Olympus Technical Services, Inc.

March 23, 2026

William Bergum
Environmental Project Officer
Montana Department of Environmental Quality
Petroleum Tank Cleanup Section
P.O. Box 200901
Helena, MT 59620-0901

Re: Work Plan Requested to Investigate Petroleum-Contaminated Media at Jac and Jil's
113 Washington Avenue
Chester, Liberty County, Montana
Facility ID 26-00105 (TID 23960), Release No. 3526
DEQ Work Plan ID No. 35134
Olympus Work Order No. A1501

Dear Mr. Bergum:

Olympus Technical Services, Inc., (Olympus), on behalf of Ms. Zoe Gustafson, is submitting this Groundwater Monitoring Work Plan for the above-referenced facility (Site). The Montana Department of Environmental Quality (DEQ) Petroleum Cleanup Section requested a work plan in correspondence dated January 13, 2026. The purpose of the work is to determine assess current groundwater conditions, preparation of a Groundwater Monitoring Report, and to evaluate remedial actions necessary for closure of the release.

Site Description

The Site is located at 113 Washington Avenue in Chester, Montana. The Site occupies a portion of the southeast ¼, northwest ¼, southwest 1/4, of section 21, Township 32 North, Range 6 East, Principal Meridian Montana. A Site location map is shown on **Figure 1** and a Site layout map is shown on **Figure 2**. The Site historically operated as a gasoline service station, but fuel service operations ceased in 1998.All known fuel structures were removed from the property in September 1998. The former station building is currently being operated as a small food and grocery business called the Liberty Quick Stop.

Previous Site Investigations

The facility historically operated as a Circle K gasoline service station. In 1989, the property was acquired by Don and Zoe Gustafson, who operated the Facility as Jac and Jil's Service Station until business operations ceased in 1998. The property is currently owned by Jesse Anderson and is operated as the Liberty Quick Stop.

In September 1998, Neal Eveland Construction of Chester, Montana removed the fuel system structure, including two 10,000-gallon gasoline underground storage tanks (USTs), associated distribution piping, and the pump island. According to Glacier Engineering's *Phase I Remedial Investigation* report from May 2000, , corrosion of the USTs was observed during tank removal activities and petroleum hydrocarbon impacts to soil and groundwater were documented within the tank basin.

Confirmation soil samples were collected by Neal Eveland during UST removal to evaluate petroleum impacts. Samples were submitted to Energy Laboratories (Energy) in Billings, Montana for analysis of MTBE, benzene, toluene, ethylbenzene, and total xylenes (BTEX), gasoline-range organics (GRO), and total purgeable hydrocarbons (TPH). Petroleum constituents were detected in all six samples, and several analytes exceeded DEQ screening levels. A groundwater sample was also collected within the UST basin and analyzed for MTBE, BTEX, GRO, GRO as gasoline (GROG), and TPH. BTEX concentrations exceeded DEQ screening criteria. Based on these findings, DEQ requested that a remedial investigation (RI) be

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conducted to further define the extent and magnitude of petroleum impacts to soil and groundwater at the Site.

Glacier Engineering conducted a Phase I RI in 2000, which included the installation of five monitoring wells (MW-1 through MW-5) and collection of soil and groundwater samples for laboratory analysis. Gasoline-range petroleum compounds exceeded DEQ's 2024 Risk-Based Screening Levels (RBSLs) for leaching to groundwater (0-10 ft) in soil samples collected from MW-2, MW-4, and MW-5. Groundwater results indicated benzene concentrations exceeding DEQ Human Health Standards (HHS) in all wells except MW-2. Additionally, MTBE and volatile petroleum hydrocarbon (VPH) fractions in samples from MW-4 exceeded applicable HHS/RBSLs. Direct Contact soil RBSLs have not been exceeded at the Site.

