

State of Washington POLLUTION LIABILITY INSURANCE AGENCY

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August 28, 2019

Mr. Ross LaGrandeur Arcadis US Inc. 1100 Olive Way, Suite 800 Seattle, WA 98101

Re: No Further Action at the Following Site:

• Name: ARCO 6067

• **Property Address:** 8009 164th Ave NE, Redmond, WA 98052

Facility/Site No.: 33365629PTAP Project No.: PNW098

Dear Mr. LaGrandeur:

The Washington State Pollution Liability Insurance Agency (PLIA) received your request for an opinion on your independent cleanup of the ARCO 6067 (Site) by Arcadis US Inc.

This letter constitutes an advisory opinion regarding a review of submitted documents/reports pursuant to the substantive requirements of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW and WAC 173-340-515 (Independent Remedial Actions), for characterizing and addressing releases discussed below at the Site.

Issue Presented and Opinion

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

No. PLIA has determined that no 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.

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Description of the Site

This opinion applies only to the Site located at 8009 164th Ave NE, Redmond, WA 98052 and comprises one King County parcel described below (Fig. 1). This opinion does not apply to any other release(s) that may affect the Properties. Any such sites, if known, are identified separately below.

1. Description of the Properties and Tax Parcels within the Site.

The Properties include the following tax parcel in King County, affected by the Site and addressed by your cleanup (Fig. 1):

• Tax Parcel No.: **022505-9030**

2. Description of the Site.

The tax parcel that makes up the Site is defined by the nature and extent of contamination associated with the following release (Figs. 2 to 10, Table 1):

 Total petroleum hydrocarbons in the diesel/oil/gasoline range (TPH-d, TPH-o, and TPH-g) and potential associated BTEX, naphthalenes, PCE, PCBs, cPAHs, methylene chloride, MTBE, EDB, EDC, and lead into the soil/groundwater/air-vapor.

3. Identification of Other Sites that may affect the Property.

Please note, a parcel of real property can be affected by multiple sites. At this time, we have no information that this Property was affected by other sites.

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

Basis for the Opinion

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

- Cleanup Action Report, BP Facility No. 6067, 8009 164th Avenue NE, Redmond, Washington, FS ID: 33365629, CS ID: 8752, PTAP No.: PNW098, by Arcadis US Inc., May 29, 2019.
- 2. Remedial Excavation Work Plan, BP Facility No. 6067, 8009 164th Avenue NE, Redmond, Washington, FS ID: 33365629, CS ID: 8752, PTAP No.: PNW098, by Arcadis US Inc., October 19, 2018.
- 3. 2017 Annual Site Status Report, ARCO Facility No. 6067 (FS ID: 33365629 and Cleanup Site ID: 8752), Site Address: 8009 164th Avenue, NE, Redmond, WA, 98052, by Arcadis US Inc., February 9, 2018.

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4. Site Closure Report for ARCO Facility No. 6067, VCP Project No. NW2736, ARCO Facility No. 6067, 8009 164th Avenue NE, Redmond, WA 98052, By Innovex Environmental Management, Inc., August 7, 2014.

Documents submitted to PLIA are subject to the Public Records Act (Chapter 42.56 RCW). To request public records, please email plia.wa.gov.

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

Analysis of the Cleanup

1. Cleanup of the Site

PLIA has concluded that **no further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

a. Characterization of the Site

PLIA has determined that the characterization of the Site was sufficient to establish cleanup standards and select a cleanup action.

1991-1992 underground storage tanks (USTs) Removal Excavation: In 1991 and 1992, soil borings B1 through B4 (B-3 and B-4 being angled borings) were advanced to the north of the station building and to the east of the 1991 excavation limits to further assess Site conditions near and under the building (Fig. 3). Soil samples were collected and analyzed for TPH-d, PCB, acetone, phenols, and toxicity characteristic leaching procedure for metals and benzene. Laboratory analytical results were below MTCA Method A cleanup levels (CULs) (Fig. 3 and Table 1).

1993-1994 Monitoring Well Installations and Investigation:

Seven soil samples were collected during the piping upgrade in 1993 and analyzed for TPH-g, heavy oil, BTEX, lead, and halogenated VOCs. Soil samples contained concentrations above the MTCA Method A CULs for TPH-g, heavy oil and BTEX. Five monitoring wells were installed in 1993 and 1994, soil samples were collected from the borings and analyzed for TPH-g, heavy oil, BTEX, and lead. Lab results were non-detect (Fig. 3 and Table 1).

2014 Investigation:

In 2014, six soil borings (O-2i, O-2n, W-3i, W-3n, O-6i, and O-6n) were advanced to 6.5' below ground surface (bgs) in proximity to areas of historical detections in the area of the former waste oil and heating oil USTs to confirm concentrations of previously detected impacts. The samples were analyzed for TPH-d, heavy oil, BTEX, EDC, napthalenes, PAHs, lead, and PCE.

Four (0-2i, 0-2n, W-3i, and W-3n) of the six boring locations contained PCE concentrations in soil samples above MTCA Method A CULs. (Remaining impacted soil was excavated during 2019 cleanup action).

b. Past Remedial Actions

1991-1992 USTs Removal Excavation:

In 1991, the heating oil and waste oil USTs were removed from the Site. The excavation extended to a maximum depth of 14' bgs and approximately 220 cubic yards of petroleum contaminated soil (PCS) were removed from the Site. Soil excavation limits were constrained by the building foundations to the north and the east (Fig. 3). Soil samples were collected from the excavation and analyzed for TPH-g/o/d, BTEX, PAHs, VOCs, PCB, and lead. Five samples were over-excavated and ten remained in place (Fig. 3 and Table 1). Soil sample concentrations were observed above MTCA Method A CULs for heavy oil, BTEX, lead, PCE, methylene chloride, and 1,1,1-trichloroethane (1,1,1 TCA). (Residual PCS was excavated in 2019 cleanup action). Groundwater was not encountered during the excavation.

2018 Cleanup Action:

In November 2018, four USTs (three 12,000-gallon gasoline USTs and one 550-gallon waste oil UST) were decommissioned by removal. The removed USTs were observed to be intact and no staining or hydrocarbon impacts were noted on the surrounding soil. The 2018 UST excavation was approximately 40' by 50' and 12' bgs. A total of 14 soil samples from bottom, sidewall, and stockpile were collected and analyzed for TPH-g/d/o and BTEX. Analytical results were reported both below the laboratory reporting levels (RLs) and the respective MTCA Method A CULs (Fig. 5 and Table 1).

In November and December 2018, fuel dispenser islands and associated product piping were removed. Ten soil samples were collected from beneath the dispenser islands and three samples from beneath the former fuel pipes that connected the USTs to the former fuel dispenser islands. Soil samples were analyzed for TPH-g/d/o and BTEX. Analytical results were reported both below the laboratory RLs and the respective MTCA Method A CULs (Fig. 5 and Table 1).

2019 Cleanup Action:

The 2019 remedial excavations were conducted in the following three areas:

 Area 1: Area 1 was excavated to a maximum depth of 9.5' bgs to remove PCS associated with the 1973 waste oil UST.
 Confirmation soil samples were collected from the bottom and sidewalls of the excavation and analyzed for TPH-g/d, VOCs, cPAH. PCBs, and total lead (Fig. 6 and Table 1).

- Area 2: Area 2 was excavated to a maximum depth of 8' bgs to remove PCS associated with the 1993 pump island upgrade. Confirmation soil samples were collected from the bottom and sidewalls of the excavation and analyzed for TPH-g/d, BTEX, MTBE, EDB, and EDC and total lead (Fig. 6 and Table 1).
- Area 3: Area 3 was excavated to a maximum depth of 6' bgs to remove historical total xylenes soil exceedance associated with the 1991 waste oil UST. A confirmation soil sample was collected from the bottom of the excavation and analyzed for TPH-g/d, BTEX, cPAH, Naphthalenes, EDC and total lead. Area 3 was bounded by samples from the 1991 excavation and 2018 characterization (Fig. 6 and Table 1).

Conceptual Site Model (CSM)

i. Soil (Direct Contact):

PCS at this Site is associated with three 12,000-gallon USTs formerly containing unleaded gasoline, the five fuel dispenser islands, associated fuel dispensary piping, and one 550-gallon waste oil tank. PCS detected at this Site above the MTCA Method A CULs was within the range of 6' to 12' bgs. The location of the PCS was within the depths (0 to 15' bgs) that humans (utility workers and property developers) may come in contact with.

Result: The direct contact exposure pathway was a concern at the Site.

ii. Vapor Exposure: The Former ARCO Station 6067 building was demolished. Other building footprints are outside the lateral inclusion zone of 30' from the edge of a contamination source. The lateral inclusion zone is defined as the area surrounding a contaminant source through which vapor phase contamination might travel and intrude into buildings (ITRC 2018, EPA 2018, Ecology Draft VI Guidance update 2018).

Result: The vapor exposure pathway is not a concern at the Site.

iii. **Groundwater:** Groundwater elevations measured in monitoring wells MW-1 though MW-5 and SVE-1 have ranged from 28.56' to 20.29' NAVD88 (10.10' to 17.09'below top of casing). Groundwater was not observed during excavation activities at the Site. Groundwater monitoring conducted at the Site between 1994 and 2017 has shown that the constituents analyzed in groundwater samples have been

measured either below the laboratory repot limits (RLs) or less than the respective MTCA Method A CULs (Fig. 4 and Table 2).

Result: The groundwater pathway is not a concern at the Site.

iv. **Surface water:** The Sammamish River is approximately 0.42 miles to the southwest of the Site.

Result: Surface water is not a concern at the Site.

c. Establishment of cleanup standards.

PLIA has determined the cleanup levels and points of compliance (POC) you established for the Site meet the substantive requirements of MTCA.

i. Cleanup Levels

Table 1. The COCs and cleanup levels are:

Contaminants of Concern (COCs)	Soil Cleanup Level mg/kg (Method A) <u>Un-restricted</u> <u>Land Use</u>	Groundwater Cleanup Level ug/l (Method A)	Sub-slab/soil gas Screening Levels ug/m³ (Method B SL)	Indoor/Air Cleanup Levels ug/m ³ (Method B CUL)
TPH-d	2,000	500	-	-
ТРН-о	2,000	500	-	-
TPH-g	100/30	1000/800	-	-
Benzene (carcinogen)	0.03	5	-	0.321
Toluene	7	1000	-	2290
Ethylbenzene	6	700	-	457
Xylenes, -m, -o	9	1000	-	45.7
Naphthalene (<u>carcinogen</u>) (does <u>not</u> include 1-methyl and 2-methyl naphthalene)	-	-		0.0735
Total Petroleum Hydrocarbon	-	-	-	140
APH [EC5-8 Aliphatics]	-	-	-	2,700
APH [EC9-12 Aliphatics]	-	-	-	140
APH [EC9-10 Aromatics]	-			180
Arsenic	20	5	-	-

^{*} Based on the current attenuation factor of 0.03.

ii. Points of Compliance.

