



Olympus Technical Services, Inc.

March 12, 2025

Patrick Skibicki
Department of Environmental Quality
Brownfields & Federal Facilities Section
PO Box 200901
Helena, MT 59620-0901

Re: Groundwater Monitoring Work Plan
Former Shell Oil Bulk Plant
Milepost 40+0244, 701 East Pike Avenue
Columbus, Stillwater County, Montana
Facility ID 48-12059, TID 17180, Release 4036, Work Plan 35007

Dear Mr. Skibicki,

This letter presents a groundwater monitoring work plan for the Former Shell Oil Bulk Plant Facility (Site) located at 701 East Pike Place in Columbus, Montana as shown on Figure 1. Olympus Technical Services, Inc. (Olympus) has prepared this work plan in response to a Department of Environmental Quality (DEQ) letter issued February 12, 2025, requesting groundwater monitoring at the Site. The DEQ has requested two groundwater monitoring events be conducted at the Site during high and low groundwater conditions. A Location Map and Site Map are provided as Figures 1 & 2. This work plan presents a detailed scope of work and a groundwater monitoring unit cost worksheet for the proposed scope of work.

Scope of Work

Well Redevelopment

Before groundwater monitoring commences, Olympus recommends monitoring wells JW-7, JW-8, JW-9, and JW-10 be redeveloped since the last known sample time was at least 2018. Each well will be developed following a pumping and surging method before sampling according to Olympus' Standard Operating Procedures (SOPs) and DEQ guidance. Purge water will be disposed of according to *Disposal of Untreated Purge Water from Monitoring Wells* (DEQ, 2015). Disposal costs are not included in this estimate since it is unknown whether purge water will be discharged to the surface or require disposal. The wells will not be sampled for at least one week following development.

Groundwater Monitoring

The proposed scope of work includes groundwater sampling during seasonal high and low groundwater conditions (anticipated June/November 2025). Groundwater monitoring will include the measurement of static water levels (SWLs) and collection of groundwater samples from four (4) Site wells (JW-7, JW-8, JW-9, and JW-10) for laboratory analysis, as well as one field duplicate. SWLs will be measured using an electronic interface probe to develop a groundwater potentiometric map of the Site. The analytical results will be submitted to DEQ following receipt of the laboratory reports after each monitoring event; in an interim data submittal following the first event and a groundwater monitoring report following the second event.

Groundwater samples will be collected from Site monitoring wells in accordance with Olympus' standard operating procedures for low flow sampling. Groundwater will be purged from wells using a peristaltic pump operating in general accordance with DEQ groundwater Sampling Guidance. Groundwater parameters consisting of dissolved oxygen (DO), specific conductivity (SC), temperature, pH, oxidation reduction potential (ORP) and turbidity will be measured during purging, and measurements will be recorded on groundwater sample information forms which will be included in a summary report. In accordance with DEQ Groundwater Sampling Guidance, dated March 6, 2018, upon parameter stabilization, groundwater samples will be collected into laboratory-supplied containers, preserved, stored on ice, and submitted by chain-of-custody procedure to Pace Analytical Services (Pace) in Mt. Juliet, Tennessee, for analysis of volatile petroleum hydrocarbons (VPH), extractable petroleum hydrocarbon (EPH) screen, and lead scavengers (ethylene dibromide and 1,2-dichloroethane). Should EPH screen results exceed 1,000 micrograms per liter ($\mu\text{g/L}$), the sample will be fractionated.

Quality assurance/quality control (QA/QC) procedures will be followed for the provision of reliable, accurate, and defensible data. QA/QC samples will be collected into laboratory supplied containers, stored on ice, and submitted to Pace under chain-of-custody procedure. One duplicate QA/QC groundwater sample will be collected for each event to test for precision related to sampling methods. The QA/QC sample will be analyzed for VPH only.

Interim Data Submittal

An interim data submittal will be prepared following the first groundwater monitoring event. The interim data submittal will include a discussion of results, tabulated analytical results, figures showing the results, potentiometric maps of the groundwater surface, and the laboratory analytical report with a data validation summary.

