



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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June 20, 2017

Casey Davidson
Construction Project Coordinator
600 Capitol Way N
Olympia WA 98501

Re: No Further Action at the following Site:

- **Site Name:** Coulter Creek Hatchery
- **Site Address:** 41 E Coulter Creek Rd, Belfair, Mason Co., WA
- **Facility/Site No.:** 19373
- **Cleanup Site No.:** 12972
- **VCP Project No.:** SW1571

Dear Mr. Davidson:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Coulter Creek Hatchery 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:

- Total Petroleum Hydrocarbons-Diesel into the groundwater.

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 Closure Site Assessment Report*, Associated Environmental Group, LLC, July 16, 2014.
2. *Phase II Environmental Site Assessment*, Associated Environmental Group, LLC, December 9 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 described above and as follows.

The Site, a fish hatchery since 1980, is located at 41 East Coulter Road, Belfair, Mason County, Washington. It is situated on the northwest corner of the intersection of Coulter Creek Road and State Route 302 North (Figure 1). The facility consists of two fish ponds, an office building, a canopy storage structure, a diesel generator building, a water diversion structure, and a residence. The generator, used for emergency power generation, was fueled by a 1,000-gallon underground storage tank (UST; Figure 2).

The surrounding area is rural interspersed with residential buildings. The Site sits at an elevation of approximately 18 feet above mean sea level. Topography is generally flat, with a slight slope on the southern portion toward Case Inlet. Case Inlet, an arm of Puget Sound, is approximately 100 feet to the southwest of the Site. Coulter Creek flows along the northern property line of the hatchery.

The Site is underlain by Quaternary age undifferentiated glacial outwash deposits that typically consist of sand and gravel with some silt and clay. Local water well logs indicate static groundwater levels are approximately 8 feet to 10 feet below ground surface (bgs).

In June 2014, the UST was removed after remaining diesel was pumped out. After removal, the UST was inspected and no visible holes or corrosion was found. Groundwater in the excavation was found at approximately 7 feet bgs. The bottom of the excavation was at 8 feet bgs. Soil samples were collected from the sidewalls and base of the excavation and from the stockpiled soil. Two groundwater samples were collected – one from the water surface and one from 6 inches below the water surface. All samples were analyzed for Total Petroleum Hydrocarbons- Diesel (TPH-D) and Total Petroleum Hydrocarbons-Oil (TPH-O). The soil samples were all non-detect. The water samples had TPH-D at 2,700 micrograms per liter ($\mu\text{g/l}$) for the surface sample and 10,000 $\mu\text{g/l}$ for the sample collected at 6 inches below the surface. Both of these results are above the MTCA Method A TPH-D cleanup level of 500 $\mu\text{g/l}$. Both results for TPH-O were non-detect.

Due to the high TPH-D detections in groundwater, the excavation was dewatered twice, removing a total of 1,222 gallons of water. After the final dewatering, groundwater that infiltrated the excavation was not sampled. This activity was done by Cowlitz Clean Sweep; no documentation was found for verification. The excavation was then backfilled.

No analyses for benzene, toluene, ethylbenzene, and xylenes (BTEX) were done.

In June 2016, three borings were advanced at the Site to collect groundwater samples (Figure 2; locations B1N, B2E, and B3S). Upon reaching the total depth planned of 10 feet bgs, temporary screens were set to allow sample collection. Samples were analyzed for TPH-D, TPH-O, and BTEX. All results were non-detect at appropriate detection levels (Table 1).

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.

a. Cleanup levels

MTCA Method A Cleanup Levels for unrestricted land use for soil and groundwater were used to characterize the Site.

The Method A cleanup levels used are:

Soil:

| | |
|---------------|-------------|
| TPH-D | 2,000 mg/kg |
| TPH-O | 2,000 mg/kg |
| Benzene | 0.03 mg/kg |
| Toluene | 7 mg/kg |
| Ethylbenzene | 6 mg/kg |
| Total Xylenes | 9 mg/kg |

Groundwater:

| | |
|---------------|-----------|
| TPH-D | 500 ug/l |
| TPH-O | 500 ug/l |
| Benzene | 5 ug/l |
| Toluene | 1000 ug/l |
| Ethylbenzene | 700 ug/l |
| Total Xylenes | 1000 ug/l |

b. Points of compliance

Standard points of compliance are being used for the Site.

The Points of Compliance used are:

Soil -Direct Contact: For soil cleanup levels based on human exposure via direct contact, the point of compliance is: "...throughout the Site from ground surface to 15 feet below the ground surface."

This pathway is not complete since no contamination was left in soil.