The proposed Points of Compliance are:

Soil Direct Contact: For cleanup levels based on human exposure via direct contact, the standard point of compliance is: "...throughout the Site from ground surface to 15 feet below the ground surface." This is in compliance with WAC 173-340-740(6)(d) and represents a reasonable estimate of the depth of soil that could be excavated and distributed at the soil surface as a result of Site development activities.

Groundwater: For groundwater, the standard POC as established under WAC 173-340-720(8) is: "...throughout the site from the uppermost level of the saturated zone extending vertically to the lowest most depth which could potentially be affected by the site."

Vapor: Cleanup levels need to be attained in the ambient air throughout the Site, including indoor air (WAC 173-340-750[6]).

c. Selection of cleanup action.

PLIA has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA.

Decommissioning of former UST

1991-1992 USTs Removal Excavation:

• Removed 2 USTs and 220 cubic yards of soil from the Site.

2018-2019 Cleanup Action:

- Decommissioned four USTs (three 12,000-gallon gasoline USTs and one 550-gallon waste oil UST) by removal. The excavation was approximately 40' by 50' and 12' bgs. A total of 14 soil samples from the bottom, sidewall, and stockpile were collected and analyzed.
- In November and December 2018, fuel dispenser islands and associated product piping were removed. Ten soil samples were collected from beneath the dispenser islands and three samples from beneath the former fuel pipes that connected the USTs to the former fuel dispenser islands.
- The three 2019 remedial excavations were conducted in Area 1 (excavated to a maximum depth of 9.5' bgs), Area 2 (excavated to a maximum depth of 8' bgs), and Area 3 (excavated to a maximum depth of 6' bgs). A total of 307.28 tons of soil was

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> excavated and transported to Republic Services transfer facility located at 3rd and Lander in Seattle, Washington pending transfer and disposal at the Roosevelt Regional Landfill in Roosevelt, Washington.

d. Cleanup.

PLIA has determined the cleanup action you performed at the Site meets the substantive requirements of MTCA.

Soil Direct Contact

Final Cleanup Action and Points of Compliance (2019): For the soil, POC is bounded by the extent of PCS confirmation sampling results below the MTCA Method A CULs

- Area 1: For Area 1, the POC to the north is bounded by Borings ARE-NSW1-5.5 and ARE-NSW2-5.5 at 5.5' bgs; to the east, by Borings ARE-ESW-4.5 at 4.5' bgs; to the south, by Borings ARE-SSW-4.5 at 4.5' bgs; to the west, by Borings ARE-WSW1-5.5 and ARE-WSW2-5.5 at 5.5' bgs; and at the base, by Borings ARE-B1-9.5 and ARE-B2-9.5 at 9.5' bgs (Figs. 6, 8 to 10 and Table 1).
- Area 2: For Area 2, the POC is bounded to the north by Borings ARE2-NSW-4.5 at 4.5' bgs; to the east, by Borings ARE2-ESW-5.5 at 5.5' bgs; to the south, by Borings ARE2-SSW-5.5 at 5.5' bgs; to the west, by Borings ARE2-WSW-5.5 at 5.5' bgs; and at the base, by Borings ARE2-B-8.0 at 8' bgs (Figs. 6, 8 to 10 and Table 1).
- Area 3: For Area 3, the POC is bounded by ARE3-B-6.0 at 6' bgs, H-1 at 10' bgs, EX2-NSW-4 at 4' bgs, EX2-ESW-4 at 4' bgs, and EX2-T4B-6 at 6' bgs (Figs. 6, 8 to 10 and Table 1).

Result: The soil direct contact pathway is no longer a concern at this Site.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

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

- Change the boundaries of the Site.
- 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 the Office of the Attorney General and

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the Department of 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 performed is equivalent. Courts make that determination (RCW 70.105D.080 and WAC 173-340-545).

3. State is immune from liability.

The state, PLIA, 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.

Termination of Agreement

Thank you for choosing to cleanup your Property under the Petroleum Technical Assistance Program (PTAP). This opinion terminates the PTAP Agreement governing Project #PNW098.

Contact Information

If you have any questions about this opinion, please contact us by phone at 1-800-822-3905, or by email at li.ma@plia.wa.gov.

Sincerely,



Li Ma, PHD, LHG, CGWP Hydrogeologist

Enclosure A: Site Description

Figure 1: Site Location Map

Figure 2: Site Plan

Figure 3: Historical Soil Status

Figure 4: Groundwater Contour Map

Figure 5: 2018 Site Infrastructure Removal

Figure 6: 2019 Remedial Excavation Soil Status Figure 7: Post-2019 Cleanup Site Soil Status

Figure 8: Cross-Section Location Map

Figure 9: Cross-Section A-A' and B-B'

Figure 10: Cross-Section C-C' Table 1: Soil Analytical Data

Table 2: Groundwater Analytical Data

cc:

Mr. Hatem Shalabi, Harbor Olympic Land 6067 LLC

Mr. Nnamdi Madakor, PLIA (email only)

Ms. Kristin Evered, PLIA (email only)

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Enclosure A:

Site Description

The Site is currently an inactive ARCO facility located at 8009 164th Avenue NE, Redmond, WA. The Property is situated in the southeast quarter, Section 2, Township 25, Range 5 in King County, Washington (47° 40' 30.22" N, -122° 7' 18.84" W, NAD83). The Property is approximately 0.9 acre. Former Site structures consisted of a station building, five fuel dispenser islands with associated canopy structures, three 12,000-gallon USTs formerly containing unleaded gasoline, associated fuel dispensary piping, and one 550-gallon waste oil tank. The four USTs were located southwest of the station building.

The Site is located in Redmond within the Puget Sound lowlands. The Site is underlain by unconsolidated sediments composed of holocene alluvium deposits, with occasional storm channel deposits. Two subtypes were encountered beneath the Site. The upper subtype is present from 5' to 10' bgs and consists of sand, gravel, and silty sand. This subtype is typically poorly-graded, grey to black and slightly moist. The lower subtype is mainly sand and gravel and was encountered at the depth of 8' to 15.5' bgs. It is typically well graded, light brown to dark brown and moist to very moist.

Based on monitoring records, the depth to groundwater has ranged from 11' bgs to 18' bgs. Groundwater flow primarily to the west-northwest and west at a gradient of approximately 0.001 ft/ft. The Site is located within an area identified by the City of Redmond as an aquifer recharge area of high significance. Based on City of Redmond public information, Redmond currently operates five water supply wells in the area and extracts three to four million gallons of water from the shallow aquifer daily. The aquifer beneath Redmond does not have a confining layer. During the subsurface investigation conducted by Geraghty and Miller in 1993, five water supply wells were identified within a half mile radius from the Site. An Ecology well log search confirmed the existence for these water supply wells. The Site water table fluctuates both yearly and seasonally; potentially in response to the pumping cycles of nearby water supply wells.

Sammamish River, the nearest natural surface water body, is located approximately 0.42 mile west and southwest of the Site.

PLOTSTALETABLE PLTPALLOTS PLOTTED: NE 92ND ST 172ND AVE 202 160TH AVE NE NE 88TH ST 54TH AVE NE H NE 85TH ST PO I REDMOND Redmond SITE anti NE 80TH ST Ride AVONDALEWAY Bear Creek Village NE ZATH ST NE 72ND WAY BEAR CREEK PKWY Bear Cr RD 520 DAMGROUP: ENVIOLD DE BEMALL, PIN, TIN, DAW - ARCADENBRATION BP. ANCOCO COPORATION BP. REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., KIRKLAND AND REDMOND, WASHINGTON, 2014. ARCO FACILITY NO. 6067 8009 164th AVENUE NE REDMOND, WASHINGTON SITE LOCATION SITE LOCATION MAP WASHINGTON 2000 FIGURE 1000 ARCADIS *** 1 GRAPHIC SCALE

Figure 1: Site Location Map

RETAINING WALL NE 80th STREET PLANTER ₩W-3 FORMER ARCO STATION 6067 PLANTER PUMP MW-5 NE 81st STREET DRIVEWAY PLANTER DRIVEWAY 164th AVENUE ARCADIS FORMER SOIL VAPOR EXTRACTION PIPING SOIL VAPOR EXTRACTION WELL UNDERGROUND STORAGE TANK ARCO FACILITY NO. 6067 8009 164th AVENUE NE REDMOND, WASHINGTON SCALE IN FEET SITE PLAN

Figure 2: Site Plan

⊕M 250 NE 81st STREET PLANTER DRIVEWAY SCALE IN FEET 164th AVENUE LOCATIONS OF FORMER SITE FEATURES AND EXCAVATION ARE APPROXIMATE ARCADIS MTCA MODEL TOXICS CONTROL ACT HISTORICAL SOIL STATUS SOIL LOCATION WHERE CONSTITUENTS ARE BELOW MTCA METHOD A CULS OVER EXCAVATED SOIL LOCATION WHERE ONE OR MORE CONSTITUENTS EXCEED MTCA METHOD A CLEANUP LEVELS (CULS) 2014 HAND AUGER SOIL BORING AND VAPOR PROBE WELL LOCATION FORMER SOIL VAPOR EXTRACTION PIPING 1993 UPGRADE SOIL SAMPLE LOCATION MTCA SITE BOUNDARY FOR SOIL IMPACTS ARCO FACILITY NO. 6067 8009 164th AVENUE NE REDMOND, WASHINGTON

Figure 3: Historical Soil Status

RETAINING WALL **NE 81st STREET** NE 80th STREE MW-5 (20,49) DRIVEWAY 164th AVENUE GROUNDWATER CONTOUR MAP WITH ANALYTICAL RESULTS SECOND QUARTER 2017 ARCADIS MAN SVE-1 ▲ VAPOR EXTRACTION WELL UST UNDERGROUND STORAGE TANK ARCO FACILITY NO. 6067 8009 164th AVENUE NE REDMOND, WASHINGTON NOT DETECTED AT OR ABOVE LABORATORY METHOD DETECTION LIMIT (MDL) GROUNDWATER ELEVATION CONTOUR LINE; DASHED WHERE INFERRED (CONTOUR INTERVAL=0.05 FOOT) **ن** الله

