State of Washington
POLLUTION LIABILITY INSURANCE AGENCY
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*www.plia.wa.gov*

March 15, 2023

Mr. Carl Donovan
Arcadis U.S., Inc.
1100 Olive Way, Suite 800
Seattle, WA 98101

**Re: No Further Action at the Following Site:**

- **Facility/Site (owner) Name:** Alders Chevron (Former Chevron Station 93883)
- **Facility/Site Address:** 1702 E Yakima Ave., Yakima, WA 98901
- **Facility Site ID:** 511
- **Technical Assistance Program No.:** PC020

Dear Mr. Donovan:

The Washington State Pollution Liability Insurance Agency (PLIA) received your request for an opinion on your independent cleanup of Alders Chevron (Former Chevron Station 93883) located at 1702 E Yakima Ave., Yakima, WA 98901 (Site). This letter provides our opinion. Opinions by PLIA are made under the authority of Chapter 70A.330 RCW and Chapter 374-80 WAC. PLIA appreciates your initiative in pursuing this administrative option for cleaning up a contaminated site under the Model Toxics Control Act (MTCA), Chapter 70A.305 RCW.

## Opinion on Cleanup

PLIA has determined that **no further remedial action is necessary** to clean up petroleum contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70A.305 RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). Our analysis is provided below.

## Description of the Site

This opinion applies only to the petroleum release at the Site located at 1702 E Yakima Ave., Yakima, WA 98901 and includes the Yakima County tax parcel described below. This opinion does not apply to any other hazardous substance release(s) that may affect the Property (parcels).

### 1. Description of the Site:

The Site is defined by the nature and extent of contamination associated with the following release(s):

- Total petroleum hydrocarbons (TPH): TPH-d (diesel), TPH-o (oil) and TPH-g (gasoline) into the soil/groundwater/air.
- Volatile organic compounds: benzene, toluene, ethylbenzene, and xylenes (BTEX); lead; and potentially methyl tert-butyl ether (MTBE); ethylene dibromide (EDB); 1-ethyl-3-(3- dimethylaminopropyl) carbodiimide (EDC); and naphthalene into the soil/groundwater/air.

The following parcel(s) have been impacted by the release(s):

- 191320-21400

## Basis of the Opinion

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

1. *Second Quarter 2022 Site Status Report and Closure Request.* Prepared by Arcadis U.S., Inc., June 29, 2022.
2. *Subsurface Investigation Report, Former Chevron Service Station 93883. 1702 East Yakima Avenue, Yakima, Washington. Project No. 30063872.* Prepared by Arcadis U.S., Inc. December 21, 2021.

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

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

## Establishment of Cleanup Standards and Points of Compliance

PLIA has determined the cleanup levels (CULs) and points of compliance (POCs) you established for the Site meet the substantive requirements of MTCA. It is presumed that if

you meet the cleanup standards under MTCA, the Site will be protective of human health and the environment for current and future property use.

**1. CULs:**

*Table 1. The proposed soil and groundwater cleanup levels are:*

| Contaminants of Concern (COCs) | **Method A** Soil Cleanup Level Unrestricted Land Use mg/kg | **Method B** Soil Cleanup Level Unrestricted Land Use mg/kg | **Method A** Groundwater Cleanup Level ug/l |
|---|---|---|---|
| TPH-d | 2,000 | (Site Specific) | 500 |
| TPH-g | 30*/100 | (Site Specific) | 800*/1,000 |
| TPH-o | 2,000 | (Site Specific) | 500 |
| Benzene (carcinogen) | 0.03 | (Site Specific) | 5 |
| Toluene | 7 | (Site Specific) | 1,000 |
| Ethylbenzene | 6 | (Site Specific) | 700 |
| Xylene | 9 | (Site Specific) | 1,000 |
| Total Lead | 250 | (Site Specific) | 15 |

*When Benzene is present.

*Table 2. The proposed air cleanup levels are:*

| Contaminants of Concern (COCs) | **Method B** Sub-Slab/Soil Gas Screening Levels ug/$m^3$ | **Method B** Indoor/Air Cleanup Levels ug/$m^3$ |
|---|---|---|
| Benzene (carcinogen) | 10.7 | 0.321 |
| Toluene | 15,600 | 2,290 |
| Ethylbenzene | 15,200 | 457 |
| Xylene | 310 | 45.7 |
| Total Lead | - | - |
| Naphthalene (carcinogen) (does not include 1-methyl and 2-methyl naphthalene) | 2.45 | 0.0735 |
| Total Petroleum Hydrocarbon (TPH) | 4,700* | 140 |
| APH [EC5-8 Aliphatics] | 90,000 | 2,700 |
| APH [EC9-12 Aliphatics] | 4,700 | 140 |
| APH [EC9-10 Aromatics] | 6,000 | 180 |

* Based on the current attenuation factor of 0.03.

**2. POCs:**

The proposed CULs must be met at the following POCs:

**Soil-Direct Contact**: For CULs based on human exposure via direct contact, the standard POC is: "*…throughout the site from the ground surface to fifteen 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.*"

**Air:** CULs need to be attained in the ambient air throughout the Site, including indoor air within the lateral and vertical inclusion zone (WAC 173-340-750[6]).

## Analysis of the Cleanup

PLIA has concluded that **no further remedial action** is necessary at the Site. Our conclusion is based on the following analysis:

### 1. History and Characterization of the Site

PLIA has determined your characterization of the Site **was** sufficient to establish cleanup standards and select a cleanup action. The Site is described in the documents (cited above) and shown in Figures 4 and 5 of *Second Quarter 2022 Site Status Report and Closure Request*, prepared by Arcadis U.S., Inc., June 29, 2022.

### Conceptual Site Model (Exposure Pathways)

A conceptual site model is a description of how contamination at the Site can potentially come into contact with, and impact, a human or other ecological receptor.

#### i. Soil Direct Contact:

- In March 1992, the waste oil underground storage tank (UST), heating oil UST, and one dry well were excavated and removed from the Site. Petroleum-impacted soil was excavated to a total depth of approximately 15' below ground surface (bgs) at the heating oil tank, approximately 11' bgs at the waste oil tank and at a depth of approximately 15' bgs directly below the dry well. Petroleum-impacted soil was encountered in all three locations.

  **Result: The direct contact exposure pathway existed at this Site.** This means that petroleum contaminated soil (PCS) was in a place underground where it was likely that a human may come into contact with it when working (e.g., digging for a buried utility line).

**ii. Groundwater:**

- Groundwater was encountered at a depth of 15' bgs during excavation of the heating oil tank.

  **Result: The soil to groundwater exposure pathway existed at this Site.** This means that PCS may come into contact with, and leach into, groundwater that may be used for drinking water purposes.

**iii. Air (Soil or Groundwater to Vapor):**

- The vacant building on the Site lies within the lateral inclusion zone of 30' (4,800 mg/kg of TPH-d at FOS-6).

  **Result: The air exposure pathway existed at this Site.** This means that petroleum contamination underground may give off harmful vapors that could enter nearby commercial or residential structures.

**iv. Surface Water:**

- The Yakima River is approximately 550' north of the Site. Surface water is not applicable for the Site.

  **Result: The surface water exposure pathway did not exist at this Site.** At this time, data does not suggest that surface water may be at risk for being impacted. This means that petroleum contamination has not spread to surface water.

**Selection of Cleanup Action:**

The conceptual site model (Section 1: i-iv above) details which exposure pathways existed prior to conducting cleanup activities at the Site. Cleanup actions performed at the Site must adequately address all known exposure pathways of concern in order to satisfy the substantive requirements of MTCA. Cleanup actions taken, along with their effect on any known exposure pathways, are described in Section 2.

**2. Cleanup of the Site:**

PLIA has determined that the cleanup action(s) you performed meet(s) cleanup standards established for the Site. The following cleanup actions have been completed at the Site:

**i. Soil:**

- Soil sampling results are listed in the following tables:

    - Table 1, 2, and 3. Summary of Soil Analytical Results, *Second Quarter 2022 Site Status Report and Closure Request,* prepared by Arcadis US., Inc., June 29, 2022.
- Petroleum-impacted soil was excavated to a total depth of approximately 11' bgs (2' below the bottom of the waste oil tank). Discrete soil samples were collected from the base (WO-2) and sidewall (WO-1) of the excavation. Soil analytical results from discrete soil sample WO-2 were greater than the MTCA Method A CUL for gasoline-range organics (GRO) at 9' bgs.
- Petroleum-impacted soil was also excavated to a total depth of approximately 15' bgs (groundwater interface), 6' below the bottom of the heating oil tank. A clay layer was encountered at approximately 15' bgs. Discrete soil samples were collected from the base (FOS-5 and FOS-6) and sidewalls (FOS-1 through FOS-4) of the excavation. In discrete soil sample FOS-6, concentrations were greater than the MTCA Method A CUL for GRO and diesel-range organics (DRO) at 14' bgs. Additional excavation was not completed due to encountering groundwater.
- Soil was initially excavated to 10' bgs, with a maximum depth of up to 15' bgs directly below the dry well. The footprint of the excavation was approximately 23' long by 32' wide. Discrete soil samples were collected from the base (DWS-1 and DWS-2) and sidewalls (DWS-3 through DWS-6) of the excavation. In discrete soil sample DWS-3, the detected concentration of GRO was greater than the MTCA Method A CUL. Additional excavation could not be completed at the time due to potentially undermining the integrity of the station building.
- Between December 1992 and January 1993, Chen-Northern, Inc. observed the removal of the three gasoline USTs and dispenser islands. Samples were collected from the sidewalls and base of the tank excavation area, and underneath the dispenser islands and product piping. Petroleum-impacted soil near the dispenser island was excavated where accessible by equipment. Canopy footings were not accessible by equipment and therefore could not be excavated at the time. Soil analytical results for samples collected from discrete soil sample locations 19, 20, and 25 exceeded MTCA Method A CULs for GRO and benzene, toluene, ethylbenzene, and total xylenes (BTEX) at 2', 4', and 9' bgs, respectively.
- In September and October 1993, Chen-Northern, Inc. oversaw the removal of the station building and canopy. Approximately 429 cubic yards of petroleum-impacted soil were excavated on-Site and subsequently disposed of by Chen-Northern, Inc. Soil samples were collected from the former canopy and station building locations. Soil analytical results indicated petroleum hydrocarbon concentrations less than MTCA Method A CULs.