Release Closure Plan

A Release Closure Plan (RCP) will be prepared for the Site, which includes discussion and results of investigative, post-investigative, and corrective action work to date. The RCP will be developed to reflect current Site conditions following the groundwater monitoring. The Site summary, remedial investigation results, conceptual Site model and evaluation of exposure pathways, evaluation of cleanup alternatives and costs for compliance monitoring will be evaluated.

Groundwater Monitoring Report

Olympus will present the results for the 2025 groundwater monitoring events in one Groundwater Monitoring Report. The summary report will include a discussion of groundwater monitoring results, site maps, tabulated analytical data, groundwater sample information forms, analytical laboratory reports, data validation summary, time trend graphs, and conclusions and recommendations based on the monitoring results.


Cost Estimate

Work Plan development, groundwater monitoring and sample collection, and report preparation will be invoiced at unit cost rates approved by the Petroleum Tank Release Compensation Board (PTRCB). Project management will be invoiced on a time and materials basis. A unit cost worksheet for groundwater monitoring is attached to this work plan.

Schedule

Olympus appreciates the opportunity to assist you with this project. Site work will commence upon approval of the work plan by DEQ and obligation of mutually agreed upon funds by PTRCB. The groundwater monitoring events are tentatively scheduled for June and November 2025. Please call me at 406-430-1784 with comments or questions regarding the proposed scope of work or the project.

Sincerely,
Olympus Technical Services, Inc.