Figure 4: Groundwater Contour Map

2018 SITE INFRASTRUCTURE REMOVAL UNDERGROUND STORAGE TANK AND PRODUCT PIPING SOIL STATUS

ARCO FACILITY NO. 6067 8009 164th AVENUE NE REDMOND, WASHINGTON

25' SCALE IN FEET

ARCADIS MA

RETAINING WALL DRIVEWAY NE 80th STREET EX2-ESW-4
EX2-T4B-6
FORMER
HEATING OIL
UST
3B-12-T3 NE 81st STREET DRIVEWAY DRIVEWAY 164th AVENUE

SOIL LOCATION WHERE CONSTITUENTS ARE BELOW MTCA METHOD A CLEANUP LEVELS

FORMER SOIL VAPOR EXTRACTION PIPING FORMER UST VENT LINES

Figure 5: 2018 Site Infrastructure Removal

RETAINING WALL DRIVEWAY NE 80th STREET **♦₩** MW-5 NE 81st STREET DRIVEWAY PLANTER 164th AVENUE ARCADIS PLEASE REFER TO SOIL ANALYTICAL TABLES FOR SOIL RESULTS 2019 REMEDIAL EXCAVATION SOIL STATUS 2019 REMEDIAL EXCAVATION SOIL SAMPLES (ARCADIS) ARCO FACILITY NO. 6067 8009 164th AVENUE NE REDMOND, WASHINGTON

Figure 6: 2019 Remedial Excavation Soil Status

RETAINING WALL NE 80th STREET NE 81st STREET FORMER PRODUCT LINES PLANTER DRIVEWAY DRIVEWAY 164th AVENUE POST-2019 CLEANUP SITE SOIL STATUS ARCADIS MODEL TOXICS CONTROL ACT SOIL LOCATION WHERE CONSTITUENTS ARE BELOW MTCA METHOD A CULS 2019 REMEDIAL EXCAVATION SOIL SAMPLES (ARCADIS) 2019 REMEDIAL EXCAVATION EXTENTS AREA (ARCADIS) 2018 INFRASTRUCTURE REMOVAL EXCAVATION EXTENT (APPROXIMATE EXTENT) 2018 SITE INFRASTRUCTURE REMOVAL SOIL SAMPLE LOCATION - ECI (APPROXIMATE LOCATION) 2014 HAND AUGER SOIL BORING AND VAPOR PROBE WELL LOCATION 1993 UPGRADE SOIL SAMPLE LOCATION

Figure 7: Post-2019 Cleanup Site Soil Status

RETAINING WALL PLANTER DRIVEWAY NE 80th STREET ⊕23 PLANTER ⊕WW. ⊕⁸² NE 81st STREET FA10-2 C" PLANTER 164th AVENUE ARCADIS CROSS SECTION LOCATION MAP MODEL TOXICS CONTROL ACT ARE BELOW MTCA METHOD A CULS 2019 REMEDIAL EXCAVATION SOIL SAMPLES (ARCADIS) UNDERGROUND STORAGE TANK 1991 USTs REMOVAL EXCAVATION (APPROXIMATE LOCATION) 1993 UPGRADE SOIL SAMPLE LOCATION 2019 REMEDIAL EXCAVATION EXTENTS AREA (ARCADIS) 2018 INFRASTRUCTURE REMOVAL EXCAVATION EXTENT (APPROXIMATE EXTENT) ARCO FACILITY NO. 6067 8008 164th AVENUE NE REDMOND, WASHINGTON SCALE IN FEET

Figure 8: Cross-Section Location Map

 $\boldsymbol{\varpi}$ ⋗ RE-NSW2-5.5 W-2 (4.5°S) O-2N (3' SE) 0-5 ARE-WSW2-5.5 W-3 (2.5° S) VP-3 / W-3N W1 (2"SE) H-1 (6' SE) VP-2 / W-3i H-2 (5' SE) RE-ESW-4.5 (5'N) Þ œ HORIZONTAL SCALE FEET NOTE:

1. PROJECTED DISTANCE AND DIRECTION DISPLAYED IN
PARENTHESES AFTER SAMPLEBORING ID.
2. "EFOOT
3. S=SOUTH, N=NORTH, E=EAST, W=WEST ARCADIS CROSS SECTION A-A' AND B-B' POORLY GRADED SAND AND GRAVEL AVERAGE GROUNDWATER ELEVATION MEASURED IN MW-3 1991 USTs REMOVAL EXCAVATION (APPROXIMATE LOCATION) CLEAN UP LEVEL ANALYTE NOT DETECTED AT CONCENTRATION GREATER THAN RESPECTVE MTCA METHOD A CUL 2019 REMEDIAL EXCAVATION SOIL SAMPLES (ARCADIS) 2018 SITE INFRASTRUCTURE REMOVAL SOIL SAMPLE LOCATION - ECI (APPROXIMATE LOCATION) LEGEND
1991 USTs REMOVAL EXCAVATION SOIL
SAMPLE 2019 REMEDIAL EXCAVATION EXTENTS (ARCADIS) ANALYTE DETECTED AT A CONCENTRATION GREATER THAN RESPECTIVE MTCA METHOD A CUL (OVER EXCAVATED) AVERAGE HIGH GROUNDWATER ELEVATION (AVERAGED FROM THE 10 HIGHEST GROUNDWATER ELEVATIONS MEASURED IN ARCO FACILITY NO. 8087 8009 184th AVENUE NE REDMOND, WASHINGTON

Figure 9: Cross-Section A-A' and B-B'

Figure 10: Cross-Section C-C' 32'-EX-1-WSW-8.5 (10° N) EX 1-T1 B-12-T1(19.5' N) FORMER USTS EX1-T2B-12-T2 (19' N) EX1-T3B-12-T3 (19' N) EX1-ESW1-6 (12' N) EX1-ESW2-4 C-2 (8' S) S3-D2-2 (8' S) S4-P2-2 (3' SE) C-1 (8' SE) MID (7' SE) B2D-4 O ARE-ESW-5.5 (3' NW) S P3-2 (3' SE) S5-P3-2 (3' SE) S7-D4-2 (3' NW) S-11-D8-2 (4' SE) A-1 (4' NW) O A1C-2 / S10-D7-2 HORIZONTAL SCALE FEET PROJECTED DISTANCE AND DIRECTION DISPLAYED
 PARENTHESES AFTER SAMPLEBORING ID.
 "= FOOT
 S= SOUTH, N = NORTH, E = EAST, W = WEST ARCADIS CROSS SECTION C-C'-C" POORLY GRADED SAND AND GRAVEL 2018 INFRASTRUCTURE REMOVAL EXCAVATION EXTENT (APPROXIMATE EXTENT) CLEAN UP LEVEL MODEL TOXICS CONTROL ACT ANALYTE NOT DETECTED AT CONCENTRATION GREATER THAN RESPECTVE MTCA METHOD A CUL 2018 SITE INFRASTRUCTURE REMOVAL SOIL SAMPLE LOCATION - ARCADIS (APPROXIMATE LOCATION) 2019 REMEDIAL EXCAVATION SOIL SAMPLES (ARCADIS) 2018 SITE INFRASTRUCTURE REMOVAL SOIL SAMPLE LOCATION - ECI (APPROXIMATE LOCATION) AVERAGE HIGH GROUNDWATER ELEVATION (AVERAGED FROM THE 10 HIGHEST GROUNDWATER ELEVATIONS MEASURED IN

FORMER PRODUCT PIPING (REMOVED IN

ARCO FACILITY NO. 6067 8009 164th AVENUE NE REDMOND, WASHINGTON

12

ANALYTE DETECTED AT A CONCENTRATION GREATER THAN RESPECTIVE MTCA METHOD A CUL (OVER EXCAVATED)

Table 1: Soil Analytical Data

	1 1					<0.1	<0.05	<0.05	<0.05	<100	ı	Δ	6	10/11/1993	MW-2
					-	<0.1	<0.05	<0.05	<0.05	<100	-	4	10	10/11/1993	MW-1
-			-			<0.1	<0.05	<0.05	<0.05	<100	-	4	5	10/11/1993	MW-1
					-	<0.1	<0.05	<0.05	<0.05	<100		Δ	10	10/11/1993	SVE-1
						ions	1993-1994: Monitoring Well Installations	4: Monitoring	1993-199						
송송	-		-	-	1	<0.1	<0.05	<0.05	<0.05	<100		<0.1	-	7/26/1993	MID**
	-			1	1	<0.1	<0.05	<0.05	<0.05	2,000	1	40.1		7/26/1993	C-2**
			ı	,	1	<0.1	<0.05	<0.05	<0.05	<100	ı	<0.1	,	7/26/1993	C-1**
_	1		1	1	1	<0.1	<0.05	<0.05	<0.05	9,100	1	40.1	1	7/26/1993	B-2**
<15	-		-	-	-	3,100	400	1,600	200	<100	1	28,000	-	7/26/1993	B-1**
65	- -					<0.1	<0.05	<0.05	<0.05	700		2.3		7/26/1993	A-2
<15	1		1	1	1	1,100	92	300	23	1,100	1	12,000	1	7/26/1993	A-1**
							ine Upgrade	1993 Product Line Upgrade	19						
	-				1	-	-	1		-	20	-	15	2/18/1992	B4
					:			:			23	1	10	2/18/1992	B4
											17		11	2/18/1992	B3
								:		1	300	1	O1	2/18/1992	В3
					ı	ı	ı	1	1	1	<10	ı	15	7/15/1991	B2
					,			1			<10		o	7/15/1991	B2
-	-		-			-	-			-	<10	-	12.5	7/15/1991	B1
					,		,	1	1		<10		7.5	7/15/1991	B1
							nvestigation	1991-1992 Soil Investigation	199						
٨			-	-	:	15	<0.005	<0.005	<0.005	<10	<10	<25	4.5	6/15/1991	H.4**
65	<0.0755				:	•		:		<10	40	<10	4	6/12/1991	Ŧ3
			1	1	1	ı	1	1	1	1,080	<10	<10	5	6/12/1991	H-2**
:50 <3	<0.6550		-			<0.005	<0.005	<0.005	<0.005	<10	<10	<10	10	6/12/1991	H-1
	-		-			<0.005	<0.005	<0.005	<0.005	<10	<10	<10	5	6/15/1991	W-4
39						<0.005	7.00.0	<0.005	<0.005	34,300	<10	<10	4	6/12/1991	W-3**
	-			-		0.02	<0.005	<0.005	<0.005	501		<10	4	6/12/1991	W-2**
55 <3	<0.0755		-		-	<0.005	<0.005	<0.005	<0.005	114	<10	<10	14	6/12/1991	W-1
80 25	0.0860			-		<0.005	<0.005	<0.005	<0.005	<10	<10	<10	1.5	6/15/1991	O-6**
			,	,		<0.005	<0.005	<0.005	<0.005	<10	<10	<10	6.5	6/15/1991	0-5
	0.1305		1	1	1	<0.005	<0.005	<0.005	<0.005	87	<10	<10	3	6/12/1991	0.4**
	-		_		_	<0.005	<0.005	<0.005	<0.005	129	<10	<10	3	6/12/1991	0-3**
50 1,240	<0.8550		1	-	:	55	9.9	26	1.5	32,000	<50	<50	3.5	6/12/1991	0-2**
	<0.0755		ı	1	-	0.68	<0.005	<0.005	<0.005		<10	<10	On .	6/12/1991	0-1**
۵			:	:	1	<0.010	<0.010	<0.010	<0.010	<10	<10	<10	11	6/11/1991	M-1
						cavation	1991 Waste Oil and Heating Oil USTs Excavation)il and Heatin	1991 Waste (
250	5 0.1			0.005	0.1	9	6	7	0.03	2,000	2,000	30/100	evels	Soil Cleanup L	MTCA Method A Soil Cleanup Levels
Н	Naphthalenes cPAHs	Napht	EDC	EDB	MTBE	Total Xylenes	Ethylbenzene	Toluene	Benzene	НО	DRO	GRO	Depth	Date	Sample ID
						m (mg/Kg)	All Concentrations are in milligrams per kilogram (mg/Kg)	ons are in milligi	All Concentration						
						ington	8009 164th Ave NE, Redmond, Washington	Ave NE, Red	8009 164tl						
							WA-6067	WA-60							
						Data	oil Analytical	of Select S	Summary						
							3	Table 3							