In 2006, Olympus conducted a supplemental soil and groundwater investigation that included advancing 13 soil borings (B1 through B13) using a direct-push drilling method, with soil samples being analyzed for VPH and extractable petroleum hydrocarbons (EPH). Groundwater samples were collected from select borings and existing Site monitoring wells and analyzed for VPH and EPH. Results confirmed that petroleum concentrations in soil and groundwater within former fuel system areas exceeded HHS/RBSLs, and impacts likely extended east to northeast (downgradient) beyond Site boundaries.

In 2011, Olympus removed approximately 2,840 cubic yards of heavily impacted source soil from the Site. Excavation extended across most of the property to depth ranging from approximately 14 to 16 feet below ground surface (bgs). The excavation was limited by the facility building and adjacent streets to the north and east; therefore, impacted soil was left in place along those boundaries. Excavated soil was transported to a one-time-use landfarm located east of Chester, Montana.

Confirmation soil samples were collected from excavation floors and sidewalls prior to backfilling. Analytical results indicated that VPH and EPH compounds were present. Western floor and west wall samples were below RBSLs, confirming effective source removal in that area. Soil samples collected from the eastern floor and north and south excavation walls where the excavation was limited due to existing infrastructure exceeded leaching to groundwater RBSLs.

Monitoring wells destroyed during excavation were replaced, and two additional downgradient wells (MW-6 and MW-7) were installed northeast and east of the Site in 2012. Post-excavation monitoring indicated declining petroleum concentrations in groundwater; however, analytes continued to exceed HHS/RBSLs in downgradient wells.

Semi-annual groundwater monitoring conducted in February and July 2014 yielded results consistent with previous monitoring events. In 2016, Olympus conducted groundwater monitoring and a vapor intrusion (VI) investigation at the Liberty Quick Stop and the adjacent former VFW building located downgradient to the east. Groundwater data indicated continued concentration declines and evidence of aerobic and anerobic biodegradation processes, including methanogenesis and nitrate, sulfate, and metals reduction. VI sampling indicated petroleum vapor concentrations within the Liberty Quick Stop were below Regional Screening Levels (RSLs). Vapor concentrations within the former VFW structure were also below RSLs, with the exception of Benzene. The VFW building was demolished between 2019 and 2021, and the lot is currently vacant.

Semi-annual groundwater monitoring conducted in 2021 evaluated the effectiveness of source soil removal performed in 2011. Activities included static water level measurements at all Site monitoring wells and groundwater sampling from select wells for VPH and EPH analyses. Depth to groundwater ranged from approximately 7 to 8.5 feet bgs. Groundwater flow direction varied from southeast to southwest, with hydraulic gradients ranging from 0.0004 to 0.007 ft/ft, consistent with historical conditions.

Analytical results indicated that petroleum concentrations in groundwater in the source area continue to decline; however, VPH concentrations in downgradient wells (MW-4R, and MW-6) have stagnated two to three orders of magnitude above HHS/RBSLs. EPH compounds have not been detected in soil or groundwater at concentrations exceeding RBSLs. Although overall contaminant trends are declining, an increasing trend in benzene concentrations was observed in MW-6. Due to low aquifer permeability and slow groundwater seepage velocities, Olympus estimated that cleanup levels may not be achieved for more than 30 years without additional remedial action.

The dissolved-phase plume extends northeast across US Highway 2 toward MW-6 and 2nd Street East toward MW-7, which are likely correspond to the residual smear zone impacts left in place at the Site boundaries. The hydraulic conductivity of groundwater at the Site is relatively flat, and the groundwater flow direction is prone to seasonal shifts to the east. The plume boundary has not been defined to the northeast due to private property access.

A Release Closure Plan (RCP) was developed in 2021 to evaluate remedial alternatives. Remediation options were limited due to low aquifer permeability, slow groundwater seepage velocities, plume migration beneath third-party properties (including US Highway 2 and 2nd Street East), and buried infrastructure.

