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June 10, 2025

Eric Krueger
Environmental Project Officer
Department of Environmental Quality
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Damon Borden
Flying J Belgrade
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Re: Remedial Investigation Work Plan for Monitoring Well Installation and Groundwater Sampling at Belgrade Flying J. 6505 Jackrabbit Lane, Belgrade, Gallatin, MT. Facility ID 16-05753, Release 6598, WP 35034.

Executive Summary

Per Montana Department of Environmental Quality (DEQ) Project Manager Eric Krueger work plan request letter dated April 29, 2025, AJM Incorporated (AJM) has completed the following remedial investigation work plan to determine the extent and magnitude of the groundwater below the former Belgrade Flying J, located at 6505 Jackrabbit Lane Belgrade, MT. This Work Plan illustrates the monitoring well installation specifications, sampling procedures, and the necessary reporting. Based on previous information collected at this location during the underground storage tank (UST) removal which occurred December 2023, there were confirmed petroleum hydrocarbon constituents that exceeded Montana Risk Based Screening Levels (RBSLs) for leaching to groundwater greater than 20ft below sampling depths. During Work Plan 24880, impacted soils were excavated and disposed of, however groundwater data needs to be collected to determine if Release 6598 can be closed.

Facility History and Release Background

Releases 6649, 6598, 6516, 559, and 294 are releases associated with the UST fuel system at the Belgrade Flying J. Each release was investigated and has been or will be closed following DEQ requirements. Other releases that occurred on site associated with truck spills and have been closed in accordance with the DEQ Enforcement Program guidelines. During the UST system removal, soil near the storage tanks and many dispenser sumps did not support evidence of petroleum hydrocarbon impacts. However, soils approximately 3ft below ground surface (bgs) nearest dispensers 1, 5, 17, 18, 20, 22, 24, 28, 29, and Piping2Comp. One sample collected at Dispenser 17 exceeds leaching potential to groundwater for analyte C9-C10 and C11-C22 Aromatics. Because this is the only location that exceeds leaching potential, this work plan discusses the installation of three monitoring wells, one under former dispenser 17, former dispenser 1, and downgradient near the former UST basin.

Summary of Facility Conditions

Belgrade Flying J was decommissioned, and all fuel system components were removed during the winter of 2023-2024. Currently, the only remaining structure on site is the former c-store and restaurant. Since the closure of the UST system, facility ownership has changed, and the new owner may begin construction in the future.

The purpose of this work plan is to illustrate the necessary tasks to complete the environmental investigation efforts at the Belgrade Flying J. Groundwater impacts under dispenser 17 and dispenser 1 are of most concern due to the higher observed soil concentrations during the 2023 UST removal and the 2024 soil excavation. This work plan will discuss the monitoring well installation specification, scheduling, sampling and reporting.

Work Plan Maps

Figure 1- Site Location. This map includes the aerial imagery of the site and surround area. The site is in Belgrade, Gallatin County, Montana. South of I-90 on Jackrabbit Lane.
Figure 2 – Site Map. This map include the former dispenser locations and the proposed groundwater monitoring well installation locations.

Final reporting will include updated site specific maps that will illustrate the potential environmental receptors, utilities, current buildings, and monitoring well locations.

Objective of Investigation

The objective of this work plan is to determine if petroleum hydrocarbon impacts observed during the 2023 UST system removal passed through the underlying soil profile and entered the local groundwater. Results from this remedial investigation will determine if Release 6598 can be moved toward closure as there will no longer be data gaps or elevated levels of soil impacts.

Tasks to complete this remedial investigation include monitoring well installation, two rounds of groundwater sampling, and necessary reporting.

Currently there are no monitoring wells located near this release, therefore three wells will be installed to accurately identify the potential areas of impact. Soils sampled during the 2023 UST removal exceeded the Montana RBSLs leaching potential to groundwater greater than 20ft. Therefore, a monitoring well is proposed to be installed under this former dispenser to determine if potential impacts leached into the underlying aquifer. This well location will further provide data under the diesel canopy area and will likely serve as the highest upgradient well compared to the two other proposed well locations.

One well will be constructed under the former dispenser 1. Higher odors and staining were observed here during the 2024 soil excavation project under WP34880 and will provide data for potential impacts under the former gasoline islands. This well will also provide side gradient data, useful to determine flow direction and gradient compared to the up and down gradient wells.

The final well will be installed down gradient along the northern property boundary near the former UST basin. This well will serve to triangulate groundwater flow and direction compared to the other two proposed monitoring wells.

Two rounds of groundwater sampling will be conducted to adequately determine the seasonal fluctuation in groundwater patterns and how these patterns may impact the hydrocarbon impacts.

Following the construction of the monitoring wells, an AR-03 Soil Boring and Monitoring Well Installation Report will be completed and sent to the Montana DEQ to summarize the findings and detail the monitoring well construction activities. After the final groundwater monitoring event, one Remedial Investigation Report will be completed, and will include a new Release Closure Plan to identify potential data gaps and potential exposure media/receptors should any impacts be observed.

