6/2012			52.93	222.32
MW-2	2/27/2008	50 to 65	273.14	51.50	221.64
	10/2/2008			51.84	221.30
	5/12/2009			52.42	220.72
	12/22/2010			52.44	220.70
	2/6/2012			51.77	221.37
MW-3	2/27/2008	52 to 67	272.77	dry	dry
	10/2/2008			dry	dry
	5/11/2009			dry	dry
MW-4	2/27/2008	49 to 64	273.01	dry	dry
	10/2/2008			dry	dry
	5/11/2009			dry	dry
MW-5	2/27/2008	50 to 65	273.13	50.87	222.26
	10/2/2008			51.65	221.48
	5/11/2009			52.28	220.85
	12/22/2010			52.21	220.92
	2/6/2012			51.60	221.53
MW-6	2/27/2008	49 to 64	272.55	dry	dry
	10/2/2008			dry	dry
	5/11/2009			dry	dry
MW-7	2/27/2008	50 to 65	274.44	52.90	221.54
	10/2/2008			53.08	221.36
	5/11/2009			53.69	220.75
	12/22/2010			53.73	220.71
	2/6/2012			52.98	221.46
MW-8	10/2/2008	51 to 61	273.14	52.68	220.46
	5/12/2009			53.28	219.86
	12/22/2010			53.32	219.82
	2/6/2012			52.58	220.56
MW-8D	5/11/2009	96 to 116	273.11	112.56	160.55
	12/22/2010			112.58	160.53
	2/6/2012			112.52	160.59
MW-9	5/11/2009	60 to 70	273.78	dry	dry
	12/22/2010			dry	dry
	2/6/2012			dry	dry
MW-10	5/11/2009	60 to 70	274.45	dry	dry
	12/22/2010			dry	dry
	2/6/2012			dry	dry
MW-11	5/12/2009	53 to 63	273.52	52.20	221.32
	12/22/2010			52.24	221.28
MW-12D	12/22/2010	113 to 123	272.72	129.96	142.76
	2/6/2012			129.80	142.92
MW-13D	12/22/2010	125 to 145	271.96	137.88	134.08
	2/6/2012			137.43	134.53
MW-14D	2/6/2012	123 to 143	272.46	134.02	138.44

All measurements are in feet
bgs - below ground surface

Table 2 - Groundwater Sample Results

Morrell's Dry Cleaner, Former Walker Chevrolet Property, Tacoma, Washington

		Metals	VOCs									
Well ID	**Date**	**Lead**	**PCE**	**TCE**	**cis-1,2-DCE**	**trans-1,2-DCE**	**Vinyl Chloride**	**Chloroethane**	**Chloroform**	**Carbon Tetrachloride**	**Acetone**	**Benzene**
MW-1	8/28/07	NA	1.3	<1	<1	<1	<0.2	<1	<1	<1	<10	2.2
	1/30/08	NA	<1	<1	<1	<1	<0.2	<1	<1	<1	<10	<1
	10/2/08	NA	<1	<1	<1	<1	<0.2	<1	<1	<1	<10	<1
	5/11/09	NA	<1	<1	<1	<1	<0.2	<1	<1	<1	<10	<1
	12/22/10	NA	<1	<1	<1	<1	<0.2	<1	<1	<1	14	<0.35
	2/6/12	<1	<1	<1	<1	<1	<0.2	<1	<1	<1	<10	<0.35
MW-2	8/28/07	NA	**2,900**	(Note 1)	**7,100**	7.4	**19**	8.1	1	1.0	<10	(Note 1)
	1/30/08	NA	**1,400**	**520**	**2,000**	3	<0.2	<1	2.5	<1	<10	<1
	10/2/08	NA	**1,900**	**880**	**2,300**	5.3	**3.1**	1.0	3.5	1.0	<10	<1
	5/12/09	NA	**1,600**	**930**	**2,400**	5.7	**2.7**	<1	4.0	<1	<10	<1
	12/22/10	NA	**2,100**	**1,100**	**2,100**	4.8	**2.7**	<1	5.0	<1	16	<0.35
	2/6/12	<1	**1,600**	**810**	**1400**	<100	<20	<100	<100	<100	<1,000	<35
MW-5	1/22/08	NA	**67**	3	13	<1	<0.2	<1	2.1	3.3	<10	<1
	1/30/08	NA	**31**	1.1	4.5	<1	<0.2	<1	1.8	2.0	<10	<1
	10/2/08	NA	**75**	3.2	17	<1	<0.2	<1	1.9	1.2	<10	<1
	5/11/09	NA	**17**	1.1	44	<1	<0.2	<1	<1	<1	<10	<1
	12/22/10	NA	**190**	**14**	41	<1	<0.2	<1	2.9	3.2	15	1.1
	2/6/12	<1	**140**	**8.7**	25	<1	<0.2	<1	<1	<1	<10	<0.35
MW-7	1/22/08	NA	**6.6**	<1	<1	<1	<0.2	<1	<1	<1	<10	<1
	1/30/08	NA	1.5	<1	<1	<1	<0.2	<1	<1	1.5	<10	<1
	10/2/08	NA	<1	<1	<1	<1	<0.2	<1	<1	1.5	<10	<1
	5/11/09	NA	1.1	<1	<1	<1	<0.2	<1	<1	2.0	<10	<1
	12/22/10	NA	1.4	<1	<1	<1	<0.2	<1	<1	3.3	11	<0.35
	2/6/12	<1	<1	<1	<1	<1	<0.2	<1	<1	2.2	<10	<0.35
MW-8	4/22/08	NA	**1,300**	**780**	**2,400**	6.3	0.2	<1	2.5	<1	<10	<1
	10/2/08	NA	**680**	**390**	**3,600**	7.6	**6.9**	<1	2.5	<1	<10	<1
	5/12/09	NA	**780**	**370**	**2,600**	3.7	**2.0**	<1	2.5	<1	<10	<1
	12/22/10	NA	**470**	**150**	**1,800**	3.3	**1.4**	<1	2.2	<1	10	<0.35
	2/6/12	<1	**960**	**610**	**1,600**	<100	<20	<100	<100	<100	<1,000	<35
MW-8D	5/11/09	NA	<1	<1	11	<1	<0.2	<1	<1	1.9	<10	<1
	12/22/10	NA	<1	<1	21	<1	<0.2	<1	<1	2.0	13	<0.35
	2/6/12	<1	<1	<1	26	<1	<0.2	<1	<1	1.8	<10	<0.35
MW-11	5/12/09	NA	<1	2.3	<1	<1	<0.2	<1	1.9	1.4	<10	<1
	12/22/10	NA	<1	4.6	<1	<1	<0.2	<1	2.0	2.8	12	<0.35
	2/6/12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12D	12/22/10	NA	**6.1**	<1	22	<1	<0.2	<1	<1	<1	12	<0.35
	2/6/12	<1	<1	<1	17	<1	<0.2	<1	<1	<1	<10	<0.35
MW-13D	12/22/10	NA	**14**	3.2	30	<1	<0.2	<1	<1	<1	18	<0.35
	2/6/12	<1	4.2	2.4	28	<1	<0.2	<1	<1	<1	<10	<0.35
MW-14D	2/6/12	<1	4.2	3.3	28	<1	<0.2	<1	<1	<1	<10	<0.35

Notes:

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

All values are in units of μg/L

VOCs - volatile organic compounds

PCE - tetrachloroethene

TCE - trichloroethene

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

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

NS - not sampled

BOLD signifies exceedence of groundwater screening levels (see Table 7)

Table 3 - Soil Sample Results

Morrell's Dry Cleaner, Former Walker Chevrolet Property, Tacoma, Washington

Boring ID	Sample Depth (ft)	Date	Metals	VOCs									
			Lead	PCE	TCE	cis-1,2-DCE	Total Xylenes	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	tert-Butylbenzene	sec-Butylbenzene	p-Isopropyltoluene	Naphthalene
DP-01	1	10/21/10	NA	**2.1**	<0.03	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	2	10/21/10	NA	**1.0**	<0.03	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DP-02	1	10/21/10	NA	**0.8**	<0.03	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DP-04	2	10/20/10	NA	**1.8**	<0.03	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DP-05	3	10/20/10	NA	**1.4**	<0.03	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	6	10/20/10	NA	**0.54**	<0.03	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DP-07	2	10/21/10	NA	**3**	<0.03	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	2.5	10/21/10	NA	**36**	**0.14**	0.11	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DP-08	3	10/20/10	NA	<0.025	<0.03	<0.05	1.16	76	26	0.43	1.8	12	**28**
	4.5	10/20/10	NA	<0.025	<0.03	<0.05	<0.15	0.49	0.35	<0.05	0.14	0.10	0.22
DP-09	3	10/20/10	NA	<0.025	<0.03	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	6	10/20/10	NA	**0.13**	<0.03	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DP-10	8.5	02/08/12	1.70	**0.24**	<0.03	<0.05	<0.15	0.054	<0.05	0.083	0.94	0.21	<0.05
DP-11	4	02/08/12	1.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DP-12	5.5	02/08/12	1.75	<0.025	<0.03	<0.05	<0.15	<0.05	<0.05	<0.05	0.13	<0.05	<0.05
DP-13	7	02/08/12	1.66	<0.025	<0.03	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DP-14	7	02/08/12	2.08	<0.025	<0.03	<0.05	<0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DP-15	4	02/08/12	1.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DP-16	4	02/08/12	2.81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DP-17	4	02/08/12	1.96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
All values are in units of mg/kg
VOCs - volatile organic compounds
PCE - tetrachloroethene
TCE - trichloroethene
cis-1,2-DCE - cis-1,2-dichloroethene
trans-1,2-DCE - trans-1,2-dichloroethene
BOLD signifies exceedence of soil screening levels (see Table 6)

Table 4 - Indoor Air Sample Results

Morrell's Dry Cleaners, Former Walker Chevrolet Property, Tacoma, Washington

Constituent	Cleanup Level [2]	Outdoor (Background)	Morrells [3]	Thriftway Office [3]
Tetrachloroethene	0.42	0.42	**22**	**15**
Trichloroethene	0.1	<0.17	**9.0**	**5.7**
cis-1,2-Dichloroethene	16	<0.12	<0.14	<0.14
trans-1,2-Dichloroethene	32	<0.63	<0.72	<0.69
Vinyl chloride	0.28	<0.040	<0.047	<0.045
Benzene	0.32	**2.0**	0.2	0.2
Ethylbenzene	460	1.7	0.3	0.5
Toluene	2,200	6.3	1.0	2.7
Xylenes (total)	46	7.9	2.1	3.3
Naphthalene	1.4	<4.1	<4.8	<4.6

Notes:

1) All concentrations are in units of micrograms per cubic meter (ug/m^3).

2) Values in this column based on the most stringent MTCA Method B air cleanup level.

3) Analytical results corrected by subtracting background results from indoor air results.

Table 5 - Sub-Slab Vapor Sample Results

Morrell's Dry Cleaners, Former Walker Chevrolet Property, Tacoma, Washington

Constituent	Screening Level [(2)]	VP-1 Results	VP-2 Results	VP-3 Results
Tetrachloroethene	4.2	**270**	**150,000**	**380**
Trichloroethene	1.0	**1.1**	**<230**	**1.9**
cis-1,2-Dichloroethene	160	<0.72	**<170**	<1.2
trans-1,2-Dichloroethene	320	<0.72	<170	<1.2
Vinyl chloride	2.8	<0.47	**<110**	<0.78
Benzene	3.2	<0.58	**<140**	<0.97
Ethylbenzene	4,600	<0.79	<180	1.8
Toluene	22,000	0.69	<160	6.0
Xylenes (total)	460	4.1	<180	9.3
Naphthalene	14	<4.8	**<900**	<8.0
Helium (%)		0.56	<0.086	<0.086

Notes:

1) All concentrations are in units of micrograms per cubic meter (ug/m^3).

2) Values in this column were obtained by multiplying the most stringent MTCA Method B air cleanup level by 10, to conservatively account for soil vapor attenuation across the floor slab in accordance with Ecology's *Guidance for Evaluating Soil Vapor Instrusion in Washington State (Ecology, 2009).*

Table 6 - Soil Cleanup Levels

Morrell's Dry Cleaner, Former Walker Chevrolet Property, Tacoma, Washington

Constituent	MTCA Method A Cleanup Level (Unrestricted Land Use)	Maximum Detected Concentration
Tetrachloroethene	0.05	36
Trichloroethene	0.03	0.85
cis-1,2-Dichloroethene	NE	0.11
Total Xylenes	9	1.16
Naphthalene	5	28
1,2,4-Trimethylbenzene	NE	76
1,3,5-Trimethylbenzene	NE	26
p-Isopropyltoluene	NE	12
tert-Butylbenzene	NE	76
sec-Butylbenzene	NE	1.8
Lead	250	2.81

Notes:
All values are in units of mg/kg
Highlighted constituents - retained as Constituents of Concern
NE- Not Established

Table 7 - Groundwater Cleanup Levels

Morrell's Dry Cleaner, Former Walker Chevrolet Property, Tacoma, Washington

Constituent	MTCA Method A Cleanup Level	Federal MCL	Selected Cleanup Level	Maximum Detected Concentration
Benzene	5	5	5	2.2
Tetrachloroethene	5	5	5	2,900
Trichloroethene	5	5	5	1,100
cis-1,2-Dichloroethene	NE	70	70	7,100
trans-1,2-Dichloroethene	NE	100	100	7.6
Vinyl Chloride	0.2	2	0.2	19
Chloroethane	NE	NE	NE	8.1
Chloroform	NE	80	7.2	5
Acetone	NE	NE	NE	18
Carbon Tetrachloride	NE	5	5	3.3

Notes:
All values are in units of μg/L
Highlighted constituents - retained as Constituents of Concern
NE- Not Established
MCL - Maximum Contaminant Level

