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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Region Office
PO Box 330316, Shoreline, WA 98133-9716 • 206-594-0000

March 13, 2023

Preet Chohan
BLT Transport
8010 S 259th Street
Kent, Washington 98032
(Preet@BLTTransport.com)

Re: **Further Action at the following Site:**

- **Site Name:** BLT Trucking
- **Site Address:** 8010 S 259th Street, Kent, Washington 98032
- **Facility/Site No.:** 60800
- **Cleanup Site ID:** 16551
- **VCP Project No.:** NW3338

Dear Preet Chohan:

The Washington State Department of Ecology (Ecology) received your request for an opinion regarding the sufficiency of your independent cleanup of the BLT Trucking facility (Site) under the Voluntary Cleanup Program (VCP)[1]. This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70A.305 RCW.[2]

Issue Presented and Opinion

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

[1] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Voluntary-Cleanup-Program
[2] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305

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

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70A.305 RCW, and its implementing regulations, Chapter 173-340 WAC[3] (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

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

- Total petroleum hydrocarbons as diesel and heavy oil (TPH-D and TPH-O), polychlorinated biphenyls (PCBs), lead, cadmium, and arsenic into the Soil.
- Arsenic into the Groundwater.

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

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel associated with this Site is affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the documents listed in **Enclosure B**. A number of these documents are accessible in electronic form from the Site web page[4]. The complete records are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Visit our Public Records Request page[5] to submit a public records request or get more information about the process. If you require assistance

[3] https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340
[4] https://apps.ecology.wa.gov/cleanupsearch/site/16551
[5] https://ecology.wa.gov/Footer/Public-records-requests

with this process, you may contact the Public Records Officer at publicrecordsofficer@ecy.wa.gov or 360-407-6040.

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

Analysis of the Cleanup

Ecology has concluded that **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

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

The Site is located on King County parcel 000660-0045, in Kent, Washington (Property).

- **Soil.**

  Contaminated soil (TPH-D + TPH-O, PCBs, cadmium, lead, and arsenic) remains on the Property at concentrations exceeding the MTCA Method A soil cleanup levels for unrestricted land use. The vertical and lateral extents of soil contamination have not been delineated. The source of arsenic contamination has not been investigated or evaluated. The potential for soil contamination off the Property to the north has not been investigated.

- **Groundwater.**

  Contaminated groundwater (arsenic) has been confirmed beneath the Property at concentrations exceeding the MTCA Method A groundwater cleanup level for unrestricted land use. Arsenic exceeding the cleanup level and background level[6] was

[6] https://apps.ecology.wa.gov/publications/SummaryPages/1409044.html

present in groundwater at multiple of the existing groundwater monitoring wells (MW-1 through MW-5). The extents of the groundwater contamination at the Site have not been delineated and the potential for downgradient off-Property migration has not been assessed. The groundwater flow direction is inconclusive.

Specific Site characterization data gaps identified by Ecology and report-specific comments are provided in **Enclosure C**.

2. Establishment of cleanup standards.

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

- **Cleanup Levels.**

Soil.

MTCA Method A industrial cleanup levels for soil were used during investigations and cleanup actions, however, per WAC 173-340-745, the use of MTCA Method A industrial cleanup levels is not appropriate for this Site. The Site is zoned by the City of Kent as CM (Commercial Manufacturing) which is for developments that combine characteristics of both retail establishments and small-scale, light industrial operations. MTCA Method A soil cleanup levels for unrestricted land uses (Table 740-1) are based on the protection of groundwater and are appropriate preliminary cleanup levels for soil. Until final cleanup levels are established, these levels will be considered screening levels.

A TEE has not been completed for the Site. The TEE is necessary to meet substantive requirements of MTCA, to set cleanup levels that are protective of terrestrial species, and to determine an appropriate cleanup action. A TEE Form[7] is available under the VCP and will need to be completed and submitted. More information regarding the TEE

[7] https://apps.ecology.wa.gov/publications/SummaryPages/ECY090300.html

can be found on the Ecology TEE web page[8].

Final soil cleanup levels will be established based on the results of the TEE.

Groundwater.

The highest beneficial use for groundwater under MTCA is considered to be as a drinking water source, unless it can be demonstrated that the groundwater is not potable. MTCA Method A groundwater cleanup levels for unrestricted uses (Table 720-1), which are protective of groundwater as a potable source, are appropriate for this Site.

- **Points of Compliance.**

Soil.

The point of compliance for soil at the Site for the protection of groundwater is soils throughout the Site per WAC 173-340-740(6)(b).

Groundwater.

The standard point of compliance for groundwater is throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest depth which could potentially be affected per WAC 173-340-720(8)(b).

3. Selection of cleanup action.

Ecology has determined the cleanup action selected for the Site does not meet the substantive requirements of MTCA. Further investigation is necessary to determine whether the cleanup meets the requirements in WAC 173-340-360(2).

[8] https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation

The incomplete Site characterization does not allow for a determination as to whether the cleanup action selected for the Site meets the substantive requirements of MTCA. An appropriate cleanup action can be selected only after the Site is fully characterized and cleanup standards have been developed. The cleanup action should be selected through completion of a feasibility study (FS) and disproportionate cost analysis (DCA) per WAC 173-340-360(3)(e).

4. Cleanup.

Ecology has determined the cleanup performed does not meet any cleanup standards at the Site.

Soil was excavated from the Property for the installation of a storm water detention gallery. The depth of the final excavation was approximately 6 to 8 feet below the ground surface (bgs). Stockpile soil samples and excavation confirmation soil samples (up to 4 feet bgs) contained TPH-D + TPH-O, PCBs, cadmium, and lead at concentrations exceeding Method A cleanup levels. Approximately 3,000+ tons of soil were excavated, but only 175.38 tons of contaminated soil were transported off the Property for disposal. The remaining excavated soil (which contained contaminants above the Method A soil cleanup levels for unrestricted land use) was used as backfill and remains at the Site.

Arsenic above the Method A cleanup level is present in soil up to 15 feet bgs, based on soil samples collected from borings B9, B10, B11, B12, and B18. The source of the arsenic contamination in subsurface soil has not been identified. The vertical and lateral extent of arsenic in soil at the Site has not been delineated.

Total arsenic and dissolved arsenic have been detected in all five monitoring wells in at least one quarterly groundwater sampling event. The extent of groundwater contamination has not been defined. Total and dissolved arsenic were not consistently analyzed in each well in every quarterly sampling event; quarterly groundwater monitoring has not been completed.

Details regarding issues with Site cleanup are described in **Enclosure C**.

6. Environmental Information Management (EIM)

The Site data has been submitted to the Ecology Environmental Information Management (EIM) database, but has not been uploaded due to deficiencies in the original submittal. The EIM

Coordinator for this Site requested corrections on the original data submittal on April 29, 2022. Please complete the requested edits and resubmit the data so that the data can be uploaded to the EIM.

Electronic submittal of all sampling data into EIM is a requirement in order to receive a No Further Action opinion for this Site. Molly Ware (email Molly.Ware@ecy.wa.gov, or via telephone at 360-280-7712) is Ecology's contact and resource on entering data into EIM.