Investigation Methods, Equipment, Technology, and Personnel

Section 7: Investigation Methods, Equipment, Technology, and Personnel

Utility Locate

Montana 811 will be contacted one week prior to monitoring well installation. There will not be a need for a private locate as the facility is mostly vacant and the drilling locations are likely in areas that have already been excavated. The identified utilities will be included in the final site figure created after the monitoring well sampling events.

Groundwater Monitoring Well Construction

An air rotary rig will be used to construct three monitoring wells to 80 feet bgs in the approximate locations shown on Figure 2 and the monitoring wells will be constructed as follows:

- Slotted 2-inch flush-threaded sch 40 casing with 0.02 slot from 80 to 40 feet bgs.
- Solid flush-threaded casing from 40 to 1-foot bgs.
- 10/20 Colorado silica sand from bottom of borehole to 35 feet bgs.
- Bentonite from 35 to 5 feet bgs, sand to 1-foot bgs.
- 8” steel well box cemented in place.
- Locking caps will be placed on each well.

During monitoring well drilling, observations of sub-surface conditions including soil characteristics, petroleum hydrocarbon impacts, and depth to groundwater will be recorded and submitted to Montana Groundwater Information Center (GWIC) following the Montana Bureau of Mines and Geology monitoring well construction guidelines. Monitoring well construction documentation will be submitted within 60 days by the certified driller. If petroleum impacted soils are encountered using a photoionization detector (PID) and heater head space field test showing results greater than 200ppm VOCs, the soils will be disposed of at the Logan Landfill under a previously approved waste tracking form. If soil does not exhibit hydrocarbon impacts, then it will be disposed of onsite.

Monitoring Well Development

Monitoring wells will be developed after well construction to purge silt and sediment ensuring a viable sample can be sent to an accredited laboratory. A downhole 2-stage submersible pump will be used to develop the wells, remove silt and sands from the well casing. This will include surging the tubing and removing both water and silt from the 2-inch diameter wells until water flow has cleared to less than 10 Nephelometric Turbidity Units (NTU). It is predicted that 30-40 gallons of water will be purged from each well and will be disposed of onsite allowing for purged water to evaporate. If odors or sheen are observed, then AJM will contact DEQ project manager to discuss onsite storage, profiling and offsite disposal. Well development will occur after the monitoring wells are constructed, and groundwater samples will be collected no sooner than one week after development to allow for sufficient recharge and stabilization.

Professional Land Survey

A Professional Land Survey (PLS) company will be contracted to conduct a survey of the area and tie-in well head elevations into a local USGS benchmark. Street curbs along with both underground and overhead utilities, fuel system lines and buildings will also be incorporated into the PLS work. Accurate casing elevations are necessary to determine the groundwater flow gradient and direction. This will provide AJM with A-CAD figures so that groundwater flow direction and gradient can be calculated along with potential future work at the facility and prevent damage to underground utilities.

Groundwater Sampling
Two groundwater sampling events will occur semi-annually for the first year to determine groundwater concentration variation compared to depth to water measurements. Sampling will be conducted in accordance with Montana DEQ Groundwater Sampling guidelines and AJM standard operating procedures (SOPs), attached in Appendix C. During sample events, static water levels and field parameter data will be obtained from all wells listed. During well purging, the data collection will include temperature, pH, dissolved oxygen, conductivity, turbidity and ORP. Once the above parameters are within the range of Montana DEQ guidance document specifications, groundwater samples will be collected. Sampling will be conducted in the 2-inch wells with a 12v submersible downhole pump with a low flow controller, with flow rates not to exceed 300mL/min. When using the submersible pump, new 3/8-inch HDPE tubing will be used per well. All non-dedicated equipment used for purging, sampling, or depth measurements will be decontaminated with an Alconox wash solution, followed by a distilled water triple rinse prior to each use.

Groundwater samples will be analyzed for volatile petroleum hydrocarbon (VPH), extractable petroleum hydrocarbon (EPH), EPH fractionation if screening level exceed 1000µg/L. During the first groundwater sampling event, samples will be analyzed for lead scavengers to ensure these contaminants are not in the groundwater when the site is prepared for closure. Appropriate labeling, cooling, and chain of custody protocols will be followed. Samples will be delivered under chain of custody to an accredited laboratory for analysis, and DEQ data validation summary forms (DVSF) will be submitted with all laboratory data collected under this work plan.

All water produced from this sampling process will be allowed to evaporate on the asphalt and no on-site storage is currently planned. Should significant sheen or free phase product be observed, the DEQ and PTRCB will be contacted to determine course of action.

