STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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October 4 2016

Paul Kuchenmeister
17815 40th Ave E
Tacoma, WA 98446-2803

Re: No Further Action at the following Site:

- **Site Name:** Kuchenmeister, Edwards & Gaffikin
- **Site Address:** 7202 Park Avenue South Tacoma, WA 98408-5414 Pierce Co
- **Facility/Site No.:** 68463877
- **Cleanup Site ID No.:** 10161
- **VCP Project No.:** SW1536

Dear Mr. Kuchenmeister:

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

Issue Presented and Opinion

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

NO. Ecology has determined that no further remedial action is necessary to clean up contamination at the Site.

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

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 release:

- Petroleum and benzene in soil.

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

Basis for the Opinion

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

1. *Underground Storage Tank Site Characterization Report*, AA Enviro Assessment, Inc., April 20, 1999.

2. *Remedial Investigation/Cleanup Action Plan*, EcoCon Environmental Services, May 17, 2016.

3. *Remedial Investigation/Cleanup Action Plan Addendum*, EcoCon Environmental Services, August 19, 2016.

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

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

Analysis of the Cleanup

Ecology has concluded that **no 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 your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action.

The Site is located at 7202 Park Avenue South, Tacoma, Pierce County, Washington (Figure 1). It consists of a 0.28 acre parcel surrounded by residential and commercial properties. Topography at the Site is generally flat and is covered by asphalt and a building. Currently, the building is serving as a restaurant.

The Site was originally developed as a grocery store in the 1920s. The building was demolished and replaced in 1956. The underground storage tank system (UST) was installed in the late 1950s. The system consisted of two 3,000-gallon gasoline tanks, one 2,000-gallon diesel tank, associated piping, and a pump island. A 300-gallon heating oil tank, and a 500-gallon waste oil tank were also installed at that time. In 1975, a 10,000-gallon gasoline tank was added to the UST system.

Soils at the Site are comprised of brown loamy sand to sandy loam over glacial till. The general area has scattered lenses of perched groundwater at various depths. The regional aquifer is generally at depths of 80 to 100 feet below ground surface (bgs). No groundwater, either perched or regional, was found during remediation work at the Site. All of the USTs were removed during October 1998. Soil contamination associated with the gasoline and diesel tanks, the two pump islands, the waste oil tank, and the heating oil tank was found. The contaminated areas in the sidewalls and bases of the excavations were then over excavated to remove as much contamination of possible. Confirmation samples were then collected at the extent of the excavations. A sample from the waste oil excavation had benzene at 0.24 milligrams per kilogram (mg/kg), which is above the current Method A cleanup level of 0.03 mg/kg. Sample E1, collected at the north end of the 10,000-gallon tank, had benzene at 0.05 mg/kg at 7 to 8 feet bgs. Sample SW72B, along 72nd Street, at 5 feet bgs, had benzene at 0.1 mg/kg and Total Petroleum Hydrocarbons-Gasoline (TPH-G) at 770 mg/kg. The current cleanup level for TPH-G is 30 mg/kg. TPH-G was also found at 10 feet bgs in sample P4 at the north pump island. A total of 721.55 tons of petroleum contaminated soil was transported to TPS Technologies in Tacoma, Washington, for treatment. Sampling locations are shown in Figure 2. Locations with contaminant concentrations above Method A cleanup levels are shown in Figure 3.

In May 2016, five soil borings were advanced at the Site to determine the current condition of the soil (Figure 4). Samples were collected in the locations and depths where contamination remained after the UST removal. The total depth explored during this work was 19.5 feet bgs. Selected soil samples were analyzed for TPH-G, benzene, toluene, ethylbenzene, and total xylenes (BTEX).

Results of this investigation found TPH-G in B1-12 at 1,090 mg/kg. No benzene was found in this sample. At location B5, benzene was found at 0.039 mg/kg and 0.036 mg/kg 11 feet and 13 feet bgs, respectively. All the rest of the results were either non-detect or below applicable cleanup levels.

No groundwater was found during any of the remediation work performed at the Site.

2. Establishment of cleanup standards.

Ecology has determined the cleanup levels and points of compliance you established for the Site meet the substantive requirements of MTCA.

Method B cleanup levels were selected for comparison of remaining contamination at the Site.

The Method B cleanup levels were determined using guidance in the *Model Remedies for Sites with Petroleum Contaminated Soils*, Toxics Cleanup Program, September 2015, Publication No. 15-09-043.