Soil- Leaching: For sites where soil cleanup levels are based on the protection of groundwater: "...*the point of compliance is throughout the Site*"

This pathway is not complete since no contamination was left in soil.

Groundwater: For groundwater, the standard point of compliance 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.*"

This pathway is not complete since no contamination was left in groundwater.

Vapor: Ambient and Indoor Air throughout the site.

This pathway is not complete since no contamination was left in soil or groundwater.

3. Selection of cleanup action.

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

The selected remedy was removal of the UST, removal of affected groundwater, and subsequent analysis of groundwater samples.

This selected remedy was compared to the Model Remedy 1 in the Draft *Model Remedies for Site with Petroleum Impacts to Groundwater*, Department of Ecology, Publication No. 16-09-057, May, 2016. The description for this remedy states:

"This model remedy is for situations where the selected remedial action results in the Method A groundwater Cleanup levels and the Method A soil cleanup levels for unrestricted land use being met throughout the Site. Following remediation, sufficient confirmation sampling and post-remedial monitoring would be necessary to document compliance with these cleanup levels."

4. Cleanup.

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

The requirements of the groundwater Model Remedy 1 have been met at the Site through removal of contaminated groundwater and subsequent confirmation sampling.

Listing of the Site

Based on this opinion, Ecology will remove the Site from our Confirmed and Suspected Contaminated Sites List.

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).

Mr. Casey Davidson
June 20, 2017
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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 (#SW1571).

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 Carol.Johnston@ecy.wa.gov.

Sincerely,



Carol A. Johnston
SWRO Toxics Cleanup Program

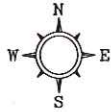
CAJ: kb

Enclosures: Figure 1: Site location map
 Figure 2: Site sampling locations map
 Table 1: Summary of Groundwater Analytical Results

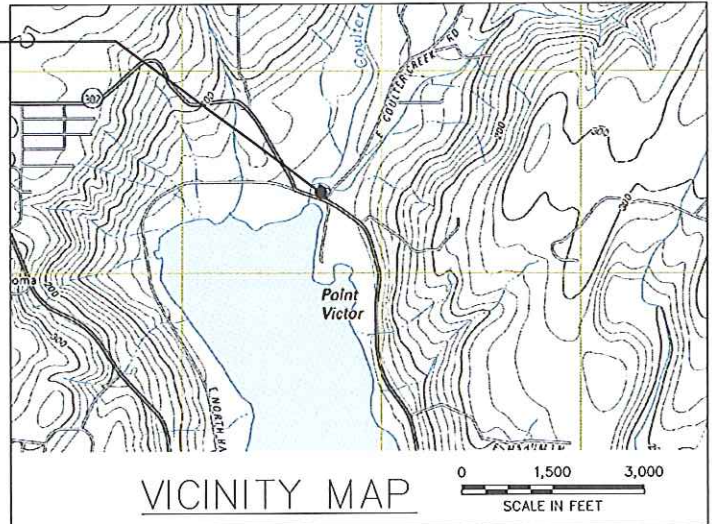
By Certified Mail: [91 7199 9991 7037 0287 2479]

cc: Mr. Scott Rose, Associated Environmental Group, LLC
 Mr. Gerald Tousley, Thurston County Environmental Health
 Mr. Nicholas Acklam, Ecology
 Mr. Matthew Alexander, Ecology
 Mr. Mark Gordon, Ecology

| FILENAME | DRAWN BY | CHECKED BY | APPROVED BY | PROJECT NUMBER |
|-------------------|--------------|-------------|-------------|----------------|
| 13-162_1304_T.DWG | ICD 9/6/2016 | BD 9/6/2016 | BD 9/6/2016 | 13-162 |