DEQ requested this work plan to evaluate current groundwater conditions prior to issuing a cleanup action work plan. Olympus discussed the scope of work with Mr. Bergum on February 6, 2026 and determined one groundwater monitoring event was necessary to assess changes in petroleum impacts at the Site since the last groundwater event conducted in May 2021. The remedial alternatives evaluated in the 2021 RCP will be updated based on current Site conditions and Olympus will provide recommendations to address data gaps and advance the Site toward closure in the groundwater monitoring report.

Scope of Work

Work Plan

This work plan fulfills DEQ's request for a Work Plan to investigate petroleum contaminated media at the Site.

Project Management

Project management will include coordination with DEQ, the responsible party, current property owners, and the Petroleum Tank Release Compensation Board (PTRCB) personnel, preparation of the Site Health and Safety Plan, project planning, scheduling, oversight of project details, equipment, personnel, setup of project files, reviewing historical reports, maps, and data for the Facility, and other various tasks related to project management.

Mobilization

This task details mobilization costs out of our Billings, Montana office for one trip for a Technician III (Senior) to visit the Site to locate and redevelop the wells and one trip for a Technician III (Senior) to conduct a groundwater sampling event.

Well Locate and Redevelopment

Before groundwater monitoring commences, Olympus recommends monitoring wells MW-1, MW-2, MW-3R, MW-4R, MW-5, MW-6, and MW-7 be located, evaluated for damage, and redeveloped since the last known sample dates were in 2016 (MW-1, MW-2, and MW-5) and 2021 (MW-3R, MW-4R, MW-6, and MW-7). Each well will be located and 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 DEQ's *Disposal of Untreaded Purge Water from Monitoring Wells* Guidance. Disposal costs are not included in this estimate since purge water has historically been discharged to the surface, per DEQ's guidance. The wells will not be sampled for at least one week following development.

Groundwater Monitoring

The proposed scope of work includes one groundwater monitoring event during seasonal high groundwater conditions (anticipated May – July 2026). Groundwater monitoring will include the measurement of static water levels (SWLs) and collection of groundwater samples from seven (7) Site wells (MW-1, MW-2, MW-3R, MW-4R, MW-5, MW-6, and MW-7) for laboratory analysis, as well as one field duplicate. Well locations are shown of Figure 2. SWLs will be measured using an electronic interface probe to develop a groundwater potentiometric surface map of the Site.

Groundwater samples will be collected from Site monitoring wells in accordance with Olympus' standard operating procedures for low flow sampling using a peristaltic pump. Groundwater field parameters consisting of dissolved oxygen (DO), specific conductivity (SC), temperature, pH, oxidation reduction potential (ORP) and turbidity will be measured in 3-5 minute intervals during purging, and the results will be provided on groundwater sample information forms attached to the groundwater monitoring report. Upon parameter stabilization, groundwater samples will be collected into laboratory-supplied containers, preserved, stored on ice, and submitted by chain-of-custody procedures to Energy for analysis of VPH, EPH screen, and lead scavengers (ethylene dibromide and 1,2-dichloroethane). Intrinsic Biodegredation Indicators (IBIs) of nitrate, nitrite, nitrate+nitrite, sulfate, methane, and dissolved ferrous iron will be analyzed for all Site wells to evaluate natural attenuation trends. EPH screen results exceeding 1,000 micrograms per liter (ug/L) will be analyzed for EPH fractions. This work plan assumes that 50% of samples (3 wells and a duplicate) will require EPH fractionation based on historical analytical results.

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 procedures. One duplicate QA/QC sample will be collected to test for precision related to sampling methods. The QA/QC sample will be analyzed for VPH and EPH only.

Release Closure Plan Update

The Release Closure Plan (RCP) developed in 2021, which included discussion and results of investigative, post-investigative, and corrective action work to date, will be updated to reflect current Site conditions following groundwater monitoring. The Site summary, remedial investigation results, data gaps, conceptual Site model, evaluation of exposure pathways, evaluation of cleanup alternatives and costs for compliance monitoring will be evaluated.