Table 8 - Indoor Air Cleanup Levels

Morrell's Dry Cleaners, Former Walker Chevrolet Property, Tacoma, Washington

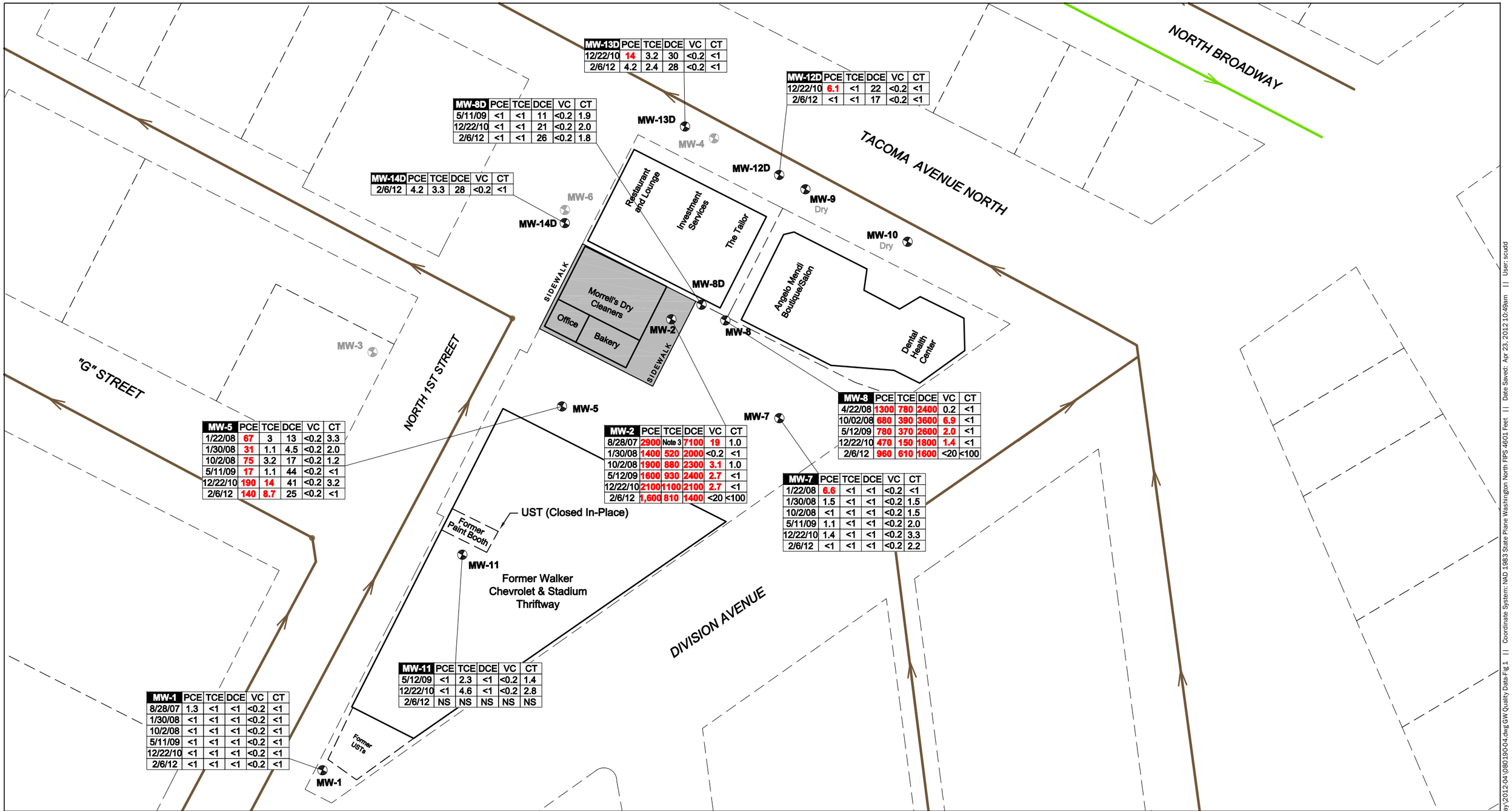
Constituent	Cleanup Level	Maximum Detected Concentration
Tetrachloroethene	0.42	22
Trichloroethene	0.1	9
cis-1,2-Dichloroethene	16	<0.14
trans-1,2-Dichloroethene	32	<0.72
Vinyl chloride	0.28	<0.047
Benzene	0.32	0.2
Ethylbenzene	460	0.3
Toluene	2,200	1
Xylenes (total)	46	2.1
Naphthalene	1.4	<4.8

Notes:

All concentrations are in units of micrograms per cubic meter (ug/m^3).

Cleanup levels are the more stringent of the MTCA Method B carcinogen or non-carcinogen air cleanup levels.

Highlighted constituents - retained as Constituents of Concern



MW-13D	PCE	TCE	DCE	VC	CT
12/22/10	14	3.2	30	<0.2	<1
2/6/12	4.2	2.4	28	<0.2	<1

MW-12D	PCE	TCE	DCE	VC	CT
12/22/10	6.1	<1	22	<0.2	<1
2/6/12	<1	<1	17	<0.2	<1

MW-9D	PCE	TCE	DCE	VC	CT
5/11/09	<1	<1	11	<0.2	1.9
12/22/10	<1	<1	21	<0.2	2.0
2/6/12	<1	<1	26	<0.2	1.8

MW-14D	PCE	TCE	DCE	VC	CT
2/6/12	4.2	3.3	28	<0.2	<1

MW-8	PCE	TCE	DCE	VC	CT
4/22/08	1300	780	2400	0.2	<1
10/02/08	680	390	3600	6.9	<1
5/12/09	780	370	2600	2.0	<1
12/22/10	470	150	1800	1.4	<1
2/6/12	960	610	1600	<20	<100

MW-5	PCE	TCE	DCE	VC	CT
1/22/08	67	3	13	<0.2	3.3
1/30/08	31	1.1	4.5	<0.2	2.0
10/2/08	75	3.2	17	<0.2	1.2
5/11/09	17	1.1	44	<0.2	<1
12/22/10	190	14	41	<0.2	3.2
2/6/12	140	8.7	25	<0.2	<1

MW-2	PCE	TCE	DCE	VC	CT
8/28/07	2900	Note 3	7100	19	1.0
1/30/08	1400	520	2000	<0.2	<1
10/2/08	1900	880	2300	3.1	1.0
5/12/09	1600	930	2400	2.7	<1
12/22/10	2100	1100	2100	2.7	<1
2/6/12	1,600	810	1400	<20	<100

MW-7	PCE	TCE	DCE	VC	CT
1/22/08	6.6	<1	<1	<0.2	<1
1/30/08	1.5	<1	<1	<0.2	1.5
10/2/08	<1	<1	<1	<0.2	1.5
5/11/09	1.1	<1	<1	<0.2	2.0
12/22/10	1.4	<1	<1	<0.2	3.3
2/6/12	<1	<1	<1	<0.2	2.2

MW-11	PCE	TCE	DCE	VC	CT
5/12/09	<1	2.3	<1	<0.2	1.4
12/22/10	<1	4.6	<1	<0.2	2.8
2/6/12	NS	NS	NS	NS	NS

MW-1	PCE	TCE	DCE	VC	CT
8/28/07	1.3	<1	<1	<0.2	<1
1/30/08	<1	<1	<1	<0.2	<1
10/2/08	<1	<1	<1	<0.2	<1
5/11/09	<1	<1	<1	<0.2	<1
12/22/10	<1	<1	<1	<0.2	<1
2/6/12	<1	<1	<1	<0.2	<1

LEGEND

- Existing Monitoring Well
- Decommissioned Monitoring Well
- Sanitary Sewer Line
- Storm Sewer Line

PCE: Tetrachloroethene
TCE: Trichloroethene
DCE: cis-1,2-Dichloroethene
VC: Vinyl Chloride
CT: Carbon Tetrachloride

Notes:
1) All concentrations are in µg/L.
2) **Red value** indicates a detection exceeding the MTCA screening level.
3) For the sample collected from MW-2 on 8/28/07, the lab reported 1,800 µg/L benzene and <1 µg/L TCE. This is likely an error; apparently the gas chromatograph peak identified by the lab as benzene was actually a TCE peak.

NS: Not Sampled

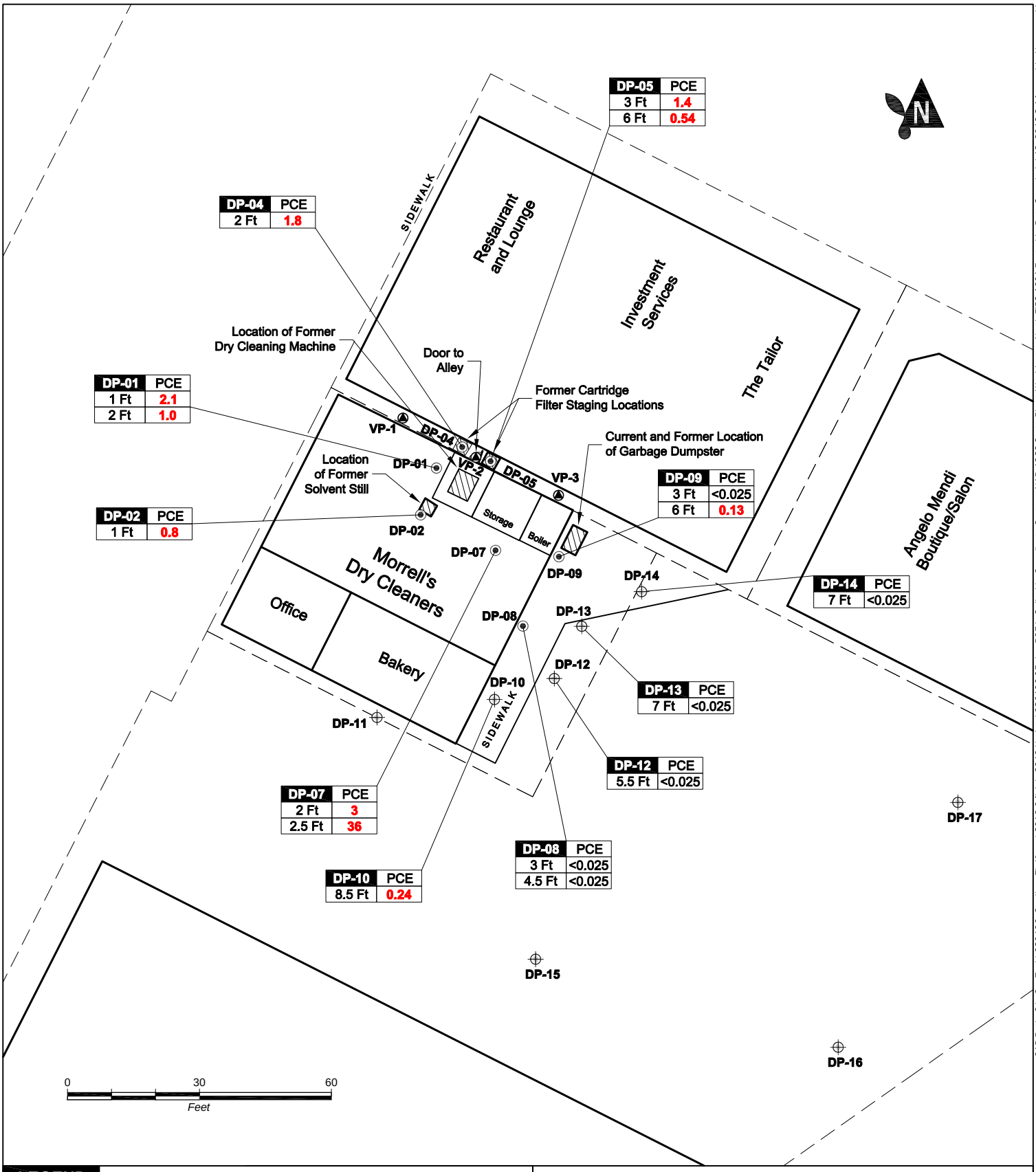
0 60 120
Feet

Groundwater Quality Data

Morrell's Dry Cleaners, Former Walker Chevrolet Property
Tacoma, Washington

Aspect Consulting	APR-2012	BY: JM/SCC	FIGURE NO. 1
	PROJECT NO. 080190	REV BY: SCC	

CAD Path: Q:_GeoTech\080190 Stadium Thriftway\2012-04\080190-04.dwg GW Quality Data-Fig 1 || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Apr 23, 2012 10:49am || User: scudd



CAD Path: Q:_GeoTech\080190 Stadium Thriftway\2012-04\July 2012 Update\080190-05.dwg PCE in Soil || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Jul 12, 2012 3:14pm || User: scudd

LEGEND

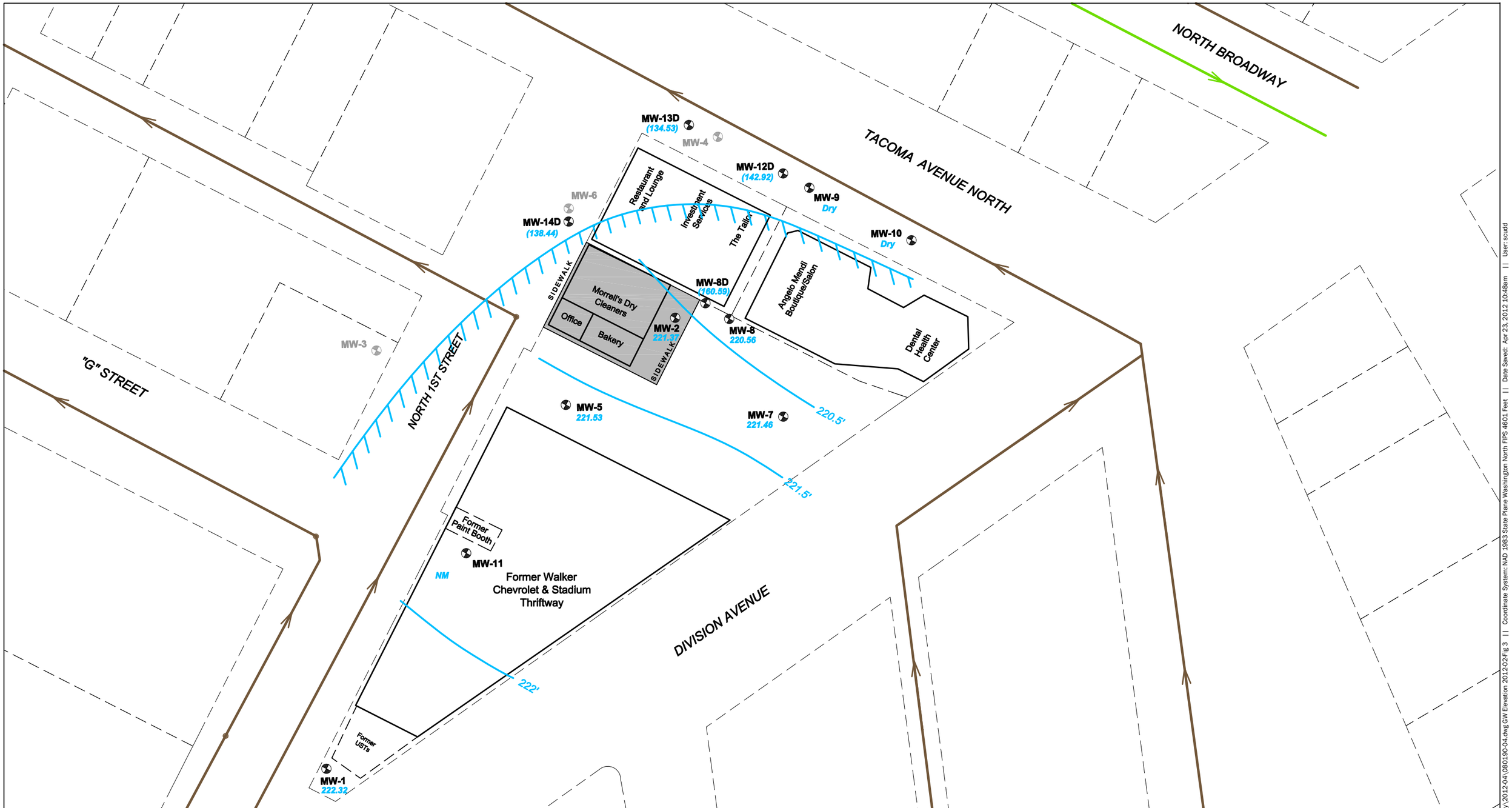
- Soil Sampling Locations *(2/8/2012)*
- Soil Sampling Locations *(10/20-21/2010)*
- Soil Vapor Sampling Locations *(2/9/2012)*
- Former Site Features
  (Based on the deposition of Linda Morrell, dated April 22 and July 21, 2010.)

