STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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August 26, 2015

Mr. Nels B. Cone
Andersen Environmental
P.O. Box 85418
Seattle, WA 98145

Re: Further Action at the following Site:

- **Site Name:** Church of God in Christ
- **Site Address:** 9201 Pacific Avenue South, Tacoma, Pierce County
- **Facility/Site No.:** 19947
- **Cleanup Site ID:** 12404
- **VCP Project No.:** SW1467

Dear Mr. Cone:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your proposed independent cleanup of the Church of God in Christ facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

YES. Ecology has determined that further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following releases:

- Volatile Organic Compounds (VOCs), into the Soil and Groundwater.

Enclosure A includes a detailed description and diagram of the Site, as currently known to Ecology.

Please note the parcel(s) of real property associated with this Site are also located within the projected boundaries of the Tacoma Smelter Plume facility (# 62855481). At this time, we have no information that those parcel(s) are actually affected; however, Ecology recommends that any soil samples collected from the Site be analyzed for lead and arsenic to determine whether the Site has been impacted. This opinion does not apply to any contamination associated with the Tacoma Smelter Plume facility.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. Andersen Environmental, Phase II Environmental Site Assessment (ESA) for 9201 Pacifica Avenue South, Tacoma, Washington, dated April 20, 2015.

2. Andersen Environmental, Phase I Environmental Site Assessment (ESA) for 9201 Pacifica Avenue South, Tacoma, Washington, dated September 16, 2014.

3. Limited Soil and Groundwater Sampling and Testing, Commercial Property, 9201 Pacific Avenue, Tacoma, Washington, dated April 26, 2013.

Those documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You can make an appointment by calling the SWRO resource contact at (360) 407-6365.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that, upon completion of your proposed cleanup, **further remedial action** will likely be necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A.**

The Site is located at 9201 Pacific Avenue South, Tacoma, Washington, and has been vacant since approximately 2014. The Site is approximately 8.86 acres and is occupied by a one-story building that is approximately 61,230 square feet. The property was originally developed as strip shopping mall, and later occupied by a church and associated activity center. The property was transferred into receivership in approximately 2013.

Previous investigations indicate that the northeast portion of the property building was developed for commercial dry-cleaning operations including the Pacific Launder Center (1969 to 1979) and the Tacoma Dry-Cleaning and Laundry Center (1979 to 1984). The Site was listed on Ecology's Confirmed and Suspected Contaminated Sites List in 2013.

In October 2014, soil and groundwater samples were collected from each boring and analyzed for Volatile Organic Compounds (VOCs), gasoline-range petroleum hydrocarbons (TPH-Gx), and Metals.

Laboratory analytical results for the October 2014 investigation indicated the following:

- VOCs including tetrachloroethylene (PCE), trichloroethylene (TCE), and cis-1,2-Dichloroethene (DCE) in soils beneath the slab foundation to a maximum depth of approximately 4 feet bgs. Concentrations of PCE and TCE were above the respective MTCA Method A Cleanup Levels (CULs).

- Cadmium was detected above the respective MTCA Method A CUL in soil boring B5 at an approximate depth of 3 feet bgs underneath the building's slab foundation.

- In addition, laboratory analytical results indicated concentrations of PCE and/or TCE above MTCA CULs in groundwater samples collected from soil borings B2, B3, and B4.

Between December 2014 and March 2015, an additional investigation was conducted at the Site to further delineate the contamination encountered previously in October 2014. Four of the soil borings were eventually completed as groundwater monitoring wells MW1 through MW4.

Laboratory analytical results for the December 2014 to March 2015 investigation indicated that concentrations of PCE were detected in groundwater samples ranging from 1.1 micrograms per liter (µg/L) at groundwater monitoring well MW-4 to 40 µg/L at groundwater monitoring well MW-3.

Based on a review of the above-listed documents, Ecology has the following comments:

1. Additional information should be added to the Site figures to show the configuration of the dry cleaning business when it was operating, including: the location of the back door; the position of the dry cleaning equipment; location of where the dry cleaning chemicals were offloaded and stored (e.g. loading dock); and whether there are potential preferential pathways such utility vaults, sewer lines, and septic tank/drain-field.

2. The areal and vertical extent of the PCE contamination present at the Site has not been adequately defined. The following comments No. 3 through No. 5 describe Ecology's recommendations for further characterization of vapor, soil and groundwater at the Site.

3. Existing data indicates that the current tenant space may be exposed to a PCE Vapor Intrusion (VI) risk which may threaten the health of future building occupants. The current MTCA Method B vapor intrusion screening level for groundwater is 22.9 µg/L. Since groundwater concentrations exceed the screening level, the Site requires a Tier II assessment (as discussed in Ecology's 2009 Draft VI Guidance) or mitigation is required.

4. The soil source mass that is contributing to the groundwater contamination has not been adequately identified. Historical information about the Site described in comment No. 1 will help in better delineating the source of the soil contamination.

5. The vertical depth of contamination within the aquifer has not been adequately characterized. We recommend collecting groundwater samples from the base of the aquifer, and at depth-discrete zones within the aquifer.