PROJECT LOCATION

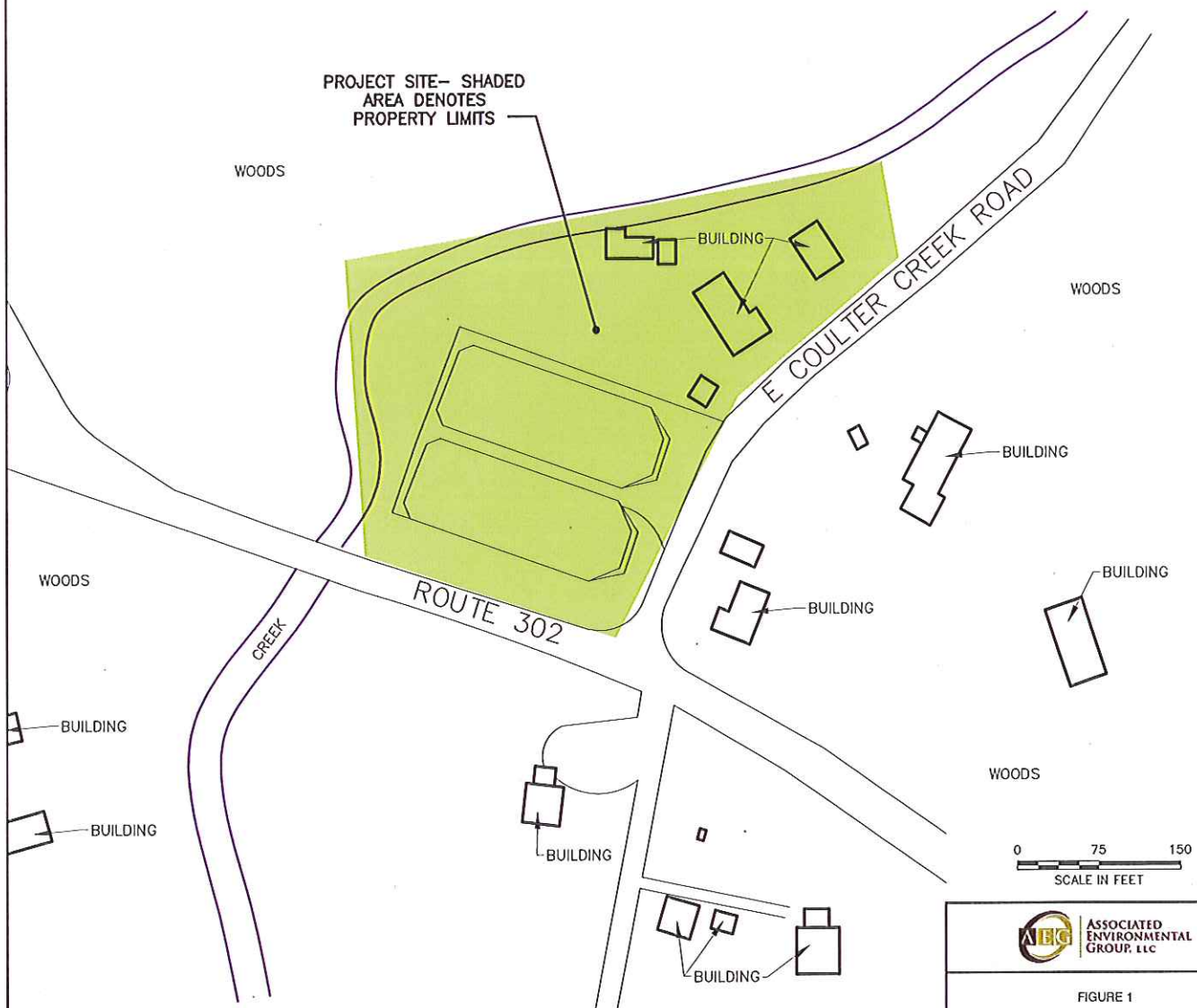


NOTES

1. THE LOCATIONS OF ALL FEATURES SHOWN ARE APPROXIMATE
2. THIS DRAWING IS FOR INFORMATION PURPOSES. IT IS INTENDED TO ASSIST IN SHOWING FEATURES DISCUSSED IN AN ATTACHED DOCUMENT.

REFERENCE

DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEG, LLC.
VICINITY IMAGE SOURCE: U.S. GEOLOGICAL SURVEY-2011, 7.5 MINUTE QUADRANGLE MAP BELFAIR, WASHINGTON

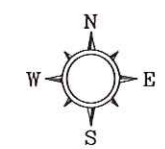


ASSOCIATED ENVIRONMENTAL GROUP, LLC

FIGURE 1

VICINITY MAP

COULTER CREEK HATCHERY
DEPARTMENT OF FISH & WILDLIFE
41 EAST COULTER CREEK ROAD
BELFAIR, WASHINGTON



LEGEND

- PROPERTY LINE
- - - EXCAVATION AREA
- N-SW-1-5 ● SOIL SAMPLE LOCATION

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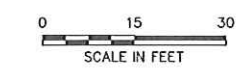