7. Next Steps

- Please address the data gaps and comments provided in **Enclosure C**.
- Additional Site characterization is needed based on the Site data, which may include:
    - Additional soil samples to determine whether contamination extends to the north off the Property.
    - Additional soil samples to delineate the extent of arsenic contamination at the Site.
    - Additional groundwater monitoring wells that are not located within or near the storm water detention gallery to evaluate the groundwater flow.
    - Additional groundwater monitoring wells and groundwater sampling to delineate the extent of arsenic in groundwater at the Site and to determine whether contamination in migrating off the Property.
- Ecology recommends including a data gap assessment and a remedial investigation work plan to complete Site characterization as part of the revised report. Ecology is available to review your work plan, to ensure the proposed work will meet the substantive requirements to fully characterize the Site.
- The path forward under the MTCA cleanup process[9] will require a completed remedial

[9] https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Cleanup-process

investigation (RI) and feasibility study (FS). The completed Site characterization (RI) should be the basis for preparation of a FS that meets the MTCA requirements for selection of a cleanup action. See the Ecology web page[10] for RI/FS report format and content requirements and a cleanup action plan report template. The RI/FS can be reported in one document.

Ecology appreciates your participation in the VCP and your continued efforts to clean up the Site under MTCA. We look forward to working together with you to bring this Site to closure. We are available to discuss this Site at your convenience.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

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

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

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70A.305.040(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 substantially equivalent. Courts make that determination. *See* RCW 70A.305.080 and WAC 173-340-545.

[10] https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Cleanup-report-checklists-and-templates

3. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70A.305.170.

Contact Information

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

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me by phone at (206) 556-5258 or e-mail at kim.vik@ecy.wa.gov.

Sincerely,

Kim Vik
Site Manager
Toxics Cleanup Program, NWRO

Enclosures (3): A – Description and Diagrams of the Site
B – Basis for the Opinion: List of Documents
C – Data Gaps and Report Comments

cc: Stephen Spencer, ECI (Stephen@Alleci.com)
Sonia Fernandez (sonia.fernandez@ecy.wa.gov)

Enclosure A

Description and Diagrams of the Site

Site Description

This section provides Ecology's understanding and interpretation of Site conditions and is the basis for the opinions expressed in the body of the letter.

Site: The Site is defined by releases of the following at 8010 South 259th Street in Kent, King County, Washington (Property, **Figure 1**).

- Diesel- and oil-range total petroleum hydrocarbons (TPH-D and TPH-O), polychlorinated biphenyls (PCBs), cadmium, lead, and arsenic in soil.
- Arsenic in groundwater.

According to the Model Toxics Control Act (MTCA), the Site is defined as all areas where contamination has come to be located. Currently, the Site boundary is not completely delineated.

Area, Property Description and Current Use: The Property is identified as King County tax parcel (000660-0045) and covers approximately 56,395 square feet (1.3 acres). The Property is developed with an 8,000-square-foot office and truck maintenance facility surrounded by asphalt parking. BLT Transport LLC operates a trucking and transport business; the Property is used for dispatch, staging and servicing of transportation trucks.

Surrounding properties include:

- A vacant lot (former Joseph Simon & Sons Site (VCP# NW1079) to the north (Site issued No Further Action [NFA] in August 2002).
- Burlington Northern Santa Fe (BNSF) railroad right-of-way (ROW) and 80th Avenue South (across the BNSF) to the west.
- South 259th Street and Way to Salvation Church (across the street) to the south.
- Alki Fence (parcel 00060-0040; former Atomic Auto Wrecking Site (VCP# NW0445) used as commercial parking to the east (NFA issued in March 2000).

The Property and surrounding properties are in an area zoned CM-2 (Commercial Manufacturing) by the City of Kent.

Property History: The Property was a part of a larger 2-acre property that originally included the Property (BLT Trucking parcel 000660-0045) and the adjacent Alki Fence property to the east (parcel 000660-0040). The Property (BLT Trucking) and the adjacent Alki Fence parcel are shown on **Figure 2**. Based on information on a 1995 SEPA Checklist (Aerotech, 2016), the original 2-acre property was historically operated by Atomic Auto Wrecking (1980 to early 1990s).

Contamination was found on the adjacent Alki Fence parcel and reported to Ecology under

ERTS#s N17374 (November 2, 1994), ERTS# 424765 (August 7, 1996), and ERTS# 508706 (January 13, 2000). Contamination on that property is known to Ecology as the Atomic Auto Wrecking Site [FSID 2569]). However, Atomic Auto Wrecking operated on both the Alki Fence property and the Property (BLT Trucking). Results of an investigation conducted on both parcels confirmed petroleum hydrocarbons, benzene, toluene, ethylbenzene, and xylene (collectively BTEX), and metals above the MTCA Method A cleanup levels on Property up to 2 feet bgs.

In 1995, petroleum-impacted soil was removed from the surface of the adjacent Alki Fence parcel. This soil was reportedly placed in stockpiles on the Property (BLT trucking) which was to undergo soil removal and bioremediation. The Environmental Restoration Work Plan (Galloway Environmental Inc., June 1995) was developed based on findings from previous investigations and shows the proposed soil removal area covering only parcel 000660-0045 (BLT Trucking property). The remediation plan consisted of soil removal and on-site bioremediation. Remediation was reportedly initiated in 1995; however, the owner at the time (Avon Car/Auto Sales) went bankrupt. There is no information confirming whether the remediation was completed. The Property was subsequently vacated and subjected to local illegal dumping (ERTS# 508706).

Sources of Contamination: The sources of petroleum hydrocarbon and metals contamination at the Site is from auto wrecking operations and the documented storage of engines, gasoline tanks, transmissions, and batteries on the Property. Soil contamination was initially discovered on the Property during a preliminary investigation conducted in 1995. Illegal dumping on the Property may have also contributed to contamination.

Surface/Storm Water System: The nearest surface water is the Green River located approximately 500 feet to the southwest and flows in a north-northwesterly direction towards Puget Sound. Storm water is collected in catch basins and drains on the Property and is connected to the City of Kent storm water system. There is a storm water detention system located on the Property that was installed in 2016. The storm water system (also referred to as a storm water basin or detention gallery) is constructed of sections of corrugated steel pipes and is located along the north Property boundary. **Figure 3** shows the installation of the storm water detention gallery.

Physiographic Setting: The Property lies on the floodplain of the Green River and is at an elevation of approximately 40 feet above mean sea level (amsl). The ground surface across the Property is generally flat.

Geology: The Property is in the lower Green River Valley (Kent Valley), which was formerly a deep marine embayment that has been filled with sediments since the end of the most recent glaciation (Vashon Glaciation). The valley extends north to Renton and south to Auburn and is bounded by glacial drift uplands to the west and east. The soil encountered beneath the Property consists of fine-grained sand to clean sand to the maximum explored depth of 15 feet

bgs. This is consistent with alluvium and floodplain deposits.

Groundwater: Five groundwater monitoring wells were installed to 15 feet bgs on the Property in 2021 (MW-1 through MW-5). Wells were screened between 5 and 15 feet bgs. The depth to groundwater beneath the Property is documented to be 6 to 7 feet bgs during the wetter months (November and March) and 8 to 10 feet bgs during the drier months (June and September). Groundwater flow based on quarterly groundwater monitoring data has been inconsistent ranging from flow to the northwest to flow to the east and appears to show "mounding" in the area of the storm water basin.

All the wells (except MW-5) appear to be installed in or very near the former excavation area, so groundwater elevations may be influenced by the storm water detention gallery. Groundwater is expected to follow topography and flow toward the Green River to the southwest. **Figures 4 and 5** show the reported groundwater flow during the second and fourth quarters of 2021, respectively.

Water Supply: Drinking water for the area is supplied by the City of Kent. The City of Kent obtains the drinking water from upland springs and wells on the Kent East Hill and from wells located in the Green River Valley. The City of Kent also purchases water from the City of Tacoma, which is sourced from the Green River watershed. None of these water supply sources are located within a 1-mile radius of the Property. The Property is also located outside the 10-year time of travel wellhead protection area of all water supply wells.

