



STATE OF WASHINGTON  
**DEPARTMENT OF ECOLOGY**

Eastern Region Office

4601 North Monroe St., Spokane, WA 99205-1295 • 509-329-3400

November 20, 2023

Travis Trent  
Fulcrum Environmental Consulting  
207 West Boone Avenue  
Spokane, WA 99201

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

- **Site Name:** Whitten Oil 1
- **Site Address:** 370 West 5<sup>th</sup> Avenue, Colville
- **Cleanup Site ID:** 9440
- **Facility/Site ID:** 49354234
- **VCP Project ID:** EA0340

Dear Travis Trent:

The Washington State Department of Ecology (Ecology) has reviewed the report documenting your remedial actions at the Whitten Oil 1 facility (Site) under the [Voluntary Cleanup Program](#) (VCP).<sup>1</sup> This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), chapter [70A.305](#) RCW.<sup>2</sup>

## **Opinion**

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

Ecology bases this opinion 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”). The analysis is provided below.

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<sup>1</sup> <https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Voluntary-Cleanup-Program>

<sup>2</sup> <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305>

## Site Description

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

- Gasoline, diesel, and oil-range petroleum hydrocarbons (GRPH, DRPH, and ORPH) into the soil and groundwater.
- Volatile organic compounds (VOCs) into the soil and 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(s) associated with this Site are affected by other sites.

## Basis for the opinion

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This opinion is based on the information contained in the documents list in **Enclosure B**. You can request these documents by filing a [records request](#).<sup>3</sup> For help making a request, contact the Public Records Officer at [recordsofficer@ecy.wa.gov](mailto:recordsofficer@ecy.wa.gov) or call (360) 407-6040. Before making a request, check whether the documents are available on the [Site webpage](#).<sup>4</sup>

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

## Analysis of the cleanup

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

### Suspected new release

Data from 2018 to present indicate a new release of petroleum hydrocarbons and VOCs to groundwater which exceeds the MTCA Method A cleanup levels for GRPH, DRPH, ORPH, and benzene. The groundwater plume has migrated beyond the property boundary to the northwest and is no longer fully delineated. Ecology has concluded that additional Site investigation is necessary to delineate the complete horizontal and vertical extent of soil and groundwater contamination. Due to the proximity of residential homes immediately downgradient of monitoring well MW-7, Ecology will require an expedited response to

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<sup>3</sup> <https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests>

<sup>4</sup> <https://apps.ecology.wa.gov/cleanupsearch/site/9440>

determine whether any interim remedial actions are required to mitigate impacts to human health and the environment. Within 30 days of receiving this letter, please submit a work plan for evaluating off-property soil and groundwater contamination in accordance with Ecology's [Guidance for Remediation of Petroleum Contaminated Sites \(wa.gov\)](#).<sup>5</sup>

### **Vapor intrusion evaluation**

Ecology has determined benzene concentrations in groundwater exceed the MTCA Method B vapor intrusion (VI) screening level established using procedures in WAC [173-340-750](#)<sup>6</sup>. Therefore, a Tier 2 VI evaluation is required to assess indoor air quality in any occupied buildings within 30 feet of groundwater exceeding the VI screening levels for all petroleum VOCs. Please refer to Ecology's [Guidance for Evaluating Vapor Intrusion in Washington State: Investigation and Remedial Action](#).<sup>7</sup>

### **Updated RI/FS**

Once the additional Site characterization has been completed, please submit an updated Remedial Investigation (RI) and conceptual site model (CSM) identifying the nature and extent of all contaminated media and exposure pathways. The RI should also include groundwater contour maps and hydrographs representing the last 5 years of monitoring data. The completed RI should be the basis for preparing a feasibility study (FS) that meets the MTCA requirements for selection of a cleanup action. Visit the [Ecology webpage](#)<sup>8</sup> for RI/FS report format and content requirements.