Schedule and Reporting
Following the construction of groundwater monitoring wells, an Abbreviate Soil Boring and Monitoring Well Installation Report (AR-03) will be submitted to the DEQ. After the collection of the two sample rounds, a Remedial Investigation Report (RIR-01) will be submitted including the following:

- Summary of monitoring well installations and well logs.
- Discussion of groundwater investigative methods and results.
- Evaluation of the available soil and groundwater data to assess the need for intrusive investigation of potential exposure pathways (e.g., vapor intrusion, utility corridor, etc.).
- Conclusions and recommendations of remedial action(s) required to resolve the release.
- Cumulative soil and groundwater data tables.
- Append boring logs, well completion diagrams, groundwater field forms, laboratory analytical data, completed Data Validation Summary Forms, and the Release Closure Plan.
- The Report will follow all guidelines found on the Montana DEQ under the Guidance dropdown at the PTCS webpage.
- The report will include data reported under an AR-03 Abbreviated Soil Boring and Groundwater Monitoring Well Installation Report.
- A Release Closure Plan will be created.

Work discussed in this work plan is estimated to be completed May 2026. A cost estimate for the soil boring, monitoring well, sampling and report writing have been completed for the above-described work and can be found in Appendix B. Work at the former Belgrade Flying J can begin upon written approval

by the DEQ. Please do not hesitate to call if there are any questions or if we can provide any additional information.

Sincerely,

Lars Heinstedt

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Appendix A
Figure 1 - Site Map
Figure 2 – Proposed Monitoring Well Locations

Figure 1
Belgrade Flying J
Belgrade, Gallatin County, Montana

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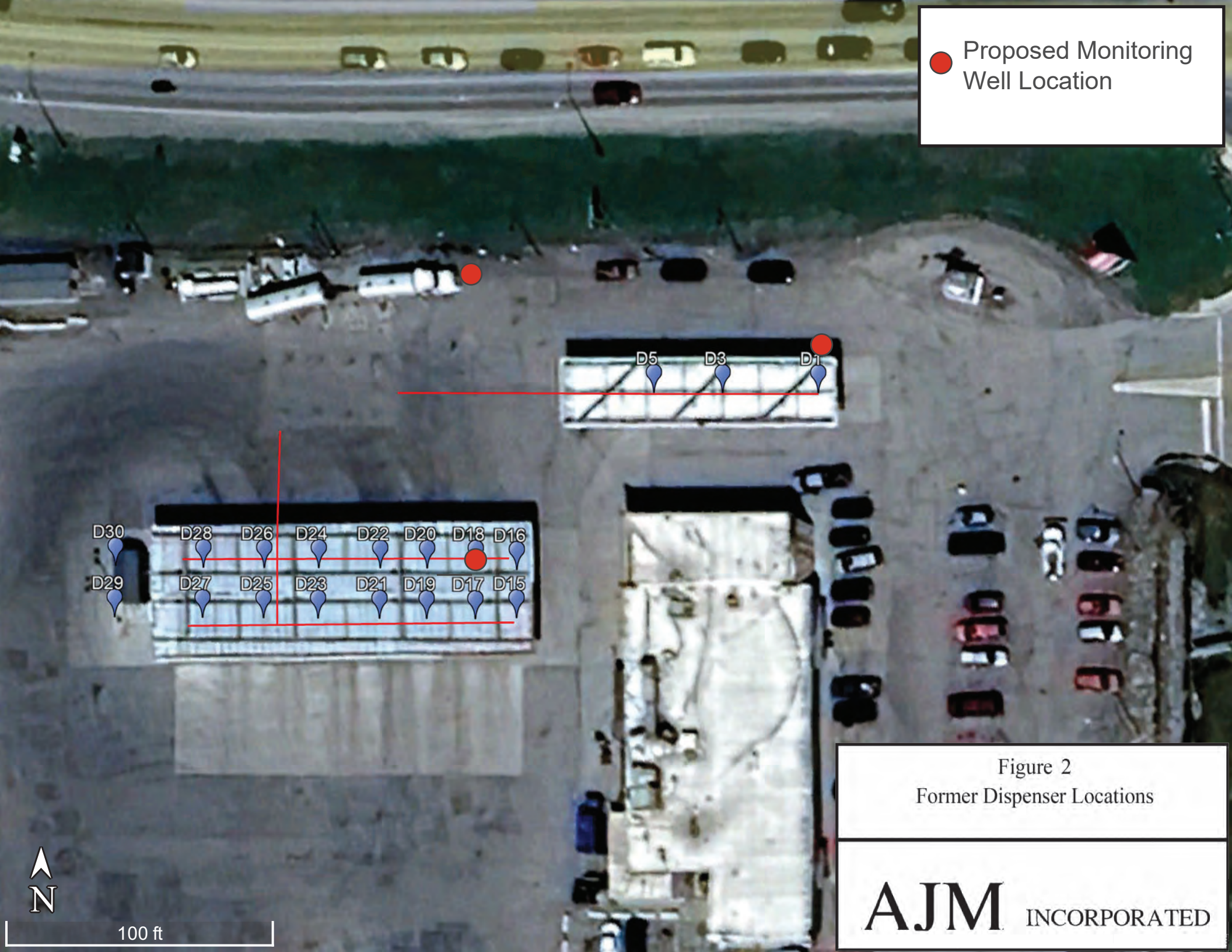

Figure 2
Former Dispenser Locations

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