Release and Extent of Contamination (Soil and Groundwater): Environmental assessments and investigations were conducted on the Property in 2016 and 2021. Soil sample locations and results for investigations conducted in 2016, including samples collected prior to excavation activities and confirmation samples collected after excavation activities are shown on **Figure 6**. Soil boring and groundwater monitoring wells from the 2021 investigation are shown on **Figure 7. Figure 7** also shows soil sample results. Groundwater results for the second and fourth quarters of 2021 are shown on **Figures 4 and 5**.

Previous Investigations: The following summarizes activities that were conducted on the Property. Some of the earlier investigations were conducted on both the Property and the adjacent property to the east (Alki Fence property).

Alki Fence Parcel (Atomic Auto Wrecking Site).

- The Alki Fence parcel and the BLT Trucking property were originally operated by Atomic Auto Wrecking. Initial investigations in 1995 showed that petroleum hydrocarbons, BTEX, and metals were found in surface soils exceeding the cleanup levels across both parcels; reportedly, most of the contamination was found on the BLT Trucking property. Arsenic was not analyzed. Samples were collected from the surface to approximately 2.5 feet bgs. Only a schematic of the sample locations was provided; therefore, the

actual sample locations are unknown. Following this investigation, a "limited amount" of petroleum-impacted soil was "scraped" from the surface of Alki Fence parcel and reportedly stockpiled on the BLT Trucking property in 1995. Soil samples collected across the Alki Fence parcel from 3 to 6 feet bgs and groundwater collected at 9 feet bgs in 1999 did not contain TPH-D, TPH-O, BTEX, or metals in soil or groundwater above the laboratory method reporting limits (MRLs). An NFA was issued for soil at the Alki Fence parcel (Atomic Auto Wrecking Site, NW0445, FSID# 2569) in March 2001. The Atomic Auto Wrecking Site was de-listed in 2006.

BLT Trucking Site.

- Petroleum hydrocarbons, BTEX, and metals contamination in soil were initially discovered in 1995 during an investigation that was conducted on both the Property and the adjacent property to the east (Alki Fence parcel), as described above. During the cleanup of the Alki Fence parcel, contaminated soil from the Alki Fence parcel was reportedly stockpiled on the BLT Trucking property. It is unclear whether this stockpile was ever removed from the BLT Trucking property.

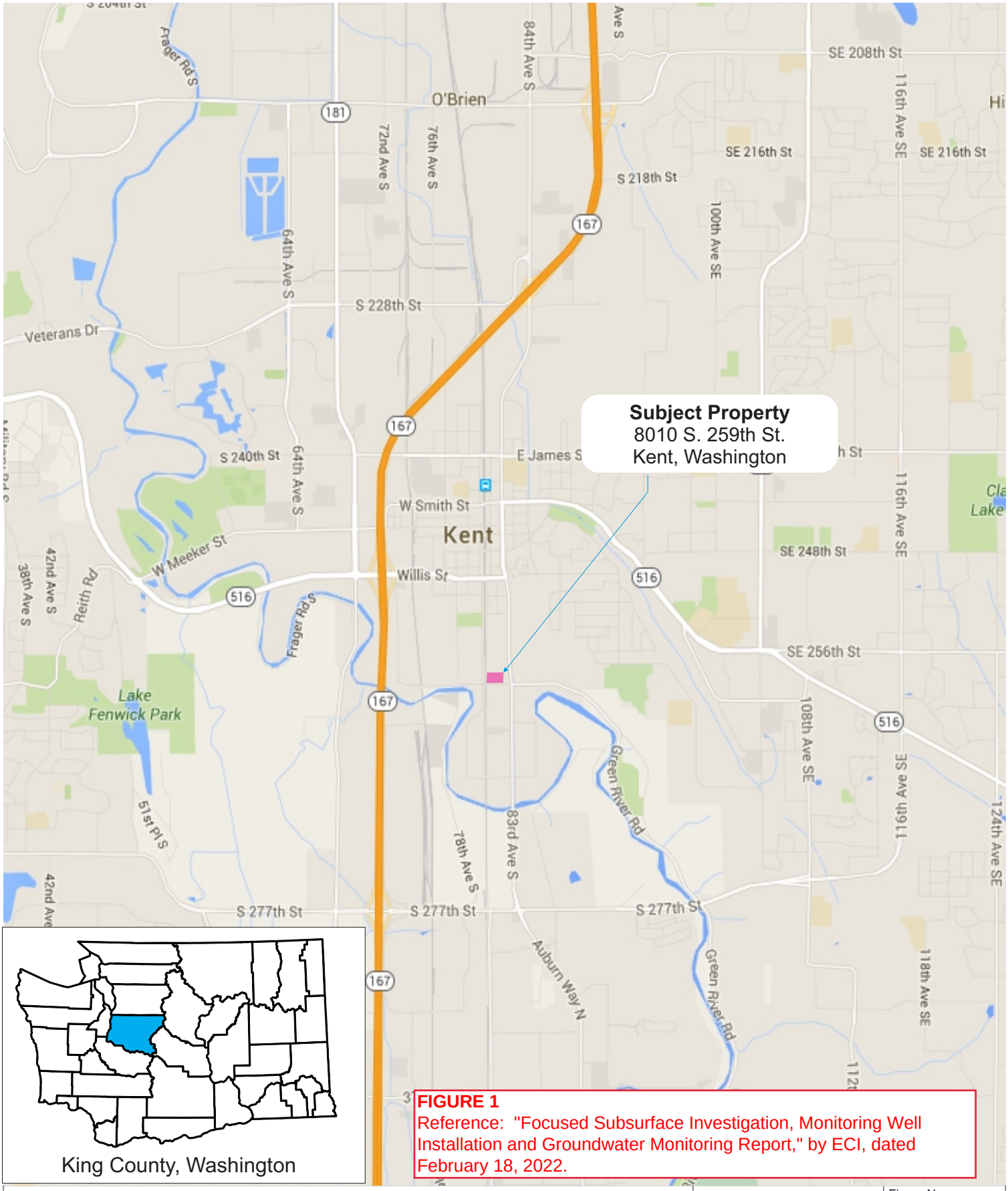
- In May and June 2016, eight borings (B1 through B8) were drilled and sampled across the Property (**Figure 6**). TPH-D + TPH-O concentrations were higher than the Method A cleanup levels in samples collected from 3 to 4 feet bgs in B3, B4, and B5. Cadmium and lead also exceeded the Method A cleanup level in the sample from B2. TPH-G was not detected above the MRLs. Ten test pits (TP9 through TP16) were excavated to approximately 3 feet bgs, except for TP10 and TP13, which were excavated to approximately 6 feet bgs. One test pit sample (collected from 3 feet bgs from TP3) contained TPH-D + TPH-O at a concentration exceeding the Method A cleanup level. Oil was detected in groundwater (NWTPH-HCID) from boring B2, B3, and B4.

- In June 2016, soil was excavated from the Property for the installation of a storm water detention gallery. The depth of the final excavation was approximately 6 to 8 feet bgs. Stockpile soil samples and excavation confirmation soil samples (up to 4 feet bgs) contained TPH-D + TPH-O, PCBs, cadmium, and lead at concentrations exceeding Method A cleanup levels. The report in 2022 stated the excavation extended to 6 to 8 feet bgs and that stockpiled soil was used as backfill. **Figure 6** shows the locations of the confirmation soil samples.