Groundwater Monitoring Report

Olympus will present the results of the 2026 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, 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

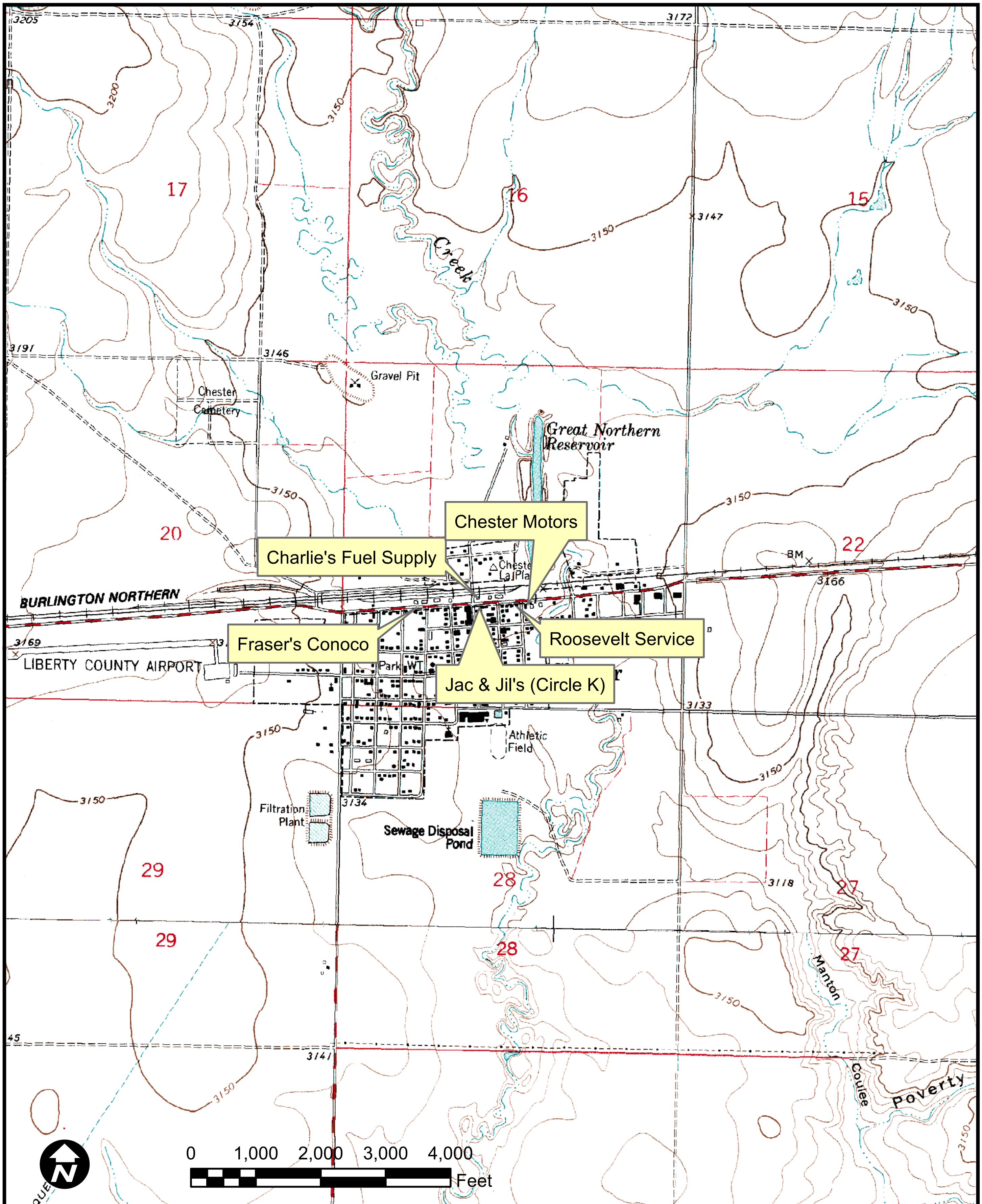
Olympus appreciates the opportunity to assist you with this project. Site work will commence upon approval of the work plan by DEQ and obligation of mutually agreed upon funds by PTRCB. The groundwater monitoring event is tentatively scheduled for May-July 2026. Please contact me at (406) 245-3554 or tallen@olytech.com with comments or questions regarding the proposed scope of work or the project.