6. Following additional Site characterization, the conceptual site model (CSM) should be refined to show the subsurface conditions beneath the Site (i.e. cross sections). A comprehensive CSM will give a better picture of the confining layers and more permeable zones between the confining layers. In addition, we recommend recalculating the potentiometric surface contours to better depict the groundwater flow direction.

7. Please prepare a work plan for the further characterization activities noted above and provide to Ecology for review. This will help ensure that the additional work meets the substantive requirements of MTCA.

8. In accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840 (Data Submittal Requirements), data generated for Independent Remedial Actions shall be submitted simultaneously in both a written and electronic format. For additional information regarding electronic format requirements, see the website http://www.ecy.wa.gov/eim. Be advised that according to the policy, any reports containing sampling data that are submitted for Ecology review are considered incomplete until the electronic data has been entered. Please ensure that data generated during on-site activities is submitted pursuant to this policy. Data must be submitted to Ecology in this format for Ecology to issue a No Further Action determination. Please be sure to submit all soil and groundwater data collected to date, as well as any future data, in this format. Data collected prior to August 2005 (effective date of this policy) is not required to be submitted; however, you are encouraged to do so if it is available. Be advised that Ecology requires up to two weeks to process the data once it is received.

2. Establishment of cleanup standards.

Ecology has determined the cleanup levels and points of compliance established for the Site do not meet the substantive requirements of MTCA.

Cleanup standards cannot be established because the Site has yet to be fully defined.

MTCA Method A CULs for soil and groundwater for unrestricted land uses have been used initially to characterize the Site. Standard points of compliance are being used

for the Site. The point of compliance for protection of groundwater shall be established in the soils throughout the Site. For soil cleanup levels based on human exposure via direct contact or other exposure pathways where contact with the soil is required to complete the pathway, the point of compliance shall be established in the soils throughout the Site from the ground surface to 15 feet bgs. In addition, the point of compliance for the groundwater shall be established throughout the Site from the uppermost level of the saturated zone extending vertically to the lowermost depth that could potentially be affected by the Site.

3. Selection of cleanup action.

Ecology has determined the cleanup action (Monitored Natural Attenuation of Groundwater) you proposed for the Site does not meet the substantive requirements of MTCA. The Site requires additional characterization before selecting a cleanup action.

4. Cleanup.

No cleanup has been performed at the Site.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you proposed will be substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me by phone at (360) 407-6265 or e-mail at john.rapp@ecy.wa.gov.

Sincerely,

John F Rapp, LHG
Project manager
SWRO Toxics Cleanup Program

JFR: knf

Enclosures: A – Description and Diagrams of the Site

By certified mail: 91710821333939704185 66

cc: Mr. Brian Martisan, Andersen Environmental
Ms. Sharon Bell, Tacoma-Pierce County Health Department
Ms. Richelle Perez, Ecology
Mr. Steve Teel, Ecology
Ms. Dolores Mitchell, Ecology

Enclosure A

Description and Diagrams of the Site

Site Description

According to the Pierce County Assessor's Office, the Site is located in the City of Tacoma, and is described by the Assessor's Parcel Number: 0320333304; Township 20N, Range 03 East, Section 33.

The Site address is listed as 9201 Pacific Avenue, Tacoma Washington (Figure 1). It is located on the east side of Pacific Avenue and the west side of "A" Street, approximately 600 feet north of 96th Street, and encompassing approximately three city blocks within the City of Tacoma. The Site is listed as approximately 386,100 square feet (8.86 acres) in size and is developed with a large one story building reported as approximately 61,230 square feet in size (Figure 2).

The Site is unoccupied and has been vacant for over one year. The building is roughly separated into three major units, 9201A (north end), 9201B (middle) and 9201C (south end). The middle unit is further divided into two sections, and the north end divided into one main section and several smaller sections with distinct entrances for each. Originally built as a strip shopping mall, the building was most recently used as a church and its associated activity center. These operations continued into 2013 when the property transferred into receivership.

The remaining portion of the Site consists of a fenced-in playground attached to the north end of the building, large surrounding parking areas, a designated wetlands located in the northeast corner, an overgrown storm-water detention area located in the southeast corner and various landscaped areas located along the perimeters. The eastern half of the subject property is presently enclosed with a chain-link fence. The surrounding area is mostly used for residential and light commercial purposes. Groundwater is estimated to vary between 9 and 14 feet below ground surface in the area of the Site.