- In March 2021, an additional subsurface investigation was conducted at the Site to further assess soil in the area of the storm water gallery and to assess groundwater. Ten soil borings (B9 through B18) were drilled, and five groundwater monitoring wells (MW-1 through MW-5) were installed to approximately 15 feet bgs (**Figure 7**). Arsenic was detected in soil samples from all the borings; however, only the samples collected at 15 feet bgs from borings B9, B10, B11, B12, and B18 contained arsenic above the Method A cleanup level. Both total and dissolved arsenic were detected above the

Method A cleanup level in one or more quarters from each well. The wells were sampled for four quarters in 2021. Some of the wells appear to be installed in the storm water detention gallery. The groundwater flow direction is inconsistent and may be affected by the storm water detention gallery. The extent of groundwater contamination and whether it is migrating off the Property is unknown.

Site Diagrams



King County, Washington

FIGURE 1
Reference: "Focused Subsurface Investigation, Monitoring Well Installation and Groundwater Monitoring Report," by ECI, dated February 18, 2022.

N
Not To Scale

Site Vicinity Map
FSI, Monitoring Well Installation
& Groundwater Monitoring Report
8010 South 259th Street
Kent, Washington

Date:	February 10, 2022
Completed By:	C.Long
Reviewed By.:	S.Spencer
Version:	ECI-001
Project No.:	0611-01-03-02

Figure No.: 01
Sheet 01 of 08

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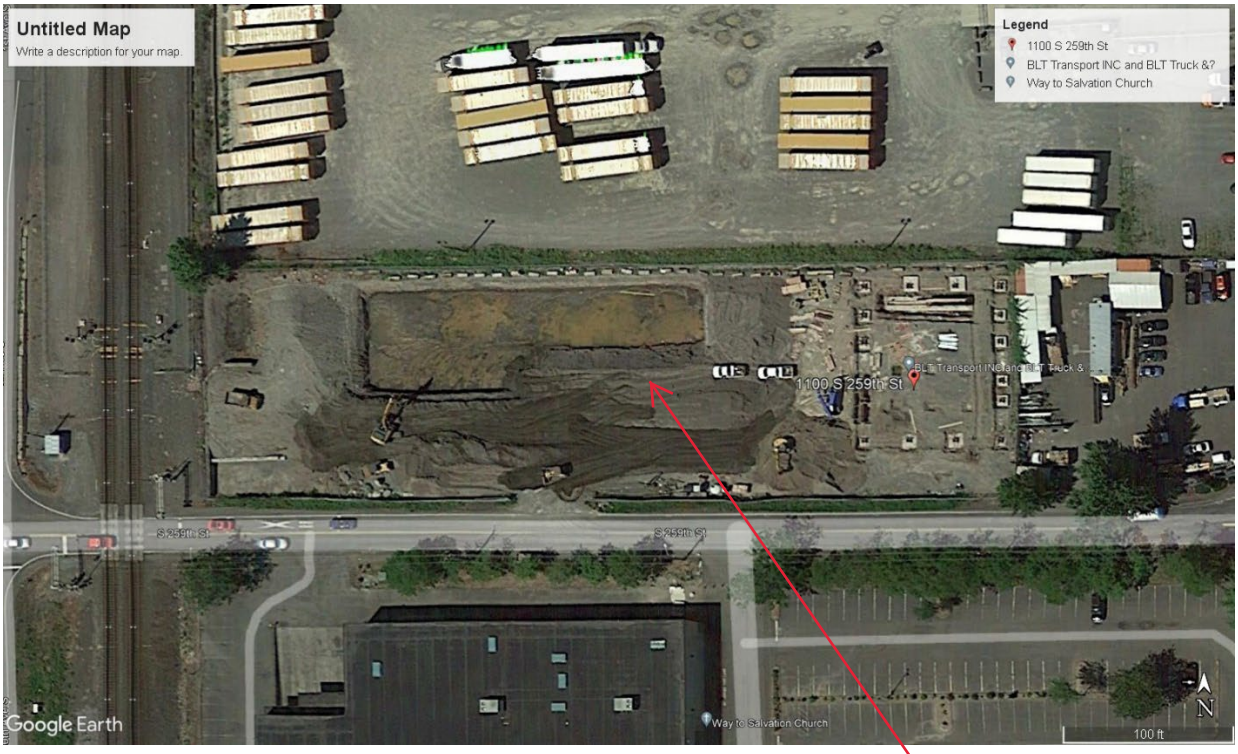
FIGURE 2
Ecology generated figure, October 2022.
Reference: King County Parcel Map.



Excavation for storm water basin/storm water detention gallery, 2016.

Storm water detention gallery construction, 2016.

FIGURE 3
Photos of the Storm Water Detention Gallery (annotated by Ecology), October 2022.
Reference: Photos provided by ECI via Email on September 9, 2022.

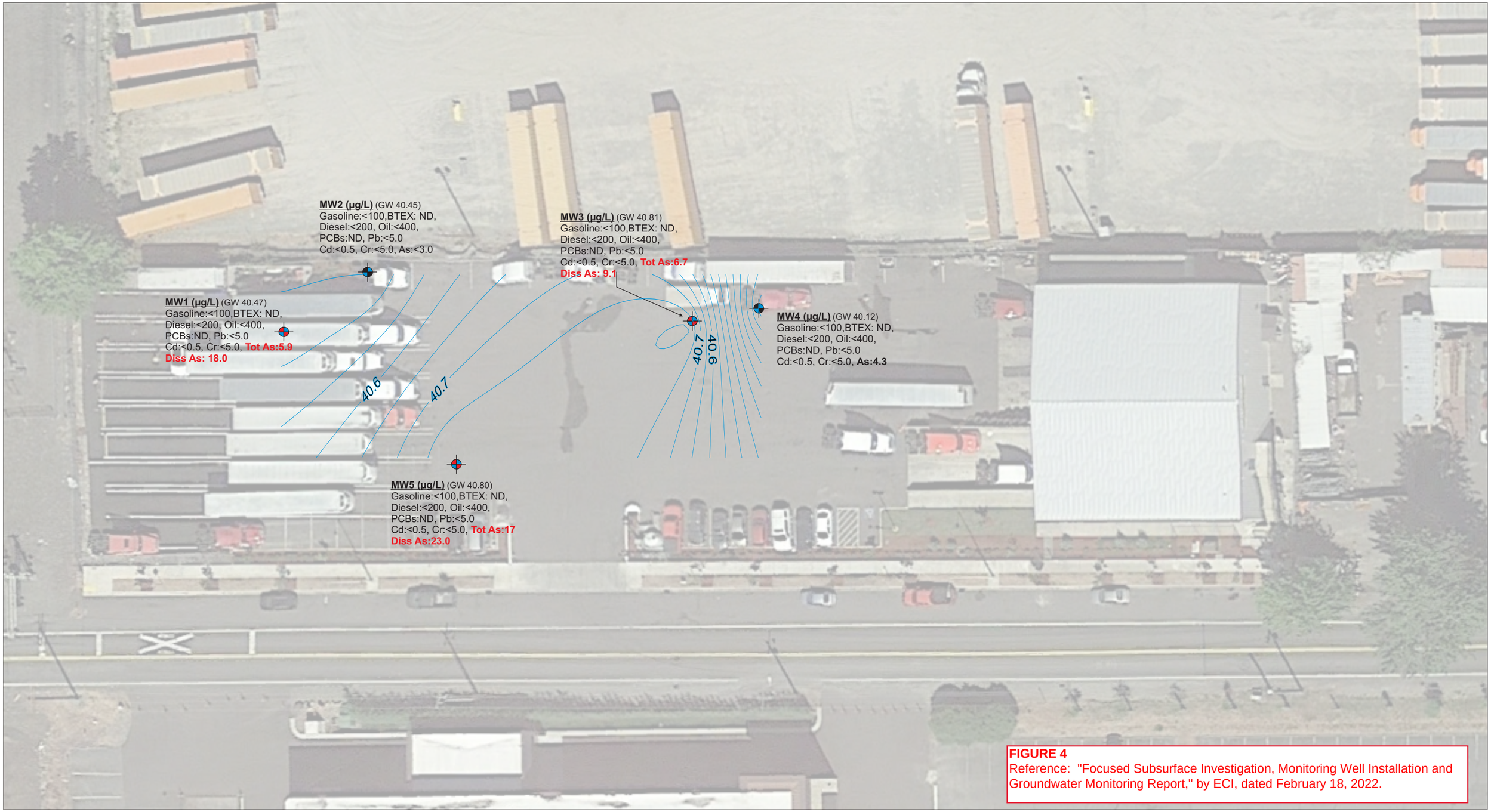


FIGURE 4
Reference: "Focused Subsurface Investigation, Monitoring Well Installation and Groundwater Monitoring Report," by ECI, dated February 18, 2022.