Model Remedy 4 was selected for establishing cleanup levels at the Site. This remedy states it may be used where Method B has been selected to establish the cleanup levels and removal of the contaminated soil is sufficient to meet the calculated Method B levels. A generic Method B direct contact TPH-G cleanup level of 1,500 mg/kg was used. Remaining levels of contamination are below this cleanup level. For benzene, the generic Method B cleanup level of 18.2 mg/kg in soil was used. All remaining benzene is well below this concentration.

The direct contact pathway has been determined to be incomplete since measured benzene levels in soil are below the Method B direct contact level of 18.2 mg/kg for unrestricted use, thus this pathway has been addressed.

The vapor intrusion pathway was screened out and is thus not a complete pathway.

The groundwater pathway was determined to be incomplete. The estimated depth to groundwater of at least 80 feet bgs confirms that this pathway can be reasonably expected to render this route of exposure incomplete.

3. Selection of cleanup action.

Ecology has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA Excavation of contaminated soil with off-Site disposal was selected as the cleanup remedy.

4. Cleanup.

Ecology has determined the cleanup you performed meets the cleanup standards established for the Site.

Using the cleanup remedy selected of excavation and off-Site disposal, a total of 721.55 tons of petroleum contaminated soil was removed from the Site. Treatment and disposal was accomplished at TPS Technologies, Inc., in Tacoma, Washington.

No groundwater was found during investigations at the Site. Due to the depth of at least 80 feet bgs to regional groundwater, it is highly unlikely that any contamination would migrate to this depth and thus was not investigated or considered a pathway of exposure.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

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

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

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

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

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

3. State is immune from liability.

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

Termination of Agreement

Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project SWS1536.

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 or the termination of the Agreement, please contact me by phone at (360) 407-6263 or e-mail at cjoh461@ecy.wa.gov .

Sincerely,

Carol A. Johnston
SWRO Toxics Cleanup Program

CAJ: hd

By certified mail [91 7108 2133 3939 7042 7278]

Enclosures (4 figures)

cc: Brian A. Dixon, ECI Environmental Services
Rob Olsen, Tacoma Pierce County Health Department
Nick Acklam, Ecology
Matthew Alexander. Ecology