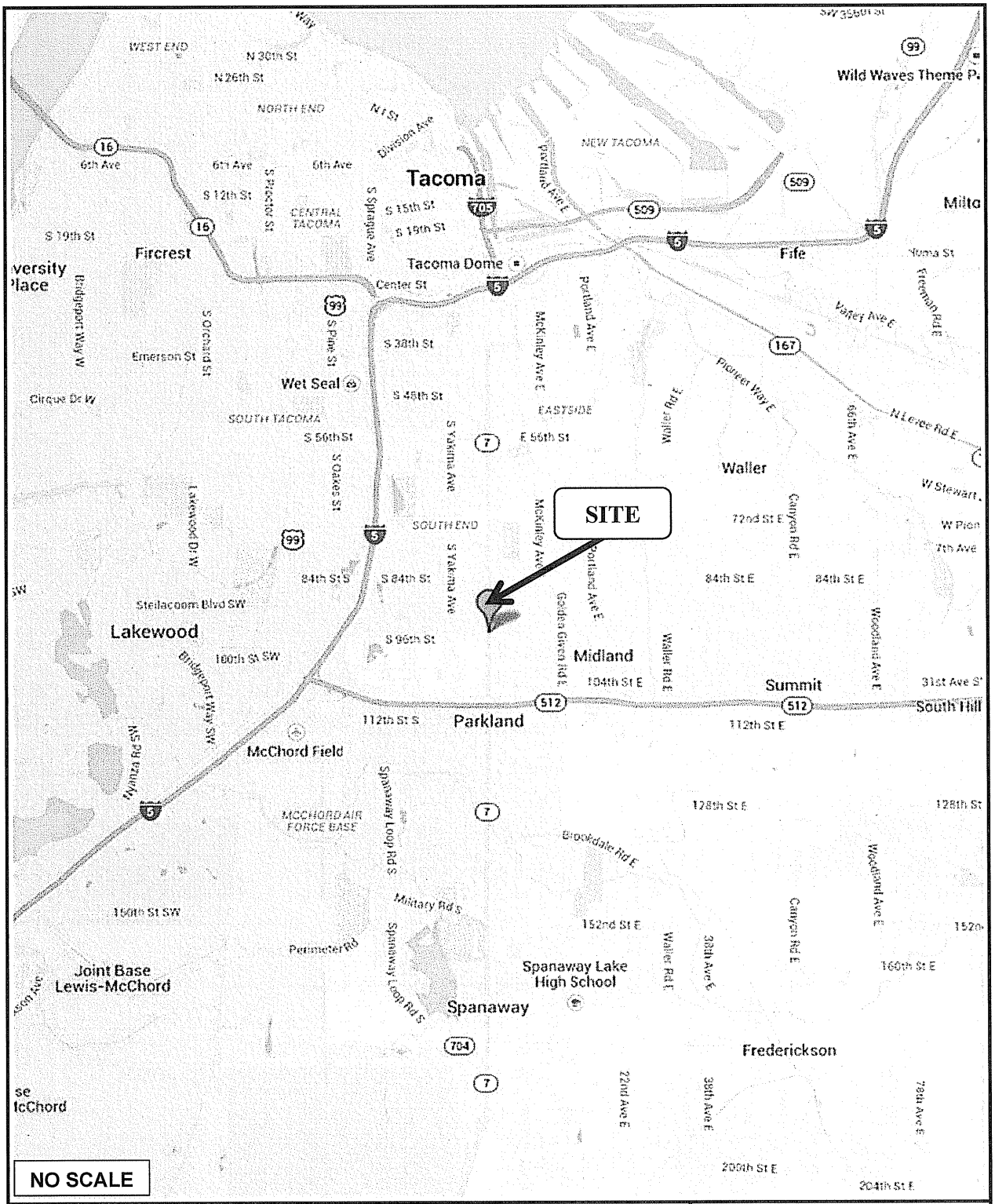
Previous investigations indicate the northeast portion of the property building was historically developed for commercial dry-cleaning operations. These business operations included the Pacific Launder Center, operating onsite from approximately 1969 to 1979, and the Tacoma Dry-Cleaning and Laundry Center operating onsite from approximately 1979 to 1984. It is not known which of these operations may have contributed to the chlorinated volatile organic compounds (CVOC) release or releases; however due to industry standard practices used during this period, the potential for either or both of these operations to have released dry-cleaning chemicals to the environment exists. The Site is listed on Ecology's Confirmed and Suspected Contaminated Sites List (CSCSL) in 2013.

The elevation of the Site is approximately 385 feet above sea level (USGS Tacoma South 7.5 minute topographic quadrangle). The underlying soils in the vicinity of the Site are classified as Quaternary Vashon Till (Qdvt) consisting of grey, unsorted, un-stratified, highly compact mixture of clay, silt, sand, gravel and with possible erratics (large boulders) directly deposited by recessional glaciers (Geological Map of the South Half of the Tacoma Quadrangle, 1987). Soils overlaying un-weathered till consist of outwash gravel, sand and surficial loam.