- In September 2021, Arcadis advanced seven soil borings (SB-1, SB-2, and MW-8 through MW-12), five of which were completed as monitoring wells (MW-8 through MW-12), to address the remaining data gaps at the Site. Soil analytical results exceeded MTCA Method A CULs at SB-1 and MW-12 for total lead. Arcadis calculated the upper confidence limit (UCL) for lead to be 91.75 milligrams per kilogram (mg/kg), less than the MTCA Method A CUL. Soil conditions at these two locations are anomalous and not representative of soil conditions at the Site.

**Result**: **The data indicate there is no longer a risk of exposure from the soil direct contact exposure pathway at the Site.** The remedial action(s) removed the potential for soil with concentrations of petroleum above CULs to come into contact with humans or ecological receptors.

**ii. Groundwater:**

- Depth to groundwater recorded at the Site ranged from 9.72' (MW-7) to 15.56' (MW-2) below top of casing. Groundwater flow direction beneath the Site is predominantly southeast, with fluctuations to the east-northeast and south-southeast.
- Historically, monitoring wells MW-3 and MW-4 had concentrations of GRO and DRO greater than MTCA Method A CULs. Between 1992 and 1993, monitoring wells MW-1 through MW-4 were destroyed. A formal well abandonment report could not be located.
- In September 2017, monitoring wells MW-5, MW-6, and MW-7 were abandoned in place using hydrated bentonite chips.
- Blaine Tech Services, Inc. conducted compliance groundwater monitoring activities during fourth quarter 2021 and first and second quarters 2022. Groundwater samples were collected from monitoring wells MW-8 through MW-12 (installed in 2021) and analyzed for site COCs.
- Site COCs were not detected in monitoring wells MW-8 through MW-12 at concentrations greater than Method A CULs for four consecutive quarters in 2021 and 2022

**Result: The data indicate there is no longer a risk of exposure from the groundwater exposure pathway at this Site**. The remedial action removed the potential for PCS above the CUL to come into contact with, and leach into, groundwater at the Site.

**iii. Air (Soil or Groundwater to Vapor):**

- PCS was excavated to the maximum extent practicable (to top of

groundwater) at the Site in the early 1990s. Confirmation samples obtained in 2021 indicated that PCS concentrations were below MTCA Method A CULs. PCS had attenuated over time to concentrations below MTCA Method A CULs and no longer pose a risk to human health.

- Petroleum contaminated groundwater (PCGW) was detected at the Site during excavation in the early 1990s. Groundwater sampling results from 2021 to 2022 indicate that groundwater contamination has attenuated to levels below MTCA Method A CULs at the Site.

**Result: The data indicate there is no longer a risk of exposure from the soil or groundwater to vapor exposure pathway at this Site.** The remedial action removed the potential for contaminated soil or groundwater to give off harmful vapors that could enter nearby commercial or residential structures.

## 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 the Department of Ecology under RCW 70A.305.040(4).

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

To recover remedial action costs from other liable persons under the 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 70A.305.080 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 Site under the PLIA Technical Assistance Program (TAP). This opinion terminates Project No. PC020.

## Contact Information

Thank you for choosing to clean up your Site in coordination with the TAP. If you have any questions about this opinion, please contact me by phone at 1-800-822-3905, or by email at pliamail@plia.wa.gov.

Sincerely,

William J. Fees

William J. Fees, P.E.
Site Manager

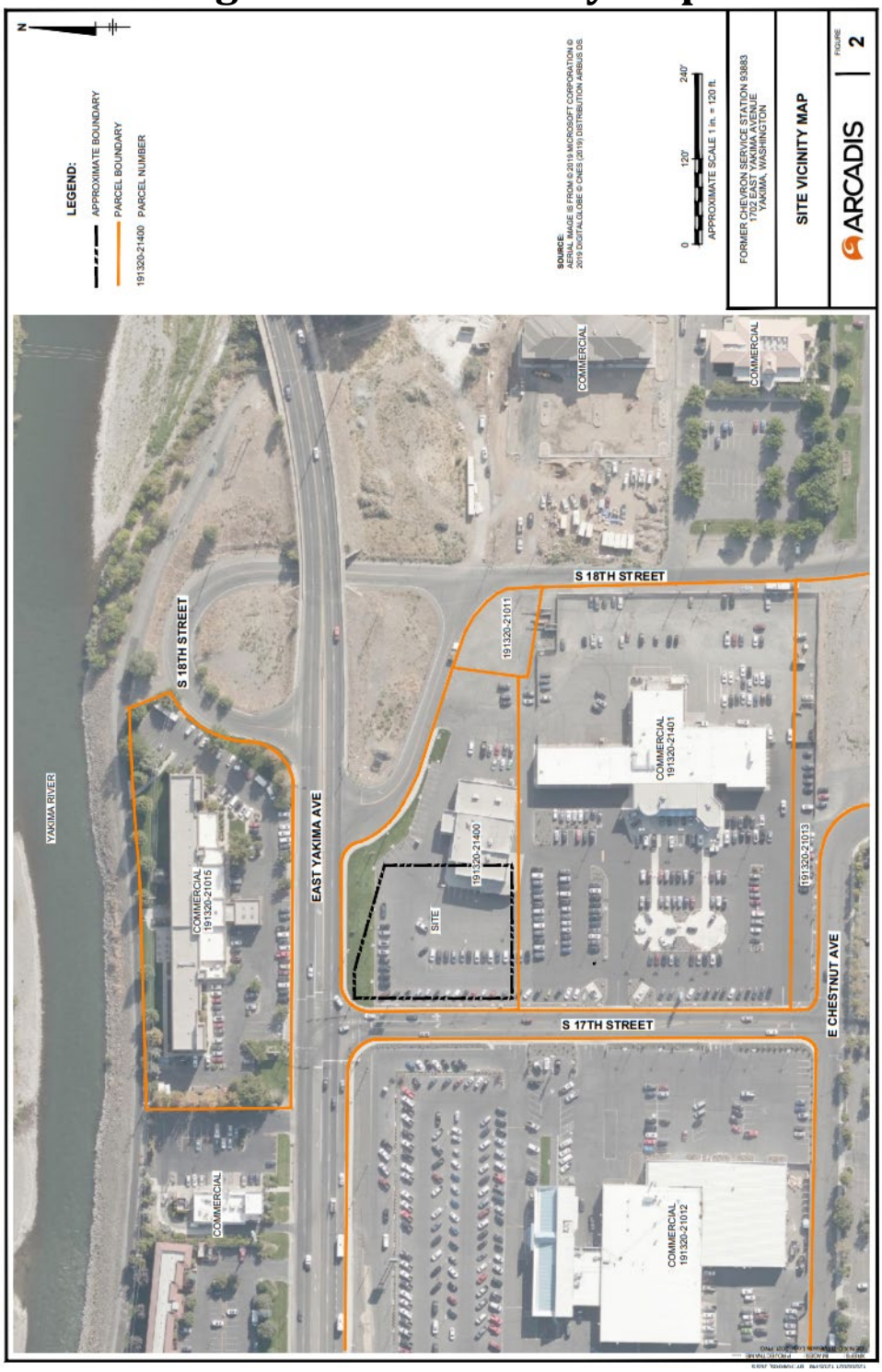
Enclosure A: Figure 1: Site Vicinity Map
Figure 2: Site Plan Map
Figure 3: Historic MTCA Soil Boundary
Figure 4: Historic MTCA Groundwater Boundary
Table 1: Historic Soil Contamination Table
Table 2: Historic Groundwater Contamination Table

cc: Cassandra Garcia, PLIA Deputy Director (by email)
Bob Hall, Property Owner (by email)