7202 S Park Ave

7202 S Park Ave, Tacoma, WA 98408

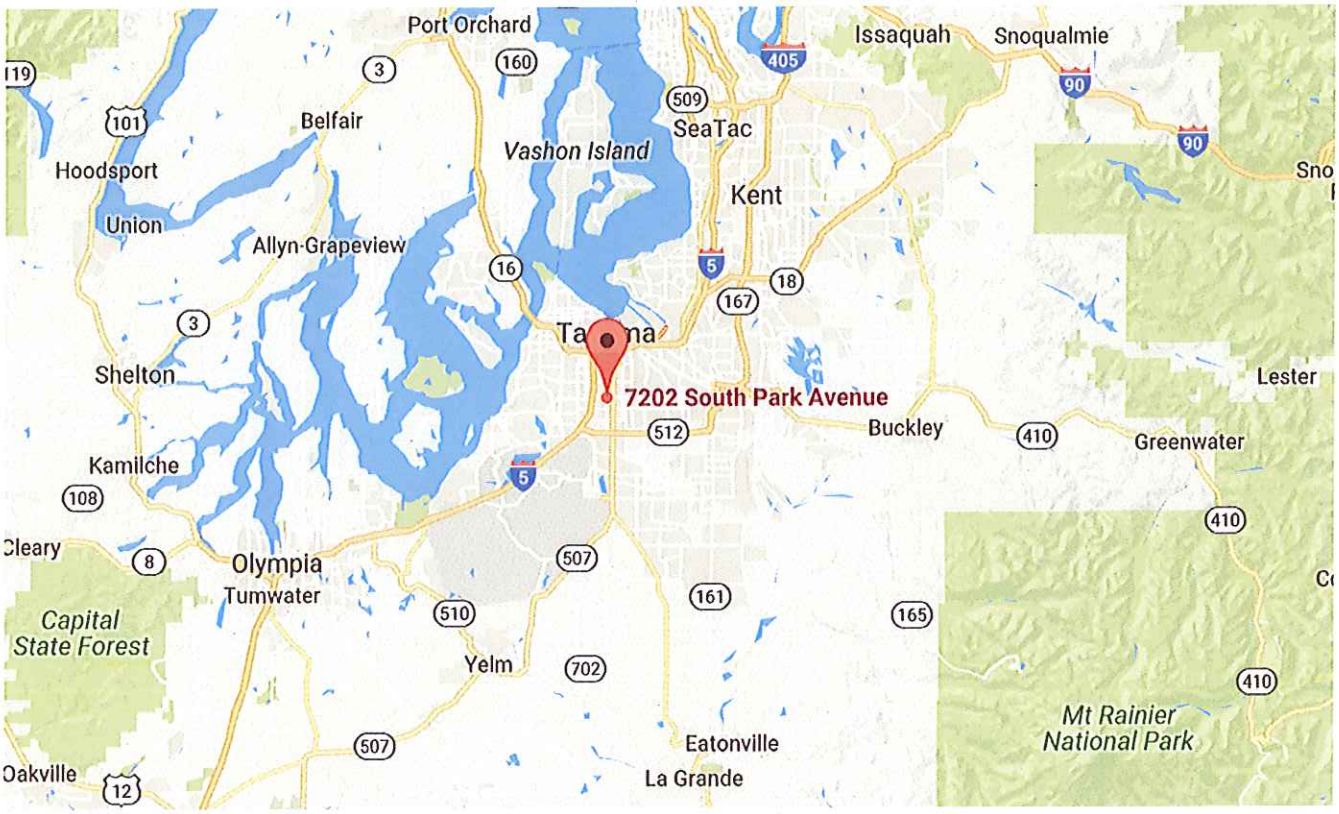
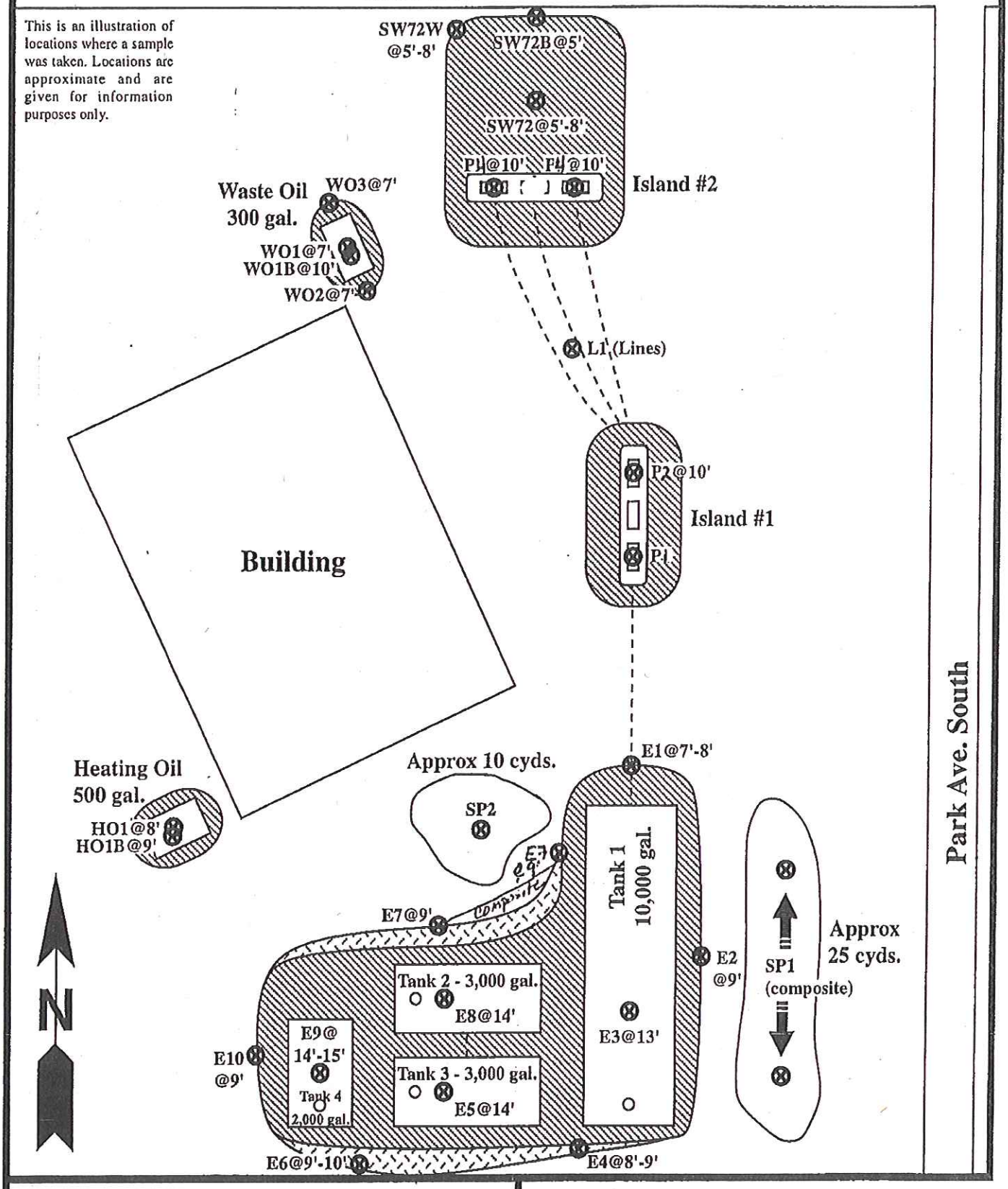