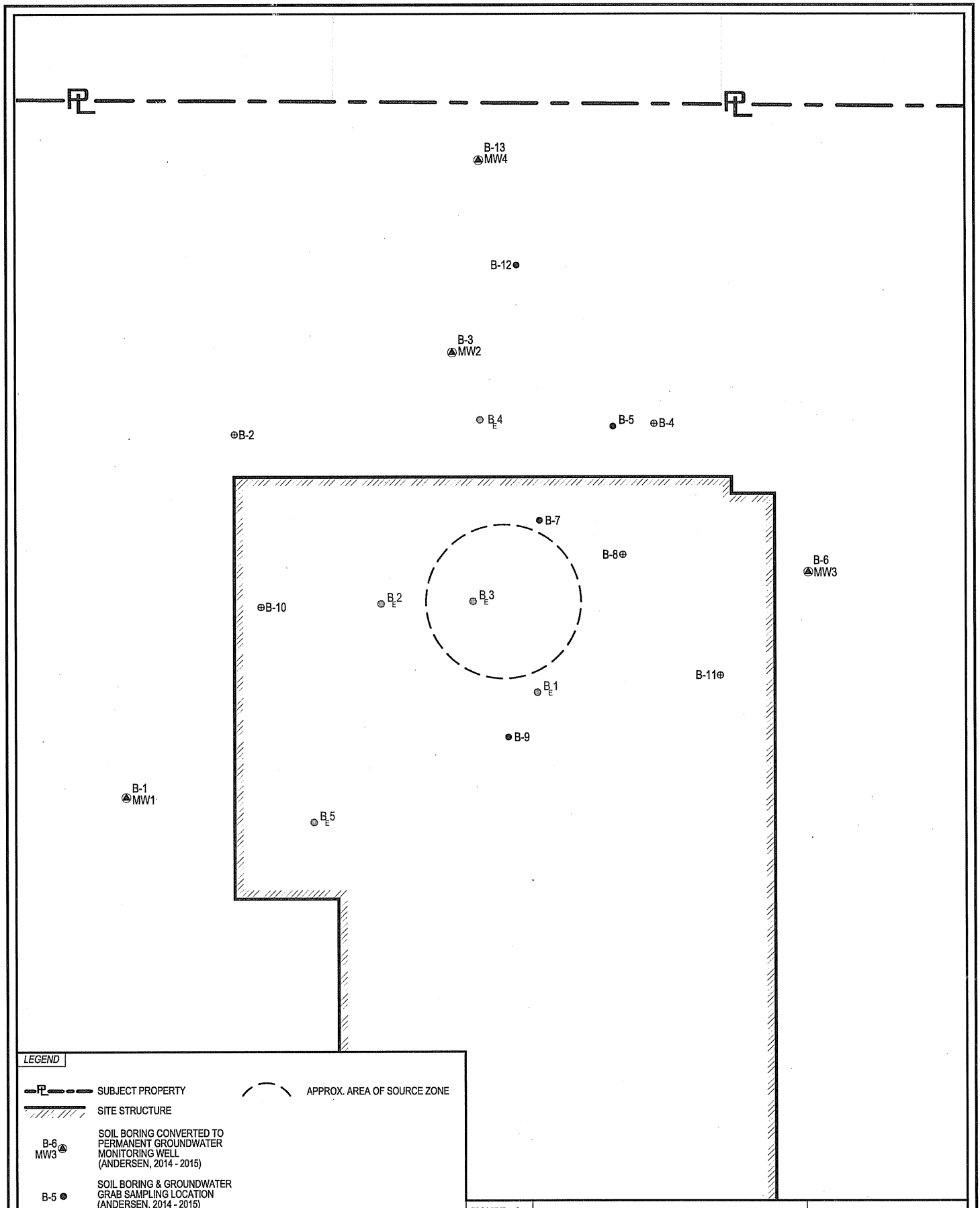
These lithologic classifications are consistent with Site conditions identified by Andersen Environmental during field investigation activities where un-weathered till was encountered to maximum depths of 25 feet below ground surface (bgs).

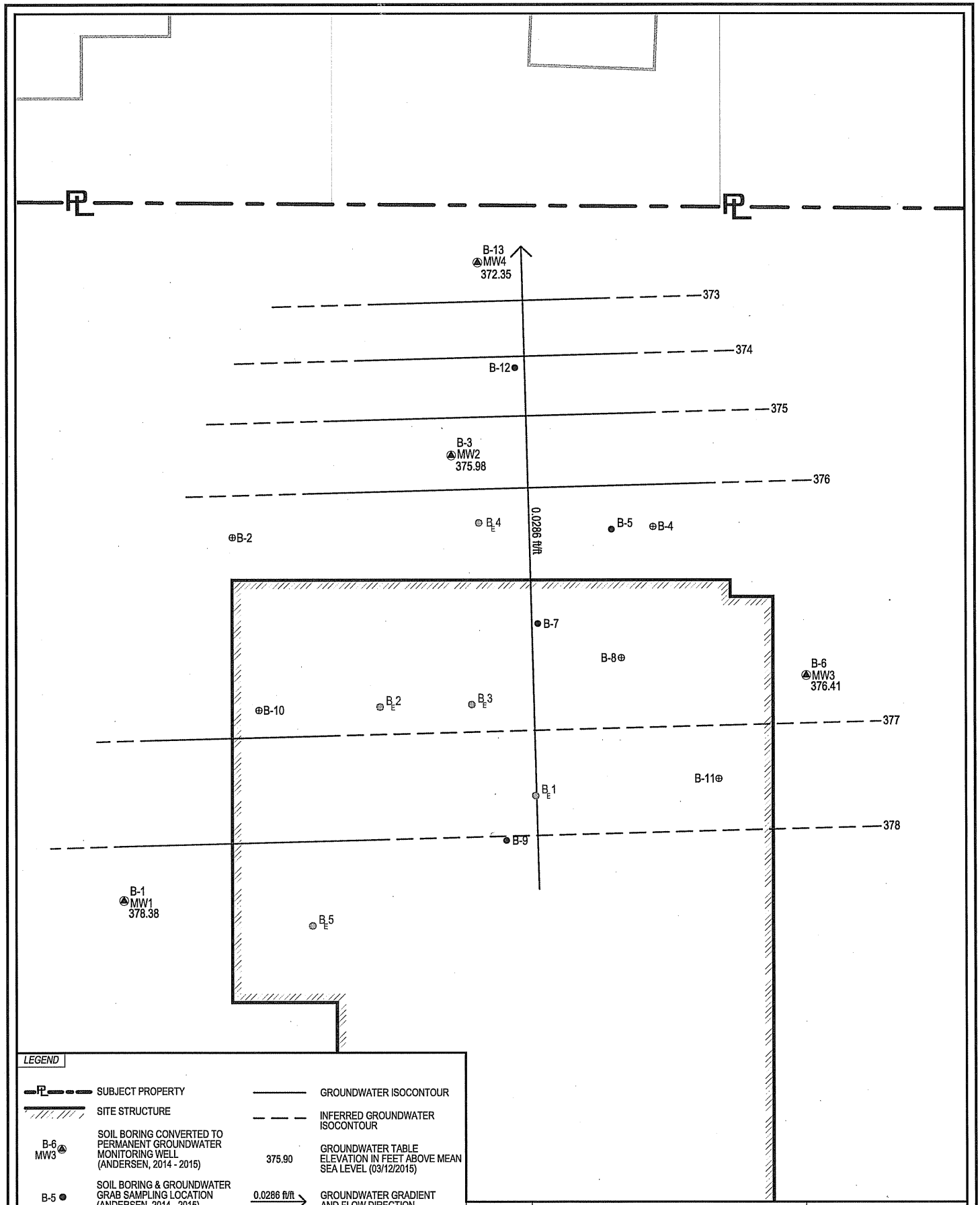
Recent field investigations performed by Andersen Environmental indicate groundwater depth beneath the Site varies from approximately 9 to 14 feet bgs with general gradient direction to the north.