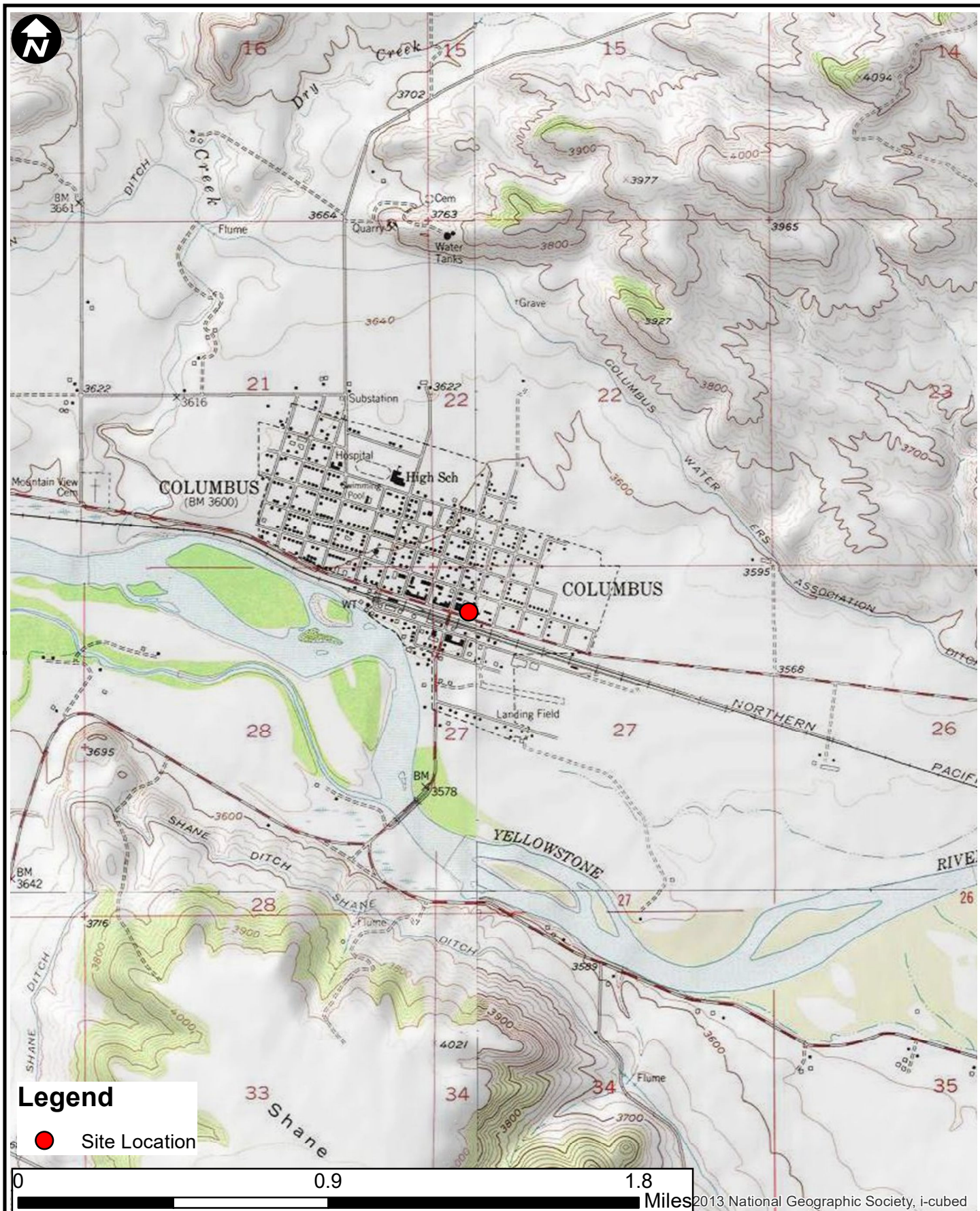
Tanner Allen
Staff Geologist



Ethan J. Perro, PG
Project Geologist

Attachments: Figures 1 & 2, and Groundwater Monitoring Unit Cost Work Sheet.