### **Terrestrial Ecological Evaluation**

A Terrestrial Ecological Evaluation (TEE) has not been performed at 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. Please conduct the TEE and provide the associated documentation forms to Ecology. Additional information on satisfying this requirement can be found at the following link:

<https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Terrestrial-ecological-evaluation>

### **Data submittal**

Please note that electronic submittal of all sampling data into Ecology's electronic Environmental Information Management (EIM) database is a requirement in order to receive a final Ecology opinion for this Site. For questions regarding EIM, please see the Ecology web

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<sup>5</sup> <https://apps.ecology.wa.gov/publications/summarypages/1009057.html>

<sup>6</sup> <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-750>

<sup>7</sup> <https://apps.ecology.wa.gov/publications/summarypages/0909047.html>

<sup>8</sup> <https://fortress.wa.gov/ecy/publications/SummaryPages/1609007.html>

page: <https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database>

## Limitations of the Opinion

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### **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).<sup>9</sup>

### **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](#)<sup>10</sup> and WAC [173-340-545](#).<sup>11</sup>

### **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](#)(6).<sup>12</sup>

## Contact Information

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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](http://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm). If you have any questions about this opinion, please contact me by phone at (509) 342-5564 or e-mail at [ted.uecker@ecy.wa.gov](mailto:ted.uecker@ecy.wa.gov).

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<sup>9</sup> <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.040>

<sup>10</sup> <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.080>

<sup>11</sup> <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-545>

<sup>12</sup> <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.170>

Travis Trent  
November 20, 2023  
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Sincerely,



Ted M. Uecker  
ERO Toxics Cleanup Program

tmu: hg

Enclosures (2):   A – Description and Diagrams of the Site  
                          B – List of Site Diagrams

cc:     Jeff Whitten, Whitten Oil  
          Christer Loftenius, Ecology   
          Nicholas Acklam, Ecology

## **Enclosure A**

### **Description and Diagrams of the Site**

## Site description

The site is located at the northeast corner of West Fifth Avenue (U.S. Highway 395) and North Lincoln Street in Colville, WA. The site has been in operation as a service station or bulk plant since the 1950s. The site is an active gasoline service station and car wash with three dispenser islands and four underground storage tanks (USTs), including two 10,000-gallon diesel tanks, one 6,000-gallon premium gasoline tank, and one 10,000-gallon unleaded gasoline tank. The entire site is paved, with sandy fill material from 3-8 feet below ground surface (bgs) underlain by fine-grained alluvium. Bedrock depth is unknown, but greater than 14.5 feet bgs. Groundwater is encountered from 3.75 to 5.24 feet bgs, flowing to the northwest at a gradient of 0.032. The flow generally follows topography.

## Site history

In September 1989, six USTs were removed from the site, with one UST abandoned in place due to its location beneath the office building. Three of the USTs removed were suspected of leakage, and approximately 1,200 cubic yards of petroleum-contaminated soil (PCS) were removed along with the USTs.

In January 1990, six soil borings ranging from 10 to 14.5 feet bgs were advanced in suspect areas to investigate the potential for soil or groundwater contamination. Soil samples were collected at five-foot vertical intervals and analyzed for total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and xylenes (BTEX). Only one sample contained detectable TPH, and all samples were below the 1990 MTCA cleanup levels. Seven groundwater monitoring wells were installed (CW-01, CW-02, MW-01, MW-02, MW-03, MW-04, and MW-06) and samples were analyzed for TPH and BTEX. The highest TPH concentrations were found in wells MW-2 and MW-4 (close to the UST basin) and downgradient MW-6. Despite groundwater contamination above MTCA cleanup levels, no further remedial actions were planned or completed.

In December 2005, a change in ownership of the site led to additional soil sampling. Five soil borings were advanced between 5 and 15 feet bgs near the active USTs. Five soil samples were collected and analyzed for gasoline-range petroleum hydrocarbons (GRPH), diesel- and oil-range petroleum hydrocarbons (GRPH and ORPH), lead, methyl tert-butyl ether (MTBE), and BTEX. GRPH, ethylbenzene, toluene, xylene, and lead were all detected but below MTCA Method A cleanup levels.

In September 2017, groundwater monitoring was resumed from the five onsite wells (CW-01, CW-02, MW-03, MW-04, and MW-06) and analyzed for NTWPH-Gx and BTEX. MW-01 and MW-02 could not be located and it was suggested they were likely decommissioned or paved over. Diesel and oil-range hydrocarbons were added to the analytical regime in September 2018, and were detected in MW-04 and MW-06 to a maximum concentration of 1580 ug/L.

During groundwater monitoring in March 2020, duplicate samples were collected from MW-04 and MW-06 and filtered prior to analyses to demonstrate whether high turbidity of groundwater samples was contributing to elevated petroleum hydrocarbon concentrations. Results indicate that the filtered and unfiltered sample have comparable oil-range hydrocarbon concentrations. Gasoline and benzene concentrations were below the Method A CULs for all samples.