	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_		_		_	_	_	_		_	_	_	_	_
EX2-ESW-4	EX1-ESW2-6	EX1-ES1-4	EX2-NSW-4	EX2-T4B-6	EX1-T3B-12	EX1-T2B-12	EX1-T1B-12	EX1-WSW-8.5	EX1-NSW-8.5	EX1-SSW-8.5	SP3	SP2	SP1		O-6n**	O-6n**	O-6n**	0-6j**	0-6j**	0-6i**	W-3n**	W-3n**	W-3i**	W-3i**	W-3i**	0-2n**	0-2n**	0-2n**	0-2i**	0-2i**			MW-5	MW-4	MW-4	MW-3	MW-3	MTCA Method A Soil Cleanup Levels	Sample ID
11/28/2018	11/28/2018	11/28/2018	11/28/2018	11/28/2018	11/28/2018	11/28/2018	11/28/2018	11/28/2018	11/28/2018	11/28/2018	11/28/2018	11/28/2018	11/28/2018		1/24/2014	1/24/2014	1/24/2014	1/23/2014	1/23/2014	1/23/2014	1/24/2014	1/24/2014	1/23/2014	1/23/2014	1/23/2014	1/24/2014	1/24/2014	1/24/2014	1/23/2014	1/23/2014	1/23/2014		4/8/1994	4/8/1994	4/8/1994	10/11/1993	10/11/1993	Soil Cleanup L	Date
4	6	4	4	6	12	12	12	8.5	8.5	8.5	stockpile	stockpile	stockpile		5.5-8.0	4.0-4.5	1.5-2.0	5.8-6.5	3.7-4.3	1.4-2.0	5.5-6.0	4.0-4.5	5.5-6.0	4.0-4.5	2.0-2.5	5.5-6.0	4.5-6.0	3.5-4.0	6.0-6.5	5.0-5.5	3.5-4.0		5	10	5	10	5	evels	Depth
<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		-	1	ı	-	-	1	-	-	-		-			1	-	-	-		<1	<1	4	<1	<1	30/100	GRO
<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		-	1	ı	-	1	1	39 Y	<8.1	<8.3	<8.2	<5.8	< 8.5	<5.9	<8.6	<8.2	<6.4	<8.2		-	-	-	_	-	2,000	DRO
<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250		-	1	ı	1	1	١	260 B	20 J B	19 J B	18 J B	14 J B	22 J B	17 J B	21 J B	18 J B	18 J B	20 J B		-	-	1	<100	<100	2,000	НО
<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	2018 US	ı	1	1	1		1	-	-		-	-	<0.0050	<0.0051	<0.0056	<0.0045	<0.0085			<0.05	<0.05	<0.05	<0.05	<0.05	0.03	Benzene
<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Is Removal	ı	1	:	1	:	1		1	-	-	-	<0.012	<0.013	<0.014	<0.011	<0.021	<0.031	2014 Investigation	<0.05	<0.05	<0.05	<0.05	<0.05	7	Toluene
<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	2018 USTs Removal (Site Assessor/ECI)	1	1	ı	1	1	1	1	-	_		-	<0.012	<0.013	<0.014	<0.011	<0.021	<0.031	stigation	<0.05	<0.05	<0.05	<0.05	<0.05	6	Ethylbenzene
<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	/ECI)		1	ı	1	1	1	1	1	_		-	<0.025	<0.026	<0.028	<0.022	<0.043	<0.062		<0.1	<0.1	<0.1	<0.1	<0.1	9	Total Xylenes
:	-		1			,	1		ı	1		1	-		ı	:	:	:	:	1	:	:	-	-	-		+	:	:	-	1					-	-	0.1	MTBE
	-	-	1				ı		ı	1		1	-		1	1	ı	1	1	1	1	-			-	-	-	:		-	1			-	-	-	-	0.005	ED8
	-	-	ı		ı		ı	1	ı	ı	-	1	-		ı	1	ı	1	1	1	<0.013	<0.013	<0.024	<0.027	<0.023	<0.012	<0.013	<0.014	<0.011	<0.021	<0.031			-		-	-		EDC
	-	-				,				٠		1	-		<0.00315	<0.00315	<0.00305	<0.00305	<0.0029	<0.00315	-	-	-	-	-	<0.00315	<0.00305	<0.00315	-	-	-					-	-	5	Naphthalenes
	-	-	1	ı	ı	1	ı	1	ı	ı		1			<0.0013	<0.0013	0.0824	0.0035	<0.0012	0.0361	1				-	0.0014	<0.0013	0.0079		-				-		-	-	0.1	cPAHs
		-	ı	1	ı		ı	1	ı	ı		1	-		4.6	3.8	19	1	1	1	1	1	-	-	-	1	1	ı	5.0	3.8	10		17	<10	<10	<10	<10	250	Lead

Table 3 Summary of Select Soil Analytical Data WA-6067 8009 164th Ave NE, Redmond, Washington All Concentrations are in milligrams per kilogram (mg/Kg)

ARE2-B-8.0	ARE2-WSW-5.5	ARE2-NSW-4.5	ARE2-ESW-5.5	ARE2-SSW-5.5		ARE-B2-9.5	ARE-B1-9.5	ARE-NSW2-5.5	ARE-NSW1-5.5	ARE-WSW2-5.5	ARE-WSW1-5.5	ARE-SSW-4.5	ARE-ESW-4.5		B2D-4	B2C-2**	B1D-4	B1C-2**	A1D-4			S13-D10-2	S12-D9-2	S11-D8-2	S10-D7-2	S9-D6-2	S8-D5-2	S7-D4-2	S6-D3-2**	S5-P3-2	S4-P2-2	S3-D2-2	S2-D1-2	S1-P1-2		MTCA Method	Sample to
1/04/2019	1/04/2019	1/04/2019	1/04/2019	1/04/2019		1/04/2019	1/04/2019	1/04/2019	1/04/2019	1/04/2019	1/04/2019	1/04/2019	1/04/2019		12/11/2018	12/11/2018	12/11/2018	12/11/2018	12/11/2018	12/11/2018		12/11/2018	12/11/2018	12/11/2018	12/11/2018	12/11/2018	12/11/2018	12/11/2018	12/11/2018	12/11/2018	12/11/2018	11/28/2018	11/28/2018	11/28/2018		MTCA Method A Soil Cleanup Levels	Date
œ	5.5	4.5	5.5	5.5		9.5	9.5	5.5	5.5	5.5	5.5	4.5	4.5		4	2	4	2	4	2		2	2	2	2	2	2	2	2	2	2	2	2	2		Levels	popul
<6.0	<6.3	<6.7	<6.6	<6.6		<5.4	<6.1	<5.4	<6.0	<7.0	<6.3	<6.6	<7.0	•	<7.2	<8.7	<7.6	<7.0	<8.1	<8.1		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		30/100	9100
<27	<30	33	31	<30		<26	<28	<27	<29	<30	<30	33	<29		<31	<33	<31	<29	<34	<31		<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		2,000	000
6 4	<80	<62	<u>6</u> 1	~59		<52	59	70	76	<80	777	<80	<58		<62	88	<62	\$	<68	<63		<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	2	2,000	-
<0.0010	<0.0010	<0.0011	<0.0011	<0.0010	2019 Reme	<0.0010	<0.0011	<0.00099	<0.0011	<0.0012	<0.0011	<0.0011	<0.0012	2019 Reme	<0.0013	<0.0014	<0.0012	<0.0012	<0.0013	<0.0014	2018 Pro	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	018 Product	0.03	Delizelle
<0.0051	<0.0052	<0.0057	<0.0054	<0.0052	dial Excavat	<0.0051	<0.0057	<0.0049	<0.0053	<0.0059	<0.0054	<0.0055	<0.0058	dial Excavat	<0.0066	<0.0072	<0.0060	<0.0059	<0.0065	<0.0068	oduct Piping	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	Piping Rem	7	Lollerie
<0.0010	<0.0010	<0.0011	<0.0011	<0.0010	2019 Remedial Excavation - Area 2 (Arcadis)	<0.0010	<0.0011	<0.00099	<0.0011	<0.0012	<0.0011	<0.0011	<0.0012	2019 Remedial Excavation - Area 1 (Arcadis)	<0.0013	<0.0014	<0.0012	<0.0012	<0.0013	<0.0014	2018 Product Piping Removal (Arcadis)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	2018 Product Piping Removal (Site Assessor/ECI)	6	Emilinenzene
<0.0030	<0.0031	<0.0034	<0.0032	<0.0031	rcadis)	<0.0030	<0.0034	<0.00299	<0.0032	<0.0036	<0.0033	<0.0033	<0.0035	rcadis)	<0.0039	<0.0043	<0.0036	<0.0036	<0.0039	<0.0041	adis)	<0.06	<0.08	<0.08	<0.06	<0.08	<0.06	<0.08	<0.08	<0.06	<0.08	<0.08	<0.06	<0.06	essor/ECI)	9	Total Aylones
<0.0010	<0.0010	<0.0011	<0.0011	<0.0010		<0.0010	<0.0011	<0.00099	<0.0011	<0.0012	<0.0011	<0.0011	<0.0012	•	:	1	1					1	1					-	-		1	1				0.1	MIDE
<0.0010	<0.0010	<0.0011	<0.0011	<0.0010		<0.0010	<0.0011	<0.00099	<0.0011	<0.0012	<0.0011	<0.0011	<0.0012		<0.0013	<0.0014	<0.0012	<0.0012	<0.0013	<0.0014								-		-			-	-		0.005	EUD
<0.0010	<0.0010	<0.0011	<0.0011	<0.0010		<0.0010	<0.0011	<0.00099	<0.0011	<0.0012	<0.0011	<0.0011	<0.0012		<0.0013	<0.0014	<0.0012	<0.0012	<0.0013	<0.0014		1			1		ı	-	-	-			-	-			EUC
	-					<0.0105	<0.0113	<0.0107	<0.0116	<0.0120	<0.0119	<0.0120	<0.0116			1	٠	1		-					٠			-	-	-			-	-		5	Naphmalenes
	-		1	ı		<0.0053	0.0287	<0.0054	<0.0058	<0.0060	<0.0060	<0.0060	<0.0058		1	1	1	1	-			,	1		1		ı	-		-	1	1		-		0.1	CPARS
<5.4	<6.0	<6.2	<6.1	<5.9		<5.2	<5.7	<5.4	<5.8	<6.0	<5.9	<6.0	<5.8		<6.2	<8.5	<6.2	<5.8	<6.8	<6.3		,	1		1			-	-	-	1	1	-	-		250	Lead