PCE: Tetrachloroethene concentrations are in mg/kg. Depths are in feet.

PCE Concentrations in Soil

Morrell's Dry Cleaners, Former Walker Chevrolet Property
Tacoma, Washington

Aspect Consulting	APR-2012	BY: JM/SCC	FIGURE NO. 2
	PROJECT NO. 080190	REV BY: SCC	



LEGEND

- Existing Monitoring Well
- Decommissioned Monitoring Well
- Sanitary Sewer Line
- Storm Sewer Line
- Shallow Aquifer Groundwater Elevation Contour in Feet
- Estimated Limit of Shallow Aquifer
- 220.85 — Groundwater Elevation in Shallow Aquifer
- (160.55) — Groundwater Elevation in Deep Aquifer
- NM — Not Measured

N

0 60 120
Feet

Groundwater Elevation Contour Map
February 2012

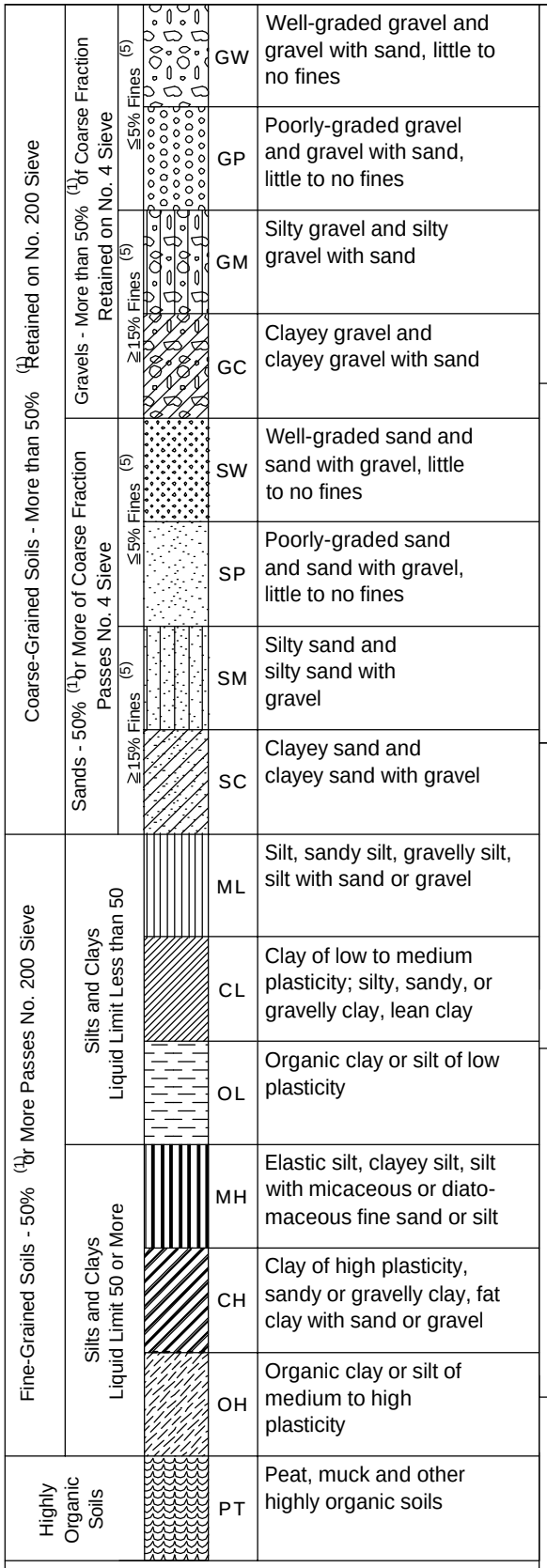
Morrell's Dry Cleaners, Former Walker Chevrolet Property
Tacoma, Washington

Aspect Consulting	APR-2012	BY: JM/SCC	FIGURE NO. 3
	PROJECT NO. 080190	REV BY: -	

CAD Path: Q:_GeoTech\080190 Stadium Thriftway\2012-04\080190-04.dwg GW Elevation 201202-Fig 3 || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Apr 23, 2012 10:48am || User: scudd

ATTACHMENT A

Well Construction and Boring Logs



Terms Describing Relative Density and Consistency

	Density	SPT (2) blows/foot
Coarse-Grained Soils	Very Loose	0 to 4
	Loose	4 to 10
	Medium Dense	10 to 30
	Dense	30 to 50
	Very Dense	>50
	Consistency	**SPT (2) blows/foot**
Fine-Grained Soils	Very Soft	0 to 2
	Soft	2 to 4
	Medium Stiff	4 to 8
	Stiff	8 to 15
	Very Stiff	15 to 30
	Hard	>30

Test Symbols

FC = Fines Content
G = Grain Size
M = Moisture Content
A = Atterberg Limits
C = Consolidation
DD = Dry Density
K = Permeability
Str = Shear Strength
Env = Environmental
PiD = Photoionization Detector

Component Definitions

Descriptive Term	Size Range and Sieve Number
Boulders	Larger than 12"
Cobbles	3" to 12"
Gravel	3" to No. 4 (4.75 mm)
Coarse Gravel	3" to 3/4"
Fine Gravel	3/4" to No. 4 (4.75 mm)
Sand	No. 4 (4.75 mm) to No. 200 (0.075 mm)
Coarse Sand	No. 4 (4.75 mm) to No. 10 (2.00 mm)
Medium Sand	No. 10 (2.00 mm) to No. 40 (0.425 mm)
Fine Sand	No. 40 (0.425 mm) to No. 200 (0.075 mm)
Silt and Clay	Smaller than No. 200 (0.075 mm)

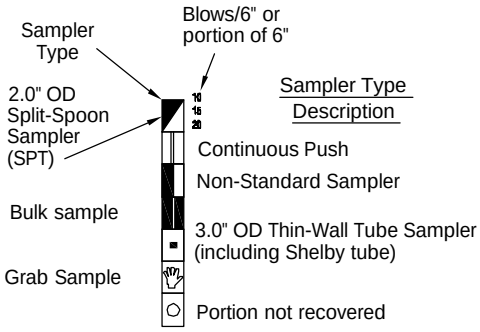
(3) Estimated Percentage

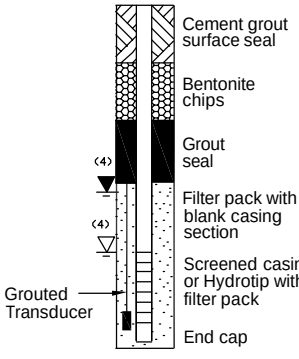
Percentage by Weight	Modifier
<5	Trace
5 to 15	Slightly (sandy, silty, clayey, gravelly)
15 to 30	Sandy, silty, clayey, gravelly)
30 to 49	Very (sandy, silty, clayey, gravelly)

Moisture Content

Dry - Absence of moisture, dusty, dry to the touch
Slightly Moist - Perceptible moisture
Moist - Damp but no visible water
Very Moist - Water visible but not free draining
Wet - Visible free water, usually from below water table

Symbols





(1) Percentage by dry weight
(2) (SPT) Standard Penetration Test (ASTM D-1586)
(3) In General Accordance with Standard Practice for Description and Identification of Soils (ASTM D-2488)
(4) Depth of groundwater — ATD = At time of drilling; Static water level (date); BGS = below ground surface
(5) Combined USCS symbols used for fines between 5% and 15% as estimated in General Accordance with Standard Practice for Description and Identification of Soils (ASTM D-2488)

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.

Aspect CONSULTING

Exploration Log Key

DATE:
DESIGNED BY:
DRAWN BY:
REVISED BY:

PROJECT NO.

FIGURE NO.
A-1

Q:_ACAD Standards\Standard Details\Exploration Log Key A1.dwg

Monitoring Well Construction Log

Aspect CONSULTING

Project Number	Well Number	Sheet
080190	MW-14D	1 of 3

Project Name: Stadium Thriftway
Location: Tacoma, WA
Driller/Method: Major Drilling - Jeffrey / Sonic Geoprobe 8140LS - track mounted
Sampling Method: Continuous Core

Ground Surface Elev
Top of Casing Elev. 272.46
Depth to Water (ft BGS) 130 - 2/3/2012
Start/Finish Date 1/30/2012-2/2/2012

Depth / Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Blows/ 6"	Material Type	Description	Depth (ft)
1-7	Flush mounted steel well monument; thermos cap Cement surface seal from 0-2' bgs						Cleared for utilities using an air vacuum - No Recovery.	1-7
8-12	2" ID schedule 40 PVC casing, threaded connection, 0'-123'						Moist, brown, very gravelly, very silty SAND (SM); cobbles up to 5"; fine to medium sand, diamict fabric.	8-12
13-23	Bentonite chip seal (NSF/ANSI 60), 2'-121' bgs						Slightly moist, sandy, very gravelly, SILT (ML); fine to medium sand; cobbles up to 4". Diamict fabric.	13-23
24-27							Moist, brown, gravelly, very silty SAND (SM); fine to medium sand; subangular gravel; diamict fabric; cobbles up to 4". Orange-brown. Brown.	24-27
28-30							Moist, brown, slightly silty, gravelly SAND (SP-SM); fine to medium sand; subrounded gravel.	28-30
31-33							Moist, gray, gravelly, silty SAND (SM); fine to medium sand; subangular gravel. Brown.	31-33
34-41							Moist, brown, slightly gravelly SAND (SP); fine to medium sand. 1" pockets of pink, slightly silty SAND.	34-41
42-44							Moist, gray with iron stain mottling, gravelly, very sandy SILT (ML); fine to medium sand; subrounded gravel; diamict fabric.	42-44
45-46							Moist, gray, slightly silty, gravelly SAND (SP-SM); fine to medium sand.	45-46
47							Moist, orange-brown, slightly gravelly SAND (SP); trace silt.	47
48-49							Moist, brown with iron stain mottling, slightly gravelly, silty SAND (SM); 1" pockets of silt, fine to medium sand, subangular fine gravel with cobbles.	48-49

Sampler Type:
- ○ No Recovery
- ▮ Continuous Core

PID - Photoionization Detector
- ▼ Static Water Level
- ▽ Water Level (ATD)

Logged by: AET
Approved by: JNM
Figure No. A - 2

_MONITORING WELL_STADIUM THRIFTWAY.GPJ May 1, 2012

Monitoring Well Construction Log

Aspect CONSULTING

Project Number	Well Number	Sheet
080190	MW-14D	2 of 3

Project Name:	Stadium Thriftway	Ground Surface Elev	
Location:	Tacoma, WA	Top of Casing Elev.	272.46
Driller/Method:	Major Drilling - Jeffrey / Sonic Geoprobe 8140LS - track mounted	Depth to Water (ft BGS)	130 - 2/3/2012
Sampling Method:	Continuous Core	Start/Finish Date	1/30/2012-2/2/2012

Depth / Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Blows/ 6"	Material Type	Description	Depth (ft)
51							Moist, dark gray brown, slightly gravelly SAND (SP); medium to coarse sand, fine subrounded gravel.	51
52							Moist, red-brown, slightly silty SAND (SP-SM); medium sand; trace gravel.	52
53							Gravelly.	53
54							Moist, yellow-brown SAND (SP); medium to coarse sand.	54
55								55
56								56
57								57
58								58
59							Moist, gray, slightly silty SAND (SP-SM); fine to medium sand, trace fine gravel; faint stratification	59
60							Moist, brown to dark brown SAND (SP); medium sand.	60
61								61
62							Red-orange, slightly gravelly.	62
63								63
64								64
65							Very moist to wet, brown, very silty SAND (SM); fine sand.	65
66							Grades to fine to medium sand.	66
67							Wet, dark red-brown, very gravelly SAND (SP); coarse sand; trace silt, with cobbles up to 3".	67
68								68
69								69
70								70
71							Wet, brown-gray SAND (SP); trace gravel; medium sand.	71
72							Wet, red-brown GRAVEL (GW); fine to coarse gravel; trace silt; trace coarse sand.	72
73							Moist, red-brown with iron staining, very gravelly SAND (SP); medium sand, fine to coarse rounded gravel with cobbles up to 3"; trace silt; diamict fabric.	73
74							Brown.	74
75							Dry, gray, gravelly, very sandy SILT (ML); fine to medium sand; subrounded to subangular gravel; cobbles up to 4".	75
76							Moist, brown-red, slightly gravelly SAND (SP); medium sand; subrounded gravel; trace silt.	76
77							Slightly moist, gray, gravelly, silty SAND (SM); fine to medium sand; fine to coarse subrounded to rounded gravel.	77
78								78
79								79
80								80
81							Wet, brown SAND (SP); fine to medium sand, trace gravel.	81
82							Wet, red-brown GRAVEL (GP); coarse gravel and cobbles.	82
83							Very moist to wet, brown, gravelly, sandy SILT (ML); diamict fabric, cobbles up to 4". Gray.	83
84								84
85								85
86								86
87								87
88								88
89								89
90								90
91								91
92								92
93							Moist, gray-brown, slightly gravelly, silty SAND (SM); fine to medium sand.	93
94								94
95								95
96								96
97								97
98							Moist to wet, brown-gray SAND (SP); fine to medium sand.	98
99							Moist, gray-brown, slightly silty, gravelly SAND (SP-SM).	99

Sampler Type:
- ○ No Recovery
- ▌▌ Continuous Core

PID - Photoionization Detector
- ▼ Static Water Level
- ▽ Water Level (ATD)

Logged by: AET

Approved by: JNM

Figure No. A - 2

_MONITORING WELL_STADIUM THRIFTWAY.GPJ May 1, 2012

Monitoring Well Construction Log

Aspect CONSULTING

Project Number	Well Number	Sheet
080190	MW-14D	3 of 3

Project Name:	Stadium Thriftway	Ground Surface Elev	
Location:	Tacoma, WA	Top of Casing Elev.	272.46
Driller/Method:	Major Drilling - Jeffrey / Sonic Geoprobe 8140LS - track mounted	Depth to Water (ft BGS)	130 - 2/3/2012
Sampling Method:	Continuous Core	Start/Finish Date	1/30/2012-2/2/2012