N

0 10 20 40 80

Approximate Scale in Feet

Explanation

- Monitoring Well < MTCA CUL's
- Monitoring Well > MTCA CUL's

BTEX Benzene, Toluene, Ethylbenzene, Total Xylenes
PCBs Polychlorinated Biphenyls
Pb Lead

Cd Cadmium
Cr Chromium
As Arsenic

Q2 2021 Groundwater Analytical and Elevation Map
FSI, Monitoring Well Installation
& Groundwater Monitoring Report
8010 South 259th Street
Kent, Washington

Date:	February 10, 2022
Completed By:	C.Long
Reviewed By.:	S.Spencer
Version:	ECI-001
Project No.:	0611-01-03-02

Figure No.: 03
Sheet 03 of 08

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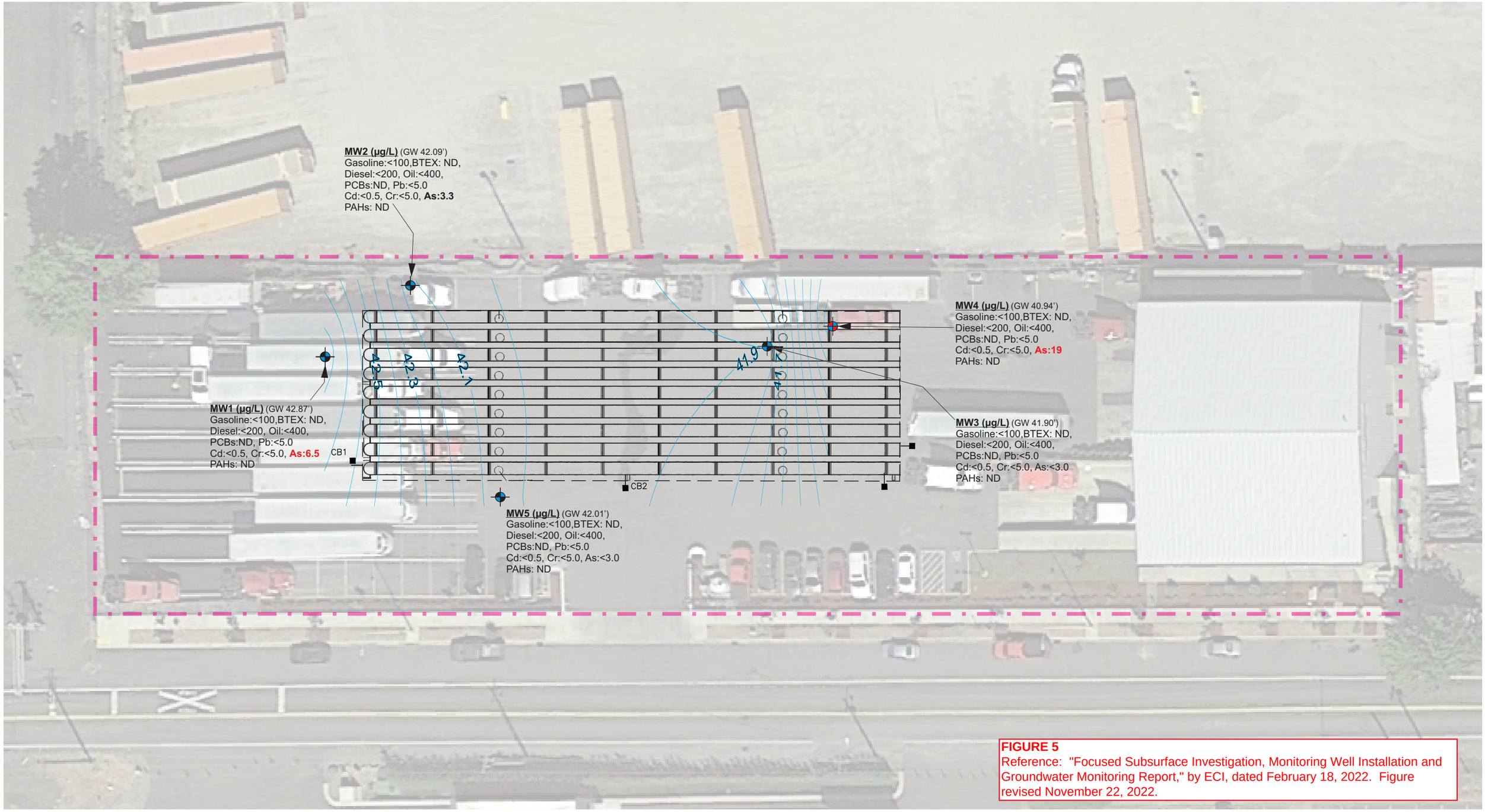

FIGURE 5
Reference: "Focused Subsurface Investigation, Monitoring Well Installation and Groundwater Monitoring Report," by ECI, dated February 18, 2022. Figure revised November 22, 2022.

N

0 15 30 60
Approximate Scale in Feet

Explanation

- Monitoring Well < MTCA CUL's
- Monitoring Well > MTCA CUL's

BTEX Benzene, Toluene, Ethylbenzene, Total Xylenes
PCBs Polychlorinated Biphenyls
Pb Lead

Cd Cadmium
Cr Chromium
As Arsenic
Storm System

Q4 2021 Groundwater Analytical and Elevation Map
FSI, Monitoring Well Installation
& Groundwater Monitoring Report
8010 South 259th Street
Kent, Washington

Date:	November 22, 2022
Completed By:	C.Long
Reviewed By.:	S.Spencer
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Figure No.: 05
Sheet 05 of 09