Figure 1

SAMPLE DIAGRAM

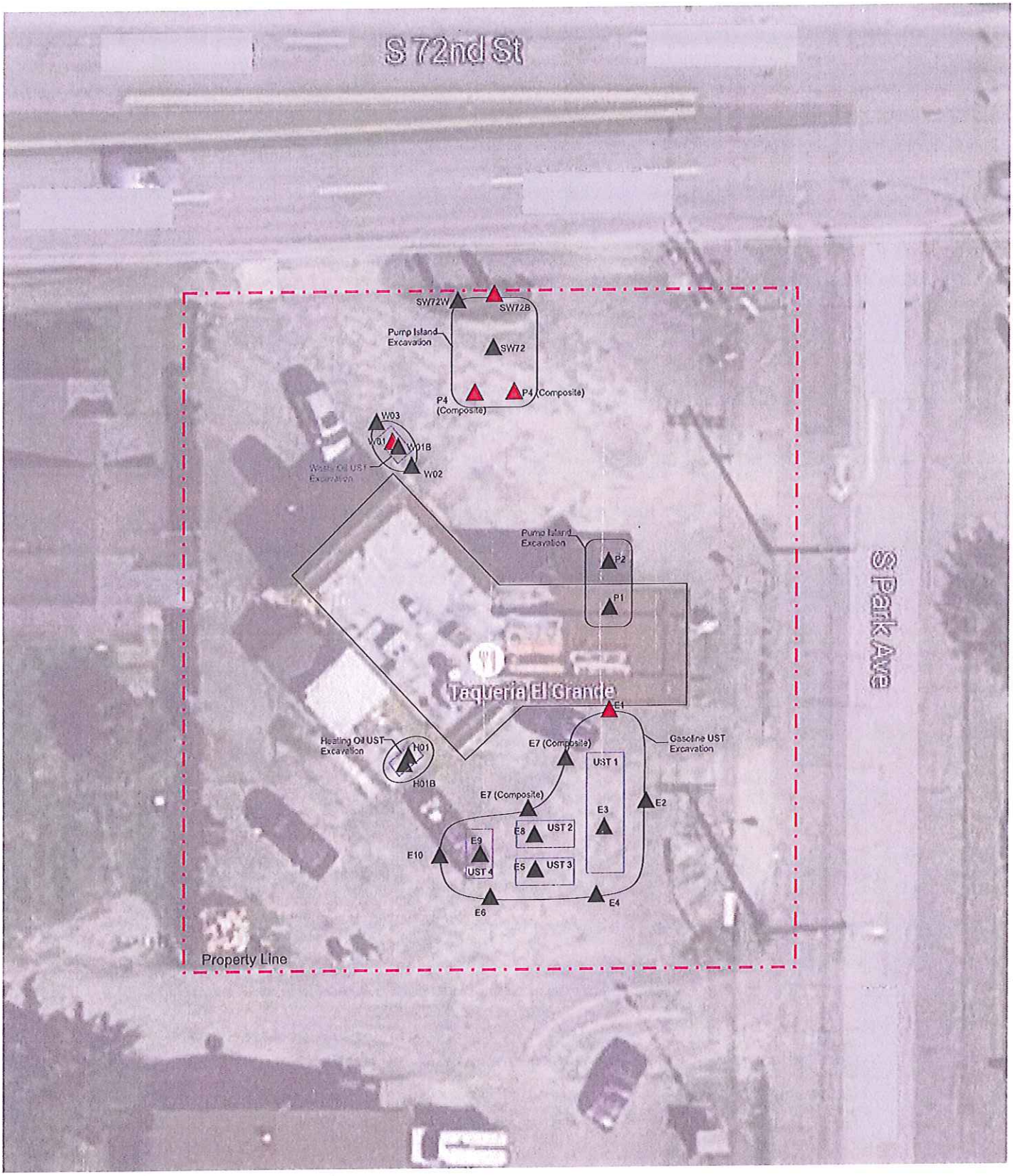


Subject Site
7202 South Park Ave.
Tacoma, Wa 98446

SCALE: 7/8" = 10'

0 5 10 20

ENVIRO ASSESSMENT, INC.