Depth / Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Blows/ 6"	Material Type	Description	Depth (ft)
101							Moist to wet, brown, very sandy GRAVEL (GP); tr. silt, fine to coarse sand; fine subrounded to subangular gravel.	101
104							Slightly moist, gray and brown mottled, gravelly, sandy SILT (ML); fine to medium sand; fine to coarse gravel; diamict fabric.	104
111							Moist, brown and gray mottled, gravelly, silty SAND (SM); fine to medium sand; subrounded gravel up to 2".	111
114							Dry to slightly moist, gray with iron stain mottling, gravelly, sandy SILT (ML); diamict fabric.	114
117							Moist, brown-gray, slightly silty, very gravelly SAND (SP-SM); medium to coarse sand.	117
118							Moist, brown-gray, gravelly, silty SAND (SM); cobbles up to 3".	118
121							Slightly moist, gray, gravelly, sandy SILT (ML); fine to medium sand; cobbles up to 3".	121
123							Moist, brown, very silty, sandy GRAVEL (GM); cobbles up to 4", angular gravel, fine to coarse sand.	123
125	10x20 colorado silica sand filter pack, 121'-143.5' bgs						Dry to slightly moist, gray, gravelly, sandy SILT (ML); fine to medium sand, cobbles up to 4".	125
129	▽ 2/1/2012						Moist, brown-gray with orange mottling, silty, very gravelly SAND (SM); fine to coarse sand; fine to coarse angular gravel with cobbles up to 3".	129
134	▼ 2/3/2012 2" ID schedule 40 PVC 20-slot screen, 123.5'-143.5' bgs						Moist to wet, gray-brown, gravelly, sandy SILT (ML); fine to coarse sand, fine to coarse subangular gravel; diamict fabric. Very gravelly. Moist. Wet.	134
143	Threaded PVC end cap							143
145							Bottom of boring at 145' BGS.	145
149								149

Sampler Type:
- ○ No Recovery
- ▮ Continuous Core

PID - Photoionization Detector
- ▼ Static Water Level
- ▽ Water Level (ATD)

Logged by: AET

Approved by: JNM

Figure No. A - 2

_MONITORING WELL_STADIUM THRIFTWAY.GPJ May 1, 2012

Boring Log

Aspect CONSULTING

Project Number	Boring Number	Sheet
080190	DP-10	1 of 1

Project Name: Stadium Thriftway
Ground Surface Elev:
Location: Tacoma, WA
Driller/Method: Major Drilling - Dan / Direct push - limited access
Depth to Water (ft BGS): Not encountered ATD
Sampling Method: Continuous Core
Start/Finish Date: 2/8/2012

Depth / Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Drive/ Recovery (inches)	Material Type	Description	Depth (ft)
							Concrete.	
1	Hydrated bentonite chip backfill						Very dense, slightly moist, brown, gravelly, silty SAND (SM); fine to medium sand; diamict fabric.	1
2				0.0				2
3				0.0				3
4				0.0				4
5				0.6				5
6								6
7				142				7
8				1.9				8
9			DP-10-8.5	479				9
10				217			Refusal at 10 ft BGS.	10
11				16				11

Sampler Type:
- ◯ No Recovery
- ▮ Continuous Core

PID - Photoionization Detector (Headspace Measurement)

- ▼ Static Water Level
- ▽ Water Level (ATD)

Logged by: AET
Approved by: JNM
Figure No. A - 3

_ENV PROBE LOG STADIUM THRIFTWAY.GPJ May 1, 2012

Boring Log

Aspect CONSULTING

Project Number	Boring Number	Sheet
080190	DP-11	1 of 1

Project Name: Stadium Thriftway
Ground Surface Elev:
Location: Tacoma, WA
Driller/Method: Major Drilling - Dan / Direct push - limited access
Depth to Water (ft BGS): Not encountered ATD
Sampling Method: Continuous Core
Start/Finish Date: 2/8/2012

Depth / Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Drive/ Recovery (inches)	Material Type	Description	Depth (ft)
0							Asphalt.	0
1	Hydrated bentonite chip backfill			0.0			Slightly moist, brown, silty, very gravelly SAND (SM); diamict fabric; fine to medium sand; fine to coarse gravel.	1
2				0.0				2
3				0.0				3
4			DP-11-4	0.0				4
5				0.0				5
6				0.0			Slightly moist, brown, slightly silty, gravelly SAND (SP-SM); fine to medium sand; fine to coarse gravel.	6
7				0.0				7
8				0.6				8
9							Refusal at 9 ft BGS.	9

Sampler Type:
- ◯ No Recovery
- ▮ Continuous Core

PID - Photoionization Detector (Headspace Measurement)

- ▼ Static Water Level
- ▽ Water Level (ATD)

Logged by: AET
Approved by: JNM
Figure No. A - 4

_ENV PROBE LOG STADIUM THRIFTWAY.GPJ May 1, 2012

Boring Log

Aspect CONSULTING

Project Number	Boring Number	Sheet
080190	DP-12	1 of 1

Project Name: Stadium Thriftway
Location: Tacoma, WA
Driller/Method: Major Drilling - Dan / Direct push - limited access
Sampling Method: Continuous Core

Ground Surface Elev:
Depth to Water (ft BGS): Not encountered ATD
Start/Finish Date: 2/8/2012

Depth / Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Drive/ Recovery (inches)	Material Type	Description	Depth (ft)
							Asphalt.	
1	Hydrated bentonite chip backfill			0.0			Moist, brown, gravelly, silty SAND (SM); fine to medium sand; fine to coarse gravel.	1
2				0.0				2
3				0.0				3
4				0.0				4
5			DP-12-5.5	242			Wet, blue gray, gravelly SAND (SP); medium sand.	5
6								6
7				141			Moist, brown, gravelly, silty SAND (SM); fine to medium sand.	7
8				17.1				8
9				4.0			Refusal at 9 ft BGS.	9

Sampler Type:
- ○ No Recovery
- ▮ Continuous Core

PID - Photoionization Detector (Headspace Measurement)

- ▼ Static Water Level
- ▽ Water Level (ATD)

Logged by: AET
Approved by: JNM
Figure No. A - 5

_ENV PROBE LOG STADIUM THRIFTWAY.GPJ May 1, 2012

Boring Log

Aspect CONSULTING

Project Number	Boring Number	Sheet
080190	DP-13	1 of 1

Project Name: Stadium Thriftway
Ground Surface Elev:
Location: Tacoma, WA
Driller/Method: Major Drilling - Dan / Direct push - limited access
Depth to Water (ft BGS): Not encountered ATD
Sampling Method: Continuous Core
Start/Finish Date: 2/8/2012

Depth / Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Drive/ Recovery (inches)	Material Type	Description	Depth (ft)
0							Asphalt.	0
1	Hydrated bentonite chip backfill			0.0			Moist, brown, gravelly, silty SAND (SM); fine to medium sand; fine to coarse gravel. Brick fragments.	1
2				0.0				2
3								3
4				0.0				4
5								5
6				0.0				6
7			DP-13-7	0.0				7
8				0.0				8
9							Refusal at 9 ft BGS.	9

Sampler Type:
- ◯ No Recovery
- ▮ Continuous Core

PID - Photoionization Detector (Headspace Measurement)
- ▼ Static Water Level
- ▽ Water Level (ATD)

Logged by: AET
Approved by: JNM
Figure No. A - 6

_ENV PROBE LOG STADIUM THRIFTWAY.GPJ May 1, 2012

Boring Log

Aspect CONSULTING

Project Number	Boring Number	Sheet
080190	DP-14	1 of 1

Project Name: Stadium Thriftway
Ground Surface Elev:
Location: Tacoma, WA
Driller/Method: Major Drilling - Dan / Direct push - limited access
Depth to Water (ft BGS): Not encountered ATD
Sampling Method: Continuous Core
Start/Finish Date: 2/8/2012

Depth / Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Drive/ Recovery (inches)	Material Type	Description	Depth (ft)
							Asphalt.	
1	Hydrated bentonite chip backfill			0.0			Slightly moist, brown, gravelly, silty SAND (SM); fine to medium sand, fine to coarse gravel.	1
2				0.0				2
3								3
4		○		0.0				4
5								5
6				0.0				6
7			DP-14-7	0.0 0.0 0.0				7
8								8
9							Refusal at 8.5 ft BGS.	9

Sampler Type:
○ No Recovery
▮ Continuous Core

PID - Photoionization Detector (Headspace Measurement)
▼ Static Water Level
▽ Water Level (ATD)

Logged by: AET
Approved by: JNM
Figure No. A - 7

_ENV PROBE LOG STADIUM THRIFTWAY.GPJ May 1, 2012

Boring Log

Project Number	Boring Number	Sheet
080190	DP-15	1 of 1

Project Name: Stadium Thriftway
Ground Surface Elev:
Location: Tacoma, WA
Driller/Method: Major Drilling - Dan / Direct push - limited access
Depth to Water (ft BGS): Not encountered ATD
Sampling Method: Continuous Core
Start/Finish Date: 2/8/2012

Depth / Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Drive/ Recovery (inches)	Material Type	Description	Depth (ft)
0							Asphalt.	0
1	Hydrated bentonite chip backfill						Slightly moist, brown, slightly silty, very gravelly SAND (SP-SM); fine to medium sand.	1
2				0.0				2
3				0.0				3
4			DP-15-4					4
5				0.0				5
6								6
7				0.0			Slightly gravelly.	7
8				0.0				8
9							Refusal at 9 ft BGS.	9

Sampler Type:
- ◯ No Recovery
- ▮ Continuous Core

PID - Photoionization Detector (Headspace Measurement)
- ▼ Static Water Level
- ▽ Water Level (ATD)

Logged by: AET
Approved by: JNM
Figure No. A - 8

_ENV PROBE LOG STADIUM THRIFTWAY.GPJ May 1, 2012

Boring Log

Aspect CONSULTING

Project Number	Boring Number	Sheet
080190	DP-16	1 of 1

Project Name: Stadium Thriftway
Ground Surface Elev:
Location: Tacoma, WA
Driller/Method: Major Drilling - Dan / Direct push - limited access
Depth to Water (ft BGS): Not encountered ATD
Sampling Method: Continuous Core
Start/Finish Date: 2/8/2012

Depth / Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Drive/ Recovery (inches)	Material Type	Description	Depth (ft)
0							Asphalt.	0
							Slightly moist, brown, gravelly, silty SAND (SM); fine to medium sand; fine to coarse gravel.	
1	Hydrated bentonite chip backfill			0.0				1
2				0.0				2
				0.0				
3				0.0				3
4			DP-16-4	0.0				4
5								5
6				0.0				6
7				0.0				7
				0.0				
8								8
				0.0				
9							Refusal at 9 ft BGS.	9

Sampler Type:
- ◯ No Recovery
- ▮ Continuous Core

PID - Photoionization Detector (Headspace Measurement)

- ▼ Static Water Level
- ▽ Water Level (ATD)

Logged by: AET
Approved by: JNM
Figure No. A - 9

_ENV PROBE LOG STADIUM THRIFTWAY.GPJ May 1, 2012

Boring Log

Aspect CONSULTING

Project Number	Boring Number	Sheet
080190	DP-17	1 of 1

Project Name: Stadium Thriftway
Ground Surface Elev:
Location: Tacoma, WA
Driller/Method: Major Drilling - Dan / Direct push - limited access
Depth to Water (ft BGS): Not encountered ATD
Sampling Method: Continuous Core
Start/Finish Date: 2/8/2012

Depth / Elevation (feet)	Borehole Completion	Sample Type/ID	Tests	PID (ppm)	Drive/ Recovery (inches)	Material Type	Description	Depth (ft)
0							Asphalt.	0
1	Hydrated bentonite chip backfill						Slightly moist, brown, slightly silty, gravelly SAND (SP-SM); fine to medium sand; fine to coarse gravel.	1
2								2
3								3
4			DP-17-4				Slightly moist, brown, gravelly, silty SAND (SP-SM); fine to medium sand; fine to coarse gravel.	4
5								5
6								6
7							Refusal at 7 ft BGS.	7
8								8
9								9

Sampler Type:
○ No Recovery
▮ Continuous Core

PID - Photoionization Detector (Headspace Measurement)
▼ Static Water Level
▽ Water Level (ATD)

Logged by: AET
Approved by: JNM
Figure No. A - 10

_ENV PROBE LOG STADIUM THRIFTWAY.GPJ May 1, 2012

ATTACHMENT B

Laboratory Certificates of Analysis

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
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
e-mail: fbi@isomedia.com

February 16, 2012

Joe Morrice, Project Manager
Aspect Consulting, LLC
401 2nd Ave S, Suite 201
Seattle, WA 98104

Dear Mr. Morrice:

Included are the results from the testing of material submitted on February 8, 2012 from the Stadium Thriftway 080190, F&BI 202073 project. There are 26 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
c: data@aspectconsulting.com, Parker Wittman
ASP0216R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 8, 2012 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Stadium Thriftway 080190, F&BI 202073 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting, LLC
202073 -01	MW-7-020612
202073 -02	MW-8D-020612
202073 -03	MW-12D-020612
202073 -04	MW-14D-020612
202073 -05	MW-1-020712
202073 -06	MW-2-020712
202073 -07	MW-13D-020712
202073 -08	MW-8-020712
202073 -09	MW-5-020712

Hexachlorobutadiene was detected in the 8260C method blank. The data were flagged as due to laboratory contamination.

All other quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-7-020612	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/13/12	Lab ID:	202073-01
Date Analyzed:	02/13/12	Data File:	202073-01.044
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	97	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-8D-020612	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/13/12	Lab ID:	202073-02
Date Analyzed:	02/13/12	Data File:	202073-02.047
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	95	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-12D-020612	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/13/12	Lab ID:	202073-03
Date Analyzed:	02/13/12	Data File:	202073-03.048
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	94	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-14D-020612	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/13/12	Lab ID:	202073-04
Date Analyzed:	02/13/12	Data File:	202073-04.049
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	96	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-1-020712	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/13/12	Lab ID:	202073-05
Date Analyzed:	02/13/12	Data File:	202073-05.051
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	98	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-2-020712	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/13/12	Lab ID:	202073-06
Date Analyzed:	02/13/12	Data File:	202073-06.052
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	98	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-13D-020712	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/13/12	Lab ID:	202073-07
Date Analyzed:	02/13/12	Data File:	202073-07.053
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	94	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-8-020712	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/13/12	Lab ID:	202073-08
Date Analyzed:	02/13/12	Data File:	202073-08.054
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	91	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-5-020712	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/13/12	Lab ID:	202073-09
Date Analyzed:	02/13/12	Data File:	202073-09.055
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	92	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/13/12	Lab ID:	I2-101 mb
Date Analyzed:	02/13/12	Data File:	I2-101 mb.042
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	94	60	125