# Enclosure A:

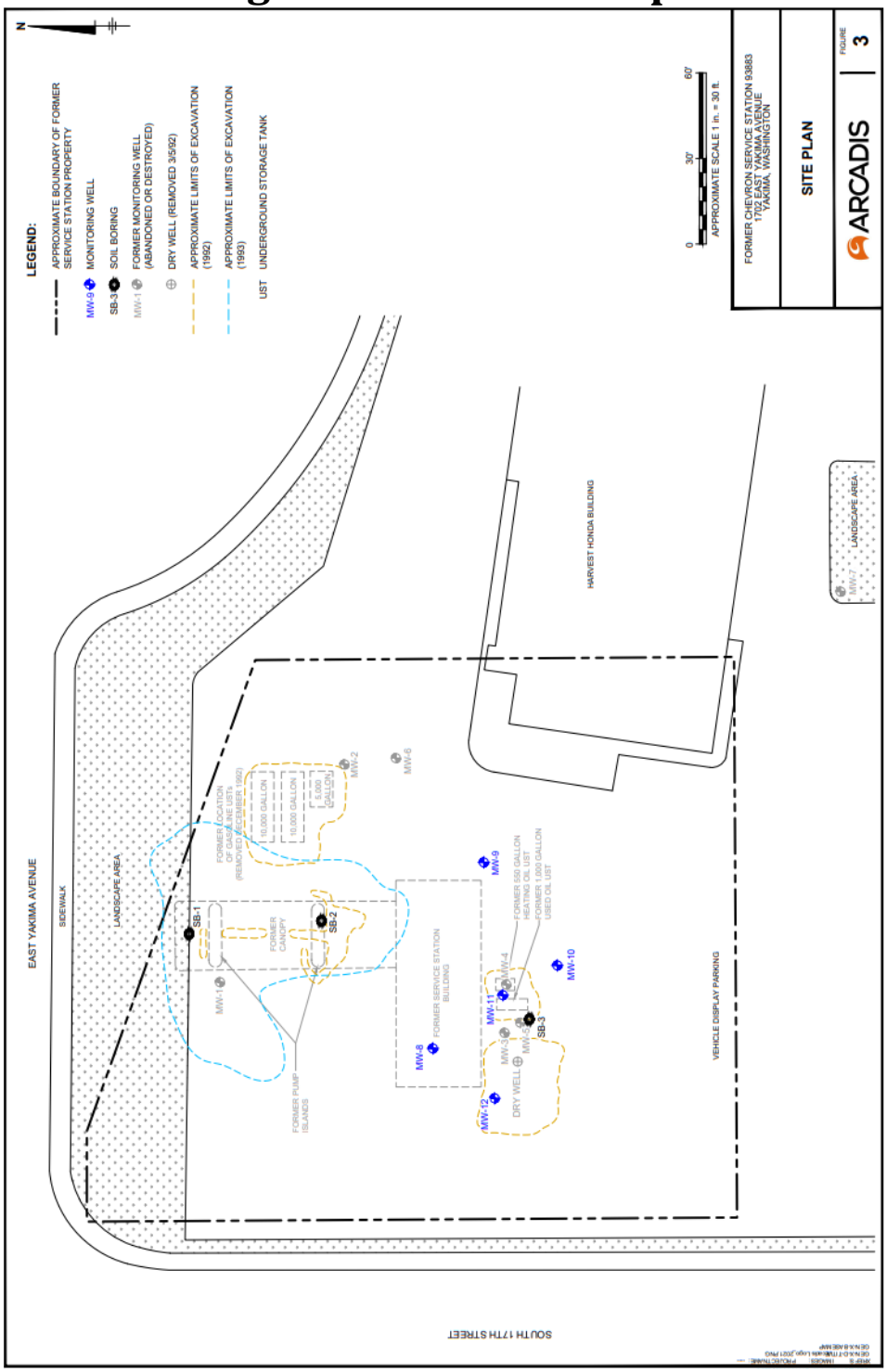
# Alders Chevron (Former Chevron Station 93883)
# TAP Project Number PC020

# Figure 1: Site Vicinity Map



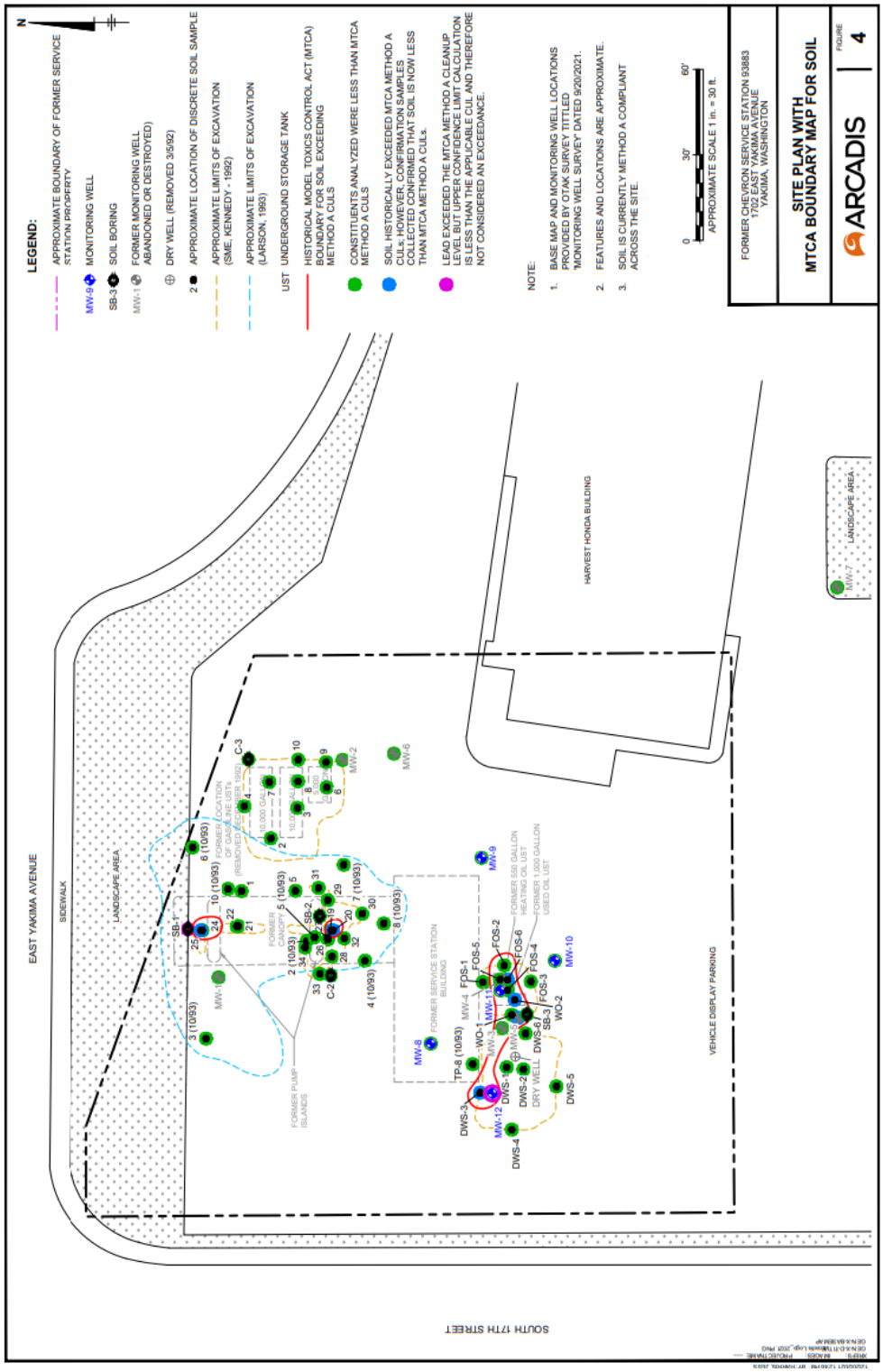

Source: *Second Quarter 2022 Site Status Report and Closure Request,* Arcadis U.S. Inc., June 29, 2022.