Sincerely,
Olympus Technical Services, Inc.

Tanner K. Allen
Staff Scientist

Attachments: Figures 1 & 2, and Groundwater Monitoring and Sampling Unit Cost Worksheet, Groundwater Sampling Standard Operating Procedure

cc: Ms. Zoe Gustafson via email



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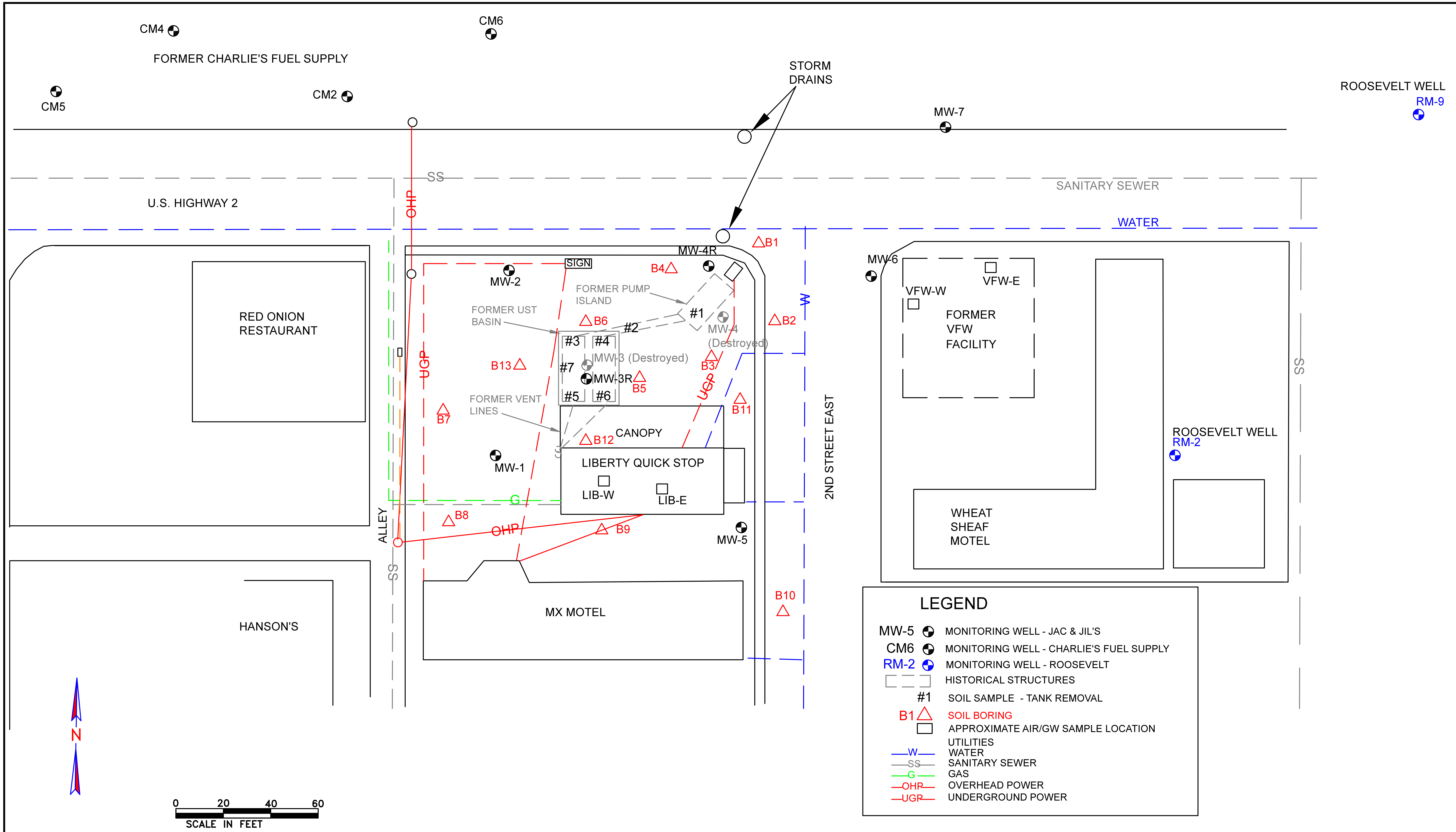
SITE LOCATION MAP
FORMER JAC & JIL'S
CHESTER, MONTANA