Analyte:	Concentration ug/L (ppb)
Lead	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-7-020612	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/08/12	Lab ID:	202073-01
Date Analyzed:	02/08/12	Data File:	020823.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	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	2.2	tert-Butylbenzene	<1
Benzene	<0.35	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	<10
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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-8D-020612	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/08/12	Lab ID:	202073-02
Date Analyzed:	02/08/12	Data File:	020824.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	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	26	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	1.8	tert-Butylbenzene	<1
Benzene	<0.35	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	<10
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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-12D-020612	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/08/12	Lab ID:	202073-03
Date Analyzed:	02/08/12	Data File:	020825.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	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	17	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	<0.35	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	<10
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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-14D-020612	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/08/12	Lab ID:	202073-04
Date Analyzed:	02/08/12	Data File:	020826.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	4.2
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	28	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	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	3.3	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	<10
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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-1-020712	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/08/12	Lab ID:	202073-05
Date Analyzed:	02/08/12	Data File:	020827.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	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	<0.35	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	<10
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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-2-020712	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/08/12	Lab ID:	202073-06 1/100
Date Analyzed:	02/08/12	Data File:	020829.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<100	1,3-Dichloropropane	<100
Chloromethane	<1,000	Tetrachloroethene	1,600
Vinyl chloride	<20	Dibromochloromethane	<100
Bromomethane	<100	1,2-Dibromoethane (EDB)	<100
Chloroethane	<100	Chlorobenzene	<100
Trichlorofluoromethane	<100	Ethylbenzene	<100
Acetone	<1,000	1,1,1,2-Tetrachloroethane	<100
1,1-Dichloroethene	<100	m,p-Xylene	<200
Methylene chloride	<500	o-Xylene	<100
Methyl t-butyl ether (MTBE)	<100	Styrene	<100
trans-1,2-Dichloroethene	<100	Isopropylbenzene	<100
1,1-Dichloroethane	<100	Bromoform	<100
2,2-Dichloropropane	<100	n-Propylbenzene	<100
cis-1,2-Dichloroethene	1,400	Bromobenzene	<100
Chloroform	<100	1,3,5-Trimethylbenzene	<100
2-Butanone (MEK)	<1,000	1,1,2,2-Tetrachloroethane	<100
1,2-Dichloroethane (EDC)	<100	1,2,3-Trichloropropane	<100
1,1,1-Trichloroethane	<100	2-Chlorotoluene	<100
1,1-Dichloropropene	<100	4-Chlorotoluene	<100
Carbon tetrachloride	<100	tert-Butylbenzene	<100
Benzene	<35	1,2,4-Trimethylbenzene	<100
Trichloroethene	810	sec-Butylbenzene	<100
1,2-Dichloropropane	<100	p-Isopropyltoluene	<100
Bromodichloromethane	<100	1,3-Dichlorobenzene	<100
Dibromomethane	<100	1,4-Dichlorobenzene	<100
4-Methyl-2-pentanone	<1,000	1,2-Dichlorobenzene	<100
cis-1,3-Dichloropropene	<100	1,2-Dibromo-3-chloropropane	<1,000
Toluene	<100	1,2,4-Trichlorobenzene	<100
trans-1,3-Dichloropropene	<100	Hexachlorobutadiene	<100
1,1,2-Trichloroethane	<100	Naphthalene	<100
2-Hexanone	<1,000	1,2,3-Trichlorobenzene	<100

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-13D-020712	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/08/12	Lab ID:	202073-07
Date Analyzed:	02/08/12	Data File:	020828.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	4.2
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	28	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	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	2.4	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	<10
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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-8-020712	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/08/12	Lab ID:	202073-08 1/100
Date Analyzed:	02/08/12	Data File:	020830.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<100	1,3-Dichloropropane	<100
Chloromethane	<1,000	Tetrachloroethene	960
Vinyl chloride	<20	Dibromochloromethane	<100
Bromomethane	<100	1,2-Dibromoethane (EDB)	<100
Chloroethane	<100	Chlorobenzene	<100
Trichlorofluoromethane	<100	Ethylbenzene	<100
Acetone	<1,000	1,1,1,2-Tetrachloroethane	<100
1,1-Dichloroethene	<100	m,p-Xylene	<200
Methylene chloride	<500	o-Xylene	<100
Methyl t-butyl ether (MTBE)	<100	Styrene	<100
trans-1,2-Dichloroethene	<100	Isopropylbenzene	<100
1,1-Dichloroethane	<100	Bromoform	<100
2,2-Dichloropropane	<100	n-Propylbenzene	<100
cis-1,2-Dichloroethene	1,600	Bromobenzene	<100
Chloroform	<100	1,3,5-Trimethylbenzene	<100
2-Butanone (MEK)	<1,000	1,1,2,2-Tetrachloroethane	<100
1,2-Dichloroethane (EDC)	<100	1,2,3-Trichloropropane	<100
1,1,1-Trichloroethane	<100	2-Chlorotoluene	<100
1,1-Dichloropropene	<100	4-Chlorotoluene	<100
Carbon tetrachloride	<100	tert-Butylbenzene	<100
Benzene	<35	1,2,4-Trimethylbenzene	<100
Trichloroethene	610	sec-Butylbenzene	<100
1,2-Dichloropropane	<100	p-Isopropyltoluene	<100
Bromodichloromethane	<100	1,3-Dichlorobenzene	<100
Dibromomethane	<100	1,4-Dichlorobenzene	<100
4-Methyl-2-pentanone	<1,000	1,2-Dichlorobenzene	<100
cis-1,3-Dichloropropene	<100	1,2-Dibromo-3-chloropropane	<1,000
Toluene	<100	1,2,4-Trichlorobenzene	<100
trans-1,3-Dichloropropene	<100	Hexachlorobutadiene	<100
1,1,2-Trichloroethane	<100	Naphthalene	<100
2-Hexanone	<1,000	1,2,3-Trichlorobenzene	<100

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-5-020712	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/09/12	Lab ID:	202073-09
Date Analyzed:	02/09/12	Data File:	020914.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	140
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	25	Bromobenzene	<1
Chloroform	2.3	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	4.6	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	8.7	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	<10
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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Stadium Thriftway 080190, F&BI 202073
Date Extracted:	02/08/12	Lab ID:	02-0190 mb
Date Analyzed:	02/08/12	Data File:	020822.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	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	<0.35	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	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	1.1 lc
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

Date of Report: 02/16/12
Date Received: 02/08/12
Project: Stadium Thriftway 080190, F&BI 202073

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 202073-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	ug/L (ppb)	10	<1	101	104	76-125	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	ug/L (ppb)	10	102	67-135

Date of Report: 02/16/12
Date Received: 02/08/12
Project: Stadium Thriftway 080190, F&BI 202073

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

Laboratory Code: 202073-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<10	84	10-172
Chloromethane	ug/L (ppb)	50	<10	87	25-166
Vinyl chloride	ug/L (ppb)	50	<0.2	90	36-166
Bromomethane	ug/L (ppb)	50	<1	87	47-169
Chloroethane	ug/L (ppb)	50	<1	94	46-160
Trichlorofluoromethane	ug/L (ppb)	50	<1	92	44-165
Acetone	ug/L (ppb)	250	<10	105	10-182
1,1-Dichloroethene	ug/L (ppb)	50	<1	94	60-136
Methylene chloride	ug/L (ppb)	50	<5	97	67-132
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	109	74-127
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	102	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	104	70-128
2,2-Dichloropropane	ug/L (ppb)	50	<1	94	36-154
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	108	71-127
Chloroform	ug/L (ppb)	50	<1	104	65-132
2-Butanone (MEK)	ug/L (ppb)	250	<10	112	10-129
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	102	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	106	60-146
1,1-Dichloropropene	ug/L (ppb)	50	<1	107	69-133
Carbon tetrachloride	ug/L (ppb)	50	2.2	98	56-152
Benzene	ug/L (ppb)	50	<0.35	107	76-125
Trichloroethene	ug/L (ppb)	50	<1	98	66-135
1,2-Dichloropropane	ug/L (ppb)	50	<1	108	78-125
Bromodichloromethane	ug/L (ppb)	50	<1	105	61-150
Dibromomethane	ug/L (ppb)	50	<1	105	66-141
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	122	10-185
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	106	72-132
Toluene	ug/L (ppb)	50	<1	107	76-122
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	107	76-130
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	105	68-131
2-Hexanone	ug/L (ppb)	250	<10	122	10-185
1,3-Dichloropropane	ug/L (ppb)	50	<1	108	71-128
Tetrachloroethene	ug/L (ppb)	50	<1	103	73-129
Dibromochloromethane	ug/L (ppb)	50	<1	107	70-139
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	109	69-134
Chlorobenzene	ug/L (ppb)	50	<1	103	77-122
Ethylbenzene	ug/L (ppb)	50	<1	106	69-135
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	106	73-137
m,p-Xylene	ug/L (ppb)	100	<2	109	69-135
o-Xylene	ug/L (ppb)	50	<1	114	68-137
Styrene	ug/L (ppb)	50	<1	108	71-133
Isopropylbenzene	ug/L (ppb)	50	<1	109	65-142
Bromoform	ug/L (ppb)	50	<1	111	65-142
n-Propylbenzene	ug/L (ppb)	50	<1	104	58-144
Bromobenzene	ug/L (ppb)	50	<1	108	75-124
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	104	66-137
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	105	51-154
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	105	53-150
2-Chlorotoluene	ug/L (ppb)	50	<1	105	66-127
4-Chlorotoluene	ug/L (ppb)	50	<1	105	65-130
tert-Butylbenzene	ug/L (ppb)	50	<1	107	65-137
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	108	59-146
sec-Butylbenzene	ug/L (ppb)	50	<1	103	64-140
p-Isopropyltoluene	ug/L (ppb)	50	<1	106	65-141
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	102	72-123
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	101	69-126
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	101	69-128
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	97	32-164
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	101	76-132
Hexachlorobutadiene	ug/L (ppb)	50	<1	81	60-143
Naphthalene	ug/L (ppb)	50	<1	114	44-164
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	102	69-148

Date of Report: 02/16/12
Date Received: 02/08/12
Project: Stadium Thriftway 080190, F&BI 202073

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	107	109	25-158	2
Chloromethane	ug/L (ppb)	50	117	112	45-156	4
Vinyl chloride	ug/L (ppb)	50	118	113	50-154	4
Bromomethane	ug/L (ppb)	50	117	111	55-143	5
Chloroethane	ug/L (ppb)	50	118	115	58-146	3
Trichlorofluoromethane	ug/L (ppb)	50	120	120	50-150	0
Acetone	ug/L (ppb)	250	115	114	60-155	1
1,1-Dichloroethene	ug/L (ppb)	50	110	110	67-136	0
Methylene chloride	ug/L (ppb)	50	111	107	39-148	4
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	111	110	64-147	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	109	108	68-128	1
1,1-Dichloroethane	ug/L (ppb)	50	112	112	79-121	0
2,2-Dichloropropane	ug/L (ppb)	50	109	110	55-143	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	111	110	80-123	1
Chloroform	ug/L (ppb)	50	111	112	80-121	1
2-Butanone (MEK)	ug/L (ppb)	250	114	113	57-149	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	118	117	73-132	1
1,1,1-Trichloroethane	ug/L (ppb)	50	114	117	83-130	3
1,1-Dichloropropene	ug/L (ppb)	50	113	112	77-129	1
Carbon tetrachloride	ug/L (ppb)	50	115	114	75-158	1
Benzene	ug/L (ppb)	50	107	107	69-134	0
Trichloroethene	ug/L (ppb)	50	101	101	80-120	0
1,2-Dichloropropane	ug/L (ppb)	50	111	110	77-123	1
Bromodichloromethane	ug/L (ppb)	50	114	113	81-133	1
Dibromomethane	ug/L (ppb)	50	111	111	82-125	0
4-Methyl-2-pentanone	ug/L (ppb)	250	116	115	70-140	1
cis-1,3-Dichloropropene	ug/L (ppb)	50	115	115	82-132	0
Toluene	ug/L (ppb)	50	108	105	72-122	3
trans-1,3-Dichloropropene	ug/L (ppb)	50	119	115	80-136	3
1,1,2-Trichloroethane	ug/L (ppb)	50	109	109	75-124	0
2-Hexanone	ug/L (ppb)	250	132	130	64-152	2
1,3-Dichloropropane	ug/L (ppb)	50	111	111	76-126	0
Tetrachloroethene	ug/L (ppb)	50	102	101	76-121	1
Dibromochloromethane	ug/L (ppb)	50	114	113	84-133	1
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	111	112	82-125	1
Chlorobenzene	ug/L (ppb)	50	106	104	83-114	2
Ethylbenzene	ug/L (ppb)	50	110	108	77-124	2
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	110	109	84-127	1
m,p-Xylene	ug/L (ppb)	100	110	108	83-125	2
o-Xylene	ug/L (ppb)	50	114	113	86-121	1
Styrene	ug/L (ppb)	50	113	112	85-127	1
Isopropylbenzene	ug/L (ppb)	50	113	112	87-122	1
Bromoform	ug/L (ppb)	50	112	110	74-136	2
n-Propylbenzene	ug/L (ppb)	50	111	109	74-126	2
Bromobenzene	ug/L (ppb)	50	106	106	80-121	0
1,3,5-Trimethylbenzene	ug/L (ppb)	50	111	110	80-126	1
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	106	105	66-126	1
1,2,3-Trichloropropane	ug/L (ppb)	50	111	109	67-124	2
2-Chlorotoluene	ug/L (ppb)	50	111	109	77-127	2
4-Chlorotoluene	ug/L (ppb)	50	112	111	78-128	1
tert-Butylbenzene	ug/L (ppb)	50	111	110	85-127	1
1,2,4-Trimethylbenzene	ug/L (ppb)	50	112	111	82-125	1
sec-Butylbenzene	ug/L (ppb)	50	111	109	80-125	2
p-Isopropyltoluene	ug/L (ppb)	50	113	112	82-127	1
1,3-Dichlorobenzene	ug/L (ppb)	50	105	104	85-116	1
1,4-Dichlorobenzene	ug/L (ppb)	50	104	104	84-121	0
1,2-Dichlorobenzene	ug/L (ppb)	50	104	103	85-116	1
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	108	106	57-141	2
1,2,4-Trichlorobenzene	ug/L (ppb)	50	103	104	72-130	1
Hexachlorobutadiene	ug/L (ppb)	50	94	94	53-141	0
Naphthalene	ug/L (ppb)	50	115	114	64-133	1
1,2,3-Trichlorobenzene	ug/L (ppb)	50	104	107	65-136	3

Date of Report: 02/16/12
Date Received: 02/08/12
Project: Stadium Thriftway 080190, F&BI 202073