Site Diagrams



AE ANDERSEN ENVIRONMENTAL	**Figure 1: Site Location Map** 9201 South Pacifica Avenue Tacoma, Washington 98444	Source: Google, Inc., 2015 AE Project Number: 1412-2091 Drawn By: Shayan Simantob


B-13
MW4
B-12
B-3
MW2
B-2
B-4
B-5
B-7
B-8
B-6
MW3
B-10
B-11
B-9
B-1
MW1
LEGEND
SUBJECT PROPERTY
APPROX. AREA OF SOURCE ZONE
SITE STRUCTURE
B-6 MW3 SOIL BORING CONVERTED TO PERMANENT GROUNDWATER MONITORING WELL (ANDERSEN, 2014 - 2015)
B-5 SOIL BORING & GROUNDWATER GRAB SAMPLING LOCATION (ANDERSEN, 2014 - 2015)
B-10 SOIL BORING (ANDERSEN, 2014)
FORMER SOIL BORING & GROUNDWATER SAMPLING LOCATION (ENVIRONMENTAL ASSOCIATES, 2013)
FIGURE 3
SITE DETAIL PLAN
ADDRESS: 9201 PACIFIC AVENUE TACOMA, CALIFORNIA 98444
SOURCE: ANDERSEN ENVIRONMENTAL
PROJECT NO.: 1412-2091
DRAWN BY: JOHN ESCALONA
CHECKED BY: BRIAN MARTASIN
DATE: 04/13/2015
ANDERSEN ENVIRONMENTAL
APPROX. SCALE: 1"= 40'
0'
20'
40'