FIGURE
1



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FORMER JAC & JIL'S
113 WASHINGTON AVENUE
CHESTER, MONTANA

Site Layout Map

FIGURE 2

STANDARD OPERATING PROCEDURE

Groundwater Sampling (GW-1)

This Standard Operating Procedure (SOP) covers multiple volume purge and low-flow methods of groundwater sampling from a well.

1.0 Equipment:

Purge Water Containment*
Five Gallon Bucket
Electronic Water Level Probe or Oil-Water Interface Probe*
Meters: pH, Specific Conductivity, Dissolved Oxygen (DO), Oxidation-Reduction Potential (ORP), Turbidity (low flow)
Pump (Peristaltic, Bladder)
Compressor or Compressed air cylinder for bladder pump
Power Supply (for pump)
Graduated cylinder or other calibrated container for measuring flow rate
Bailers with Line*
Tubing*
Filter(s) and accessories*
Sample Containers
Preservatives*
Decontamination Supplies
Coolers with Ice
Field Sampling Forms
Field Notebook
Chains-of-Custody
Indelible Ink Pen(s)
Personal Protective Equipment
Sampling and analytical plan (SAP)

*As required by site-specific SAP or Site conditions

2.0 Groundwater Sampling Sequence

The sampling sequence within a specific site should begin with the well containing the lowest anticipated analyte concentration. Successive samples will be obtained from wells anticipated to have increasing analyte concentration. If the relative degree of suspected concentrations cannot be reasonably assumed, wells will be sampled in order of increasing proximity to the suspected analyte source area, preferably from the perimeter towards the center of the site, and, if the groundwater flow direction is known, preferably in the order of up-gradient, cross-gradient, down-gradient, then in the vicinity of the suspected analyte source.

3.0 Instrument Calibration

Calibrate instruments at the beginning and end of each day following the appropriate SOP. Document calibration procedures in the field notebook.

4.0 Decontamination

All reusable sample equipment that comes into contact with groundwater shall be decontaminated prior to use at each well following the procedures in the site-specific SAP. This includes but is not limited to the static water level probe/cable and bladder pump barrel.

Decontamination is typically conducted using a phosphate-free soap (e.g. Alconox) water wash, distilled water rinse, isopropyl alcohol wash, nitric acid wash (if metals analysis is to be conducted) and final distilled water rinse procedure.

5.0 Water Level Measurements

Measure static water levels in the wells prior to sample collection and prior to installing the pump and tubing (if a dedicated pump is not already in place). If the well is equipped with a dedicated pump, then measure the static water level prior to purging. Because water levels may fluctuate on a short-term basis, measure the static water levels in all site wells within a relatively short period of time.

If non-aqueous phase liquid (NAPL) is suspected to be present, use an oil-water interface probe to test for its presence. Follow the meter-specific operating instructions for the measurement.

If NAPL is not suspected to be present, utilize an electronic water level probe. Check the operation of the meter by turning on the indicator signal switch and pressing the test button on the side of the reel. The buzzer should sound, and the indicator light should illuminate. If the water-level indicator signal(s) is not functioning properly, replace the batteries and/or use a different meter.