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	123	118	25-158	4
Chloromethane	ug/L (ppb)	50	118	113	45-156	4
Vinyl chloride	ug/L (ppb)	50	125	123	50-154	2
Bromomethane	ug/L (ppb)	50	118	117	55-143	1
Chloroethane	ug/L (ppb)	50	118	118	58-146	0
Trichlorofluoromethane	ug/L (ppb)	50	111	115	50-150	4
Acetone	ug/L (ppb)	250	108	108	60-155	0
1,1-Dichloroethene	ug/L (ppb)	50	114	114	67-136	0
Methylene chloride	ug/L (ppb)	50	106	108	39-148	2
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	111	108	64-147	3
trans-1,2-Dichloroethene	ug/L (ppb)	50	111	108	68-128	3
1,1-Dichloroethane	ug/L (ppb)	50	110	108	79-121	2
2,2-Dichloropropane	ug/L (ppb)	50	109	113	55-143	4
cis-1,2-Dichloroethene	ug/L (ppb)	50	113	110	80-123	3
Chloroform	ug/L (ppb)	50	109	109	80-121	0
2-Butanone (MEK)	ug/L (ppb)	250	112	111	57-149	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	110	107	73-132	3
1,1,1-Trichloroethane	ug/L (ppb)	50	114	113	83-130	1
1,1-Dichloropropene	ug/L (ppb)	50	115	112	77-129	3
Carbon tetrachloride	ug/L (ppb)	50	113	112	75-158	1
Benzene	ug/L (ppb)	50	110	108	69-134	2
Trichloroethene	ug/L (ppb)	50	102	101	80-120	1
1,2-Dichloropropane	ug/L (ppb)	50	111	109	77-123	2
Bromodichloromethane	ug/L (ppb)	50	112	110	81-133	2
Dibromomethane	ug/L (ppb)	50	110	108	82-125	2
4-Methyl-2-pentanone	ug/L (ppb)	250	115	113	70-140	2
cis-1,3-Dichloropropene	ug/L (ppb)	50	117	115	82-132	2
Toluene	ug/L (ppb)	50	108	106	72-122	2
trans-1,3-Dichloropropene	ug/L (ppb)	50	113	111	80-136	2
1,1,2-Trichloroethane	ug/L (ppb)	50	106	104	75-124	2
2-Hexanone	ug/L (ppb)	250	119	117	64-152	2
1,3-Dichloropropane	ug/L (ppb)	50	110	109	76-126	1
Tetrachloroethene	ug/L (ppb)	50	108	105	76-121	3
Dibromochloromethane	ug/L (ppb)	50	112	110	84-133	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	109	108	82-125	1
Chlorobenzene	ug/L (ppb)	50	106	104	83-114	2
Ethylbenzene	ug/L (ppb)	50	108	106	77-124	2
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	106	107	84-127	1
m,p-Xylene	ug/L (ppb)	100	109	107	83-125	2
o-Xylene	ug/L (ppb)	50	114	112	86-121	2
Styrene	ug/L (ppb)	50	114	112	85-127	2
Isopropylbenzene	ug/L (ppb)	50	112	110	87-122	2
Bromoform	ug/L (ppb)	50	111	107	74-136	4
n-Propylbenzene	ug/L (ppb)	50	112	108	74-126	4
Bromobenzene	ug/L (ppb)	50	109	106	80-121	3
1,3,5-Trimethylbenzene	ug/L (ppb)	50	110	107	80-126	3
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	104	101	66-126	3
1,2,3-Trichloropropane	ug/L (ppb)	50	106	104	67-124	2
2-Chlorotoluene	ug/L (ppb)	50	110	107	77-127	3
4-Chlorotoluene	ug/L (ppb)	50	111	109	78-128	2
tert-Butylbenzene	ug/L (ppb)	50	110	108	85-127	2
1,2,4-Trimethylbenzene	ug/L (ppb)	50	111	109	82-125	2
sec-Butylbenzene	ug/L (ppb)	50	109	107	80-125	2
p-Isopropyltoluene	ug/L (ppb)	50	113	110	82-127	3
1,3-Dichlorobenzene	ug/L (ppb)	50	105	103	85-116	2
1,4-Dichlorobenzene	ug/L (ppb)	50	104	102	84-121	2
1,2-Dichlorobenzene	ug/L (ppb)	50	102	100	85-116	2
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	94	96	57-141	2
1,2,4-Trichlorobenzene	ug/L (ppb)	50	100	104	72-130	4
Hexachlorobutadiene	ug/L (ppb)	50	95	98	53-141	3
Naphthalene	ug/L (ppb)	50	105	109	64-133	4
1,2,3-Trichlorobenzene	ug/L (ppb)	50	101	104	65-136	3

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 - Analyte present in the blank and the sample.

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 - Analysis performed outside the method or client-specified holding time requirement.

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.

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.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

202073

SAMPLE CHAIN OF CUSTODY

ME 02-08-12 #1 4/V2

Page # 1 of 1

Send Report To Joe Morrice

Company Aspect Consulting

Address 401 2nd Ave S, Suite 201

City, State, ZIP Seattle, WA 98104

Phone #_____ Fax #_____

SAMPLERS *(signature)*

PROJECT NAME/NO. Stadium Thriftway

PO# 080190

REMARKS dissolved samples were field filtered

TURNAROUND TIME
- ☑ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☑ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260B	SVOCs by 8270	HFS	dissolved lead 200.8	Notes
MW-7-020612	01 AE	2/6/12	1040	water	5				X			X	
MW-8D-020612	02 T	"	1135	"	"				X			X	
MW-12D-020612	03	"	1250	"	"				X			X	
MW-14D-020612	04	"	1535	"	"				X			X	
MW-1-020712	05	2/7/12	1020	"	"				X			X	
MW-2-020712	06	"	1120	"	"				X			X	
MW-13D-020712	07	"	1220	"	"				X			X	
MW-8-020712	08	"	1315	"	"				X			X	
MW-5-020712	09	"	1355	"	"				X			X	

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Amy Tice	Aspect	2/8/12	
Received by:	DO VO	F & BI	"	10.30
Relinquished by:				
Received by:		Samples received at 2 °C		

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February 22, 2012

Joe Morrice, Project Manager
Aspect Consulting, LLC
401 2nd Ave S, Suite 201
Seattle, WA 98104

Dear Mr. Morrice:

Included are the results from the testing of material submitted on February 8, 2012 from the Stadium Thriftway 080190, F&BI 202079 project. There are 19 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
c: data@aspectconsulting.com, Parker Wittman
ASP0222R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 8, 2012 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Stadium Thriftway 080190, F&BI 202079 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Aspect Consulting, LLC
202079 -01	DP-10-4.5
202079 -02	DP-10-8.5
202079 -03	DP-11-4
202079 -04	DP-11-8
202079 -05	DP-12-4
202079 -06	DP-12-5.5
202079 -07	DP-13-4
202079 -08	DP-13-7
202079 -09	DP-14-4
202079 -10	DP-14-7
202079 -11	DP-15-4
202079 -12	DP-15-7
202079 -13	DP-16-4
202079 -14	DP-16-7
202079 -15	DP-17-4
202079 -16	DP-17-6

The 8260C calibration standard failed the acceptance criteria for several analytes. The data were flagged accordingly.

The 8260C laboratory control sample and laboratory control sample duplicate failed the relative percent difference for trichlorofluoromethane. The analyte was not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP-10-8.5	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	202079-02
Date Analyzed:	02/13/12	Data File:	202079-02.020
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	1.70

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP-11-4	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	202079-03
Date Analyzed:	02/13/12	Data File:	202079-03.023
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	100	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	1.17

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP-12-5.5	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	202079-06
Date Analyzed:	02/13/12	Data File:	202079-06.024
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	100	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	1.75

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP-13-7	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	202079-08
Date Analyzed:	02/13/12	Data File:	202079-08.025
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	1.66

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP-14-7	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	202079-10
Date Analyzed:	02/13/12	Data File:	202079-10.026
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	2.08

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP-15-4	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	202079-11
Date Analyzed:	02/13/12	Data File:	202079-11.027
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	99	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	1.33

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP-16-4	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	202079-13
Date Analyzed:	02/13/12	Data File:	202079-13.029
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	2.81

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP-17-4	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	202079-15
Date Analyzed:	02/13/12	Data File:	202079-15.030
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	1.96

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	I2-94 mb
Date Analyzed:	02/13/12	Data File:	I2-94 mb.018
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Lead	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP-10-8.5	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	202079-02
Date Analyzed:	02/14/12	Data File:	021422.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	176 ip	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	Tetrachloroethene	0.24
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 ca	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05 ca	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 ca	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	0.083
Benzene	<0.03	1,2,4-Trimethylbenzene	0.054
Trichloroethene	<0.03	sec-Butylbenzene	0.94
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	0.21
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	<0.5
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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP-12-5.5	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	202079-06
Date Analyzed:	02/14/12	Data File:	021423.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	123	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	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 ca	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05 ca	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 ca	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	0.13
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	<0.5
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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP-13-7	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	202079-08
Date Analyzed:	02/14/12	Data File:	021424.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	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 ca	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05 ca	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 ca	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	<0.5
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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP-14-7	Client:	Aspect Consulting, LLC
Date Received:	02/08/12	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/09/12	Lab ID:	202079-10
Date Analyzed:	02/14/12	Data File:	021425.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	62	142
Toluene-d8	96	55	145
4-Bromofluorobenzene	103	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5 ca	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	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 ca	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05 ca	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 ca	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	<0.5
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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Stadium Thriftway 080190, F&BI 202079
Date Extracted:	02/08/12	Lab ID:	02-0172 mb
Date Analyzed:	02/08/12	Data File:	020807.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	98	55	145
4-Bromofluorobenzene	102	65	139

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.5	1,3-Dichloropropane	<0.05
Chloromethane	<0.5	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	<0.5
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

Date of Report: 02/22/12
Date Received: 02/08/12
Project: Stadium Thriftway 080190, F&BI 202079

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 202079-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/kg (ppm)	50	1.70	106	105	65-126	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	108	81-120

Date of Report: 02/22/12
Date Received: 02/08/12
Project: Stadium Thriftway 080190, F&BI 202079

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

Laboratory Code: 202063-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	22	10-142
Chloromethane	mg/kg (ppm)	2.5	<0.5	50	10-126
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	49	10-138
Bromomethane	mg/kg (ppm)	2.5	<0.5	58	10-163
Chloroethane	mg/kg (ppm)	2.5	<0.5	66	10-176
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	58	10-176
Acetone	mg/kg (ppm)	12.5	<0.5	73	10-163
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	67	10-160
Methylene chloride	mg/kg (ppm)	2.5	<0.5	70	10-156
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	74	21-145
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	75	14-137
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	73	19-140
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	77	10-158
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	75	25-135
Chloroform	mg/kg (ppm)	2.5	<0.05	76	21-145
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	76	19-147
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	75	12-160
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	72	10-156
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	77	17-140
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	74	9-164
Benzene	mg/kg (ppm)	2.5	<0.03	76	29-129
Trichloroethene	mg/kg (ppm)	2.5	<0.03	75	21-139
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	78	30-135
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	80	23-155
Dibromomethane	mg/kg (ppm)	2.5	<0.05	76	23-145
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	82	24-155
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	83	28-144
Toluene	mg/kg (ppm)	2.5	<0.05	76	35-130
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	81	26-149
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	77	30-142
2-Hexanone	mg/kg (ppm)	12.5	<0.5	81	15-166
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	79	31-137
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	78	20-133
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	80	28-150
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	77	28-142
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	75	32-129
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	80	32-137
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	77	31-143
m,p-Xylene	mg/kg (ppm)	5	<0.1	81	34-136
o-Xylene	mg/kg (ppm)	2.5	<0.05	85	33-134
Styrene	mg/kg (ppm)	2.5	<0.05	84	35-137
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	79	31-142
Bromoform	mg/kg (ppm)	2.5	<0.05	79	21-156
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	83	23-146
Bromobenzene	mg/kg (ppm)	2.5	<0.05	79	34-130
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	84	18-149
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	74	28-140
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	75	25-144
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	82	31-134
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	83	31-136
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	78	30-137
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	77	10-182
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	85	23-145
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	79	21-149
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	78	30-131
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	76	29-129
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	79	31-132
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	71	11-161
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	81	22-142
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	78	19-142
Naphthalene	mg/kg (ppm)	2.5	<0.05	74	14-157
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	80	20-144

Date of Report: 02/22/12
Date Received: 02/08/12
Project: Stadium Thriftway 080190, F&BI 202079

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	45	41	10-146	9
Chloromethane	mg/kg (ppm)	2.5	65	61	27-133	6
Vinyl chloride	mg/kg (ppm)	2.5	71	65	22-139	9
Bromomethane	mg/kg (ppm)	2.5	77	67	38-114	14
Chloroethane	mg/kg (ppm)	2.5	70	66	20-153	6
Trichlorofluoromethane	mg/kg (ppm)	2.5	89	67	10-196	28 vo
Acetone	mg/kg (ppm)	12.5	83	77	52-141	7
1,1-Dichloroethene	mg/kg (ppm)	2.5	83	75	47-128	10
Methylene chloride	mg/kg (ppm)	2.5	81	81	42-132	0
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	89	76	60-123	16
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	87	79	67-127	10
1,1-Dichloroethane	mg/kg (ppm)	2.5	88	78	68-115	12
2,2-Dichloropropane	mg/kg (ppm)	2.5	93	83	57-133	11
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	92	81	72-113	13
Chloroform	mg/kg (ppm)	2.5	89	78	66-120	13
2-Butanone (MEK)	mg/kg (ppm)	12.5	92	81	57-123	13
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	88	77	56-135	13
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	91	77	62-131	17
1,1-Dichloropropene	mg/kg (ppm)	2.5	96	84	69-128	13
Carbon tetrachloride	mg/kg (ppm)	2.5	93	80	60-139	15
Benzene	mg/kg (ppm)	2.5	91	80	68-114	13
Trichloroethene	mg/kg (ppm)	2.5	89	79	68-114	12
1,2-Dichloropropane	mg/kg (ppm)	2.5	92	81	72-127	13
Bromodichloromethane	mg/kg (ppm)	2.5	94	83	72-130	12
Dibromomethane	mg/kg (ppm)	2.5	89	80	70-120	11
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	94	82	45-145	14
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	99	86	75-136	14
Toluene	mg/kg (ppm)	2.5	91	80	66-126	13
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	96	83	72-132	15
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	88	79	75-113	11
2-Hexanone	mg/kg (ppm)	12.5	93	82	33-152	13
1,3-Dichloropropane	mg/kg (ppm)	2.5	92	81	72-130	13
Tetrachloroethene	mg/kg (ppm)	2.5	96	82	72-114	16
Dibromochloromethane	mg/kg (ppm)	2.5	94	82	74-125	14
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	90	80	74-132	12
Chlorobenzene	mg/kg (ppm)	2.5	87	77	76-111	12
Ethylbenzene	mg/kg (ppm)	2.5	94	82	64-123	14
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	90	79	69-135	13
m,p-Xylene	mg/kg (ppm)	5	95	83	78-122	13
o-Xylene	mg/kg (ppm)	2.5	99	88	77-124	12
Styrene	mg/kg (ppm)	2.5	99	86	74-126	14
Isopropylbenzene	mg/kg (ppm)	2.5	90	80	76-127	12
Bromoform	mg/kg (ppm)	2.5	94	81	56-132	15
n-Propylbenzene	mg/kg (ppm)	2.5	97	85	74-124	13
Bromobenzene	mg/kg (ppm)	2.5	93	81	72-122	14
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	99	87	76-126	13
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	86	75	56-143	14
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	86	75	61-137	14
2-Chlorotoluene	mg/kg (ppm)	2.5	98	85	74-121	14
4-Chlorotoluene	mg/kg (ppm)	2.5	97	86	75-122	12
tert-Butylbenzene	mg/kg (ppm)	2.5	92	82	73-130	11
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	90	80	76-125	12
sec-Butylbenzene	mg/kg (ppm)	2.5	99	88	71-130	12
p-Isopropyltoluene	mg/kg (ppm)	2.5	92	81	70-132	13
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	91	81	75-121	12
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	88	78	74-117	12
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	90	82	76-121	9
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	78	73	61-136	7
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	82	82	70-129	0
Hexachlorobutadiene	mg/kg (ppm)	2.5	83	79	50-153	5
Naphthalene	mg/kg (ppm)	2.5	75	75	60-125	0
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	81	82	62-130	1

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 - Analyte present in the blank and the sample.

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 - Analysis performed outside the method or client-specified holding time requirement.

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.