FIGURE 2
SITE MAP

COULTER CREEK HATCHERY
DEPARTMENT OF FISH & WILDLIFE
41 EAST COULTER CREEK ROAD
BELFAIR, WASHINGTON

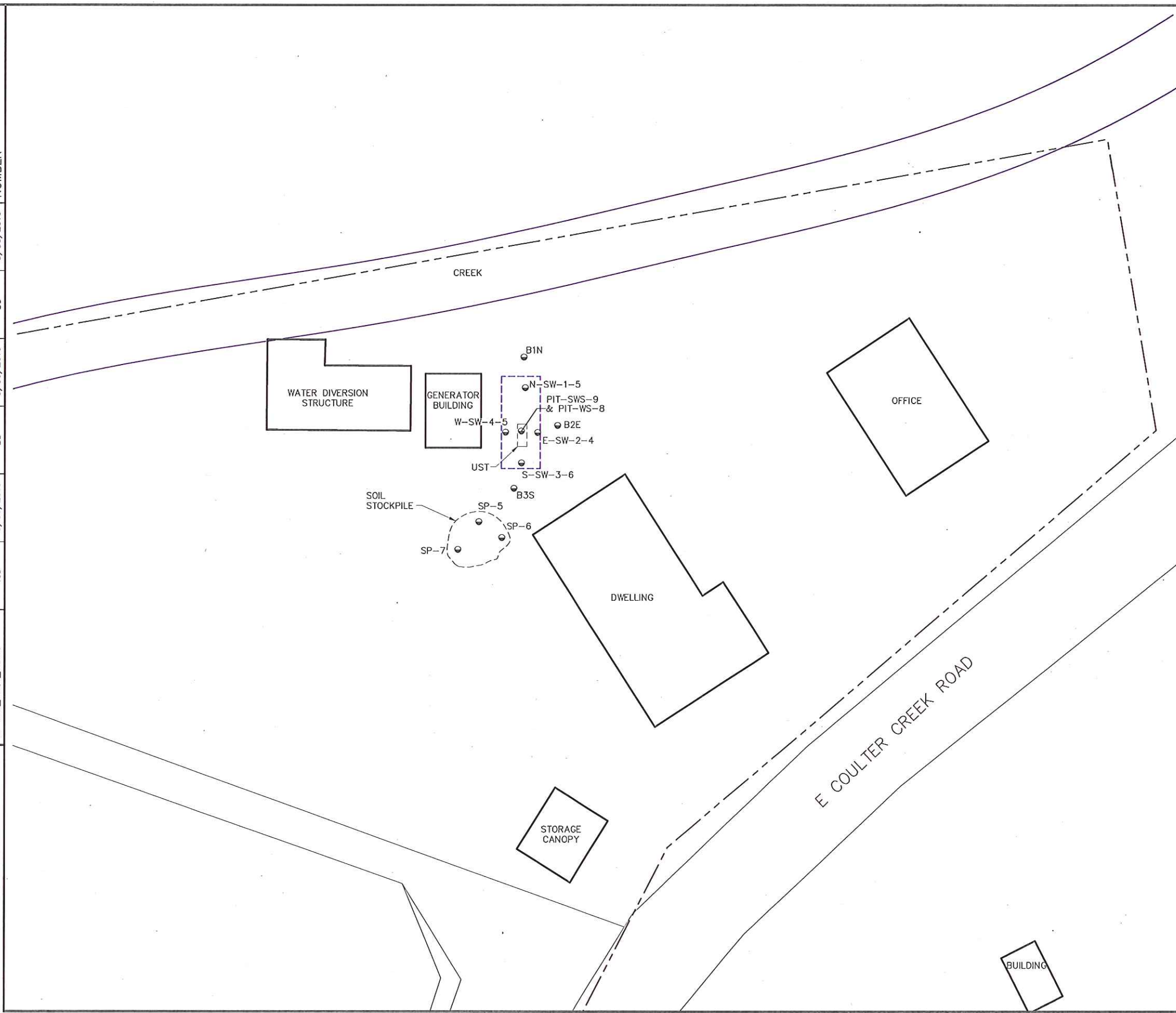


Table 1 - Summary of Groundwater Analytical Results
Coulter Creek
Belfair, Washington

| Sample Number | Date Collected | Volatile Organic Compounds | | | | Total Petroleum Hydrocarbons (TPH) | |
|------------------------------|----------------|----------------------------|---------|--------------|---------|------------------------------------|-----------|
| | | Benzene | Toluene | Ethylbenzene | Xylenes | Diesel | Heavy Oil |
| B-1NW | 6/30/2016 | <1.0 | <1.0 | <1.0 | <3.0 | <250 | <500 |
| B-2EW | 6/30/2016 | <1.0 | <1.0 | <1.0 | <3.0 | <250 | <500 |
| B-3SW | 6/30/2016 | <1.0 | <1.0 | <1.0 | <3.0 | <250 | <500 |
| PQL | | 1.0 | 1.0 | 1.0 | 3.0 | 250 | 500 |
| MTCA Method A Cleanup Levels | | 5.0 | 1,000 | 700 | 1,000 | 500 | 500 |

Notes:

All values presented in micrograms per liter (µg/l)

< Not detected at the listed laboratory detection limits

PQL = Practical Quantification Limit (laboratory detection limit)