# Figure 2: Site Plan Map



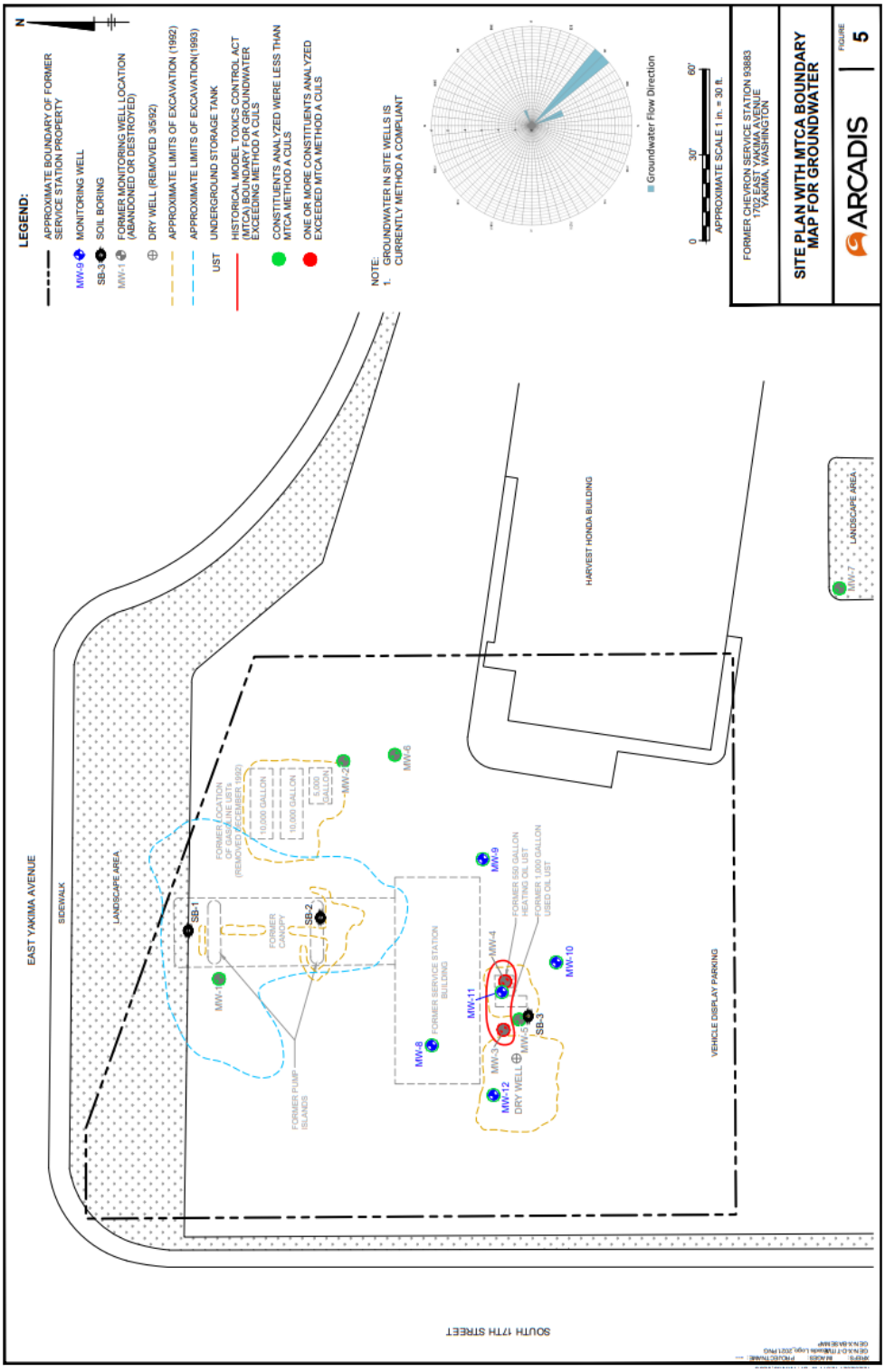

Source: *Second Quarter 2022 Site Status Report and Closure Request,* Arcadis U.S. Inc., June 29, 2022.

# Figure 3: Historic MTCA Soil Boundary




Source: *Second Quarter 2022 Site Status Report and Closure Request,* Arcadis U.S. Inc., June 29, 2022.

# Figure 4: Historic MTCA Groundwater Boundary




Source: *Second Quarter 2022 Site Status Report and Closure Request,* Arcadis U.S. Inc., June 29, 2022.