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.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

202079

SAMPLE CHAIN OF CUSTODY

ME 02-08-12

BI3/V32

Page # 1 of 1

Send Report To Joe Morrice
Company Aspect Consulting
Address 401 2nd Ave S, Suite 201
City, State, ZIP Seattle, WA 98104
Phone # _____ Fax # _____

SAMPLERS (signature)

PROJECT NAME/NO. Stadium Thriftway

PO# 080190

REMARKS

TURNAROUND TIME
☐ Standard (2 Weeks)
☐ RUSH _____
Rush charges authorized by _____

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260B	SVOCs by 8270	HFS	lead (200.8)	HOLD					Notes
DP-10-4.5	01A-E	2/8/12	0840	SOIL	5								X					
DP-10-8.5	02A-E		0900		5				X			/						
DP-11-4	03		0910		1							X						
DP-11-8	04		0930		1								X					
DP-12-4	05A-E		0940		5								X					
DP-12-5.5	06		0950		5				X			X						
DP-13-4	07		1000		5				X			X	X					HOLD
DP-13-7	08		1015		5				X			X						run 8260B, lead
DP-14-4	09		1020		5				X			X	X					HOLD
DP-14-7	10		1030		5				X			X						run 8260B, lead

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Amy Tice	Aspect	2/8/12	pm
Received by:	Nhan Phan	FEBT	2/8/12	1520
Relinquished by:				
Received by:		Samples received at 3 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

202079

SAMPLE CHAIN OF CUSTODY ME 02-08-12

BTEX/VOCs

Page # 2 of 2

Send Report To Joe Morrice

Company Aspect Consulting

Address

City, State, ZIP Seattle

Phone # Fax #

SAMPLERS (signature)

PROJECT NAME/NO. Stadium Thriftway

PO# 080190

REMARKS

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	lead (200.8)	HOLD					Notes
						ANALYSES REQUESTED												
DP-15-4	11	2/8/12	1040	SOIL	1							X						
DP-15-7	12		1050		1								X					
DP-16-4	13		1055		1							X						
DP-16-7	14		1105		1								X					
DP-17-4	15		1120		1							X						
DP-17-6	16	↓	1130	↓	1								X					

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Amy Tice	Aspect	2/8/12	pm
Received by:	Nhan Phan	FeBT	2/8/12	1520
Relinquished by:				
Received by:		Samples received at 3 °C		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

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Air Toxics LTD.
Laboratory Services Since 1989

2/26/2012
Mr. Eric Marhofer
Aspect Consulting LLC
401 Second Avenue South
Suite 201
Seattle WA 98104

Project Name: STADIUM THRIFTWAY
Project #:
Workorder #: 1202273

Dear Mr. Eric Marhofer

The following report includes the data for the above referenced project for sample(s) received on 2/13/2012 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1202273

Work Order Summary

CLIENT:	Mr. Eric Marhofer Aspect Consulting LLC 401 Second Avenue South Suite 201 Seattle, WA 98104	**BILL TO:**	Accounts Payable Aspect Consulting LLC 350 Madison Ave N Bainbridge Island, WA 98110
PHONE:	206-838-6582	**P.O. #**	
FAX:	206-838-5853	**PROJECT #**	STADIUM THRIFTWAY
DATE RECEIVED:	02/13/2012	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	02/26/2012		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	OUTDOOR - 020912	Modified TO-15	4.5 "Hg	5 psi
01B	OUTDOOR - 020912	Modified TO-15	4.5 "Hg	5 psi
02A	MORRELLS - 020912	Modified TO-15	8.0 "Hg	5 psi
02B	MORRELLS - 020912	Modified TO-15	8.0 "Hg	5 psi
03A	THRIFTWAY OFFICE - 020912	Modified TO-15	7.0 "Hg	5 psi
03B	THRIFTWAY OFFICE - 020912	Modified TO-15	7.0 "Hg	5 psi
04A	Lab Blank	Modified TO-15	NA	NA
04B	Lab Blank	Modified TO-15	NA	NA
05A	CCV	Modified TO-15	NA	NA
05B	CCV	Modified TO-15	NA	NA
06A	LCS	Modified TO-15	NA	NA
06AA	LCSD	Modified TO-15	NA	NA
06B	LCS	Modified TO-15	NA	NA
06BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda D. Frumarx DATE: 02/26/12

Laboratory Director

Certfication numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089, NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/11 , Expiration date: 06/30/12.
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15 Full Scan/SIM
Aspect Consulting LLC
Workorder# 1202273

Three 6 Liter Summa Canister (100% Certified) samples were received on February 13, 2012. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the Full Scan and SIM acquisition modes. The method involves concentrating up to 1.0 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
ICAL %RSD acceptance criteria	</=30% RSD with 2 compounds allowed out to < 40% RSD	For Full Scan: 30% RSD with 4 compounds allowed out to < 40% RSD For SIM: Project specific; default criteria is </=30% RSD with 10% of compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	For Full Scan: </= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers For SIM: Project specific; default criteria is </= 30% Difference with 10% of compounds allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The results for each sample in this report were acquired from two separate data files originating from the same analytical run. The two data files have the same base file name and are differentiated with a "sim" extension on the SIM data file.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV and/or LCS.

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: OUTDOOR - 020912

Lab ID#: 1202273-01A

No Detections Were Found.

Client Sample ID: OUTDOOR - 020912

Lab ID#: 1202273-01B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.079	0.62	0.25	2.0
Toluene	0.032	1.7	0.12	6.3
Tetrachloroethene	0.032	0.062	0.21	0.42
Ethyl Benzene	0.032	0.40	0.14	1.7
m,p-Xylene	0.063	1.4	0.27	6.2
o-Xylene	0.032	0.40	0.14	1.7

Client Sample ID: MORRELLS - 020912

Lab ID#: 1202273-02A

No Detections Were Found.

Client Sample ID: MORRELLS - 020912

Lab ID#: 1202273-02B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.092	0.68	0.29	2.2
Trichloroethene	0.037	1.7	0.20	9.0
Toluene	0.037	1.9	0.14	7.3
Tetrachloroethene	0.037	3.2	0.25	22
Ethyl Benzene	0.037	0.45	0.16	2.0
m,p-Xylene	0.073	1.6	0.32	7.2
o-Xylene	0.037	0.64	0.16	2.8

Client Sample ID: THRIFTWAY OFFICE - 020912

Lab ID#: 1202273-03A

No Detections Were Found.

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: THRIFTWAY OFFICE - 020912

Lab ID#: 1202273-03B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.088	0.69	0.28	2.2
Trichloroethene	0.035	1.1	0.19	5.7
Toluene	0.035	2.4	0.13	9.0
Tetrachloroethene	0.035	2.2	0.24	15
Ethyl Benzene	0.035	0.52	0.15	2.2
m,p-Xylene	0.070	1.9	0.30	8.1
o-Xylene	0.035	0.71	0.15	3.1

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: OUTDOOR - 020912

Lab ID#: 1202273-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021823**	**Date of Collection: 2/9/12 4:10:00 PM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/19/12 06:15 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Naphthalene	0.79	Not Detected	4.1	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	123	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: OUTDOOR - 020912

Lab ID#: 1202273-01B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021823sim**	**Date of Collection: 2/9/12 4:10:00 PM**	
Dil. Factor:	**1.58**	**Date of Analysis: 2/19/12 06:15 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
cis-1,2-Dichloroethene	0.032	Not Detected	0.12	Not Detected
Benzene	0.079	0.62	0.25	2.0
Trichloroethene	0.032	Not Detected	0.17	Not Detected
Toluene	0.032	1.7	0.12	6.3
Tetrachloroethene	0.032	0.062	0.21	0.42
Ethyl Benzene	0.032	0.40	0.14	1.7
m,p-Xylene	0.063	1.4	0.27	6.2
o-Xylene	0.032	0.40	0.14	1.7
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	110	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: MORRELLS - 020912

Lab ID#: 1202273-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021824**	**Date of Collection: 2/9/12 4:05:00 PM**	
Dil. Factor:	**1.83**	**Date of Analysis: 2/19/12 07:02 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Naphthalene	0.92	Not Detected	4.8	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	85	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	120	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: MORRELLS - 020912

Lab ID#: 1202273-02B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021824sim**	**Date of Collection: 2/9/12 4:05:00 PM**	
Dil. Factor:	**1.83**	**Date of Analysis: 2/19/12 07:02 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected	0.047	Not Detected
cis-1,2-Dichloroethene	0.037	Not Detected	0.14	Not Detected
Benzene	0.092	0.68	0.29	2.2
Trichloroethene	0.037	1.7	0.20	9.0
Toluene	0.037	1.9	0.14	7.3
Tetrachloroethene	0.037	3.2	0.25	22
Ethyl Benzene	0.037	0.45	0.16	2.0
m,p-Xylene	0.073	1.6	0.32	7.2
o-Xylene	0.037	0.64	0.16	2.8
trans-1,2-Dichloroethene	0.18	Not Detected	0.72	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	112	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: THRIFTWAY OFFICE - 020912

Lab ID#: 1202273-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021825**	**Date of Collection: 2/9/12 4:00:00 PM**	
Dil. Factor:	**1.75**	**Date of Analysis: 2/19/12 07:45 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Naphthalene	0.88	Not Detected	4.6	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	83	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	117	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: THRIFTWAY OFFICE - 020912

Lab ID#: 1202273-03B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021825sim**	**Date of Collection: 2/9/12 4:00:00 PM**	
Dil. Factor:	**1.75**	**Date of Analysis: 2/19/12 07:45 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	Not Detected	0.045	Not Detected
cis-1,2-Dichloroethene	0.035	Not Detected	0.14	Not Detected
Benzene	0.088	0.69	0.28	2.2
Trichloroethene	0.035	1.1	0.19	5.7
Toluene	0.035	2.4	0.13	9.0
Tetrachloroethene	0.035	2.2	0.24	15
Ethyl Benzene	0.035	0.52	0.15	2.2
m,p-Xylene	0.070	1.9	0.30	8.1
o-Xylene	0.035	0.71	0.15	3.1
trans-1,2-Dichloroethene	0.18	Not Detected	0.69	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	81	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	110	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1202273-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021810**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/18/12 02:33 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Naphthalene	0.50	Not Detected	2.6	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	80	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	118	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1202273-04B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021810sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/18/12 02:33 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Benzene	0.050	Not Detected	0.16	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Toluene	0.020	Not Detected	0.075	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
Ethyl Benzene	0.020	Not Detected	0.087	Not Detected
m,p-Xylene	0.040	Not Detected	0.17	Not Detected
o-Xylene	0.020	Not Detected	0.087	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	81	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	109	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1202273-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/18/12 08:54 AM**	

Compound	**%Recovery**
Naphthalene	82

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	80	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1202273-05B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021802sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/18/12 08:54 AM**	

Compound	%Recovery
Vinyl Chloride	90
cis-1,2-Dichloroethene	91
Benzene	79
Trichloroethene	82
Toluene	83
Tetrachloroethene	84
Ethyl Benzene	92
m,p-Xylene	96
o-Xylene	101
trans-1,2-Dichloroethene	89

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	81	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1202273-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021807**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/18/12 12:08 PM**	

Compound	**%Recovery**
Naphthalene	167 Q

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	79	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	84	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1202273-06AA

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021808**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/18/12 12:49 PM**	

Compound	**%Recovery**
Naphthalene	137

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	79	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	92	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1202273-06B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021807sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/18/12 12:08 PM**	

Compound	%Recovery
Vinyl Chloride	90
cis-1,2-Dichloroethene	96
Benzene	83
Trichloroethene	87
Toluene	86
Tetrachloroethene	87
Ethyl Benzene	94
m,p-Xylene	99
o-Xylene	103
trans-1,2-Dichloroethene	103

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	80	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1202273-06BB

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e021808sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/18/12 12:49 PM**	

Compound	%Recovery
Vinyl Chloride	90
cis-1,2-Dichloroethene	95
Benzene	83
Trichloroethene	87
Toluene	86
Tetrachloroethene	86
Ethyl Benzene	93
m,p-Xylene	99
o-Xylene	102
trans-1,2-Dichloroethene	102

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	79	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Eric Marhofer
Collected by: (Print and Sign) E. M.
Company Aspect Consulting Email emarhofer@aspectconsulting.com
Address 401 2nd Ave S, Ste 201 City Seattle State WA Zip 98104
Phone 206-838-6502 Fax 206-838-6852

Project Info:
P.O. #
Project #
Project Name Stadium Thriftway

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01AB	OUTDOOR - 020912	34470	2/9/12	1610	NMOC TO-15 4.1/L0 (SP)	-29	-5		
02AB	MORRELLS - 020912	34726	2/9/12	1605	↓	-30	-9.5		
03AB	THRIFTWAY OFFICE - 020912	33997	2/9/12	1600	↓	-30	-9		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
E. M.	2/10/12 0915	B. Whittaker ATL	2/13/12 0715
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:
Project specific reporting list

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex		N/A	Good	Yes No (None)	1202273

Form 1293 rev.11

1202273

Air Toxics LTD.
Laboratory Services Since 1989

Method : Modified TO-15 Hi/Lo (Sp)-Aspect (Stadium, Tacoma)

CAS Number	Compound	Rpt. Limit (ppbv)
75-01-4	Vinyl Chloride	0.010
156-59-2	cis-1,2-Dichloroethene	0.020
71-43-2	Benzene	0.050
79-01-6	Trichloroethene	0.020
108-88-3	Toluene	0.020
127-18-4	Tetrachloroethene	0.020
100-41-4	Ethyl Benzene	0.020
108-38-3	m,p-Xylene	0.040
95-47-6	o-Xylene	0.020
156-60-5	trans-1,2-Dichloroethene	0.10
91-20-3	Naphthalene	0.50

CAS Number	Surrogate	Method Limits
17060-07-0	1,2-Dichloroethane-d4	0.0-0.0
2037-26-5	Toluene-d8	0.0-0.0
460-00-4	4-Bromofluorobenzene	0.0-0.0

Indoor Air

Air Toxics LTD.
Laboratory Services Since 1989

2/26/2012
Mr. Eric Marhofer
Aspect Consulting LLC
401 Second Avenue South
Suite 201
Seattle WA 98104

Project Name: STADIUM THRIFTWAY
Project #:
Workorder #: 1202276A

Dear Mr. Eric Marhofer

The following report includes the data for the above referenced project for sample(s) received on 2/13/2012 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1202276A

Work Order Summary

CLIENT:	Mr. Eric Marhofer Aspect Consulting LLC 401 Second Avenue South Suite 201 Seattle, WA 98104	**BILL TO:**	Accounts Payable Aspect Consulting LLC 350 Madison Ave N Bainbridge Island, WA 98110
PHONE:	206-838-6582	**P.O. #**	
FAX:	206-838-5853	**PROJECT #**	STADIUM THRIFTWAY
DATE RECEIVED:	02/13/2012	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	02/26/2012		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	VP-1-020912	Modified TO-15	8.0 "Hg	5 psi
02A	VP-2-020912	Modified TO-15	6.5 "Hg	5 psi
03A	VP-3-020912	Modified TO-15	6.5 "Hg	5 psi
04A	Lab Blank	Modified TO-15	NA	NA
04B	Lab Blank	Modified TO-15	NA	NA
05A	CCV	Modified TO-15	NA	NA
05B	CCV	Modified TO-15	NA	NA
06A	LCS	Modified TO-15	NA	NA
06AA	LCSD	Modified TO-15	NA	NA
06B	LCS	Modified TO-15	NA	NA
06BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda D. Frumarx DATE: 02/26/12

Laboratory Director

Certfication numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089,
NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/11 , Expiration date: 06/30/12.
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
Aspect Consulting LLC
Workorder# 1202276A

Three 6 Liter Summa Canister (100% Certified) samples were received on February 13, 2012. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	</= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Sample VP-2-020912 was transferred from Low Level analysis to full scan TO-15 (5&20 ppbv) due to high levels of target compounds.