Table 3
Summary of Select Soil Analytical Data
WA-6067
8009 164th Ave NE, Redmond, Washington
All Concentrations are in milligrams per kilogram (mg/Kg)

Table 3 Summary of Select Soil Analytical Data WA-6067

8009 164th Ave NE, Redmond, Washington

All Concentrations are in milligrams per kilogram (mg/Kg)

ple ID	Date	Depth	GRO	DRO	но	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	EDB	EDC	Naphthalenes	cPAHs	Lead
CA Method A S	nod A Soil Cleanup Levels	evels	30/100	2,000	2,000	0.03	7	6	9	0.1	0.005	-	5	0.1	250
						2019 Reme	nedial Excavatio	ion - Area 3 (Arcadis)	cadis)						
3-B-6.0	1/04/2019	8	<5.3	<28	<56	<0.00093	<0.0046	<0.00093	<0.00283				<0.0113	<0.0057	<5.6

ARE3-B-6.0		MTCA Met	Sample ID
1/04/2019		MTCA Method A Soil Cleanup Levels	Date
0		Levels	Depth
<5.3	-	30/100	GRO
<28		2,000	DRO
6 8		2,000	НО
<0.00093	2019 Rem	0.03	Benzene
<0.0046	edial Excava	7	loluene
<0.00093	2019 Remedial Excavation - Area 3 (Arcadis)	6	Toluene Ethylbenzene Total Xylenes
<0.00283	rcadis)	9	l otal Xylenes
1		0.1	MIBE
,		0.005	EUB
1			FDC
<0.0113		5	Naphthalenes
	1	П	Г

Ecology Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, WAC Chapter 173-340-800, Table 740-1 Υ = The chromatographic response resembles a typical fuel pattern Volatile Organic Compounds (BTEX, MTBE, EDB and EDC) analyzed by EFA Method 8280C B = Compound was found in the blank and sample $\mathsf{J} = \mathsf{Result}$ is less than the RL but greater than or equal to the MDL and the concentration is an appro MTBE = Methyl Tertiary Butyl Ether EDB = Ethylene dibromide

EDC = 1,2-Dichloroethane

GRO = Total petroleum hydrocarbons (TPH) - Gasoline range Organics analyzed by Ecology Method NWTPH-Gx

< = Not detected at or above laboratory method detection limit (MDL) for the given analysis, value shown is MDL</p>

HO = TPH - Heavy Oil Range Organics analyzed by Ecology Method NWTPH-Dx DRO = TPH - Diesel Range Organics analyzed by Ecology Method NWTPH-Dx BOLD and highlighted values are greater than their respective MTCA Method A cleanup level

BOLD values are non-detect above the laboratory detection limit where the detection limit is higher than the MTCA Method A cleanup level

Depth = Depth of sample in feet below ground surface (bgs)

Soil Cleanup Level for gasoline mixtures (GRO) without benzene and the total of toluene, ethylbenzene, and xylenes are less than 1% of the gasoline mixture is 100 mg/kg. For all other gasoline mixtures, the GRO Soil Cleanup Level is 30 mg/kg Polycyclic aromatic hydrocarbons (PAHs), including the seven carcinogenic PAHs (cPAHs) and Naphthalenes, by EPA Method 8270

Total oPAHs calculated by summing the concentrations of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(b)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-od)pyrene and adjusted for toxicity to represent a total benzo(a)pyrene concentration according to Washington State Administrative Code 173-340-708(8). If one or more adjusted oPAH constituents were reported as Non-Detect, half of the reporting limit was used in calculations. Naphthalenes is a sum total of 1-methyl-naphthalene, 2-methyl-naphthalene, and naphthalene (per MTCA Cleanup Regulation Table 720-1 [d] and [f]). If one or more constituents were reported as Non-Detect, half of the reporting limit was used in calculations.

Table 2: Groundwater Analytical Data

	-						_					מת תכ		1100	37 30	Z	1000	
	<2.0	-	-	-	<1.0	<0.5	<0.5	<0.5	-	-	<50	28.67	-	8.71	37.38	P	2/22/1996	MW-2
-	2.1	-			<1.0	<0.5	<0.5	⊲0.5	-		<50	22.43	-	14.95	37.38	Р	11/2/1995	MW-2
	<2.0				<1.0	<0.5	<0.5	40.5			<50	21.99		15.39	37.38	P	8/1/1995	MW-2
	<2.0	1			<1.0	<0.5	<0.5	40.5			60	24.18		13.2	37.38	P	5/4/1995	MW-2
,	<2.0				<1.0	<0.5	<0.5	40.5			<50	26.03		11.35	37.38	P	2/21/1995	MW-2
-	65	-			<1.0	<0.5	<0.5	<0.5	-	-	<50	21.39	-	15.99	37.38	P	11/2/1994	MW-2
	0.544 J	-	-		<1.06	<0.384	<0.412	<0.331		-	<31.6	20.60	0.00	16.95	37.55	뚜	5/18/2017	MW-1
<0.17	<0.17	1			<0.79	<0.21	<0.18	<0.42			<27	23.94		13.61	37.55	F	4/12/2016	MW-1
<0.17	<0.17	1	,		<0.62	<0.51	<0.44	<0.42			<27	24.96	ı	12.59	37.55	F	1/21/2016	MW-1
<0.1ï	<0.17	1			<0.62	40.51	<0.44	<0.42		,	27	22.2		15.35	37.55	F	10/22/2015	MW-1
<0.17	<0.17				<0.62	<0.51	<0.44	<0.42			<27	21.25		16.30	37.55	F	7/27/2015	MW-1
<0.17	<0.17		,		<0.62	<0.51	<0.44	<0.42	,	١	<27	24	0.00	13.55	37.55	F	4/22/2015	MW-1
<0.17	<0.17	:		,	<0.12	<0.13	<0.16	<0.14	1		21 JB	25.75	0.00	11.80	37.55	LF	1/9/2015	MW-1
<2.0	0.26 J			<1.0	<3.0	<1.0	<1.0	<1.0	,		ŝ	21.31	0.00	16.24	37.55	F	10/1/2014	MW-1
-0.1	<0.17	<0.16	1	<0.17	0.74 JB	0.19 JB	0.45 J	<0.14	,		<10	20.69	0.00	16.86	37.55	뚜	7/7/2014	MW-1
<10	<10	<0.50	<0.0097	<0.50	<1.0	<0.50	0.65	<0.50			<50	22.77		14.78	37.55	LF	11/19/2013	MW-1
<10	<10	<0.50	<0.0098	<0.50	<1.0	<0.50	<0.50	<0.50			<50	21.25		16.3	37.55	ᄕ	8/30/2013	MW-1
_		-	-			-	1	-	-	-	-	23.51	-	14.04	37.55	ᄕ	6/5/2013	I-MW
<10.0	<10.0	<0.50	<0.0096	<0.50	<1.0	<0.50	<0.50	<0.50	-	-	<50	23.57	-	13.98	37.55	LF	6/4/2013	MW-1
<10.	<10.0	<1.0	<0.010	<1.0	<3.0	<1.0	<1.0	<1.0			<50	24.79		12.76	37.55	NP	4/19/2012	MW-1
- 20	<2.0	<1.0	<0.010	<1.0	<2.0	<1.0	<1.0	<1.0			<50	25.79		11.76	37.55	NP	4/6/2011	MW-1
<2.0	22	<1.00	<0.010	<1.00	<3.00	<1.00	<1.00	<1.00	-		<50.0	24.94	1	12.61	37.55	NP	6/22/2010	MW-1
-1.0	<1.00	<0.200	<0.010	<1.00	<0.750	<0.200	<0.200	<0.200	<472	<236	<50.0	22.93	-	14.62	37.55	LF, a	2/25/2009	NW-1
	ı		1	ı	△3.00	<0.500	<0.500	<0.500	ı	ı	<50.0	24.6	ı	12.95	37.55	N N	4/14/2008	MW-1
				<u> </u>	△.00	<0.500	<0.500	<0.500			<50.0	24.44		13.11	37.55	NP	4/23/2007	MW-1
,			,	<1.00	<1.00	<0.500	<0.500	<0.500		1	<50.0	24.94	1	12.61	37.55	R	3/2/2006	MW-1
				<000	4100	<0.500	△ 500	<0.200	'	:	<80.0	23.38		14 17	37.55	NP.	3/4/2005	MW-1
					1.05	<0.500	<0.500	<0.500			<50.0	24.96		12.59	37.55	중	3/11/2004	MW-1
		.		- 1.00	\$1.00 \$1.00	<0.500 <a>0.500	40.500	A 500			450.0	24.8		12.75	37.55	₹ ₹	1/29/2003	MW-1
				\$1.00	1.00	\$0.500	\$0.500	C.500	-		50.0	26.25		14./5	37.50	5 3	3/13/2001	- AAIM
,					<1.00	<0.500	AU.500	Q.500	,		<50.0	24.85		12.00	37.50	5 2	3/22/2000	MW-1
<1.00		,		,	<1.00	<0.500	40.500	<0.500	,		△50.0	21.3		16.25	37.56	¥ N	9/10/1999	MW-1
<1.00					<1.00	<0.500	<0.500	<0.500			<50.0	26.66		10.89	37.55	NP	3/17/1999	MW-1
<1.0					<1.0	<0.5	<0.5	40.5			<50	20.74		16.81	37.55	NP	9/17/1998	MW-1
<1.0		-	-	-	<1.0	<0.5	<0.5	<0.5	-		<50	24.21	-	13.34	37.55	NP	3/12/1998	MW-1
<2.0		1	1	ı	<1.0	<0.5	<0.5	40.5		1	<50	22.28		15.27	37.55	N	8/13/1997	MW-1
	<2.0				<1.0	<0.5	40.5	0.5			&	26.57		10.98	37.55	N _D	3/17/1997	MW-1
									-			MM	,	NM	37.55	NS	11/8/1996	MW-1
,												21.86		15.69	37.56	NS	8/8/1996	MW-1
	<2.0	· [<1.0	<0.5	<0.5	40.5			8	25		12.55	37.55	70	5/2/1996	MW-1
	1					1	1		'			28.23		9.32	37.55	NS	2/22/1996	MW-1
	1	'				1	1		1			22	1	15.55	37.55	NS	11/2/1995	MW-1
Ī		<u>'</u>		<u>.</u>	'				'		'	21.61		15 94	37.55	NS	8/1/1995	MW-1
		۱				1			1			23.74		13.81	37.55	NS	5/4/1995	MW-1
,	ı			1		1			-	ı		25.4		12.15	37.55	SN	2/21/1995	MW-1
	39				<1.0	<0.5	<0.5	<0.5	-		<50	21.08	-	16.47	37.55	P	11/2/1994	MW-1
15	15	5	0.01	20	1,000	700	1,000	5	500	500	800/1,000			:ULs) in µg/L	anup Levels (C	odel Toxics Control Act (MTCA) Method A Cleanup Levels (CULs) in µg/	Control Act (MTC	Model Toxics (
Lead	Total Lead	EDC	EDB	MTBE	Total Xylenes	Ethylbenzene Total Xylenes	۳	Benzene	Н Н	DRO	GRO	GWE	NAPL	DTW	100	Notes	Date	Well
Dissolv								,	;	!						:		