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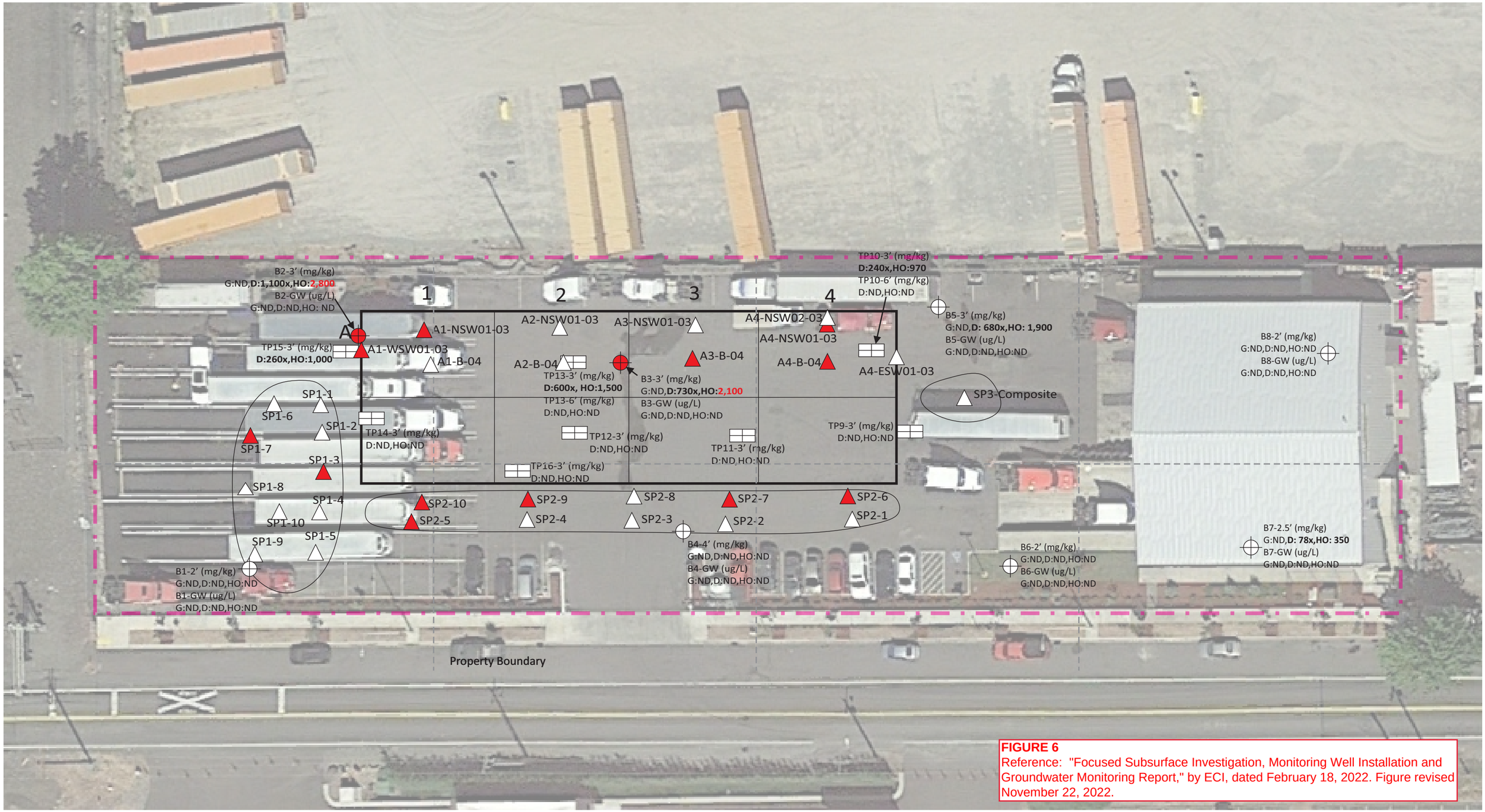

FIGURE 6
Reference: "Focused Subsurface Investigation, Monitoring Well Installation and Groundwater Monitoring Report," by ECI, dated February 18, 2022. Figure revised November 22, 2022.

N

0 15 30 60
Approximate Scale in Feet

Explanation

: Soil Boring Location
G: Gasoline Range Organics
D: Diesel Range Organics
HO: Heavy Oil Range Organics
: Storm System

mg/Kg: milligram per kilogram
ug/L: microgram per liter
ND: Not detected above laboratory reporting limit

Historical Boring / Sample Location Map
FSI, Monitoring Well Installation
& Groundwater Monitoring Report
8010 South 259th Street
Kent, Washington

Date:	November 22, 2022
Completed By:	C.Long
Reviewed By.:	S.Spencer
Version:	ECI-001
Project No.:	0611-01-03-02

Figure No.: 08
Sheet 08 of 09

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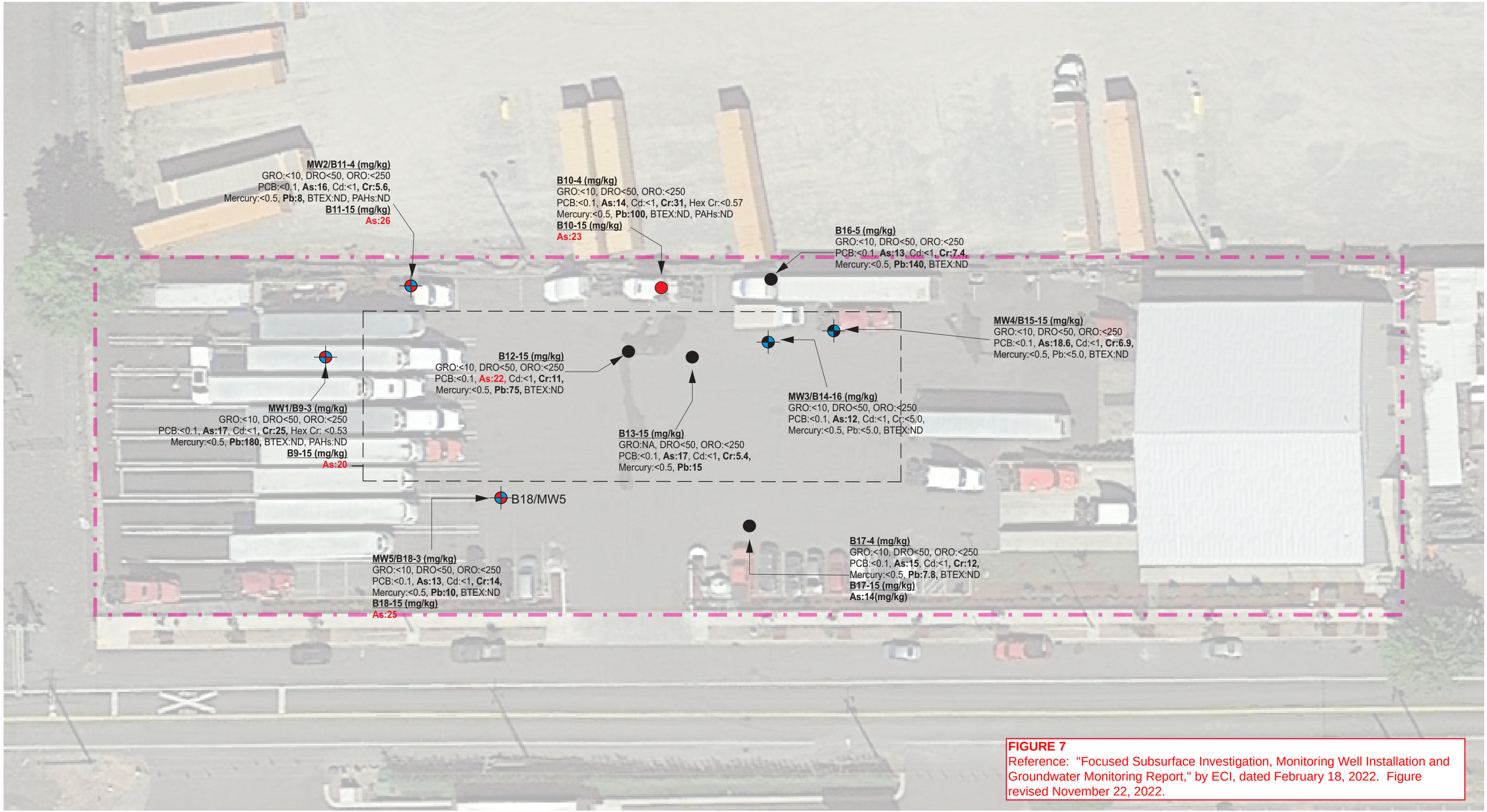

FIGURE 7
Reference: "Focused Subsurface Investigation, Monitoring Well Installation and Groundwater Monitoring Report," by ECI, dated February 18, 2022. Figure revised November 22, 2022.