Dilution was performed on samples VP-2-020912 and VP-3-020912 due to the presence of high level target species.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV and/or LCS.
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: VP-1-020912

Lab ID#: 1202276A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.18	0.21	0.98	1.1
Toluene	0.18	0.50	0.69	1.9
Tetrachloroethene	0.18	40	1.2	270
m,p-Xylene	0.18	0.74	0.79	3.2
o-Xylene	0.18	0.21	0.79	0.92

Client Sample ID: VP-2-020912

Lab ID#: 1202276A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	43	22000	290	150000

Client Sample ID: VP-3-020912

Lab ID#: 1202276A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	0.30	0.35	1.6	1.9
Toluene	0.30	1.6	1.1	6.0
Tetrachloroethene	0.30	56	2.1	380
Ethyl Benzene	0.30	0.42	1.3	1.8
m,p-Xylene	0.30	1.6	1.3	7.2
o-Xylene	0.30	0.48	1.3	2.1

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-1-020912

Lab ID#: 1202276A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e022007**	**Date of Collection: 2/9/12 11:30:00 AM**	
Dil. Factor:	**1.83**	**Date of Analysis: 2/20/12 12:52 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.18	Not Detected	0.47	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.72	Not Detected
cis-1,2-Dichloroethene	0.18	Not Detected	0.72	Not Detected
Benzene	0.18	Not Detected	0.58	Not Detected
Trichloroethene	0.18	0.21	0.98	1.1
Toluene	0.18	0.50	0.69	1.9
Tetrachloroethene	0.18	40	1.2	270
Ethyl Benzene	0.18	Not Detected	0.79	Not Detected
m,p-Xylene	0.18	0.74	0.79	3.2
o-Xylene	0.18	0.21	0.79	0.92
Naphthalene	0.92	Not Detected	4.8	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	78	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-2-020912

Lab ID#: 1202276A-02A

EPA METHOD TO-15 GC/MS

File Name:	**14022115**	**Date of Collection: 2/9/12 1:10:00 PM**	
Dil. Factor:	**8.55**	**Date of Analysis: 2/21/12 02:02 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	43	Not Detected	110	Not Detected
trans-1,2-Dichloroethene	43	Not Detected	170	Not Detected
cis-1,2-Dichloroethene	43	Not Detected	170	Not Detected
Benzene	43	Not Detected	140	Not Detected
Trichloroethene	43	Not Detected	230	Not Detected
Toluene	43	Not Detected	160	Not Detected
Tetrachloroethene	43	22000	290	150000
Ethyl Benzene	43	Not Detected	180	Not Detected
m,p-Xylene	43	Not Detected	180	Not Detected
o-Xylene	43	Not Detected	180	Not Detected
Naphthalene	170	Not Detected	900	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	123	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	92	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-3-020912

Lab ID#: 1202276A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e022008**	**Date of Collection: 2/9/12 2:45:00 PM**	
Dil. Factor:	**3.05**	**Date of Analysis: 2/20/12 01:39 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.30	Not Detected	0.78	Not Detected
trans-1,2-Dichloroethene	0.30	Not Detected	1.2	Not Detected
cis-1,2-Dichloroethene	0.30	Not Detected	1.2	Not Detected
Benzene	0.30	Not Detected	0.97	Not Detected
Trichloroethene	0.30	0.35	1.6	1.9
Toluene	0.30	1.6	1.1	6.0
Tetrachloroethene	0.30	56	2.1	380
Ethyl Benzene	0.30	0.42	1.3	1.8
m,p-Xylene	0.30	1.6	1.3	7.2
o-Xylene	0.30	0.48	1.3	2.1
Naphthalene	1.5	Not Detected	8.0	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	75	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1202276A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e022006**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/20/12 11:59 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Benzene	0.10	Not Detected	0.32	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
Tetrachloroethene	0.10	Not Detected	0.68	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
Naphthalene	0.50	Not Detected	2.6	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	77	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	114	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1202276A-04B

EPA METHOD TO-15 GC/MS

File Name:	**14022107**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/21/12 10:38 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	5.0	Not Detected	13	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
Naphthalene	20	Not Detected	100	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	90	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1202276A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e022002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/20/12 08:49 AM**	

Compound	%Recovery
Vinyl Chloride	88
trans-1,2-Dichloroethene	88
cis-1,2-Dichloroethene	90
Benzene	84
Trichloroethene	91
Toluene	84
Tetrachloroethene	86
Ethyl Benzene	86
m,p-Xylene	87
o-Xylene	91
Naphthalene	83

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	78	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1202276A-05B

EPA METHOD TO-15 GC/MS

File Name:	**14022103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/21/12 08:41 AM**	

Compound	%Recovery
Vinyl Chloride	105
trans-1,2-Dichloroethene	101
cis-1,2-Dichloroethene	115
Benzene	106
Trichloroethene	102
Toluene	102
Tetrachloroethene	96
Ethyl Benzene	102
m,p-Xylene	102
o-Xylene	103
Naphthalene	83

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	97	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1202276A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e022003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/20/12 09:45 AM**	

Compound	%Recovery
Vinyl Chloride	90
trans-1,2-Dichloroethene	100
cis-1,2-Dichloroethene	93
Benzene	88
Trichloroethene	95
Toluene	88
Tetrachloroethene	89
Ethyl Benzene	91
m,p-Xylene	96
o-Xylene	98
Naphthalene	66

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	76	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1202276A-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**e022004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/20/12 10:29 AM**	

Compound	%Recovery
Vinyl Chloride	89
trans-1,2-Dichloroethene	101
cis-1,2-Dichloroethene	94
Benzene	89
Trichloroethene	96
Toluene	88
Tetrachloroethene	90
Ethyl Benzene	92
m,p-Xylene	94
o-Xylene	98
Naphthalene	70

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	76	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	106	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1202276A-06B

EPA METHOD TO-15 GC/MS

File Name:	**14022104**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/21/12 09:03 AM**	

Compound	%Recovery
Vinyl Chloride	111
trans-1,2-Dichloroethene	118
cis-1,2-Dichloroethene	119
Benzene	108
Trichloroethene	107
Toluene	103
Tetrachloroethene	96
Ethyl Benzene	103
m,p-Xylene	105
o-Xylene	104
Naphthalene	97

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	95	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1202276A-06BB

EPA METHOD TO-15 GC/MS

File Name:	**14022105**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/21/12 09:33 AM**	

Compound	%Recovery
Vinyl Chloride	110
trans-1,2-Dichloroethene	116
cis-1,2-Dichloroethene	116
Benzene	109
Trichloroethene	106
Toluene	102
Tetrachloroethene	97
Ethyl Benzene	104
m,p-Xylene	106
o-Xylene	106
Naphthalene	98

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	119	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager ERIC MARHOFER

Collected by: (Print and Sign) Eric Marhofer

Company ASPECT CONSULTING Email emarhofer@aspectconsulting.com

Address 401 2ND AVE S, STE 201 City SEATTLE State WA Zip 98104

Phone 206-838-6582 Fax 206-838-6853

Project Info:
P.O. #
Project #
Project Name STADIUM THRIFTWAY

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	VP-1-020912	13846	2/9/12	1130	MODIFIED TO-15 LL(SIM) + ASTM D1946 (Helium)	-30	-10		
02A	VP-2-020912	9915	2/9/12	1310		-29.5	-6		
03A	VP-3-020912	1601	2/9/12	1445		-30	-9		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Eric Marhofer	2/10/12 0915	B. Whittaker ATL	2/13/12 0715
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:
Project specific reporting list, plus helium for leak trace gas.

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex		N/A	Good	Yes No (None)	1202276

Form 1293 rev.11

1202278

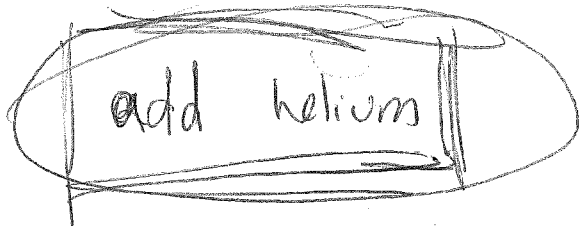
Air Toxics LTD.
Laboratory Services Since 1989

Method : Modified TO-15-LL (Sp)-c/t-1,2-DCE, BTEX, PCE, TCE, VC & Naph

CAS Number	Compound	Rpt. Limit (ppbv)
75-01-4	Vinyl Chloride	0.10
156-60-5	trans-1,2-Dichloroethene	0.10
156-59-2	cis-1,2-Dichloroethene	0.10
71-43-2	Benzene	0.10
79-01-6	Trichloroethene	0.10
108-88-3	Toluene	0.10
127-18-4	Tetrachloroethene	0.10
100-41-4	Ethyl Benzene	0.10
108-38-3	m,p-Xylene	0.10
95-47-6	o-Xylene	0.10
91-20-3	Naphthalene	0.50

CAS Number	Surrogate	Method Limits
17060-07-0	1,2-Dichloroethane-d4	70-130
2037-26-5	Toluene-d8	70-130
460-00-4	4-Bromofluorobenzene	70-130

Soil gas



Air Toxics LTD.
Laboratory Services Since 1989

2/24/2012
Mr. Eric Marhofer
Aspect Consulting LLC
401 Second Avenue South
Suite 201
Seattle WA 98104

Project Name: STADIUM THRIFTWAY
Project #:
Workorder #: 1202276B

Dear Mr. Eric Marhofer

The following report includes the data for the above referenced project for sample(s) received on 2/13/2012 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1202276B

Work Order Summary

CLIENT:	Mr. Eric Marhofer Aspect Consulting LLC 401 Second Avenue South Suite 201 Seattle, WA 98104	**BILL TO:**	Accounts Payable Aspect Consulting LLC 350 Madison Ave N Bainbridge Island, WA 98110
PHONE:	206-838-6582	**P.O. #**	
FAX:	206-838-5853	**PROJECT #**	STADIUM THRIFTWAY
DATE RECEIVED:	02/13/2012	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	02/24/2012		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	VP-1-020912	Modified ASTM D-1946	8.0 "Hg	5 psi
02A	VP-2-020912	Modified ASTM D-1946	6.5 "Hg	5 psi
03A	VP-3-020912	Modified ASTM D-1946	6.5 "Hg	5 psi
04A	Lab Blank	Modified ASTM D-1946	NA	NA
05A	LCS	Modified ASTM D-1946	NA	NA
05AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Linda D. Frumarx DATE: 02/24/12

Laboratory Director

Certfication numbers: AZ Licensure AZ0719, CA NELAP - 02110CA, LA NELAP - 02089,
NY NELAP - 11291, TX NELAP - T104704434-11-3, UT NELAP -CA009332011-1, WA NELAP - C935
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/11 , Expiration date: 06/30/12.
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified ASTM D-1946
Aspect Consulting LLC
Workorder# 1202276B

Three 6 Liter Summa Canister (100% Certified) samples were received on February 13, 2012. The laboratory performed analysis via Modified ASTM Method D-1946 for Helium in air using GC/TCD. The method involves direct injection of 1.0 mL of sample.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A 3-point calibration curve is performed. Quantitation is based on a daily calibration standard which may or may not resemble the composition of the associated samples.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: VP-1-020912

Lab ID#: 1202276B-01A

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.092	0.56

Client Sample ID: VP-2-020912

Lab ID#: 1202276B-02A

No Detections Were Found.

Client Sample ID: VP-3-020912

Lab ID#: 1202276B-03A

No Detections Were Found.

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-1-020912

Lab ID#: 1202276B-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9021512b**	**Date of Collection: 2/9/12 11:30:00 AM**	
Dil. Factor:	**1.83**	**Date of Analysis: 2/15/12 02:31 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.092	0.56

Container Type: 6 Liter Summa Canister (100% Certified)

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-2-020912

Lab ID#: 1202276B-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9021513b**	**Date of Collection: 2/9/12 1:10:00 PM**	
Dil. Factor:	**1.71**	**Date of Analysis: 2/15/12 02:58 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.086	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: VP-3-020912

Lab ID#: 1202276B-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9021514b**	**Date of Collection: 2/9/12 2:45:00 PM**	
Dil. Factor:	**1.71**	**Date of Analysis: 2/15/12 03:22 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.086	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1202276B-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9021504b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/15/12 09:21 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.050	Not Detected

Container Type: NA - Not Applicable

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1202276B-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9021502b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/15/12 08:27 AM**	

Compound	**%Recovery**
Helium	94

Container Type: NA - Not Applicable

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1202276B-05AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9021524b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 2/15/12 08:43 PM**	

Compound	**%Recovery**
Helium	94

Container Type: NA - Not Applicable

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager ERIC MARHOFER

Collected by: (Print and Sign) Eric Marhofer

Company ASPECT CONSULTING Email emarhofer@aspectconsulting.com

Address 401 2ND AVE S, STE 201 City SEATTLE State WA Zip 98104

Phone 206-838-6582 Fax 206-838-6853

Project Info:
P.O. #
Project #
Project Name STADIUM THRIFTWAY

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	VP-1-020912	13846	2/9/12	1130	MODIFIED TO-15 LL(SIM) + ASTM D1946 (Helium)	-30	-10		
02A	VP-2-020912	9915	2/9/12	1310		-29.5	-6		
03A	VP-3-020912	1601	2/9/12	1445		-30	-9		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Eric Marhofer	2/10/12 0915	B. Whittaker ATL	2/13/12 0715
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:
Project specific reporting list, plus helium for leak trace gas.

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex		N/A	Good	Yes No (None)	1202276

Form 1293 rev.11

1202278

Air Toxics LTD.
Laboratory Services Since 1989

Method : Modified TO-15-LL (Sp)-c/t-1,2-DCE, BTEX, PCE, TCE, VC & Naph

CAS Number	Compound	Rpt. Limit (ppbv)
75-01-4	Vinyl Chloride	0.10
156-60-5	trans-1,2-Dichloroethene	0.10
156-59-2	cis-1,2-Dichloroethene	0.10
71-43-2	Benzene	0.10
79-01-6	Trichloroethene	0.10
108-88-3	Toluene	0.10
127-18-4	Tetrachloroethene	0.10
100-41-4	Ethyl Benzene	0.10
108-38-3	m,p-Xylene	0.10
95-47-6	o-Xylene	0.10
91-20-3	Naphthalene	0.50

CAS Number	Surrogate	Method Limits
17060-07-0	1,2-Dichloroethane-d4	70-130
2037-26-5	Toluene-d8	70-130
460-00-4	4-Bromofluorobenzene	70-130

Soil gas