Holding the device atop the casing, lower the cable gradually into the well or piezometer until the indicator contacts the water surface. Contact with the water surface is indicated by a buzzer sound and illumination of the indicator light. Stop lowering the cable. Note the point on the graduated cable that corresponds to the measuring point at the top of the casing when the electronic circuit is first completed. If the measuring point is not designated on the well casing, then use the north side of the casing. Draw the cable at least one foot above the water level, then lower it until the indicator contacts the water surface. If the readings differ by more the 0.02 feet, then repeat until the measured readings stabilize. Record the water level to the nearest 0.01 feet.

6.0 Purging

Sampling can be performed via multiple volume or low flow methods, depending on the SAP requirements. Record all field measurements in a field notebook or field sampling form. Example field sample forms are attached to this SOP.

Multiple Volume Purging Procedure

a) Before purging each well, measure and record the depth to water from the designated measuring point on the well casing to the nearest 0.01 foot using an electronic water level meter.

b) Purge a minimum of three well volumes using a pump or bailer. The following equations can be used to calculate one well volume. The first equation gives the results in cubic feet (V1), and the second equation gives the results in gallons (V2):

V1 = 0.0057 * (d*d) * W V2 = 0.043 * (d*d) * W

Where:

d = the well casing diameter in inches (in); and

W = the depth of water in the well casing measured in feet, calculated by subtracting the measured depth to water in the well from the total well depth.

Example: Monitoring well diameter = 4-in diameter
Water level = 25.5 ft below ground surface (bgs)
Well depth = 36.0 ft bgs

Therefore, the well has 10.5 ft of water column.

Using equation 1:
V1 = 0.0057 (4in*4in) * 10.5ft
V1 = 0.92 cubic ft

Or using equation 2:
V2 = 0.043 (4in*4in) 10.5ft
V2 = 7.2 gallons

Therefore, 3 well volumes = 3 x 0.96 cubic ft = 2.86 cubic ft

or

3 well volumes = 3 x 10.5 gallons = or 21.5 gallons

would be the minimum three well casing volumes that need to be purged from the well.

c) When using a downhole down-hole DO meter, lower the DO meter into the well to the approximate level of the pump intake and start the meter.

d) The well will be purged and samples will be collected using a disposable hand-bailer, a peristaltic pump, a positive displacement (bladder) pump and/or a disposable polyethylene or Teflon-lined polyethylene tubing. If pump and tubing are not dedicated to the well, the bladder pump will be decontaminated and new tubing or bailers will be used for each subsequent well location. The pump intake should be placed within the well screen and near the middle of the water column. Field parameters (typically DO, pH, temperature, ORP, and specific conductance) should be measured at 1, 2, and 3 well volumes to ensure that all stagnant water has been removed from the well and that water quality parameters have stabilized.

Note: If a well is evacuated during purging, it will be allowed to recharge until the water level has recovered to 80 percent of the static level or for a period not exceeding 24 hours before sampling. If it has not recovered sufficiently to allow sampling after 24 hours, this well will be noted as "dry" during the sampling event.

e) Purge water will be handled in accordance with the site-specific SAP and SOP G-6.

Low Flow Purging Procedure

a) Samples will be collected with a peristaltic (for inorganics only) or bladder (for any analytes) pump. Use new disposable tubing and bladders for collection of each sample.

b) Non-disposable equipment that comes into contact with the sampled water (e.g. bladder pump body) must be decontaminated prior to collection of each sample.

c) Slowly lower the pump or disposable polyethylene tubing into the well until the pump intake is located approximately the midsection of the saturated screened interval. The depth interval of the well screen will be provided in the site-specific SAP. For wells with screens longer than 10 feet, the primary flow zones and target depth for the pump intake should be identified in the site-specific SAP.