Table 1
Groundwater Gauging Data and Analytical Results
WA 6067
8009 164TH AVE NE, REDMOND, WA 98052
All analytical results are presented in micrograms per liter (µg/L)

MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	WW-3	WW-3	MW-3	MW-3	E-MW	E-MW	MW-2	2-WM	MW-2	2-WM	2-MW	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	C-WM	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	WW-2	MW-2	C-MW	MW-2	WW-2	MW-2	2-WM	MW-2	MW-2	MW-2	Model Toxics	Well
3/17/1999	9/17/1998	3/12/1998	8/13/1997	3/17/1997	11/8/1996	8/8/1996	5/2/1996	2/22/1996	11/2/1995	8/1/1995	5/4/1995	2/21/1995	11/2/1994	5/18/2017	4/12/2016	1/21/2016	10/22/2015	7/27/2015	4/22/2015	1/9/2015	10/1/2014	7/7/2014	11/19/2013	8/30/2013	6/4/2013	4/19/2012	4/6/2011	6/22/2010	2/25/2009	4/14/2008	4/23/2007	3/2/2006	3/4/2005	3/11/2004	1/28/2003	2/25/2002	3/13/2001	3/22/2000	9/10/1999	3/17/1999	9/17/1998	3/12/1998	8/13/1997	3/17/1997	11/8/1996	8/8/1996	Control Act (MT	Date
N	NP	NP	NP	NP	ס	P	NS	סר	סר	70	70	o	0	LF	ᄕ	벁	두	무	뜌	두	듀	=	5	<u>۾</u> د	=	N E	NP NP	¥.	LF.a	NP	NP.	NP	NP	NP	NP	NP	NP	Ą	NS	NP	SN	SN	NP	NS	P	NS	lodel Toxics Control Act (MTCA) Method A Clea	Notes
37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37 38	37.38	37.38	37 38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38	37.38		
11.02	16.95	13.54	15.48	11.87	14.85	15.80	12.66	9.49	15.72	16.10	13.98	12.21	16.67	17.09	12.99	12.03	14.89	15.85	12.99	11.35	15.51	18 44	14.42	15.87	13.38	12.15	11.22	12.11	13.81	12.27	12.43	11.90	13.43	11.86	12.05	10.45	14.15	11.90	15.60	10.21	16.29	12.77	14.75	11.08	14.10	15.02	nup Levels (CULs) in µg/L	DTW
1														0.00	-			-	0.00	0.00	0.00	000								ı		1										1	-					NAPL
26.90	20.97	24.38	22.44	26.05	23.07	22.12	25.26	28.43	22.20	21.82	23.94	25.71	21.25	20.29	24.39	25.35	22.49	21.53	24.39	26.03	21.87	20 94	22,96	21.51	24 00	25.23	26.16	25.27	23.57	25.11	24.95	25.48	23.95	25.52	25.33	26.93	23.23	25.48	21 78	27.17	21.09	24.61	22.63	26.30	23.28	22.36		GWE
<50.0	<50	<50	<50	<50	<50	<50		< 50	<50	<50	~50	<50	<50	<31.6	<27	<27	<27	<27	<27	22 JB	< 50	<u><10</u>	6 6	6 0 €	^50	6 50	\$	<50.0	<50.0	<50.0	<50.0	<50.0	<80.0	<50.0	<50.0	<50.0	<50.0	<50.0	•	<50.0			05>	1	<50	1	800/1,000	GRO
1		-		-		-	-								-			-		-									<236	-		-		-			-		•			1			-		500	DRO
1				-													-	-										1	<472					-	-	-					-	-				1	500	Ю
<0.500	40.5	<0.5	<0.5	<0.5	40.5	<0.5		40.5	40.5	<0.5	40.5	40.5	<0.5	<0.331	<0.42	<0.42	<0.42	<0.42	<0.42	<0.14	<1.0	<0.14	<0.50	<0.50	<0.50	<1.0	<1.0	<1.00	<0.200	<0.500	<0.500	<0.500	<0.200	<0.500	<0.500	<0.500	<0.500	<0.500		<0.500		-	<0.5		<0.5	1	5	Benzene
<0.500	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.412	<0.18	<0.44	<0.44	<0.44	<0.44	<0.16	<1.0	0.26.1	<0.50	<0.50	<0.50	<1.0	<1.0	<1.00	<0.200	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500		<0.500		1	<0.5		< 0.5		1,000	۰ ا
<0.500	<0.5	<0.5	<0.5	<0.5	40.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.384	<0.21	<0.51	<0.51	<0.51	<0.51	<0.13	<1.0	∆n 13	<0.50	<0.50	△ 0.50	<1.0	<1.0	<1.00	<0.200	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500		<0.500		1	<0.5		<0.5	1	700	Ethylbenzene Total Xylenes
<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.06	<0.79	<0.62	<0.62	<0.62	<0.62	<0.12	3.0	0.47 JR	<1.0	<1.0	40	30	<20	△.00	<0.750	△3.00	<3.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00		<1.00		1	<1.0	1	<1.0	1	1,000	Total Xylenes
,		-		-		-	-											-			41.0	<0 17	<0.50	<0.50	^n 50	<1.0	<1.0	<1.00	<1.00	ı	١	<1.00	<2.00			<1.00	<1.00					1	-	•	-		20	MTBE
1		-	1	-			-	1	1	1		ı				1	1	1					<0.0096	<0.0096	<0.0098	<0.0098	<0.010	<0.010 b	<0.010	ı		1										1	1	•	-	1	0.01	EDB
1												,	1					-			1	<0 18	<0.50	<0.50	<0.50	<1.0	<1.0	<1.00	<0.200													1		1			5	EDC
1				<2.0	1.04	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0	57	<0.240	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	2.0	<0.17	10	<10	<10.0	<10.0	20	8.2	<1.00	ı						-						1	-		8.38	1	15	Total Lead
<1.00	<1.0	<1.0	<2.0			1		1	1	1	1	,	1		<0.17	0.30 J	<0.17	<0.17	<0.17	<0.17	<2.0	<0.17	40	<10	<10.0	<10.0	<20	<2.00	<1.00	ı	ı	1		1	1	1	1	1		<1.00		1	<2.0	1		1	15	Dissolved Lead

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WA 6067
8009 164TH AVE NE, REDMOND, WA 98052
All analytical results are presented in micrograms per liter (µg/L)