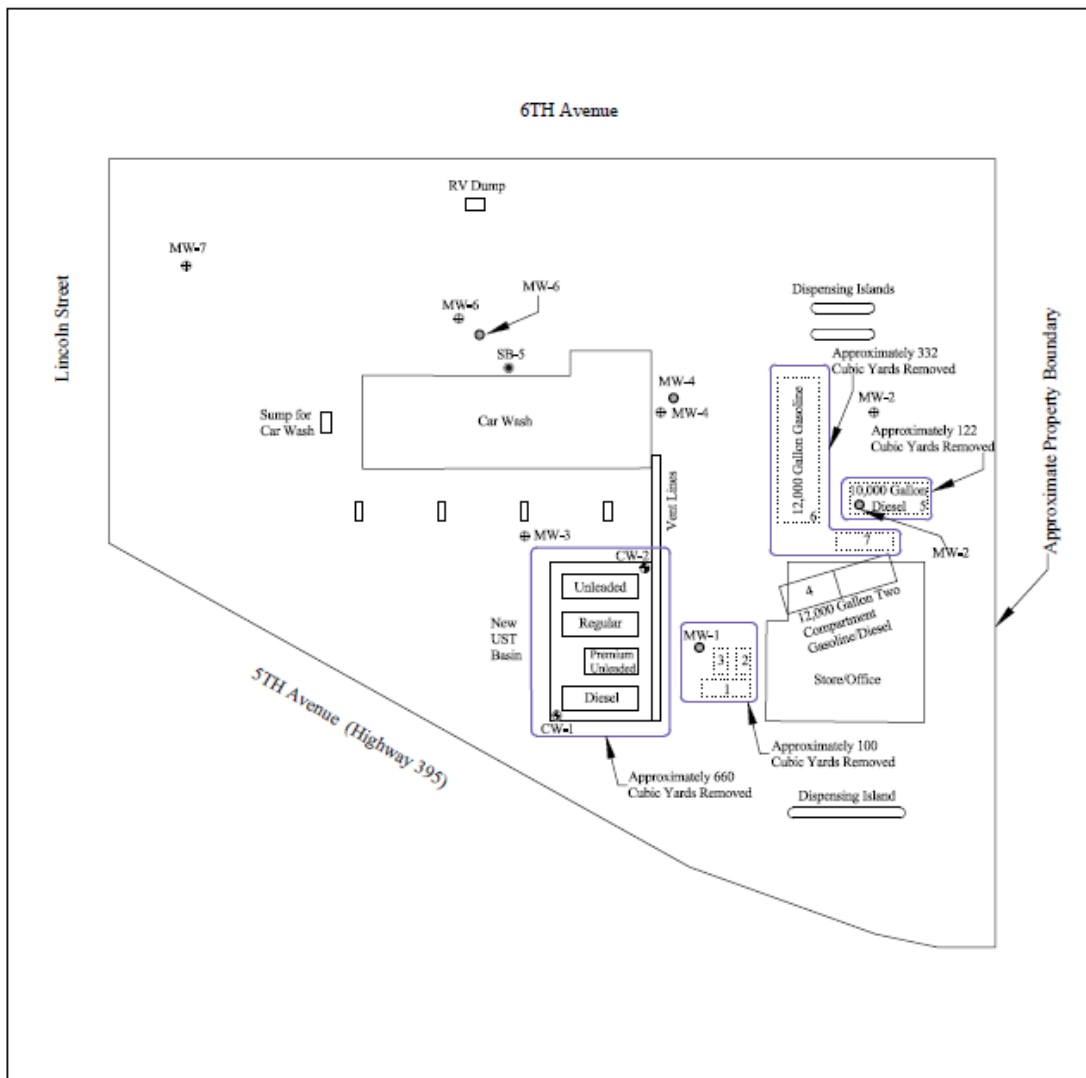
In September and October 2020, monitoring wells MW-04 and MW-06 were decommissioned due to failing surface seals and poor recharge rates. Four monitoring wells (MW-02, MW-04, MW-06, and MW-07) were installed to replace the decommissioned wells and provide additional downgradient and source data points. Samples were collected from all seven onsite monitoring wells. GRPH, combined DRPH and ORPH, and benzene exceeded the Method A cleanup levels in CW-02 and MW-04. These constituents were also detected below cleanup levels in CW-01, MW-02, MW-06, and MW-07.