# Table 1: Historic Soil Contamination Table

| Sample ID | Sample Location | Date | Sample Depth | TPH | GRO | DRO | DRO w/SGC | HRO | HRO w/SGC | Benzene | Toluene | Ethylbenzene | Total Xylenes | MTBE | EDB | EDC | Total Lead | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MTCA Method A Cleanup Levels** | | | | -- | 30/100 | 2,000 | 2,000 | 2,000 | 2,000 | 0.03 | 7 | 6 | 9 | 0.1 | 0.005 | -- | 250 | |
| **Rittenhouse-Zeman & Associates, Inc. (RZA) - Subsurface Petroleum Hydrocarbon Evaluation** | | | | | | | | | | | | | | | | | | |
| C-I, S-2 | -- | 5/1/1989 | 9.5-10 | -- | -- | -- | -- | -- | -- | **<0.05** | <0.05 | <0.05 | <0.05 | -- | -- | -- | -- | COMPLETED AS MW-1 |
| C-2 , S-4 | -- | 5/1/1989 | 19.5-20 | -- | -- | -- | -- | -- | -- | **<0.05** | <0.05 | <0.05 | <0.05 | -- | -- | -- | -- | |
| C-3, S-3 | -- | 5/1/1989 | 14.5-16 | -- | -- | -- | -- | -- | -- | **<0.05** | <0.05 | <0.05 | <0.05 | -- | -- | -- | -- | |
| C-4, S-5 | -- | 5/1/1989 | 24.5-25 | -- | -- | -- | -- | -- | -- | **<0.05** | <0.05 | <0.05 | <0.05 | -- | -- | -- | -- | COMPLETED AS MW-2 |
| C-5, S-1 | -- | 5/1/1989 | 19.5-20 | 28 | -- | -- | -- | -- | -- | **<0.05** | <0.05 | <0.05 | <0.05 | -- | -- | -- | -- | COMPLETED AS MW-3 |
| **Rittenhouse-Zeman & Associates, Inc. (RZA-AGRA) - Waste Oil, Heating Oil, and Dry Well Excavation** | | | | | | | | | | | | | | | | | | |
| FOS-1 | -- | 3/5/1992 | 5 | ND | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | NORTH WALL HEATING OIL TANK |
| FOS-2 | -- | 3/5/1992 | 5 | ND | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | EAST WALL HEATING OIL TANK |
| FOS-3 | -- | 3/5/1992 | 5 | ND | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | SOUTH WALL HEATING OIL TANK |
| FOS-4 | -- | 3/5/1992 | 5 | ND | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | WEST WALL HEATING OIL TANK |
| FOS-5 | -- | 3/5/1992 | 10 | 520 | 48 | 190 | -- | -- | -- | <0.027 | <0.027 | <0.027 | <0.027 | -- | -- | -- | -- | 2 FT. BELOW HEATING OIL TANK |
| FOS-6 | -- | 3/5/1992 | 14 | 3,500 | 340 | 4,800 | -- | -- | -- | <0.027 | 0.031 | 0.068 | 0.26 | -- | -- | -- | -- | 6 FT. BELOW HEATING OIL TANK |
| DWS-1 | -- | 3/5/1992 | 11 | 250 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 3 FT. BELOW BOTTOM OF DRY WELL |
| DWS-2 | -- | 3/5/1992 | 14 | 29 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 6 FT. BELOW BOTTOM OF DRY WELL |
| DWS-3 | -- | 3/5/1992 | 9 | 12,000 | 1,000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | NORTH WALL DRY WELL |
| DWS-4 | -- | 3/5/1992 | 4 | ND | -- | 410 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | WEST WALL DRY WELL |
| DWS-5 | | 3/5/1992 | 4 | ND | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | SOUTH WALL DRY WELL |
| DWS-6 | -- | 3/5/1992 | 4 | ND | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | EAST WALL DRY WELL |
| WO-1 | -- | 3/16/1992 | 4 | 25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | WEST WALL USED OIL TANK |
| WO-2 | -- | 3/16/1992 | 9 | 1,300 | 73 | 1,200 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.12 | 2 FT. BELOW USED OIL TANK |
| **Chen-Northern, Inc. - Limited Environmental Assessment** | | | | | | | | | | | | | | | | | | |
| 1 | 28N, 4E | 12/17/1992 | 4 | -- | <6 | -- | -- | -- | -- | <0.025 | <0.025 | <0.025 | <0.025 | -- | -- | -- | -- | BASE OF LINES |
| 2 | Tank 1 | 12/17/1992 | 12 | -- | <5 | -- | -- | -- | -- | <0.025 | <0.025 | <0.025 | <0.025 | -- | -- | -- | -- | WEST BASE |
| 3 | Tank 2 | 12/17/1992 | 12 | -- | <5 | -- | -- | -- | -- | <0.027 | <0.027 | <0.027 | <0.027 | -- | -- | -- | -- | CENTER BASE |
| 4 | Tank 2 | 12/18/1992 | 7 | -- | <6 | -- | -- | -- | -- | <0.028 | <0.028 | 0.042 | <0.028 | -- | -- | -- | -- | NORTH SIDEWALL |
| 5 | 7N, 6E | 12/17/1992 | 4 | -- | <5 | -- | -- | -- | -- | <0.027 | <0.027 | 0.17 | 0.10 | -- | -- | -- | -- | BASE OF LINES |
| 6 | Tank 3 | 12/17/1992 | 12 | -- | <5 | -- | -- | -- | -- | <0.027 | <0.027 | <0.027 | <0.027 | -- | -- | -- | -- | CENTER BASE |
| 7 | Tank 1 | 12/17/1992 | 13 | -- | <5 | -- | -- | -- | -- | <0.027 | <0.027 | <0.027 | <0.027 | -- | -- | -- | -- | EAST BASE |
| 8 | Tank 2 | 12/17/1992 | 12 | -- | <5 | -- | -- | -- | -- | <0.027 | <0.027 | <0.027 | <0.027 | -- | -- | -- | -- | EAST BASE |
| 9 | Tank 3 | 12/17/1992 | 6 | -- | <6 | -- | -- | -- | -- | <0.030 | <0.030 | 0.076 | <0.030 | -- | -- | -- | -- | EAST SIDEWALL |
| 10 | Tank 2 | 12/17/1992 | 5 | -- | <5 | -- | -- | -- | -- | <0.026 | <0.026 | 0.046 | <0.026 | -- | -- | -- | -- | EAST SIDEWALL |
| 19 | 6S, 6W | 12/18/1992 | 2 | 96 | 88 | 220 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 20 | 6S, 6W | 12/29/1992 | 4 | -- | 4,300 | -- | -- | -- | -- | 9.5 | 44 | 89 | 300 | -- | -- | -- | -- | ADJACENT TO SOUTH PUMP ISLAND |
| 21 | 23N, 4W | 12/29/1992 | 2 | -- | 6 | -- | -- | -- | -- | <0.027 | <0.027 | <0.041 | 0.019 | -- | -- | -- | -- | |
| 22 | 23N, 4W | 12/29/1992 | 4 | 1,100 | -- | 700 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 24 | 36N, 6W | 1/12/1993 | 4.5 | 100 | 51 | -- | -- | -- | -- | <0.026 | 0.066 | 0.049 | 0.96 | -- | -- | -- | -- | |
| 25 | 36N, 6W | 1/12/1993 | 9 | 100 | 83 | -- | -- | -- | -- | 0.038 | 0.032 | 0.094 | 0.36 | -- | -- | -- | -- | |
| 26 | 4S, 8W | 1/12/1993 | 5.5 | 48 | 15 | -- | -- | -- | -- | <0.027 | <0.027 | 0.028 | 0.24 | -- | -- | -- | -- | |
| 27 | 4S, 8W | 1/12/1993 | 9 | <21 | <5 | -- | -- | -- | -- | <0.026 | <0.026 | <0.026 | 0.035 | -- | -- | -- | -- | |
| 28 | 14W, 6S | 1/12/1993 | 4.5 | -- | <6 | -- | -- | -- | -- | <0.028 | <0.028 | <0.028 | <0.028 | -- | -- | -- | -- | |
| 29 | 5S, 9E | 1/12/1993 | 4.5 | -- | <5 | -- | -- | -- | -- | <0.027 | <0.027 | <0.027 | <0.027 | -- | -- | -- | -- | |
| 30 | 18S, 2W | 1/12/1993 | 4.5 | -- | <5 | -- | -- | -- | -- | <0.027 | <0.027 | <0.027 | <0.027 | -- | -- | -- | -- | |
| 31 | 0S, 6E | 1/12/1993 | 4.5 | -- | <6 | -- | -- | -- | -- | <0.028 | <0.028 | <0.028 | <0.028 | -- | -- | -- | -- | |
| 32 | 12S, 8W | 1/12/1993 | 5 | -- | <6 | -- | -- | -- | -- | <0.028 | <0.028 | <0.028 | 0.052 | -- | -- | -- | -- | |
| 33 | 18W, 3S | 1/12/1993 | 6 | -- | <6 | -- | -- | -- | -- | <0.028 | <0.028 | <0.028 | <0.028 | -- | -- | -- | -- | |
| 34 | 9W, 4N | 1/12/1993 | 4 | -- | <6 | -- | -- | -- | -- | <0.028 | <0.028 | <0.028 | <0.028 | -- | -- | -- | -- | |
| **Chen-Northern, Inc. - Limited Environmental Assessment** | | | | | | | | | | | | | | | | | | |
| TP-8 | -- | 10/5-6/93 | | <21 | -- | <11 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2 (10/93) | -- | 10/5-6/93 | | | <5 | <11 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3 (10/93) | -- | 10/5-6/93 | -- | -- | -- | -- | -- | -- | -- | **<0.032** | <0.032 | <0.032 | <0.032 | -- | -- | -- | -- | |
| 4 (10/93) | -- | 10/5-6/93 | -- | 84 | -- | -- | 59 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 5 (10/93) | -- | 10/5-6/93 | -- | -- | -- | -- | -- | -- | -- | <0.028 | <0.028 | <0.028 | <0.028 | -- | -- | -- | -- | |
| 6 (10/93) | -- | 10/5-6/93 | -- | -- | -- | -- | -- | -- | -- | <0.026 | <0.026 | <0.026 | <0.026 | -- | -- | -- | -- | |
| 7 (10/93) | -- | 10/5-6/93 | -- | -- | -- | -- | -- | -- | -- | <0.026 | <0.026 | <0.026 | <0.026 | -- | -- | -- | -- | |
| 8 (10/93) | -- | 10/5-6/93 | -- | -- | -- | -- | -- | -- | -- | <0.029 | <0.029 | <0.029 | <0.029 | -- | -- | -- | -- | |
| 10 (10/93) | -- | 10/5-6/93 | -- | -- | <5 | <10 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| **SAIC Energy, Environment & Infrastructure, LLC - Supplemental Site Assessment** | | | | | | | | | | | | | | | | | | |
| MW-8-10 | -- | 8/29/2013 | 10 | -- | 480 | 2,100 | 2,000 | 1,600 | 1,100 | <0.022 | <0.044 | <0.044 | 0.11 | <0.022 | **<0.044** | <0.044 | 123 | |
| MW-8-13 | -- | 8/29/2013 | 13 | -- | 11 | 56 | 46 | 130 | 92 | 0.002 | <0.001 | <0.001 | <0.001 | <0.0005 | <0.001 | <0.001 | 661 | |
| MW-8-19 | -- | 8/29/2013 | 19 | -- | <1.3 | <3.3 | <3.3 | <11 | <11 | <0.0005 | <0.0009 | <0.0009 | <0.0009 | <0.0005 | <0.0009 | <0.0009 | 3.85 | |
| MW-6-8 | -- | 8/29/2013 | 8 | -- | 50 | 410 | 320 | 400 | 250 | <0.029 | <0.059 | <0.059 | <0.059 | <0.029 | **<0.059** | <0.059 | 39.4 | |
| MW-6-8 | -- | 8/29/2013 | 8 | -- | 17 | 240 | 200 | 270 | 230 | 0.003 | 0.002 | <0.001 | 0.001 | <0.0005 | <0.001 | <0.001 | 61.3 | Duplicate sample |
| MW-6-13 | -- | 8/29/2013 | 13 | -- | <1 | <3.4 | <3.4 | <11 | <11 | <0.0005 | <0.001 | <0.001 | <0.001 | <0.0005 | <0.001 | <0.001 | 1.46 | |
| MW-6-19 | -- | 8/29/2013 | 19 | -- | <1 | <3.3 | <3.3 | <11 | <11 | <0.0005 | <0.001 | <0.001 | <0.001 | <0.0005 | <0.001 | <0.001 | 3.11 | |
| MW-7-11 | -- | 8/29/2013 | 11 | -- | <1 | <3.2 | <3.2 | <11 | <11 | 0.0008 | <0.001 | <0.001 | <0.001 | <0.0005 | <0.001 | <0.001 | 6.4 | |
| MW-7-19 | -- | 8/29/2013 | 19 | -- | <1.2 | <3.3 | <3.3 | <11 | <11 | <0.0005 | <0.0009 | <0.0009 | <0.0009 | <0.0005 | <0.0009 | <0.0009 | 4.79 | |
| **Arcadis - Subsurface Investigation** | | | | | | | | | | | | | | | | | | |
| SB-1-2.5_210913 | SB-1 | 9/13/2021 | 2.5 | -- | <2.85 | 2.59 J | -- | 19.6 J | -- | 0.00118 | 0.00354 J | 0.00118 J | 0.00709 J | <0.00114 | <0.00285 | <0.00285 | 482 | Lead calculated below UCL |
| SB-1-9_210913 | SB-1 | 9/13/2021 | 9 | -- | <2.70 | 2.47 J | -- | 8.41 J | -- | 0.000980 J | 0.00459 J | <0.00270 | 0.00510 J | <0.00108 | <0.00270 | <0.00270 | 6.56 | |
| SB-1-12_210913 | SB-1 | 9/13/2021 | 12 | -- | <2.90 | <4.29 | -- | 3.89 J | -- | 0.000886 J | 0.00510 J | 0.000935 J | 0.00781 | <0.00116 | <0.00290 | <0.00290 | 3.46 | |
| SB-2-2.5_210914 | SB-2 | 9/14/2021 | 2.5 | -- | <2.76 | 6.30 | -- | 45.6 | -- | <0.00111 | 0.00207 J | <0.00276 | 0.00440 J | <0.00111 | <0.00276 | <0.00276 | 31.6 | |
| SB-2-5_210914 | SB-2 | 9/14/2021 | 5 | -- | <2.66 | 1.44 J | -- | 7.60 J | -- | <0.00106 | 0.00141 J | <0.00266 | 0.00253 J | <0.00106 | <0.00266 | <0.00266 | 15.2 | |
| SB-3-10_210915 | SB-3 | 9/15/2021 | 10 | -- | <2.99 | 2.83 J | -- | 6.05 J | -- | <0.00120 | <0.00598 | <0.00299 | 0.00108 J | <0.00120 | <0.00299 | <0.00299 | 2.90 | |
| SB-3-12_210915 | SB-3 | 9/15/2021 | 12 | -- | <4.40 | 7.13 | -- | 54.7 | -- | <0.00176 | <0.00879 | <0.00440 | <0.0114 | <0.00176 | <0.00440 | <0.00440 | 5.4 | |
| SB-3-12_210916 | SB-3 | 9/15/2021 | 12 | -- | <4.01 | 3.92 J | -- | 22.6 | -- | <0.00160 | <0.00802 | <0.00401 | <0.0104 | <0.00160 | <0.00401 | <0.00401 | 3.29 | Duplicate sample |
| MW-8-11_210913 | MW-8 | 9/13/2021 | 11 | -- | <4.26 | 3.73 J | -- | 19.7 | -- | <0.00170 | <0.00851 | <0.00426 | <0.0111 | <0.00170 | <0.00426 | <0.00426 | 3.98 | |
| MW-8-18_210913 | MW-8 | 9/13/2021 | 18 | -- | <3.26 | <4.48 | -- | 3.88 J | -- | <0.00131 | <0.00653 | <0.00326 | <0.00849 | <0.00131 | <0.00326 | <0.00326 | 2.30 | |
| MW-9-10_210914 | MW-9 | 9/14/2021 | 10 | -- | <3.54 | <4.65 | -- | <11.6 | -- | <0.00141 | <0.00707 | <0.00354 | 0.00245 J | <0.00141 | <0.00354 | <0.00354 | 2.08 | |
| MW-9-20_210914 | MW-9 | 9/14/2021 | 20 | -- | <3.08 | <4.37 | -- | <10.9 | -- | <0.00123 | <0.00617 | <0.00308 | 0.00114 J | <0.00123 | <0.00308 | <0.00308 | 3.46 | |
| MW-10-12_210914 | MW-10 | 9/14/2021 | 12 | -- | <3.28 | <4.54 | -- | <11.3 | -- | <0.00131 | <0.00656 | <0.00328 | 0.00207 J | <0.00131 | <0.00328 | <0.00328 | 3.60 | |
| MW-10-18_210914 | MW-10 | 9/14/2021 | 18 | -- | <3.02 | <4.36 | -- | <10.9 | -- | <0.00121 | <0.00604 | <0.00302 | <0.00785 | <0.00121 | <0.00302 | <0.00302 | 2.33 | |
| MW-11-14_210915 | MW-11 | 9/15/2021 | 14 | -- | <2.86 | <4.26 | -- | <10.6 | -- | <0.00115 | <0.00573 | <0.00286 | <0.00745 | <0.00115 | <0.00286 | <0.00286 | 2.32 | |
| MW-11-20_210915 | MW-11 | 9/15/2021 | 20 | -- | <3.07 | <4.39 | -- | <11.0 | -- | <0.00123 | <0.00615 | <0.00307 | <0.00799 | <0.00123 | <0.00307 | <0.00307 | 2.64 | |
| MW-12-2.5_210913 | MW-12 | 9/13/2021 | 2.5 | -- | <3.76 | 9.93 | -- | 52.2 | -- | <0.00150 | 0.00367 J | 0.00140 J | 0.0126 | <0.00150 | <0.00376 | 0.00619 | 455 | Lead calculated below UCL |
| MW-12-5_210914 | MW-12 | 9/14/2021 | 5 | -- | 5.87 | 254 | -- | 242 | -- | 0.000726 J | 0.00420 J | <0.00308 | 0.00845 | <0.00123 | <0.00308 | 0.00186 J | 200 | |
| MW-12-11_210914 | MW-12 | 9/14/2021 | 11 | -- | <3.93 | 10.7 | -- | 27.8 | -- | 0.000741 J | <0.00785 | <0.00393 | 0.00196 J | <0.00157 | <0.00393 | <0.00393 | 5.90 | |
| MW-12-20_210914 | MW-12 | 9/14/2021 | 20 | -- | <3.20 | <4.46 | -- | <11.1 | -- | <0.00128 | <0.00640 | <0.00320 | <0.00832 | <0.00128 | <0.00320 | <0.00320 | 5.22 | |