₽-MW	MW-4	MW-4	WW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	C-AAIN	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	S-MW	WW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	WW-3	Model Toxics	Well											
3/4/2005	3/11/2004	1/29/2003	2/25/2002	3/13/2001	3/22/2000	8/10/1999	3/17/1999	9/17/1998	3/12/1998	8/13/1997	3/17/1997	11/8/1996	8/8/1996	5/2/1996	2/22/1996	11/2/1995	8/1/1995	5/4/1985	2/21/1995	11/2/1994	0/18/201/	4/12/2016	1/21/2016	10/22/2015	7/27/2015	4/22/2015	1/9/2015	10/1/2014	7/7/2014	11/19/2013	8/30/2013	6/4/2013	4/19/2012	4/6/2011	6/22/2010	9000/2010	4/23/2007	3/2/2006	3/4/2005	3/11/2004	1/29/2003	2/25/2002	3/13/2001	3/22/2000	9/10/1999	Control Act (MT	Date
YAG	dN	DRY	NP	DRY	DRY	YAG	SN	SN	NP	NP	NP	Р	SN	d	SN	d	P	P	P	P	F	F	뚜	F	두	두	- LF	두	F	FF	내	-FF	NP.	Y .	N :	T 27	Z Z	N N	Ą	NP	NP	NP	NP	NP	ΑN	odel Toxics Control Act (MTCA) Method A Clea	Notes
38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	31.82	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37 92	37.82	37.92	37.92	37.92	37.92	37.92	37.92	37.92	37.92	inup Levels	T 0c
DRY	13.76	DRY	12.40	DRY	DRY	DRY	NM	NM	14.62	16.56	12.94	15.95	16.89	13.75	MN	16.80	16.53	15.06	13.35	17.7	17.44	13.79	12.83	15.57	15.53	13.75	12.11	16.13	17.08	15.04	16.57	14.17	12.97	12.00	12.85	14 77	13.11	12.75	14.31	12.70	12.98	11.25	14.90	12.71	16.38	(CULs) in µg/L	DTW
-	-	-		-		-		-					-	-	-		-				0.00					0.00	0.00	0.00	0.00	-	1		-	ı				1		ı				1			NAPL
DRY	25.06	DRY	26.42	DRY	DRY	DRY	NM	NM	24.20	22.26	25.88	22.87	21.93	25.07	MN	22.02	22.29	23.76	25.47	21.12	20.48	24.13	25.09	22.35	22.39	24.17	25.81	21.79	20.84	22.88	21.35	23.75	24.95	25.92	25.07	23.15	24.00	25.17	23.61	25.22	24.94	26.67	23.02	25.21	21.54		GWE
-	<50.0	-	<50.0	-		-			<u>\$</u>	<50	<50	<50	-	<50	-	<50	<50	<50	<50	<50	\$31.0	<27	<27	<27	<27	<27	20 JB	<50	^10	<50	<50	<50	<50	<50	\$50.0	450.0	50.0	<50.0	<80.0	<50.0	636	<50.0	<50.0	<50.0	<50.0	800/1,000	GRO
-	-										٠			-	-												-				1				- 600	038		,		ı						500	DRO
1	-				:										-	1		١			ŀ								ı		1				. 4	<472		,		ı				1		500	НО
-	<0.500		<0.500			-			0.5	<0.5	40.5	40.5		<0.5	-	40.5	<0.5	40.5	<0.5	<0.5	SU.331	<0.42	<0.42	<0.42	<0.42	<0.42	<0.14	<1.0	<0.14	<0.50	<0.50	<0.50	<1.0	<1.0	<1.00	40,000	40.500	40.500	<0.200	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	5	Benzene
-	<0.500	-	1.01			-			40.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.412	<0.18	<0.44	<0.44	ô.44	<0.44	<0.16	<1.0	0.25 J	<0.50	<0.50	<0.50	<1.0	<1.0	<1.00	0.500	0.500	40.500	<0.500	<0.500	4.37	0.989	<0.500	<0.500	<0.500	1,000	"
-	<0.500		<0.500				,		<0.5	<0.5	<0.5	<0.5		<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.384	40.21	<0.51	<0.51	<0.51	<0.51	<0.13	<1.0	40.13	<0.50	<0.50	<0.50	<1.0	<1.0	<1.00	<0.000	AD 500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	700	Ethylbenzene Total Xylenes
-	<1.00		<1.00						<1.0	<1.0	<1.0	<1.0		<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.00	<0.79	<0.62	<0.62	<0.62	<0.62	<0.12	<3.0	0.48 J	<1.0	<1.0	<1.0	<3.0	<2.0	4.50	<0.750	3 6	4.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1,000	Total Xylenes
_	-	-	<1.00	-	ı	_		-						-	-	1		١	٠									<1.0	<0.17	<0.50	<0.50	<0.50	<1.0	<1.0	<1.00	<100		<1.00	<2.00	,		<1.00	<1.00			20	MTBE
-	-		1							1				-	-			1									1	1	ı	<0.0085	<0.0096	<0.0097	<0.0098	<0.010	<0.010	<0.010		1		1		ı				0.01	EDB
	-					-								-	-			١									-		<0.16	<0.50	<0.50	<0.50	<1.0	<1.0	1.00	<n 200<="" td=""><td></td><td></td><td></td><td>ı</td><td></td><td></td><td></td><td></td><td></td><td>5</td><td>EDC</td></n>				ı						5	EDC
-										1	<2.0	7.82		3.3	-	<2.0	11	<2.0	2.2	35	<0.240	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	0.17 J	<0.17	<10	<10	<10.0	<10.0	<2.0	\$200	18				ı	١	ı				15	Total Lead
-	-		1				,		<1.0	<2.0						1					,	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<2.0	<0.17	<10	<10	<10.0	<10.0	<2.0	200	400		-				,			<1.00	15	Dissolved Lead

Table 1
Groundwater Gauging Data and Analytical Results
WA 6067
WA 9007
8009 164TH AVE NE, REDMOND, WA 98052
All analytical results are presented in micrograms per liter (µg/L)

MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	S-WM	MW-5	MW-5	MW-5	MW-5	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MWA	- WW	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	Model Toxics	Well
4/19/2012	4/6/2011	6/22/2010	2/25/2009	4/14/2008	4/23/2007	3/2/2006	3/4/2005	3/11/2004	1/29/2003	2/25/2002	3/13/2001	3/22/2000	9/10/1999	3/17/1999	9/17/1998	3/12/1998	8/13/1997	3/17/1997	11/8/1996	8/8/1996	5/2/1996	2/22/1996	11/2/1995	8/1/1995	5/4/1995	2/21/1995	11/2/1994	5/18/2017	4/12/2016	1/21/2016	10/22/2015	7/27/2015	4/22/2015	1/9/2015	10/1/2014	7/7/2014	8/30/2013	6/5/2013	6/4/2013	4/19/2012	4/6/2011	6/22/2010	2/25/2009	4/14/2008	4/23/2007	3/2/2006	Control Act (MT	Date
NP	NP	NP	LF, a	NP	NP	NP	NP	NP	Ϋ́P	Ą	NP	NP	SN	NP	NP	SN	NP	NP	P	70	SN	P	P	P	P	P	Р	F	두	LF	LF	F	F	F	<u>ج</u> ا	n 5	; ;	; ;	F	Ą	NP	NP	LF, a	NP	NP	DRY	Control Act (MTCA) Method A Clear	Notes
38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	38.82	eanup Levels (CULs) in μg	100
13.30	12.35	13.20	15.05	13.49	13.64	13.04	14.67	13.09	13.22	11.75	15.30	13.17	16.80	11.46	17.41	13.92	15.86	12.29	15.25	16.17	13.03	06'6	16.14	16.53	14.35	12.65	17.09	18.24	14.90	13.88	16.61	17.57	14.83	13.11	17.23	18 10	17.02	15.30	15.25	14.05	13.06	13.88	15.94	14.18	14.36	DRY	CULs) in µg/L	DTW
-		1			-		1		1	1			-			-	-				_		-		-		-	0.00		-	-		0.00	0.00	0.00	0.00				1	-		-			-		NAPL
25.01	25.96	25.11	23.26	24.82	24.67	25.27	23.64	25.22	25.09	26.56	23.01	25.14	21.51	26.85	20.90	24.39	22.45	26.02	23.06	22.14	25.28	28.41	22.17	21.78	23.96	25.66	21.22	20.58	23.92	24.94	22.21	21.25	23.99	25.71	21.59	20.72	21.20	23.52	23.57	24.77	25.76	24.94	22.88	24.64	24.46	DRY		GWE
<50	<50	<50.0	<50.0	<50.0	<50.0	<50.0	<80.0	<50.0	<50.0	<50.0	<50.0	<50.0	-	<50.0	<50	-	<50	^50	97.6	<50	-	<50	<50	<50	<50	320	<50	⊲1.6	<27	<27	<27	<27	<27	17 JB	6	46	ŝ	;	<50	<50	<50	<50.0	<50.0	<50.0	<50.0	1	800/1,000	GRO
	1	1	<236				1	٠	,	1		-		١			-		-		-		-		-			٠	١	-				'			,			1			<236				500	DRO
	1		<472			1	1		1	1		-			-				-		-		-		-				١	-										1			<472	1		1	500	НО
<1.0	<1.0	<1.00	<0.200	<0.500	<0.500	<0.500	<0.200	<0.500	<0.500	<0.500	<0.500	<0.500		<0.500	<0.5		<0.5	40.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.331	<0.42	< 0.42	<0.42	<0.42	<0.42	<0.14	4.0	<0.00	\$0.00	3	<0.50	<1.0	<1.0	<1.00	<0.200	<0.500	<0.500		5	Benzene
<1.0	<1.0	<1.00	<0.200	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500		<0.500	<0.5		<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.412	<0.18	< 0.44	<0.44	0.44	6.44	<0.16	4.0	<0.00	20.00		<0.50	<1.0	<1.0	<1.00	<0.200	<0.500	<0.500		1,000	n
<1.0	<1.0	<1.00	<0.200	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500		<0.500	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	0.68	<0.5	<0.384	<0.21	< 0.51	<0.51	40.51	40.51	<0.13	<1.0	40.00	0.00		<0.50	<1.0	<1.0	<1.00	<0.200	<0.500	<0.500	1	700	zene
<3.0	<2.0	<3.00	<0.750	△3.00	<3.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00		<1.00	<1.0		<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	1.3	3.6	<1.0	<1.06	<0.79	<0.62	<0.62	40.62	40.62	<0.12	3.0	010.IB	1.0		<1.0	<3.0	<2.0	<3.00	<0.750	<3.00	<3.00		1,000	Total Xylenes
<1.0	<1.0	<1.00	<1.00			<1.00	<2.00	١	,	<1.00	<1.00	-		٠	-				-		-		-		-				١	-					4.0	<0.50	\$0.50		<0.50	4.0	<1.0	<1.00	<1.00			1	20	MTBE
<0.0099	<0.010	<0.010	<0.010			1	1		1	1		-		ı	-				-		-		-		-			,	١	-						-0.00a0	/800.0>	1	<0.0096	<0.0099	<0.010	<0.010	<0.010	ı	1		0.01	EDB
<1.0	<1.0	<1.00	<0.200				1	١	,	1	٠	-		٠	-				-		-		-		-				١	-					1	<0.50 60.16	\$0.50	3	<0.50	4.0	<1.0	<1.00	<0.200	:			5	EDC
<10.0	<2.0	<2.00	<1.00			ı	1		,	1								<2.0	8.05	<2.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	90	<0.240	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	20	<0.17	100		<10.0	<10.0	<2.0	<2.00	<1.00	ı			15	Total Lead
<10.0	<2.0	<2.00	<1.00			1	1		1	ı	١	-		<1.00	<1.0		<2.0		-	1			-	•	-			-	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	20	017.1	1	1	<10.0	<10.0	<2.0	<2.00	<1.00	1	1	1	15	Dissolved Lead