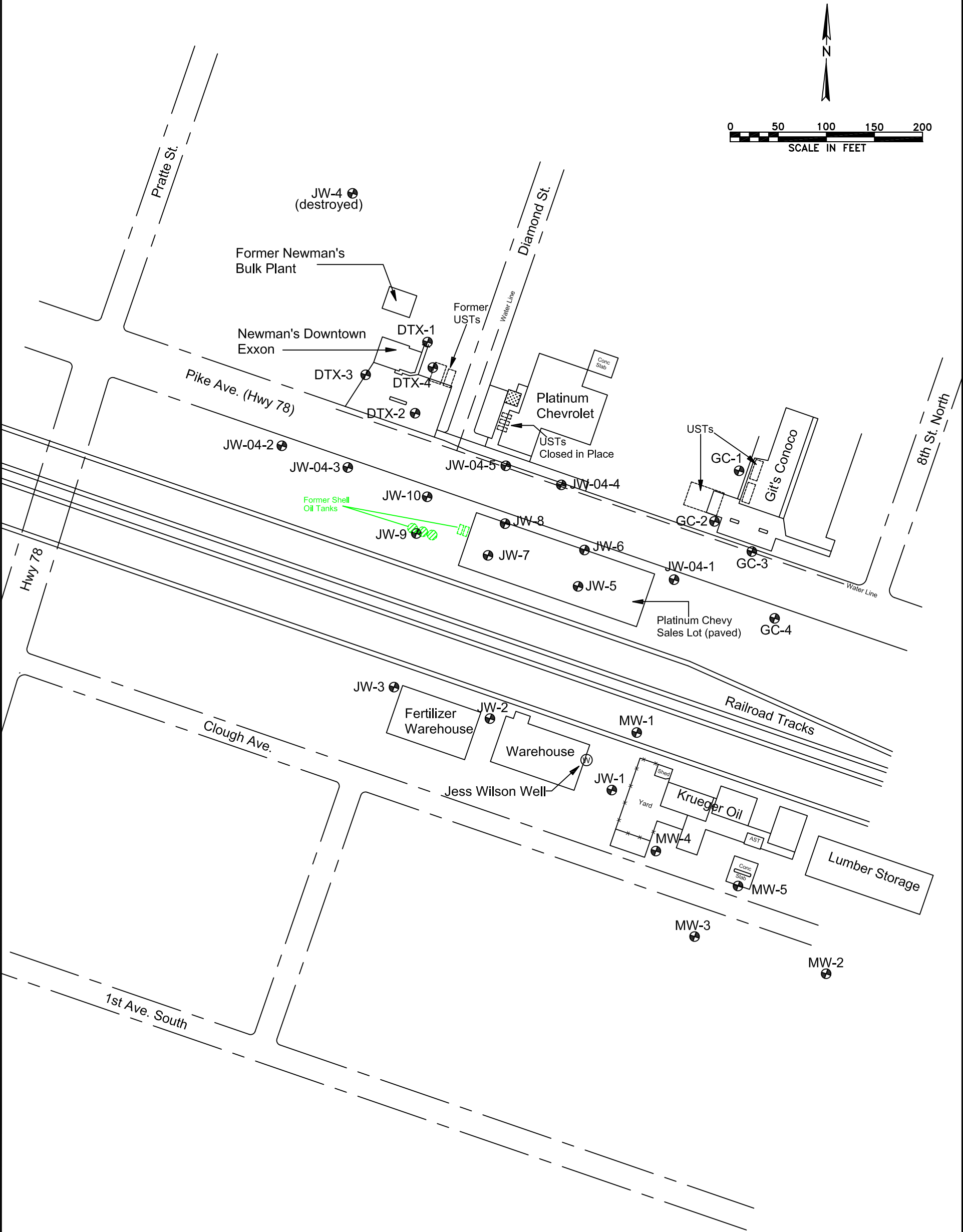
Attachments



Olympus Technical Services, Inc.

Site Location
Topographic Map

FIGURE
1





Petroleum Tank Release Compensation Board

STATE OF MONTANA

P.O. Box 200902 • Helena, MT 59620-0902 • (406) 444-9710

Groundwater Monitoring and Sampling Unit Cost Worksheet

7/28/2022

Cost Estimate Expl.


Work Plan Tasks

Unit Cost Worksheet

Help

Contractor Information

Company Name:
Address:
City, State, Zip:
Cost Estimator/Print Name:
[Signature:](#)

Olympus Technical Services, Inc.
6809 King Avenue West, Unit F
Billings, MT 59106
Ethan Perro


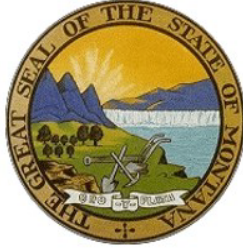
Phone: 406-430-1784
[Date:](#) 3/14/2025

Project Information

Site Name:
Address:
City:

Former Shell Oil Bulk Plant
701 East Pike Avenue
Columbus

Facility ID# 48-12059
Release # 4036
WP ID# 35007
Treads ID# 17180



Petroleum Tank Release Compensation Board

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7/28/2022

Groundwater Monitoring and Sampling Summary Sheet

Cost Estimate Expl.

Work Plan Tasks

Unit Cost

Help

Monitoring Well Details

4	Total Number of Wells at Site
	Number of Fluid Level Measurements Only ⁽²⁾
8	Number of Wells to be Monitored/Sampled ⁽⁴⁻¹¹⁾
2	Average Well Casing Diameter (inches)
10	Average Depth to Groundwater (ft)
20	Average Depth of Wells (ft)

Sampling Method

<input checked="" type="checkbox"/>	Low-Flow
<input type="checkbox"/>	Low Yield Aquifer
<input type="checkbox"/>	No Purge
<input type="checkbox"/>	Other (please specify)

of Events - Monitoring/Sampling Interval

Estimated Start Date:		6/1/2025
2	Semi-Annual	
	Annual	
	Bi-Annual	
	Other	

Sampling Instrument

X	Peristaltic Pump
	Bladder Pump
<input type="checkbox"/>	Submersible Pump
<input checked="" type="checkbox"/>	Bailer
<input type="checkbox"/>	Other (please specify)

2 Total Events

8	< 25 ft total depth
	25 - 50 ft total depth
	50 - 75 ft total depth
	75 - 100 ft total depth
8	Total