**Notes:**

1.) Analytical results are presented in milligrams per kilogram (mg/kg)

2.) GRO MTCA Method A CUL with benzene present is 30 mg/kg and without is 100 mg/kg

3.) **BOLD and highlighted** values are greater than their respective MTCA Method A cleanup level

4.) Bolded and blue shading denotes soil sample location was confirmed below CULs with confirmation sampling

5.) **BOLD** values are non-detect below the laboratory method detection limit (MDL), but the MDL is greater than the MTCA Method A cleanup level

6.) An upper confidence level (UCL) of 91.753 milligrams per kilogram was calculated for lead. Soil analytical results for lead at borings SB-1-2.5 and MW-12-2.5 are not considered an exceedance because the UCL is less than the MTCA Method A CUL

7.) **BOLD** values are non-detect below the laboratory method detection limit (MDL), but the MDL is greater than the MTCA Method A cleanup level

8.) Sample Depth measured in feet below ground surface

**Acronyms & Abbreviations:**

-- = Not applicable, not available, or not analyzed

< = Not detected at or above the laboratory Method Detection Limit (MDL)

CULs - Cleanup Levels

MTCA = Model Toxic Control Act

SGC = Silica gel cleanup

UCL = upper confidence level

**Laboratory Qualifiers**

J = The identification of the analyte is acceptable; the reported value is an estimate.

**Current Analytical Methods:**

Samples analyzed by USEPA Method 418.1

TPH = Total Petroleum hydrocarbons

Samples analyzed by Method NWTPH-Gx

GRO = Gasoline Range Organic Hydrocarbons

Samples analyzed by NWTPH-Dx

DRO = Diesel Range Organic Hydrocarbons

HO = Heavy Oil Range Organic Hydrocarbons

Samples analyzed by USEPA Method 8260, 8260D

BTEX = benzene, toluene, ethylbenzene and total xylenes

MTBE = Methyl tertiary butyl ether

EDC = 1,2-Dichloroethane

EDB = ethylene dibromide

Samples analyzed by USEPA 6000 series

Total lead

| Sample ID | Date | Sample Depth | Naphthalene | 1-Methylnaphthalene | 2-Methylnaphthalene | Total Naphthalenes | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Chrysene | Dibenz(a,h)anthracene | Indeno(1,2,3-Cd)pyrene | Total cPAHs | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MTCA Method A CULs | | | 5 | -- | -- | 5 | -- | 0.1 | -- | -- | -- | -- | -- | 0.1 | |
| SAIC Energy, Environment & Infrastructure, LLC - Supplemental Site Assessment | | | | | | | | | | | | | | | |
| MW-5-10 | 8/29/2013 | 10 | 0.51 | 1.2 | 2 | 3.71 | 0.021 | 0.023 | 0.042 | 0.0088 | 0.093 | 0.01 | 0.013 | 0.042 | |
| MW-5-13 | 8/29/2013 | 13 | 0.0094 | 0.015 | 0.022 | 0.0464 | 0.0038 | 0.0049 | 0.0085 | 0.0033 | 0.0088 | 0.0011 | 0.0029 | 0.0088 | |
| MW-5-19 | 8/29/2013 | 19 | <0.00073 | <0.00073 | <0.00073 | <0.00073 | <0.00073 | <0.00073 | <0.00073 | <0.00073 | <0.00037 | <0.00073 | <0.00073 | <0.00073 | |
| MW-6-8 | 8/29/2013 | 8 | 0.043 | 0.093 | 0.15 | 0.286 | <0.0079 | <0.0079 | 0.016 | <0.0079 | 0.019 | <0.0079 | <0.0079 | 0.019 | |
| MW-6-8 | 8/29/2013 | 8 | 0.024 | 0.055 | 0.089 | 0.168 | <0.0067 | 0.0078 | 0.015 | <0.0067 | 0.018 | <0.0067 | <0.0067 | 0.018 | Duplicate sample |
| MW-6-13 | 8/29/2013 | 13 | <0.00076 | <0.00076 | <0.00076 | <0.00076 | <0.00076 | <0.00076 | <0.00076 | <0.00076 | <0.00038 | <0.00076 | <0.00076 | <0.00076 | |
| MW-6-19 | 8/29/2013 | 19 | <0.00072 | <0.00072 | <0.00072 | <0.00072 | <0.00072 | <0.00072 | <0.00072 | <0.00072 | <0.00036 | <0.00072 | <0.00072 | <0.00072 | |
| MW-7-11 | 8/29/2013 | 11 | 0.00096 | 0.0008 | 0.0013 | 0.00306 | <0.00071 | <0.00071 | 0.00097 | <0.00071 | 0.00095 | <0.00071 | <0.00071 | 0.00097 | |
| MW-7-19 | 8/29/2013 | 19 | 0.0013 | <0.00071 | 0.0014 | 0.0027 | <0.00071 | <0.00071 | <0.00071 | <0.00071 | <0.00036 | <0.00071 | <0.00071 | <0.00071 | |

| Sample ID | Date | Sample Depth | Methylene Chloride | TCE | PCE | PCB-1016 | PCB-1221 | PCB -1232 | PCB-1242 | PCB -1248 | PCB -1254 | PCB -1260 | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MTCA Method A CULs | | | 0.02 | 0.03 | 0.05 | -- | -- | -- | -- | -- | -- | -- | |
| SAIC Energy, Environment & Infrastructure, LLC - Supplemental Site Assessment | | | | | | | | | | | | | |
| MW-5-10 | 8/29/2013 | 10 | <0.087 | <0.044 | <0.044 | <0.0037 | <0.0047 | <0.0082 | <0.0034 | <0.0034 | <0.0034 | <0.0050 | |
| MW-5-13 | 8/29/2013 | 13 | <0.002 | <0.001 | <0.001 | <0.0038 | <0.0049 | <0.0085 | <0.0035 | <0.0035 | <0.0035 | <0.0052 | |
| MW-5-19 | 8/29/2013 | 19 | <0.002 | <0.0009 | <0.0009 | <0.0039 | <0.0050 | <0.0087 | <0.0036 | <0.0036 | <0.0036 | <0.0053 | |
| MW-6-8 | 8/29/2013 | 8 | <0.12 | <0.059 | <0.059 | <0.0043 | <0.0055 | <0.0095 | <0.0039 | <0.0039 | <0.0039 | <0.0058 | |
| MW-6-8 | 8/29/2013 | 8 | <0.002 | <0.001 | <0.001 | <0.0036 | <0.0046 | <0.0080 | <0.0033 | <0.0033 | <0.0033 | <0.0049 | Duplicate sample |
| MW-6-13 | 8/29/2013 | 13 | <0.002 | <0.001 | <0.001 | <0.0041 | <0.0052 | <0.0090 | <0.0037 | <0.0037 | <0.0037 | <0.0055 | |
| MW-6-19 | 8/29/2013 | 19 | <0.002 | <0.001 | <0.001 | <0.0039 | <0.0049 | <0.0086 | <0.0035 | <0.0035 | <0.0035 | <0.0053 | |
| MW-7-11 | 8/29/2013 | 11 | <0.002 | <0.001 | <0.001 | <0.0038 | <0.0049 | <0.0085 | <0.0035 | <0.0035 | <0.0035 | <0.0052 | |
| MW-7-19 | 8/29/2013 | 19 | <0.002 | <0.009 | <0.0009 | <0.0039 | <0.0050 | <0.0086 | <0.0036 | <0.0036 | <0.0036 | <0.0053 | |

Source: *Second Quarter 2022 Site Status Report and Closure Request,* Arcadis U.S. Inc., June 29, 2022.