d) The well will be pumped at a rate of 100 to 500 milliliters per minute and the water level monitored approximately every five minutes. A steady flow rate will be maintained that results in a stabilized water level, ideally with a drawdown of 0.3 feet or less. Monitor water levels at a minimum of 5-minute intervals and record the measurement on the field sampling form or in the field notebook.

e) Place meters in the flow through cell prior to initiating pumping and record every parameters at a minimum of 5-minute intervals; including, turbidity, pH, oxidation-reduction potential (ORP), temperature, specific conductance (SC), and dissolved oxygen (DO). Record the parameters in a data logger, on the field sampling form, or in the field notebook. The well will be considered stabilized and ready for sample collection when the indicator parameters have stabilized for three consecutive readings as follows:
<10 NTU (turbidity)for three consecutive readings or three consecutive readings within 10% of each other
±0.1 S.U. for pH
±3% for specific conductivity
± 10 millivolts ORP and
± 10% dissolved oxygen or three consecutive values less than 0.5 mg/L

Depending on site conditions, parameters may not stabilize during pumping. If parameters do not stabilize, contact the project manager to select an appropriate course of action. Actions recommended by Montana DEQ include:

- Purge the well for a minimum of four hours prior to sampling if the static water level was stable prior to pumping, or
- Purge three well volumes from the well prior to sampling, or
- Discontinue purging and do not collect a sample.

Lack of stabilization of parameters shall be documented in the field logbook.

7.0 Groundwater Sample Collection

a) Label each sample container with sample identification, date, time collected (military time), and preservative.

b) Don latex or nitrile gloves prior to collecting sample. Without moving or turning off the pump, groundwater samples should be collected in order from most to least volatile analytes directly from the pump discharge tubing into laboratory supplied sample containers (do not collect sample downstream from any inline-flow device/meter). The pump rate may be decreased for sample collection in order to fill sample containers (sometimes necessary to fill volatile organic compound (VOC) sample vials) but the pump rate may not be increased. Samples collected using a bailer will be poured directly from the bailer into the sample jar. Preserve samples according to analytical requirements in attached table or site-specific SAP.

c) Samples collected for volatile organic compounds (VOCs) are typically collected in 40-ml vials. Fill each sample bottle completely so the water forms a convex meniscus at the top to ensure that no air is trapped when sealing the sample container. No air bubbles should pass through the sample as the bottle is filled or be trapped in the sample when the bottle is sealed. Invert the sample container after it is preserved and sealed to verify the absence of air bubbles. If air bubbles are present, uncap the sample bottle, add more sample and repeat procedure. If air bubbles are still present, discard the bottle and re-sample. If air bubbles continue to be present in the sample bottle, it may be caused by the preservative reacting with alkaline water. In that case the sample may be collected without a preservative, but must be analyzed within 7 days of collection. For non-preserved samples, notify the laboratory as soon as possible that the samples will be delivered to them in an unpreserved condition and need to be analyzed within 7 days of collection. The laboratory will indicate when they will need to have the samples delivered by.

d) Collect filtered samples by attaching the in-line filter directly to the sample discharge tubing and pump the sample through the filter directly into the sample container.

e) Store samples on ice and submit for laboratory analysis according to chain of custody procedures specified in SOP G-4.

A list of common analytes and preservative requirements are described below.

Analysis	Number of Containers	Container Type	Preservation	Maximum Holding Time
VOCs	2	40 ml glass	4^0 C & HCL	14 days
SVOCs	2	1 liter glass	4^0 C	7 days
VPH	2	40 ml glass	4^0 C & HCL	14 days
EPH	2	1 liter glass	4^0 C & H_2SO_4	14 days
Metals	1	500 ml Plastic	4^0 C & HNO_3	6 months, 28 days Hg
Nutrients	1	500 Plastic	4^0 C & H_2SO_4	Varies (contact lab)
Common Ions	1	1 liter Plastic	4^0 C	7 days