

June 6, 2024

Donnie McCurry
Department of Environmental Quality
PO Box 200901
Helena, MT 59620-0901

Re: Groundwater Monitoring Work Plan

Keith's Country Store, 1621 10th Avenue South, Great Falls, Cascade County, Montana

Facility ID 07-01418, TID 18394, Release 3212, WPID 34867

Dear Mr. McCurry,

This letter presents a groundwater monitoring work plan for Keith's Country Store (Site) located at 1621 10<sup>th</sup> Avenue South in Great Falls, 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 May 24, 2024, requesting groundwater monitoring at the Site to establish current groundwater conditions since the hydrogen peroxide system was shut down in 2022. DEQ has requested analysis of volatile organic compounds (VOCs) by EPA Method 8260, lead scavengers, and natural attenuation evaluation at select wells. A Site Map is provided as Figure 2. This work plan presents a detailed scope of work, cost estimate, and a groundwater monitoring unit cost worksheet for the proposed scope of work.

# Scope of Work Groundwater Monitoring

The proposed scope of work includes groundwater sampling during seasonal high and low groundwater conditions (anticipated November/December 2024 and May/June 2025). Groundwater monitoring will include the measurement of static water levels (SWLs) from eight Site wells (MW-3, MW-4, MW-5, MW-9, MW-10, MW-15, MW-16, and SDW-4) and groundwater samples will be collected from four wells (MW-4, MW-10, MW-15, and MW-16) for laboratory analysis, as well as one field duplicate. SWLs will be measured using an electronic water level probe to develop a groundwater potentiometric map of the Site. The analytical results will be submitted to DEQ within 60 days of 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 select 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 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. Upon parameter stabilization, groundwater samples will be collected into laboratory-supplied containers, preserved, stored on ice, and submitted by chain-of-custody procedure to Energy Laboratories (Energy) in Helena, Montana, for analysis of volatile petroleum hydrocarbon (VPH), select VOCs benzene, toluene, ethylbenzene, total xylenes, and naphthalene (BTEXN) by EPA Method 8260, lead scavengers (1,2-dichloroethane and 1,2-dibromoethane), and intrinsic biodegradation indicators of sulfate, nitrate, nitrate+nitrite, methane, and dissolved ferrous iron.

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 Energy under chain-of-custody procedure. One duplicate groundwater sample will be collected to test for precision related to sampling methods. The QA/QC sample will be analyzed for VPH and BTEXN by EPA Method 8260.

### Interim Data Submittal

An interim data submittal will be prepared following the first groundwater monitoring event. The interim data submittal will be prepared in accordance with DEQ's *Groundwater Monitoring Work Plan and Report Guidance* to include tabulated analytical results, figures showing the results, potentiometric maps of the groundwater surface, groundwater field forms, and the laboratory analytical report with a data validation summary.

### Release Closure Plan

A Release Closure Plan (RCP) was developed for the Site in 2021, which includes discussion and results of investigative, post-investigative, and corrective action work to date. The RCP will be updated to reflect current Site conditions following the groundwater monitoring and utility inquiry. 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 re-evaluated and updated as appropriate. An RCP will not be submitted if Site closure is recommended.

## **Groundwater Monitoring Report**

Olympus will present the results for the 2024-2025 groundwater monitoring event 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, mobilization, groundwater monitoring and sample collection, and reporting tasks will be invoiced at unit cost rates approved by the Petroleum Tank Release Compensation Board (PTRCB). A unit cost worksheet for groundwater monitoring is attached to this work plan. Project management will be invoiced on a time and materials basis.

### Schedule

Olympus appreciates the opportunity to assist you with this project. Site work will commence upon approval of the work plan by DEQ. The first groundwater monitoring event is tentatively scheduled for the fourth quarter of 2024 pending workplan approval and PTRCB obligation. Please call me at 406-443-3087 with comments or questions regarding the proposed scope of work or the project.

Sincerely,

Olympus Technical Services, Inc.

Diane Tackett, PG

**Project Geologist** 

Ethan Perro, PG

**Environmental Manager** 

Attachments: Figures 1 & 2, Detailed Cost Estimate, and Groundwater Monitoring Unit Cost

Work Sheet.