# Table 2: Historic Groundwater Contamination Table

| Well ID | Date | TOC | DTW | LNAPL | GWE | TPH | GRO | DRO | DRO w/Silica Gel | HRO | HRO w/Silica Gel | Benzene | Toluene | Ethylbenzene | Total Xylenes | MTBE | EDB | EDC | Total Lead | Dissolved Lead | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MTCA Method A CULs | | | | | | -- | 800/1,000 | 500 | 500 | 500 | 500 | 5 | 1,000 | 700 | 1,000 | 20 | 0.01 | 5 | 15 | 15 | |
| MW-1 | 4/27/1989 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <1.0 | <1.0 | <1.0 | <1.0 | -- | -- | -- | -- | | |
| MW-1 | 5/14/1992 | 95.53 | 13.81 | 0.00 | 81.72 | <1000 | <1000 | <1000 | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <0.2 | | |
| MW-1 | 6/19/1992 | 95.53 | 13.46 | 0.00 | 82.07 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-1 | 6/26/1992 | 95.53 | 13.54 | 0.00 | 81.99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-1 | 7/28/1992 | 95.53 | 13.57 | 0.00 | 81.96 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-1 | 9/1/1992 | 95.53 | 13.66 | 0.00 | 81.87 | <1000 | <1000 | <1000 | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <3.0 | <3.0 | |
| MW-1 | 11/23/1992 | 95.53 | 14.89 | 0.00 | 80.64 | <10,000 | <1000 | <5000 | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <3.0 | | |
| MW-1 | 3/24/1993 | 95.53 | 14.55 | 0.00 | 80.98 | -- | <100 | -- | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | | |
| MW-1 | 6/25/1993 | 95.53 | 13.85 | 0.00 | 81.68 | -- | <100 | -- | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | | |
| MW-1 | 9/3/1993 | 95.53 | 13.87 | 0.00 | 81.66 | -- | <100 | -- | -- | -- | -- | 4.7 | 11 | 2 | 12 | -- | -- | -- | -- | | |
| MW-1 | | | | | | | | | | | | Well Destroyed | | | | | | | | | |
| MW-2 | 4/27/1989 | -- | -- | -- | -- | -- | <1000 | -- | -- | -- | -- | <1.0 | <1.0 | <1.0 | <1.0 | -- | -- | -- | -- | | |
| MW-2 | 5/14/1992 | 96.06 | 14.51 | 0.00 | 81.55 | <1000 | <1000 | <1000 | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <0.2 | <3.0 | |
| MW-2 | 6/19/1992 | 96.06 | 14.17 | 0.00 | 81.89 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-2 | 6/26/1992 | 96.06 | 14.24 | 0.00 | 81.82 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-2 | 7/28/1992 | 96.06 | 14.28 | 0.00 | 81.78 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-2 | 9/1/1992 | 96.06 | 14.38 | 0.00 | 81.68 | <1000 | <1000 | <1000 | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <3.0 | <3.0 | |
| MW-2 | 11/23/1992 | 96.06 | 15.56 | 0.00 | 80.50 | -- | <1000 | <5000 | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <3.0 | | |
| MW-2 | 3/24/1993 | 96.06 | 15.22 | 0.00 | 80.84 | -- | <100 | -- | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | | |
| MW-2 | 6/25/1993 | 96.06 | 14.55 | 0.00 | 81.51 | -- | <100 | -- | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | -- | | |
| MW-2 | 9/3/1993 | 96.06 | 14.58 | 0.00 | 81.48 | -- | <100 | -- | -- | -- | -- | <0.5 | 1 | <0.5 | 1 | -- | -- | -- | -- | | |
| MW-2 | | | | | | | | | | | | Well Destroyed | | | | | | | | | |
| MW-3 | 4/27/1989 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | <1.0 | <1.0 | <1.0 | <1.0 | -- | -- | -- | -- | | |
| MW-3 | 3/5/1992 | -- | -- | -- | -- | 5,000 | **8,000** | **100,000** | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | 3.7 | | |
| MW-3 | 5/14/1992 | 95.44 | 13.82 | 0.00 | 81.62 | 92,000 | **2,000** | **12,000** | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | **<0.5** | <0.2 | <0.2 | | |
| MW-3 | 6/19/1992 | 95.44 | 13.45 | (sheen) | 81.99 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-3 | 6/26/1992 | 95.44 | 13.52 | (sheen) | 81.92 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-3 | 7/13/1992 | 95.44 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-3 | | | | | | | | | | | | Well Destroyed | | | | | | | | | |
| MW-4 | 5/14/1992 | 94.92 | 13.34 | 0.00 | 81.58 | 12,000 | **4,000** | **56,000** | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | **<0.5** | <0.2 | <0.2 | | |
| MW-4 | 6/19/1992 | 94.92 | 12.94 | (sheen) | 81.98 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-4 | 6/26/1992 | 94.92 | 13.02 | (sheen) | 81.90 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-4 | 7/28/1992 | 94.92 | 13.06 | 0.00 | 81.86 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-4 | 9/1/1992 | 94.92 | 13.16 | 0.00 | 81.76 | 4,400 | <1000 | **<1000** | -- | -- | -- | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- | -- | <3.0 | <3.0 | |
| MW-4 | 11/23/1992 | 94.92 | DRY | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | Well Dry |
| MW-4 | 3/24/1993 | 94.92 | DRY | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | Well Dry |
| MW-4 | 6/25/1993 | 94.92 | 13.35 | 0.00 | 81.57 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | No Recovery |
| MW-4 | 9/3/1993 | 94.92 | DRY | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | | |
| MW-4 | | | | | | | | | | | | Well Destroyed | | | | | | | | | |
| MW-5 | 9/21/2013 | 1,030.28 | 10.81 | 0.00 | 1,019.47 | -- | <50 | <29 | <29 | <67 | <67 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.0094 | <0.5 | <4.7 | -- | |
| MW-5 | 12/23/2013 | 1,030.28 | 11.59 | 0.00 | 1,018.69 | -- | <50 | <29 | <29 | <67 | <67 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.0097 | <0.5 | <4.7 | -- | |
| MW-5 | 3/26/2014 | 1,030.28 | 10.39 | 0.00 | 1,019.89 | -- | <50 | <29 | <29 | <67 | <67 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.0096 | <0.5 | 5.5 | -- | |
| MW-5 | 6/27/2014 | 1,030.28 | 10.64 | 0.00 | 1,019.64 | -- | <50 | <29 | <29 | <68 | <68 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.0097 | <0.5 | 10.6 | -- | |
| MW-5 | | | | | | | | | | | | Well Abandoned via Chip Inplace | | | | | | | | | |
| MW-6 | 9/21/2013 | 1,030.64 | 11.36 | 0.00 | 1,019.28 | -- | <50 | <28 | <28 | <66 | <66 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.0096 | <0.5 | <4.7 | -- | |
| MW-6 | 12/23/2013 | 1,030.64 | 12.07 | 0.00 | 1,018.57 | -- | <50 | <29 | <29 | <68 | <68 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.0097 | <0.5 | <4.7 | -- | |
| MW-6 | 3/26/2014 | 1,030.64 | 10.94 | 0.00 | 1,019.70 | -- | <50 | <29 | <29 | <67 | <67 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.0095 | <0.5 | <4.7 | -- | |
| MW-6 | 6/27/2014 | 1,030.64 | 11.17 | 0.00 | 1,019.47 | -- | <50 | <29 | <29 | <67 | <67 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.0097 | <0.5 | <4.7 | -- | |
| MW-6 | | | | | | | | | | | | Well Abandoned via Chip Inplace | | | | | | | | | |
| MW-7 | 9/21/2013 | 1,029.01 | 10.22 | 0.00 | 1,018.79 | -- | <50 | <28 | <28 | <66 | <66 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.0095 | <0.5 | <4.7 | -- | |
| MW-7 | 12/23/2013 | 1,029.01 | 11.07 | 0.00 | 1,017.94 | -- | <50 | <29 | <29 | <68 | <68 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.0097 | <0.5 | <4.7 | -- | |
| MW-7 | 3/26/2014 | 1,029.01 | 9.72 | 0.00 | 1,019.29 | -- | <50 | <29 | <29 | <67 | <67 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.0096 | <0.5 | <4.7 | -- | |
| MW-7 | 6/27/2014 | 1,029.01 | 9.94 | 0.00 | 1,019.07 | -- | <50 | <29 | <29 | <67 | <67 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.0097 | <0.5 | <4.7 | -- | |
| MW-7 | | | | | | | | | | | | Well Abandoned via Chip Inplace | | | | | | | | | |
| MW-8 | 9/20/2021 | 1,033.97 | 11.87 | 0.00 | 1,022.10 | -- | <100 | 77.3 J | -- | 105 J | -- | 0.100 J | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | |
| MW-8 | 9/20/2021 | 1,033.97 | 11.87 | 0.00 | 1,022.10 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | Duplicate sample |
| MW-8 | 11/10/2021 | 1,033.97 | 12.55 | 0.00 | 1,021.42 | -- | 49.9 B J | <200 | -- | <250 | -- | 0.179 J | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | |
| MW-8 | 1/17/2022 | 1,033.97 | 12.32 | 0.00 | 1,021.65 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | |
| MW-8 | 04/06/2022 | 1,033.97 | 11.25 | 0.00 | 1,022.72 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | |
| MW-9 | 9/20/2021 | 1,033.08 | 11.98 | 0.00 | 1,021.10 | -- | <100 | 103 J | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | |
| MW-9 | 11/10/2021 | 1,033.08 | 12.33 | 0.00 | 1,020.75 | -- | 43.6 B J | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0204** | <1.00 | 3.52 J | -- | |
| MW-9 | 11/10/2021 | 1,033.08 | 12.33 | 0.00 | 1,020.75 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0204** | <1.00 | <6.00 | -- | Duplicate sample |
| MW-9 | 1/17/2022 | 1,033.08 | 12.01 | 0.00 | 1,021.07 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | |
| MW-9 | 1/17/2022 | 1033.076 | 12.01 | 0 | 1021.066 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | Duplicate sample |
| MW-9 | 04/06/2022 | 1,033.08 | 10.45 | 0.00 | 1,022.63 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0202** | <1.00 | <6.00 | -- | |
| MW-9 | 04/06/2022 | 1033.076 | 10.45 | 0 | 1022.626 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0202** | <1.00 | <6.00 | -- | Duplicate sample |
| MW-10 | 9/20/2021 | 1,032.68 | 10.82 | 0.00 | 1,021.86 | -- | <100 | <200 | -- | 162 J | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | |
| MW-10 | 11/10/2021 | 1,032.68 | 11.35 | 0.00 | 1,021.33 | -- | 44.4 B J | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | |
| MW-10 | 1/17/2022 | 1,032.68 | 11.98 | 0.00 | 1,020.70 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | |
| MW-10 | 04/06/2022 | 1,032.68 | 10.17 | 0.00 | 1,022.51 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0202** | <1.00 | <6.00 | -- | |
| MW-11 | 9/20/2021 | 1,033.43 | 11.33 | 0.00 | 1,022.10 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | |
| MW-11 | 11/10/2021 | 1,033.43 | 12.00 | 0.00 | 1,021.43 | -- | 45.9 B J | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0202** | <1.00 | <6.00 | -- | |
| MW-11 | 1/17/2022 | 1,033.43 | 11.88 | 0.00 | 1,021.55 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | |
| MW-11 | 04/06/2022 | 1,033.43 | 10.73 | 0.00 | 1,022.70 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | <1.00 | <6.00 | -- | |
| MW-12 | 9/20/2021 | 1,033.83 | 11.81 | 0.00 | 1,022.02 | -- | <100 | 83.0 J | -- | 134 J | -- | 0.120 J | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0200** | 0.225 J | <6.00 | -- | |
| MW-12 | 11/10/2021 | 1,033.83 | 12.42 | 0.00 | 1,021.41 | -- | 35.5 B J | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0204** | 0.094 J | <6.00 | -- | |
| MW-12 | 1/17/2022 | 1,033.83 | 12.22 | 0.00 | 1,021.61 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0204** | <1.00 | **3.70 J** | -- | |
| MW-12 | 04/06/2022 | 1,033.83 | 11.20 | 0.00 | 1,022.63 | -- | <100 | <200 | -- | <250 | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | **<0.0208** | <1.00 | <6.00 | -- | |
| TRIP BLANK | 9/20/2021 | -- | -- | -- | -- | -- | 33.2 B J | -- | -- | -- | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | -- | <1.00 | -- | -- | |
| TRIP BLANK | 1/17/2022 | -- | -- | -- | -- | -- | <100 | -- | -- | -- | -- | <1.00 | <1.00 | <1.00 | <3.00 | <1.00 | -- | <1.00 | -- | -- | |
| TRIP BLANK | 04/06/2022 | -- | -- | -- | -- | -- | <100 | -- | -- | -- | -- | <1.00 | **0.289 J** | <1.00 | **0.297 J** | <1.00 | -- | <1.00 | -- | -- | |