N

0 15 30 60
Approximate Scale in Feet

: Soil Boring Location < CUL
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
As: Arsenic
Monitoring Well < MTCA CUL's
Monitoring Well > MTCA CUL's

Explanation
Cd: Cadmium
Cr: Chromium
Pb: lead
BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes
BOLD: Above laboratory reporting limit

: Soil Boring Location > CUL
Red: Above Cleanup Level
mg/Kg: milligram per kilogram
NA: Not run for that COC
ND: Not detected above laboratory reporting limit
: Storm System

2021 Boring Sample Location Map
FSI, Monitoring Well Installation
& Groundwater Monitoring Report
8010 South 259th Street
Kent, Washington

Date:	November 22, 2022
Completed By:	C.Long
Reviewed By.:	S.Spencer
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Figure No.: 06
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Enclosure B

Basis for the Opinion:
List of Documents

1. Aerotech Environmental Consulting, Inc., *Findings Summary of the State of Washington Department of Ecology File Review for: BLT Transport, LLC, 1100 South 259th Street, Kent, Washington 98032*. May 2, 2016.

2. ECI Environmental Services, *Focused Subsurface Investigation, 1100 259th Street, Kent, Washington 98302*. June 10, 2016.

3. ECI Environmental Services, *Site Characterization Report, 1100 S. 259th Street, Kent, Washington 98302*. July 21, 2016.

4. ECI Environmental Services*, Focused Subsurface Investigation, Monitoring Well Installation and Groundwater Monitoring Report, BLT Trucking, 8010 South 259th Street, Kent, Washington 98032*. February 18, 2022. Revised Figures dated November 22, 2022.

5. ECI Environmental Services, BLT Trucking: Arsenic in Groundwater at and near the BLT Trucking site Facility/Site ID: 60800, Cleanup Site ID: 16551, VCP Site #: NW3338 (letter), November 14, 2022.

6. ECI Environmental Services, *Focused Subsurface Investigation, Monitoring Well Installation and Groundwater Monitoring Report, BLT Trucking, 8010 South 259th Street, Kent, Washington 98032*, Revised Figures 1 through 9, November 29, 2022.

7. Galloway Environmental, Inc., *Environmental Restoration Work Plan, Atomic Auto Wrecking Site, Kent, Washington*. June 1995.

8. Siebenaler, Letter regarding Preliminary Site Investigation Report for Carr Auto Sales. March 8, 1995.

9. Stemen Environmental, Inc., *Phase II Site Assessment Report, Boyd Investments Properties, Tax Parcel #0926002400, 1037 South Central, Kent, Washington*. October 1999.

10. Ecology, Site Hazard Assessment Worksheet for Joseph Simon and Sons, 1025 S. Central Avenue, Kent, Washington. August 27, 2002.

Enclosure C

Data Gaps and Report Comments

Ecology has identified the following issues regarding the use of cleanup levels.

- **The use of MTCA Method A cleanup levels for industrial properties is not appropriate for this Site.**

  Results for soil samples collected from borings B1 through B8 and test pits TP9 through TP16 in May and June 2016 were compared to MTCA Method A soil cleanup levels for industrial properties. These results were used to determine the area of contaminated soil to be removed. Following the removal of contaminated soil, MTCA Method A soil cleanup levels as screening levels for industrial properties were also used to evaluate compliance for stockpile samples and for confirmation soil samples collected from the limits of the excavation.

  The use of MTCA Method A industrial cleanup levels is not appropriate for this Site because the Site zoning allows non-industrial use. The appropriate preliminary cleanup levels for soil are MTCA Method A for unrestricted land use. These levels are screening levels until final cleanup levels are established based on the results of the TEE.

  Investigation and confirmation soil sample results need to be compared to the appropriate cleanup level.

- **TPH-D and TPH-O have not been evaluated properly against the MTCA Method A cleanup level.**

  TPH-D and TPH-O results for soil and groundwater collected during the investigations at the Site were evaluated as separate components, which is not appropriate. Although analytical laboratories often report TPH-D and TPH-O as separate fractions, Method A values were derived using the entire range of TPH fractions present. Evaluation of compliance with the MTCA Method A soil and groundwater cleanup levels for TPH-D and TPH-O requires adding concentrations of the two fractions and comparing the result to the cleanup level, per Implementation Memorandum #4, Determining Compliance with Method A Cleanup Levels for Diesel and Heavy Oil, Publication No. 04-09-086, June 2004[11] and Guidance for Remediation of Petroleum Contaminated Sites, Publication No. 10-09-057, revised June 2016[12]

[11] https://apps.ecology.wa.gov/publications/SummaryPages/0409086.html
[12] https://apps.ecology.wa.gov/publications/SummaryPages/1009057.html

To demonstrate compliance, the combined laboratory detected concentration for TPH-D + TPH-O needs to be less than the MTCA Method A cleanup level of 2,000 milligrams per kilogram (mg/kg) for soil and 500 micrograms per liter (µg/L) for groundwater.

It should also be noted that Ecology does not recognize the use of silica gel cleanup for NWTPH-Dx analyses of groundwater samples, unless uncontaminated background samples indicate that naturally occurring organic matter is a significant component of the TPH detected. Refer to Ecology's Guidance for Remediation of Petroleum Contaminated Sites (referenced above) for more detail.

Ecology has identified the following issues regarding the selected cleanup action.

- **Residual TPH-D, TPH-O, PCBs, cadmium, and lead are present in confirmation soil samples above the MTCA Method A cleanup levels.**

When comparing soil results to the appropriate cleanup levels for the initial screening (MTCA Method A unrestricted land use), the results for soil samples collected from borings and test pits prior to excavation activities contained one or more contaminants above the Method A cleanup levels. Because the location, limits, and depth of the excavation is not clear, it is also unclear which soil samples were removed during excavation activities.

After excavation activities, 11 confirmation soil samples were collected from the limits of the excavation at depths of 3 and 4 feet bgs. Based on the confirmation soil sample results, residual TPH-D + TPH-O, PCBs, cadmium, and lead were still present at concentrations exceeding the MTCA Method A cleanup levels. Analysis of the confirmation soil samples were inconsistent; only eight were analyzed for TPH-D and TPH-O, and only six were analyzed for PCBs and metals. No confirmation soil samples were collected on the south sidewall of the remedial excavation.

- **Contaminated stockpiled soil was used as backfill.**

Three stockpiles (SP1, SP2, and SP3) were generated during excavation activities. SP1 contained soil from the ground surface to 3 feet bgs and was estimated to be approximately 1,500 tons. SP2 contained soil from approximately 3 to 4 feet bgs and was estimated to be approximately 1,500 tons. SP3 contained soil that was over-excavated along the northern Property boundary, where PCB-contaminated soil was present and where TPH-O contamination was present in the "area of stockpile SP2."

The results of one or more samples collected from each of the three stockpiles contained one or more of the following contaminants above the MTCA Method A

cleanup levels: TPH-D + TPH-O, PCBs, cadmium, and lead. According to the report, the soil from SP3 was transported and disposed of off the Property (175.38 tons); however, it was reported that the storm water detention gallery excavation (approximately 6 to 8 feet deep) was backfilled with pea gravel and the soil from stockpiles SP1 and SP2 (total of approximately 3,000 tons). There is no record of offsite disposal of the estimated 3,000 tons of stockpiled soil (SP1 and SP2). Based on this information, contaminated soil exceeding MTCA Method A cleanup levels exists in the storm water detection gallery area to at least 8 feet bgs.

- **Arsenic is present in soil above the MTCA Method A cleanup level up to 15 feet bgs.**

Ten soil borings (B9 through B18) were drilled and sampled in 2021 in and around the area of the storm water detention gallery. Arsenic exists in soil beneath the Property at concentrations exceeding the MTCA Method A cleanup level up to 15 feet bgs (borings B9, B10, B11, B12, and B18). The source of the arsenic contamination in subsurface soil has not been identified. The vertical and lateral extent of arsenic in soil at the Site has not been delineated.