Table 1
Groundwater Gauging Data and Analytical Results
WA 6067
8009 164TH AVE NE, REDMOND, WA 98052
All analytical results are presented in micrograms per liter (µg/L)

SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	Model Toxics	Well
4/22/2015	1/9/2015	10/1/2014	7/7/2014	11/19/2013	8/30/2013	6/4/2013	4/19/2012	4/6/2011	6/22/2010	2/25/2009	4/14/2008	4/23/2007	3/2/2006	3/4/2005	3/11/2004	1/29/2003	2/25/2002	3/13/2001	3/22/2000	9/10/1999	3/17/1999	9/17/1998	3/12/1998	8/13/1997	3/17/1997	11/8/1996	8/8/1996	5/2/1996	2/22/1996	11/2/1995	8/1/1995	5/4/1995	2/21/1995	11/2/1994	5/18/2017	5/18/2017	4/12/2016	1/21/2016	10/22/2015	7/27/2015	4/22/2015	1/9/2015	10/1/2014	7/7/2014	11/19/2013	8/30/2013	6/4/2013	Control Act (MT	Date
두	- LF	F	F	F	뜌	ᄕ	NP	NP	NP	LF, a	NP	NP	NP.	NP	NP	NP	NP	NP	NP	SN	NP	ΥP	NP.	SN	SN	ס	P	70	q	Р	þ	Р	9	Р	LF, DUP	ᄕ	LF	뚜	F	뜌	5	٦	Fi	<u>ج</u> ا	F	두	F	lodel Toxics Control Act (MTCA) Method A Cleanup Levels (CULs) in µg/	Notes
38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.66	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	38.31	leanup Levels (тос
14.3	12.64	17.10	17.78	15.72	17.24	14.68	13.45	12.52	13.42	15.13	13.62	13.77	13.30	14.91	13.22	13.37	11.85	15.50	13.27	17.05	11.58	17.59	14.10	16.09	12.40	15.45	16.39	13.25	10.10	16.35	16.74	14.5	12.74	17.33	17.82	17.82	14.15	13.19	15.99	16.95	14.13	12.40	17.00	17.52	15.46	16.98	14.55	CULs) in µg/L	DTW
0.00	0.00	0.00	0.00			-							1		-		-			-			1			1	-		-		-	-			0.00	0.00	-		,		0.00	0.00	0.00	0.00					NAPL
24.36	26.02	21.56	20.88	22.94	21.42	23.98	25.21	26.14	25.24	23.53	25.04	24.89	25.36	23.75	25.44	25.29	26.81	23.16	25.39	21.61	27.08	21.07	24.56	22.57	26.26	23.21	22.27	25.41	28.56	22.31	21.92	24.16	25.92	21.33	20.49	20.49	24.16	25.12	22.32	21.36	24.18	25.91	21.31	20.79	22.85	21.33	23.76		GWE
<27	14 JB	<50	<10	^50	<50	<50	<50	\$	<50.0	<50.0	<50.0	<50.0	<50.0	<80.0	<50.0	<50.0	<50.0	<50.0	<50.0	-	<50.0	60	<50			<50	<50	^50	<50	<50	<50	<50	270	<50	<31.6	G1.6	<27	<27	<27	<27	<27	15 JB	<u>\$</u>	40	6	^50	^50	800/1,000	GRO
	-	,	,			-				<236			1	,			-			-	,	,	1				-		-		-	-					-		,								1	500	DRO
,			,			-				<472	,	,	1	,						-			1			1	-				-					,												500	НО
<0.42	< 0.14	<1.0	<0.14	<0.50	<0.50	<0.50	<1.0	<1.0	<1.00	<0.200	<0.500	<0.500	<0.500	<0.200	<0.500	<0.500	<0.500	<0.500	<0.500	-	<0.500	0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	40.5	<0.5	<0.331	<0.331	< 0.42	<0.42	<0.42	<0.42	<0.42	<0.14	<1.0	<0.14	<0.50	<0.50	<0.50	5	Benzene
<0.44	<0.16	<1.0	<0.16	0.62	<0.50	<0.50	<1.0	<1.0	<1.00	<0.200	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	-	<0.500	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.412	<0.412	<0.18	<0.44	<0.44	<0.44	<0.44	<0.16	<1.0	<0.16	<0.50	<0.50	0.5	1,000	Toluene
<0.51	<0.13	<1.0	40.13	<0.50	<0.50	<0.50	<1.0	<1.0	<1.00	<0.200	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	-	<0.500	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.67	<0.5	<0.384	<0.384	< 0.21	<0.51	<0.51	<0.51	40.51	40.13	<1.0	40.13	△0.50	<0.50	<0.50	700	Ethylbenzene
<0.62	<0.12	<3.0	0.14 JB	<1.0	<1.0	<1.0	<3.0	<2.0	<3.00	<0.750	<3.00	<3.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	-	<1.00	4.0	<1.0			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.3	<1.0	<1.06	<1.06	<0.79	<0.62	<0.62	<0.62	<0.62	<0.12	3.0	0.18 JB	4.0	<1.0	<1.0	1,000	Ethylbenzene Total Xylenes
	-	<1.0	<0.17	<0.50	<0.50	<0.50	<1.0	<1.0	<1.00	<1.00			<1.00	<2.00			<1.00	<1.00									-		-		-	-					-						<1.0	<0.17	<0.50	<0.50	<0.50	20	2
	-		,	<0.0096	<0.0096	<0.0097	<0.0097	<0.010	<0.010	<0.010			1										1			1	-		-		-	-			1		-								<0.0096	<0.0097	<0.0097	0.01	EDB
		,	<0.16	<0.50	<0.50	<0.50	<1.0	<1.0	<1.00	<0.200		,	1	ı									1				-				-								,					<0.16	<0.50	<0.50	<0.50	5	EDC
<0.17	< 0.17	0.21 J	<0.17	40	<10	<10.0	<10.0	<2.0	<2.00	<1.00			1							-			1			<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	1	<0.240	0.50 J	0.37 J	<0.17	<0.17	6	<0.17	<2.0	<0.17	10	40	<10.0	15	Total Lead
<0.17	<0.17	<2.0	<0.17	40	<10	<10.0	<10.0	<2.0	<2.00	<1.00			1	ı					1		<1.00	<1.0	<1.0			1			1	1	-			1		1	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<2.0	<0.17	<u><10</u>	~10	<10.0	15	Dissolved Lead

Table 1
Groundwater Gauging Data and Analytical Results
WA 6067
8009 164TH AVE NE, REDMOND, WA 98052
All analytical results are presented in micrograms per liter (µg/L)

Table 1 Groundwater Gauging Data and Analytical Results WA 6067

8009 164TH AVE NE, REDMOND, WA 98052
All analytical results are presented in micrograms per liter (µg/L)

SVE-1	SVE-1	SVE-1	SVE-1	SVE-1	Model Toxics	Well	
5/18/2017	4/12/2016	1/21/2016	10/22/2015	7/27/2015	Model Toxics Control Act (MTCA) Method A Cleanup Levels (CULs) in µg/l	Date	
ç	5	F	뚜	- LF	CA) Method A C	Notes	
38.66	38.66	38.66	38.66	38.66	leanup Levels (тос	
18.29	14.33	13.32	16.22	17.20	CULs) in µg/L	DTW	
0.00		1		-		NAPL	
20.37	24.33	25.34	22.44	21.46		GWE	
S1.6	<27	<27	<27	<27	800/1,000	GRO	
		1			500	DRO	
		1			500	но	
<0.331	<0.42	<0.42	<0.42	< 0.42	5	Benzene	
<0.412	<0.18	<0.44	<0.44	<0.44	1,000	Toluene	
<0.384	40.21	40.51	<0.51	<0.51	700	Ethylbenzene	
<1.06	<0.79	<0.62	<0.62	<0.62	1,000	Total Xylenes	
		1	-	-	20	MTBE	
	1	1		-	0.01	EDB	
,		,		-	5	EDC	
<0.240	<0.17	<0.17	<0.17	<0.034	15	Total Lead	
,	<0.17	<0.17	<0.17	<0.17	15	Dissolved Lead	

M

F1 = MS and/or MSD recovery is outside acceptance limits.
GRO, DRO, HO analyzed by Ecology Northwest Methods; Benzene, toluene, ethylbenzene, and total xylenes (BTEX), MTBE, and EDB by 8280B; Lead by U.S. Environ
b = Analyzed outside of the method specified holding time due to laboratory oversight.
a = Drawdown greater than 3 feet observed during sampling.
NP = No purge sample
P = Purge sample
B = Compound was found in the blank and sample
J = estimated value – The result is greater than or equal to the Method Detection Limit (MDL) and less than the Limit of Quantitation (LOQ)
DUP = Duplicate sample
LFILEP = Low flow (purge) sample

Agency (EPA) 6000/7000 Series; EDC by EPA 8011

Notes:

- = Not analyzed/not applicable
- = Not analyzed/not applicable
- = Analytical result is less than reporting limit shown

- = Analytical result is less than reporting limit shown

BOLD constituent detected above MTCA Cleanup Levels

TOC = Top of casing in feet North American Vertoad Datum of 1988 (NAVD 88)

DTW = Depth to water in feet below TOC

NAPL = Non-aqueous phase liquid thickness in feet

GWE = Groundwater elevation in feet NAVD 88

GRO = Gasoline Range Organics analyzed by Ecology Method NWTPH-Dx

HOC = Diesel Range Organics analyzed by Ecology Method NWTPH-Dx

HOC = Heavy Oil Range Organics analyzed by Ecology Method NWTPH-Dx

HOE = Methyl tertiary burly either

EDB = Ethylene dibromide

EDC = 1,2-Dichloroethame

8001,000 = GRO MTCA Method A CUL with benzene present is 800 µg/L and without is 1,000 µg/L

NS = Not sampled

NS = Not sampled