| Well ID | Sample Date | Benzo(a) anthracene | Benzo(a) pyrene | Benzo(b) fluoranthene | Benzo(k) fluoranthene | Chrysene | Dibenz(a,h) anthracene | Indeno(1,2,3-cd)pyrene | Total cPAHs | Naphthalene | 1-Methyl-naphthalene | 2-Methyl-naphthalene | Total Naphthalenes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MTCA Method A CULs** | | | **0.1** | -- | -- | -- | -- | -- | **0.1** | **160** | -- | -- | **160** |
| **MW-5** | 9/21/2013 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.031 | <0.010 | <0.010 | 0.0255 |
| **MW-5** | 12/23/2013 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | 0.033 | <0.010 | <0.010 | 0.027 |
| **MW-5** | 3/26/2014 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.030 | <0.010 | <0.010 | 0.025 |
| **MW-5** | 6/27/2014 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.030 | <0.010 | 0.013 | 0.0265 |
| **MW-6** | 9/21/2013 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | 0.036 | <0.010 | <0.010 | 0.028 |
| **MW-6** | 12/23/2013 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.030 | <0.010 | <0.010 | 0.025 |
| **MW-6** | 3/26/2014 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.030 | <0.010 | <0.010 | 0.025 |
| **MW-6** | 6/27/2014 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.030 | <0.010 | 0.012 | 0.026 |
| **MW-7** | 9/21/2013 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | 0.11 | <0.010 | <0.010 | 0.07 |
| **MW-7** | 12/23/2013 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | 0.047 | <0.010 | <0.010 | 0.034 |
| **MW-7** | 3/26/2014 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | 0.015 | 0.016 | 0.010 | <0.031 | <0.010 | <0.010 | 0.0255 |
| **MW-7** | 6/27/2014 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.030 | <0.010 | 0.011 | 0.0255 |

| Well ID | Date | Methylene Chloride | Vinyl Chloride | TCE | PCE | PCB-1016 | PCB-1221 | PCB -1232 | PCB-1242 | PCB -1248 | PCB -1254 | PCB -1260 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MTCA Method A CULs** | | **5** | **0.2** | **5** | **5** | -- | -- | -- | -- | -- | -- | -- |
| **MW-5** | 9/21/2013 | <2 | **<1** | <1 | <0.8 | <0.082 | <0.082 | <0.16 | <0.082 | <0.082 | <0.082 | <0.12 |
| **MW-5** | 12/23/2013 | <2 | **<1** | <1 | <0.8 | <0.081 | <0.081 | <0.16 | <0.081 | <0.081 | <0.081 | <0.12 |
| **MW-5** | 3/26/2014 | <2 | **<0.5** | <0.5 | <0.5 | <0.081 | <0.081 | <0.16 | <0.081 | <0.081 | <0.081 | <0.12 |
| **MW-5** | 6/27/2014 | <2 | **<0.5** | <0.5 | <0.5 | <0.081 | <0.081 | <0.16 | <0.081 | <0.081 | <0.081 | <0.12 |
| **MW-6** | 9/21/2013 | <2 | **<1** | <1 | <0.8 | <0.082 | <0.082 | <0.16 | <0.082 | <0.082 | <0.082 | <0.12 |
| **MW-6** | 12/23/2013 | <2 | **<1** | <1 | <0.8 | <0.082 | <0.082 | <0.16 | <0.082 | <0.082 | <0.082 | <0.12 |
| **MW-6** | 3/26/2014 | <2 | **<0.5** | <0.5 | <0.5 | <0.080 | <0.080 | <0.16 | <0.080 | <0.080 | <0.080 | <0.12 |
| **MW-6** | 6/27/2014 | <2 | **<0.5** | <0.5 | <0.5 | <0.081 | <0.081 | <0.16 | <0.081 | <0.081 | <0.081 | <0.12 |
| **MW-7** | 9/21/2013 | <2 | **<1** | <1 | <0.8 | <0.082 | <0.082 | <0.16 | <0.082 | <0.082 | <0.082 | <0.12 |
| **MW-7** | 12/23/2013 | <2 | **<1** | <1 | <0.8 | <0.081 | <0.081 | <0.16 | <0.081 | <0.081 | <0.081 | <0.12 |
| **MW-7** | 3/26/2014 | <2 | **<0.5** | <0.5 | <0.5 | <0.080 | <0.080 | <0.16 | <0.080 | <0.080 | <0.080 | <0.12 |
| **MW-7** | 6/27/2014 | <2 | **<0.5** | <0.5 | <0.5 | <0.080 | <0.080 | <0.16 | <0.080 | <0.080 | <0.080 | <0.12 |

Source: *Second Quarter 2022 Site Status Report and Closure Request,* Arcadis U.S. Inc., June 29, 2022.