During groundwater monitoring events in March and September 2021, all seven onsite wells were sampled. There was a significant increase in the combined DRPH and ORPH concentrations in MW-04, which follow a sharp decrease in September 2019 followed by relative stability through 2020. A similar increasing trend was observed with benzene. MW-06 showed a slight increase in DRPH and ORPH to above the MTCA Method A cleanup level during the same time period. MW-02 also remained above the cleanup levels for DRPH and GRPH. All other wells were below the cleanup levels for DRPH, ORPH, GRPH, and BTEX. Groundwater monitoring in March 2022 showed exceedances of DRPH in CW-02, MW-02, MW-03, MW-04, and MW-06, ORPH in MW-04, GRPH in MW-02 and MW-04, and benzene in MW-04. This sampling event saw an increase of DRPH to above the Method A cleanup level in MW-03 and MW-6.

Results from the September 2022 and March 2023 groundwater sampling were relatively consistent with previous exceedances, except for increasing GRPH in CW-02 and MW-03, a sharp increase and decrease of DRPH in CW-02, and a sharp increase in benzene CW-02. An evaluation of groundwater contaminant concentrations and areal extent from September 2017 to March 2023 indicates a new release of DRPH and benzene sometime prior to the September 2022 sampling event.

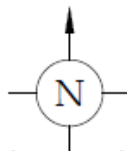


# Site Diagrams



## LEGEND

- Approximate extent of soil excavation
- Existing onsite UST
- Historical UST removed from site
- Historic Soil Boring
- Historical Monitoring Well
- Existing onsite Monitoring Well
- Existing onsite Compliance Well



Approximate Scale In Feet

**Figure 2: Historical USTs, Soil Borings, and Monitoring Wells Site Diagram Map**

Second Semi-annual Groundwater Sampling Event March 2023  
 Whitty's Chevron  
 370 West 5th Avenue  
 Colville, Washington

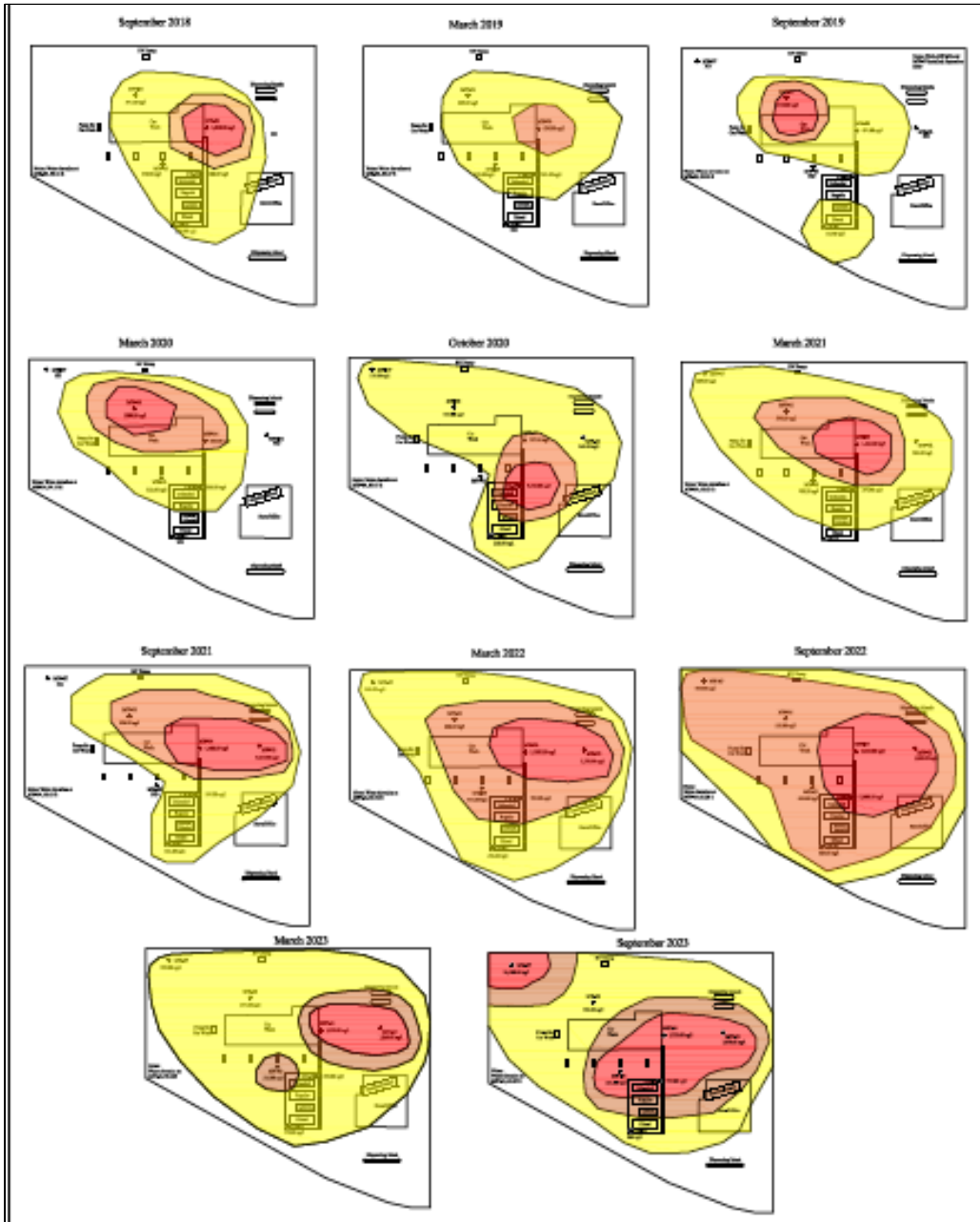
**FULCRUM ENVIRONMENTAL CONSULTING, INC.**  
 207 W. BOONE AVENUE  
 SPOKANE, WASHINGTON 99201  
 (509) 459-9220 [www.efulcrum.net](http://www.efulcrum.net)