LEGEND

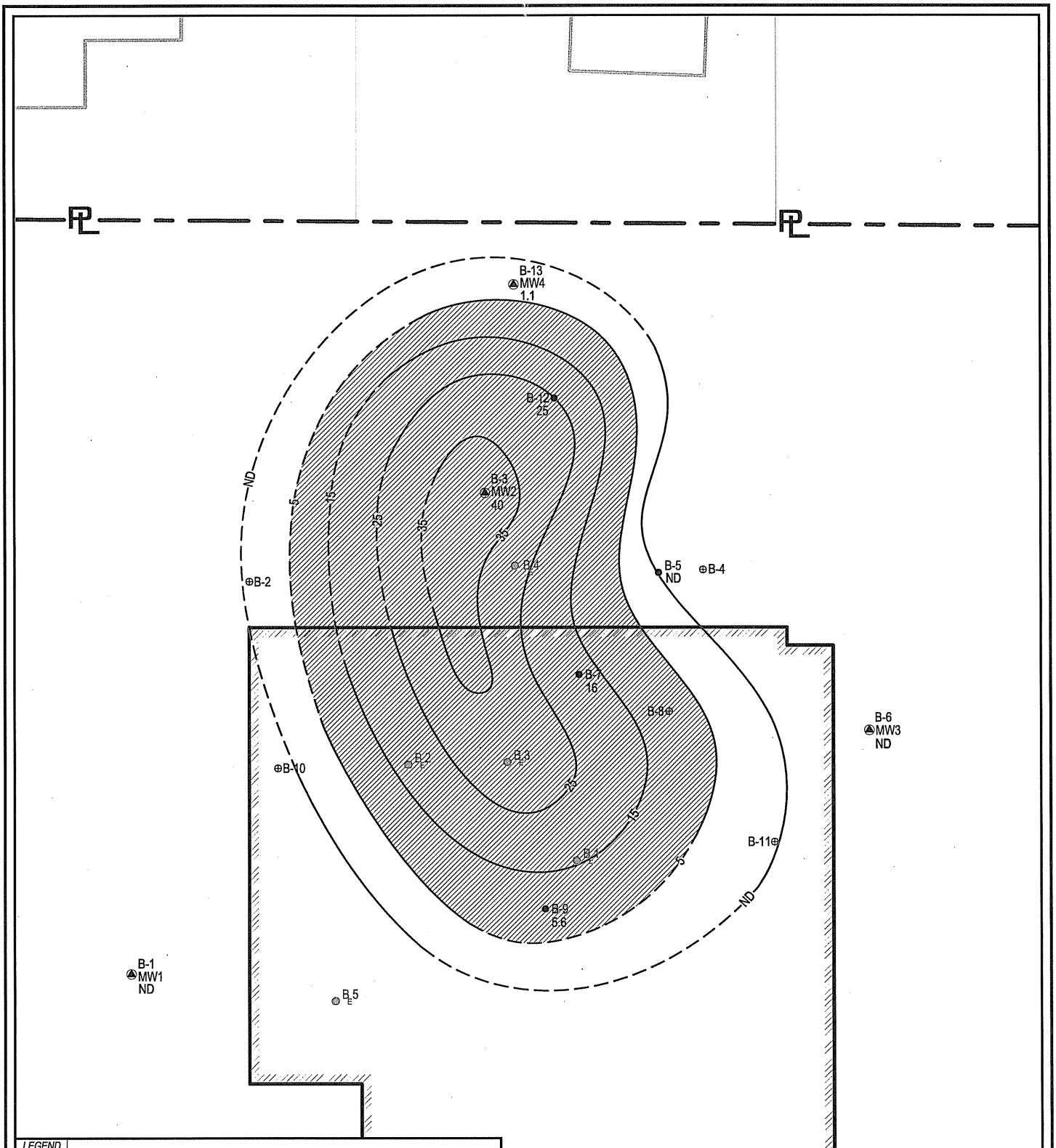
- SUBJECT PROPERTY
- SITE STRUCTURE
- B-6 MW3 — SOIL BORING CONVERTED TO PERMANENT GROUNDWATER MONITORING WELL (ANDERSEN, 2014 - 2015)
- B-5 — SOIL BORING & GROUNDWATER GRAB SAMPLING LOCATION (ANDERSEN, 2014 - 2015)
- B-10 — SOIL BORING (ANDERSEN, 2014)
- B-6 — FORMER SOIL BORING & GROUNDWATER SAMPLING LOCATION (ENVIRONMENTAL ASSOCIATES, 2013)
- GROUNDWATER ISOCONTOUR
- INFERRED GROUNDWATER ISOCONTOUR
- 375.90 — GROUNDWATER TABLE ELEVATION IN FEET ABOVE MEAN SEA LEVEL (03/12/2015)
- 0.0286 ft/ft — GROUNDWATER GRADIENT AND FLOW DIRECTION

FIGURE 4	GROUNDWATER GRADIENT AND CONTOUR MAP
ADDRESS:	9201 PACIFIC AVENUE TACOMA, CALIFORNIA 98444
SOURCE:	ANDERSEN ENVIRONMENTAL
PROJECT NO.:	1412-2091
DRAWN BY:	JOHN ESCALONA
CHECKED BY:	BRIAN MARTASIN
DATE:	04/13/2015

ANDERSEN ENVIRONMENTAL

APPROX. SCALE: 1"= 40'

0' 20' 40'



LEGEND

- SUBJECT PROPERTY
- SITE STRUCTURE
- B-6 MW3 — SOIL BORING CONVERTED TO PERMANENT GROUNDWATER MONITORING WELL (ANDERSEN, 2014 - 2015)
- B-5 — SOIL BORING & GROUNDWATER GRAB SAMPLING LOCATION (ANDERSEN, 2014 - 2015)
- B-10 — SOIL BORING (ANDERSEN, 2014)
- B_E6 — FORMER SOIL BORING & GROUNDWATER SAMPLING LOCATION (ENVIRONMENTAL ASSOCIATES, 2013)
- ISOCONCENTRATION CONTOUR
- INFERRED ISOCONCENTRATION CONTOUR
- 40 — TETRACHLOROETHENE IN GROUNDWATER (MICROGRAMS PER LITER)
- ND — NON-DETECT ABOVE LABORATORY DETECTION LIMIT
- TETRACHLOETHENE PLUME ABOVE MTCA METHOD A CLEANUP LEVEL