▲ Soil Sample Location

▲ Concentration Exceeds MTCA Method A Cleanup Level

N

Not To Scale

Historical Soil Sample Location Map
Focused Subsurface Investigation
7202 S Park Ave
Tacoma, WA 98408

Date:	May 13, 2016
Completed By:	K. Spencer
Reviewed By.:	B. Dixon
Version:	ECI-001
Project No.:	0603-01-01

Figure No.: 03

Sheet 03 of 05

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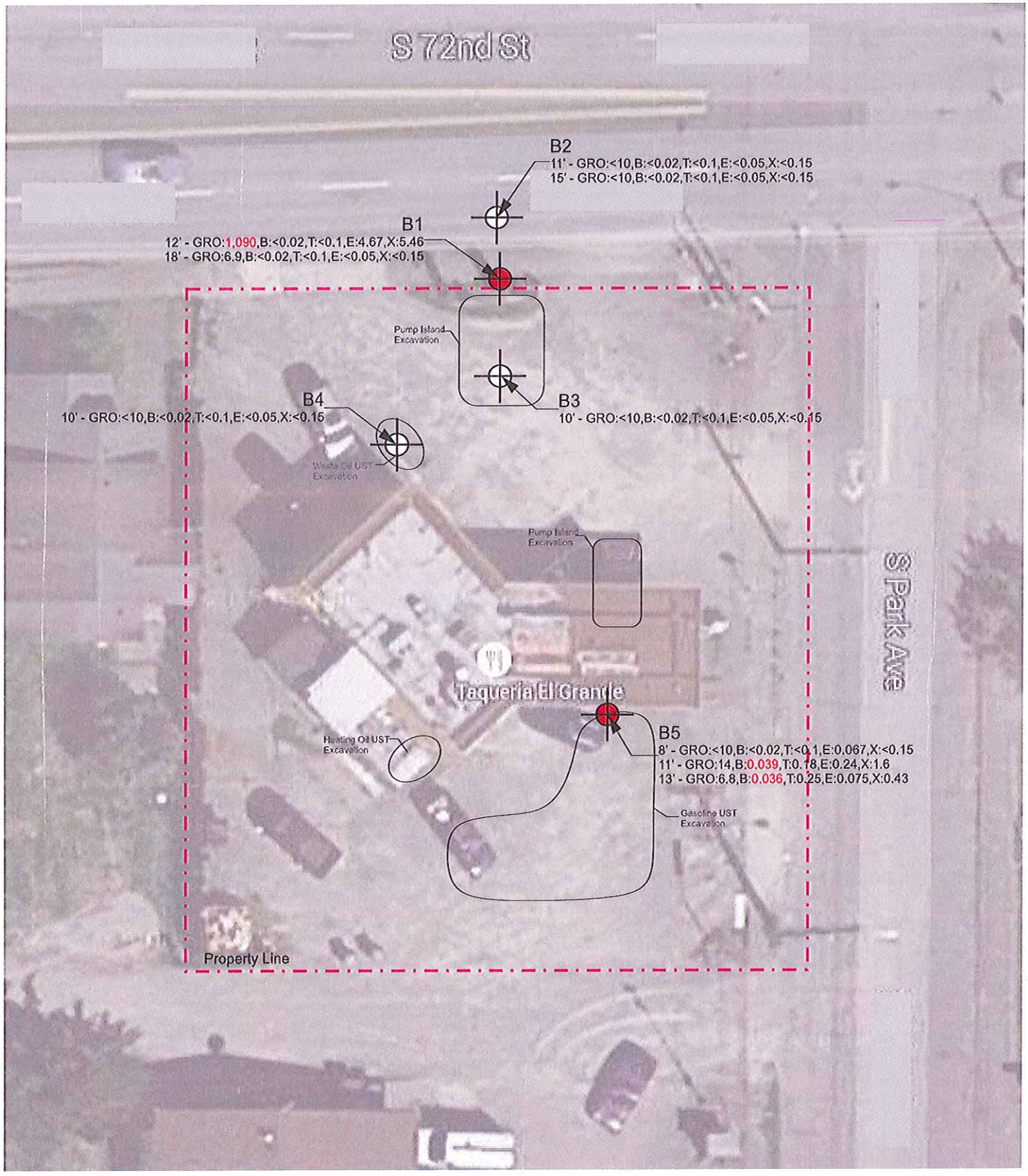

N
Not To Scale

Soil Sample Location

Concentration Exceeds MTCA Method A Cleanup Level

Boring Location Map
Focused Subsurface Investigation
7202 S Park Ave
Tacoma, WA 98408

Date:	May 13, 2016
Completed By:	K. Spencer
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Version:	ECI-001
Project No.:	0603-01-01

Figure No.: 04
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