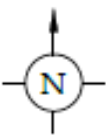
MAP BY: Abby Whitmore

PROJECT NUMBER: 233710.00

DATE: October 09, 2023

REVIEWED BY: T. Trent



<b>LEGEND</b>		<p><b>Figure 6: Combined Diesel-Range and Heavy Oil-Range Hydrocarbons - Areal Extent Over Time</b></p> <p>Whitey's Chevron          170 West 5th Avenue          Colville, Washington</p>				
	Concentrations above 1000.00 ppb					
	Concentrations 500.00 - 1000.00 ppb	<p>FULCRUM ENVIRONMENTAL CONSULTING, INC.          207 W. BOONE AVENUE          SPOKANE, WASHINGTON 99201          (509) 459-9220    www.efac.com</p>				
	Detectable concentrations below the regulatory threshold of 500 ppb					
		<table border="1"> <tr> <td>MAP BY: Amy Whitmore</td> <td>PROJECT NUMBER: 233710.00</td> </tr> <tr> <td>DATE: October 09, 2023</td> <td>REVIEWED BY: T. Trent</td> </tr> </table>	MAP BY: Amy Whitmore	PROJECT NUMBER: 233710.00	DATE: October 09, 2023	REVIEWED BY: T. Trent
MAP BY: Amy Whitmore	PROJECT NUMBER: 233710.00					
DATE: October 09, 2023	REVIEWED BY: T. Trent					

# Enclosure B

## List of Site Documents

1. Fulcrum Environmental Consulting, Inc., Whitten Oil Groundwater Monitoring September 2023 Sampling Report, November 1, 2023.
2. Fulcrum Environmental Consulting, Inc., Whitten Oil Groundwater Monitoring March 2023 Sampling Report, May 2, 2023.
3. Fulcrum Environmental Consulting, Inc., Whitten Oil Groundwater Monitoring March 2022 Sampling Report, April 20, 2022.
4. Fulcrum Environmental Consulting, Inc., Whitten Oil Groundwater Monitoring September 2021 Sampling Report, November 8, 2021.
5. Fulcrum Environmental Consulting, Inc., Whitten Oil Groundwater Monitoring March 2021 Sampling Report, March 24, 2021.
6. Fulcrum Environmental Consulting, Inc., Whitten Oil Monitoring Well Decommissioning/Installation and Groundwater Monitoring Event for September/October 2020, January 8, 2021.
7. Fulcrum Environmental Consulting, Inc., Whitten Oil Groundwater Monitoring March 2020 Sampling Report, April 1, 2020.
8. Fulcrum Environmental Consulting, Inc., Whitten Oil Groundwater Monitoring September 2019 Sampling Report, October 18, 2019.
9. Fulcrum Environmental Consulting, Inc., Whitten Oil Groundwater Monitoring June 2018 Sampling Report, September 11, 2018.
10. Fulcrum Environmental Consulting, Inc., Whitten Oil Groundwater Monitoring March 2018 Sampling Report, June 19, 2018.
11. Fulcrum Environmental Consulting, Inc., Whitten Oil Groundwater Monitoring December 2017 Sampling Report, June 19, 2018.
12. Fulcrum Environmental Consulting, Inc., Whitten Oil Groundwater Monitoring September 2017 Sampling Report, June 19, 2018.