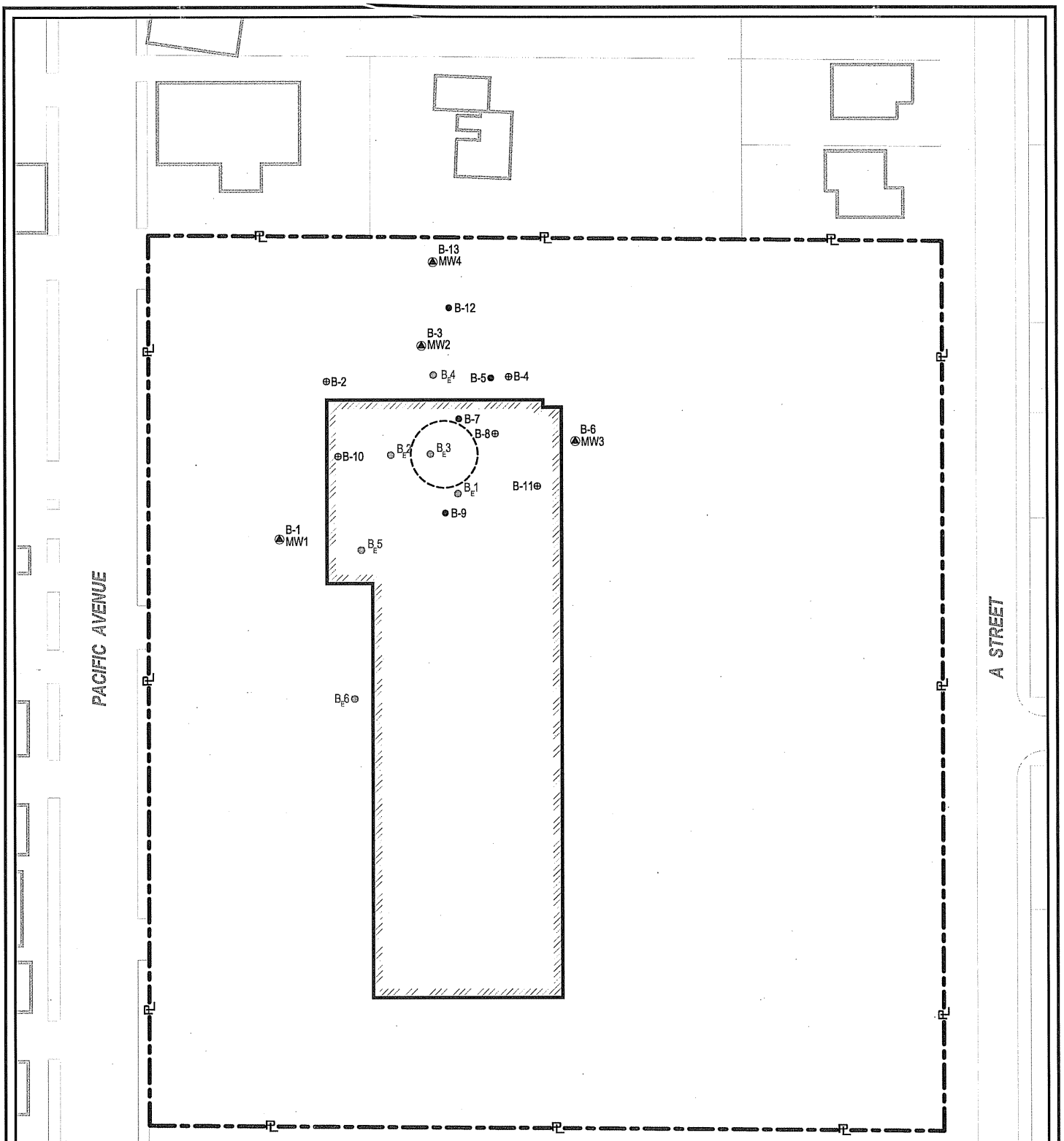
NOTES

A. SAMPLES FROM B-1/MW1, B-3/MW2, B-5 & B-6/MW3 COLLECTED ON 12/29/2014
B. SAMPLES FROM B-7 & B-9 COLLECTED ON 12/30/2014
C. SAMPLES FROM B-12 & B-13/MW4 COLLECTED ON 12/25/2015

FIGURE 5	TETRACHLOROETHENE IN GROUNDWATER
ADDRESS:	9201 PACIFIC AVENUE TACOMA, CALIFORNIA 98444
SOURCE:	ANDERSEN ENVIRONMENTAL
PROJECT NO.:	1412-2091
DRAWN BY:	JOHN ESCALONA
CHECKED BY:	BRIAN MARTASIN
DATE:	04/13/2015

ANDERSEN ENVIRONMENTAL

APPROX. SCALE: 1"= 40'
0' 20' 40'



LEGEND

- SUBJECT PROPERTY
- SITE STRUCTURE
- APPROX. AREA OF SOURCE ZONE
- B-6 MW3 — SOIL BORING CONVERTED TO PERMANENT GROUNDWATER MONITORING WELL (ANDERSEN, 2014 - 2015)
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FIGURE 2	SITE PLAN
ADDRESS:	9201 PACIFIC AVENUE TACOMA, CALIFORNIA 98444
SOURCE:	ANDERSEN ENVIRONMENTAL
PROJECT NO.:	1412-2091
DRAWN BY:	JOHN ESCALONA
CHECKED BY:	BRIAN MARTASIN
DATE:	04/13/2015

ANDERSEN ENVIRONMENTAL

APPROX. SCALE: 1"= 100'

0' 50' 100'

Table 1: Volatile Organic Compounds in Soil
COGIC Property
9201 South Pacific Avenue, Tacoma, Washington 98444