- **Total and dissolved arsenic in groundwater is present above the MTCA Method A cleanup level.**

Five of the soil borings drilled in 2021 were completed as groundwater monitoring wells (MW-1 through MW-5) and sampled for four consecutive quarters. Total arsenic and dissolved arsenic have been detected in all five monitoring wells in at least one quarterly groundwater sampling event. The results of the second quarter event (June 2021) showed that both total and dissolved arsenic concentrations were above the MTCA Method A cleanup level in the three samples that were analyzed for both total and dissolved arsenic (MW-1, MW-3, and MW-5).

The concentrations of dissolved arsenic were greater than the results of total arsenic. The results of the second quarter total and dissolved arsenic were dismissed as "non-representative"; however, the wells were not resampled. Total and dissolved arsenic were not consistently analyzed in each well in every quarterly sampling event.

<u>Ecology has identified the following data gaps for the Site characterization.</u>

- **The limits and location of the remedial excavation and storm water detention gallery are unclear.**

The revised Figures 5 through 9 of the *Focused Subsurface Investigation, Monitoring Well Installation and Groundwater Monitoring Report* show the location of the storm

water detention gallery; however, revised Figures 2 through Figure 3 should also show that feature. It is sufficient to just show the outline of the storm water gallery and label it on each figure as "Location of storm water detention gallery and remedial excavation." The outline of the storm water detention gallery appears to be the limits of the remedial excavation.

Note that Figure 3 of the *Site Characterization Report* shows an excavation labeled "Approximate Extent of Storm water Vault Excavation." This outline does not match revised Figure 8 of the *Focused Subsurface Investigation, Monitoring Well Installation and Groundwater Monitoring Report*. According to both reports, soil was removed from only one remedial excavation and was also used as backfill for the installation of the storm water detention gallery.

To assess whether soil samples with concentrations above Method A cleanup levels have been removed or are still present on the Property, the limits of the excavation need to be accurate. It is also important in determining whether the existing monitoring wells (MW-1 through MW-5) are installed within or outside of the remedial excavation area and the storm water detention gallery. Accurate locations are necessary to delineate the extent of contamination. All figures should be consistent.

- **The lateral extent of soil contamination to the north is not fully delineated.**

  Confirmation soil samples A1-NSW01-03 and A4-NSW02-03 collected at approximately 3 feet bgs along the north sidewall of the excavation contained PCBs at concentrations of 7.8 and 1.3 mg/kg, respectively, which exceed the MTCA Method A cleanup level of 1 mg/kg for PCB mixtures. Soil sample A1-NSW01-3 also contained lead at 393 mg/kg, which also exceeds the MTCA Method A cleanup level of 250 mg/kg. The north sidewall of the excavation appears to be very close to the north Property boundary, so it is unclear if any soil contamination extends off the Property to the north.

- **The groundwater flow direction needs to be re-evaluated.**

  Based on the location of the storm water detention gallery and the locations of the wells MW-1 through MW-5, it appears that all the groundwater monitoring wells, except for MW-5, have been installed in or near the storm water detention gallery area. Two groundwater monitoring wells (MW-3 and MW-4) are completed within the storm water detention gallery; the other three wells are located around the perimeter of the storm water detention gallery.

  The depth of the excavation for the installation of the storm water detention gallery is approximately 8 feet bgs. The groundwater monitoring wells were installed to 15 feet bgs with 10-foot-long screens (approximately 5 to 15 feet bgs). Groundwater is encountered beneath the Property at depths ranging from 6 to 10 feet bgs. It is possible

the groundwater is being influenced by the storm water detention gallery. The groundwater contour maps included in the report appear inconsistent and it is questionable whether the contours represent actual groundwater conditions.

Assess the groundwater flow beneath the Property and whether the groundwater is being influenced by the presence of the storm water detention gallery, especially during storm events. Evaluate the location of the wells in relationship to the former excavation and the piping for the storm water detention gallery. Site characterization requires an accurate investigation of groundwater flow to determine downgradient conditions.

- **Evaluate the presence of arsenic in soil and groundwater with consideration of assessing background levels.**

  Provide a discussion regarding the presence of arsenic in soil and groundwater. The discussion should include an investigation of possible sources and background levels. Ecology suggests conducting an assessment of background arsenic in groundwater. Based on the information in the recent letter (*BLT Trucking: Arsenic in Groundwater at and near the BLT Trucking Site Facility* dated November 14, 2022), there appears to be an adequate amount of groundwater data for dissolved arsenic that can be used for a statistical analysis of background arsenic in groundwater, especially groundwater data from the property to the north. Ecology offers statistical tools and guidance to calculate compliance and background levels on their web page[13]. Additional technical assistance with statistical analysis can be provided by Arthur Buchan (abuc461@ecy.wa.gov) at Ecology.

Ecology is providing comments regarding the review of the *Focused Subsurface Investigation, Monitoring Well Installation and Groundwater Monitoring Report (FSI Report)*.

- **Update Figures.**
  - Add a new figure that shows all the soil sample locations including previous investigations from 2016 (B1 through B8, TP9 through TP16, and the 11 confirmation soil samples), and the more recent investigation from 2021 (B9 through B18 and MW-1 through MW-5). This figure should not include the

[13] https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools

stockpile locations or stockpile sample locations. Include the extents of the final remedial and storm water detention gallery excavations and note the depth of the excavation. This will help assess what samples have been removed during excavation activities and what samples remain (those that are outside the excavation) which is needed to delineate the extent of soil contamination present on the Site. It will also help to determine where the existing wells are in relationship to the storm water detention gallery. Using different symbols, identify which soil sample locations are still present on the Property and whether they exceed the MTCA Method A cleanup levels, and which soil sample locations represent samples that have been removed during excavation activities. All contaminants should be represented.

- Update revised Figures 2 through 4 to clearly and accurately show the extent(s) of the remedial and storm water detention gallery excavations. This feature is already shown on the revised Figure 5, but should be shown on all figures that show the Property (Figures 2 through 9) and should be accurate and consistent.

- Update revised Figures 2 through 9 to show the storm water drain line. This is shown in the Explanation of all the figures, but is not shown on the figures themselves. Please show how storm water is conveyed to and from the detention gallery.

- Include an as-built diagram of the storm water detention gallery as an Appendix to the report.

- **Update Tables.**

  - Update all applicable data tables in the report and in Appendix B with the appropriate soil and groundwater cleanup levels (MTCA Method A unrestricted land use, correct per the TEE analysis, if needed) and re-evaluate the data. TPH-D + TPH-O should be compared to the cleanup levels collectively instead of separately.

  - Update Table 1 in Appendix B to indicate which samples have been removed during excavation activities.

  - Add a table showing the measured groundwater depths-to-water and groundwater elevations for each monitoring well in each monitoring event. Please include the monitoring well casing survey data.

- **Provide Laboratory Reports.**

The laboratory reports for soil samples collected from borings B1 through B8 on May 15, 2016, and the metals laboratory report for soil samples collected from test pits TP9 through TP16 in June 2016, are missing from the original reports.

- **Provide an RI work plan.**

  Please provide a work plan to that describes in detail your approach to resolving the data gaps and completing the revisions to the FSI report. The work plan should include elements needed to complete the RI and an RI report, per WAC 173-340-350(7). Once the RI is deemed complete by Ecology, the FS and FS report can proceed.

- **Provide a schedule for the completion of the RI Report.**

  Please provide a schedule for the completion of the RI and the RI Report.