Sample ID	Sample Date	Sample Depth (ft bgs)	EPA Method 8260C (mg/kg)										
			Tetrachloro-ethylene (PCE)	Trichloro-ethylene (TCE)	cis-1,2,Dichloro-ethylene	trans-1,2,Dichloro-ethylene	Vinyl Chloride	1,2, Dichloro-ethane	1,1,1,Trichloro-ethane	Napthalene	1,2,4,Trimethyl-benzene	Acetone	All Other 8260C VOC Analytes
B_E1-3	4/17/2013	3	ND<0.02	**0.03**	**0.05**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B_E1-3dup	4/17/2013	3	ND<0.02	**0.04**	**0.05**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B_E2-3	4/17/2013	3	ND<0.02	**0.03**	**0.25**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B_E3-4	4/17/2013	4	**1.2**	**0.5**	**0.19**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B_E4-3	4/17/2013	3	**0.03**	ND<0.02	**0.17**	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B_E5-15	4/17/2013	15	ND<0.02	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B_E6-15	4/17/2013	15	ND<0.02	ND<0.02	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.25	ND
B1-12	12/29/14	12	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	**0.011 Y**	ND
B2-14	12/29/14	14	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B3-13	12/29/14	13	**0.0091**	**0.0015**	**0.0019**	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B4-14	12/29/14	14	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B5-14	12/29/14	14	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B6-15	12/29/14	15	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	**0.27**	**0.0015**	ND<0.0056	ND
B7-17	12/30/14	17	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B8-10	12/30/14	10	**0.0069**	**0.0012**	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B9-10	12/30/14	10	**0.014**	**0.0023**	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B10-7	12/30/14	7	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B11-10	12/30/14	10	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B12-16	02/25/15	16	**0.011**	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
B13-14	02/25/15	14	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.0011	ND<0.048	ND<0.2000	ND<0.0056	ND
CUL			0.05(A)	0.03(A)	160(B)	1600(B)	240(B)	1600(A)	2.0(A)	5.0(A)	NE	7200(B)	Varies

Notes:
"B_E1-3" - Environmental Associates, 2013
"B1-12" - Andersen Environmental, 2014 - 2015
ND - Analyte not detected above Practical Quanitation Limit
NE - Not Established
PQL - Practical Quantitation Limit
CUL - Existing CleanUp Level under MTCA Method (A) or Method (B)
Detections in bold, detections exceeding screening criteria shaded in gray
Y - Laboratory calibration parameters not within nominal range. See laboratory report.
mg/kg = milligrams per kilogram

TABLES

Table 2: Volatile Organic Compounds in Groundwater
COGIC Property
9201 South Pacific Avenue, Tacoma, Washington 98444

Sample ID	Sample Date	EPA Method 8260C (µg/l)														
		Tetrachloro-ethylene (PCE)	Trichloro-ethylene (TCE)	cis-1,2,Dichloro-ethylene	trans-1,2,Dichloro-ethylene	Vinyl Chloride	1,2,Dichloro-ethane	Chloroform	Benzene	Ethyl-benzene	Total Xylenes	Isopropyl-benzene	sec-Butyl-benzene	1,2,4,Tri-methyl-benzene	Acetone	All Other 8260C VOC Analytes
B_E1	4/17/2013	**2.4**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B_E1-dup	4/17/2013	**2.3**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B_E2	4/17/2013	**21**	**4.7**	**26**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B_E3	4/17/2013	**44**	**16**	**32**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B_E4	4/17/2013	**7**	**2.4**	**9.3**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B_E5	4/17/2013	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B_E6	4/17/2013	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<10	ND
B1/MW1	12/29/14	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	**0.33**	ND<0.2	**0.4**	**0.29**	**1.55**	**0.26**	**0.36**	**0.43**	ND<5	ND
B3/MW2	12/29/14	**40**	**11**	**39**	**0.78**	ND<0.2	ND<0.2	**0.24**	ND<0.2	ND<0.2	**0.72**	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
B5	12/29/14	ND<0.2	ND	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	**0.41**	**1.92**	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
B6/MW3	01/23/15	ND<0.2	ND	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.04	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
B7	12/30/14	**16**	**3.3**	**6.9**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	**0.35**	**1.25**	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
B9	12/30/14	**5.6**	**0.96**	**0.67**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	**0.2**	**0.42**	**1.45**	ND<0.2	ND<0.2	ND<0.2	**10 Y**	ND
B12	02/25/15	**25**	**5.5**	**17**	**0.21**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.04	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
B13/MW4	02/25/15	**1.1**	ND<0.2	**0.21**	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.04	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
Trip Blank	10/30/14	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<0.04	ND<0.2	ND<0.2	ND<0.2	ND<5	ND
CUL		5	5	80	160	0.2	5	80	5	700	1000	NE	80	80	7200	Varies

Notes:
"BE1" - Environmental Associates, 2013
"B1" - Andersen Environmental, 2014 - 2015
ND - Analyte not detected above Practical Quanitation Limit
NE - Not established
PQL - Practical Quanitation Limit
CUL - Existing CleanUp Level under MTCA Method A or CLARC Tables
Detections in bold, detections exceeding screening levels shaded in gray