

June 24, 2026

Mr. Jonathan Love
Environmental Science Specialist
Petroleum Tank Cleanup Section
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

**RE: Groundwater Monitoring Work Plan for the Petroleum Release at the Hardin Auto Company
416 North Center Street, Hardin, Big Horn County, Montana
Facility ID #02-06445, TID #17791, Release #253, Work Plan ID #35150**

**Owner/
Responsible
Party:** Beartooth Ford
Tonya House
PO Box 1249
Columbus, MT 59019
[Tonners5@gmail.com](mailto:Tonnors5@gmail.com)

**Consultant/
Work Plan
Preparer:** Pioneer Technical Services, Inc.
Taylor Bienvenue
2310 Broadwater Ave, Suite 1
Billings, MT 59102
tbienvenue@pioneer-technical.com

Dear Mr. Love:

On behalf of Tonya House with Beartooth Ford, Pioneer Technical Services, Inc. is submitting this Groundwater Monitoring Work Plan for the Hardin Auto Company facility as requested in correspondence from Montana Department of Environmental Quality dated June 1, 2026. Our scope of work and associated proposed costs for Work Plan #35150 are below.

If you have any questions concerning this project or the proposed scope of work, please contact me at (406) 723-1931 or tbienvenue@pioneer-technical.com.

Sincerely,



Taylor Bienvenue, G.I.T.
Project Scientist
Pioneer Technical Services, Inc.

Attachment 1: Figures
Attachment 2: Cost Estimate

cc: Ms. Tonya House (Beartooth Ford)
Mr. Charles Peterson, P.G. (Pioneer)

EXECUTIVE SUMMARY

The purpose of this document is to provide a groundwater monitoring work plan (work plan) for the Hardin Auto Company (facility or site), located at 416 North Center Street, Hardin, Big Horn County, Montana, Facility ID #02-06445, as requested by Montana Department of Environmental Quality (DEQ) Petroleum Tank Cleanup Section in correspondence dated June 1, 2026. The objective of this groundwater monitoring work plan is to monitor the response of Release #253 to a remedial fluid application completed at the site in 2024 and propose additional work, if needed.

The recommended actions outlined in this work plan include conducting two semi-annual groundwater monitoring events and preparing a Groundwater Monitoring Report appended with a Release Closure Plan upon completion of all activities. These activities are detailed in the following work plan.

1 FACILITY SUMMARY AND CURRENT CONDITIONS

1.1 Site Location and Current Use

The Hardin Auto Company facility is located at 416 North Center Street, in Hardin, Montana, at the southwest corner of the intersection of Fifth Street West and Center Street. The site is within a predominantly commercial business area of Hardin and is fairly level with an elevation of approximately 2,903 feet above mean sea level. The site is a rectangular-shaped parcel and is bordered by city alleys to the west, across from which is the Big Horn County Library; a bank immediately to the south; Fifth Street West to the north, across from which is a parking area; and Center Street to the east, across from which are commercial retail buildings. This area of Hardin is served by public utility city services (e.g., potable water and sanitary and storm sewer systems). The site consists of a one-story, slab-on-grade, brick building with a car showroom/office area and attached car service shop. The location of the site is shown on the Location and Vicinity Map, Figure 1, and Site Map, Figure 2, provided in Attachment 1.

1.2 Facility Summary

From 1962 to 1990, the Hardin Auto Company service station and dealership used two underground storage tanks (USTs) as part of a retail fuel station. The two USTs, one 500-gallon tank and one 1,000-gallon tank, were removed on March 16, 1990. During tank removal, approximately 250 cubic yards of hydrocarbon contaminated soil were removed from the tank basin. Following excavation of the contaminated material, a monitoring well was installed and the site was backfilled with uncontaminated material (DEQ, 1991). Montana DEQ was later notified that analytical results from soil samples collected from the sidewalls of the excavation exceeded the risk-based screening levels (RBSLs). As a result, a soil vapor extraction system was installed on the existing monitoring well. The soil vapor extraction system operated for approximately 10 months (HydroSolutions, 2016).

The historical record contains no official documentation regarding the site closure; therefore, DEQ submitted a task order on June 7, 2016, to collect additional site data to fulfill DEQ requirements for site release/closure. HydroSolutions conducted an additional remedial investigation of soil and groundwater at the site and outlined results in a report dated December 2016. As part of the investigation, HydroSolutions installed four monitoring wells (MW-1, MW-2, MW-3, and MW-4). Hydrocarbon contamination was observed in all four soil borings with two or more analyte concentrations exceeding soil RBSLs in MW-1 and MW-2. Groundwater samples were analyzed for volatile petroleum hydrocarbon (VPH) constituents and lead scavengers. Hydrocarbon constituents were present in groundwater samples above the RBSLs for MW-1 and MW-2. Based on these findings, HydroSolutions recommended continued monitoring or remediation of the site (HydroSolutions, 2016).

On March 15, 2021, Pioneer Technical Services, Inc. (Pioneer) developed and submitted a scope of work (Work Plan #34279) for the site to further understand the current extent and magnitude of Release #253 (Pioneer, 2021). Montana DEQ approved Work Plan #34279 on April 15, 2021. In accordance with this work plan, Pioneer completed two groundwater monitoring events, one during high groundwater conditions and one during low groundwater conditions, and provided a

groundwater monitoring report that recommended an *in situ* remediation fluid injection be performed around monitoring well MW-1 to address residual gasoline impacts in the tank basin (Pioneer, 2022a).

On April 5, 2022, DEQ responded to the groundwater monitoring report stating:

“Data presented in the Report and groundwater laboratory analytical data indicates that groundwater contamination is still present above DEQ’s Risk Based Screening Levels and Human Health Standards. Your consultant recommends injections and additional monitoring for cleanup. However, before cleanup can be considered, additional investigation is warranted. Therefore, for this scope of work, soil borings, vapor probes, and monitoring wells are necessary to define the downgradient extent of contamination” (DEQ, 2022).

Under Work Plan #34540, Pioneer completed a remedial investigation in 2022 that included installing additional soil borings and monitoring wells, installing soil borings and sub-slab vapor intrusion sampling ports, completing soil sampling, and completing semi-annual groundwater monitoring. Based on the findings and conclusions of the remedial investigation report, Pioneer recommended completing the second round of groundwater monitoring, sub-slab vapor intrusion monitoring, and associated groundwater monitoring report outlined in Work Plan #34540 (Pioneer, 2022b). The second round of groundwater monitoring and sub-slab vapor intrusion monitoring was completed in spring of 2023. Based on the findings and conclusions of this report, Pioneer recommended a PetroFix® remediation fluid (PetroFix) injection be performed in the vicinity of monitoring wells MW-1, MW22-02, and SB22-02 to address residual gasoline impacts remaining in the former UST basin. In addition to the *in situ* injection, Pioneer recommended the collection of a tap water sample to verify no petroleum impacts to the water line servicing the building. Following injection, Pioneer recommended continuing semi-annual groundwater monitoring to verify the *in situ* remediation application prior to requesting release closure (Pioneer, 2023). Montana DEQ found these recommendations agreeable and issued Work Plan #34873 to complete the recommendations (DEQ, 2024a).

Under Work Plan #34873, Pioneer applied approximately 1,184.7 pounds of PetroFix to the petroleum-impacted subsurface at the site in December 2024. The application of PetroFix appears to have been effective in reducing the lingering dissolved-phase gasoline contamination present in groundwater at the site. On April 25, 2023, before the PetroFix injection, monitoring well MW-1 had a benzene concentration of 214 micrograms per liter (µg/L). On April 7, 2025, 4 months after injection, the benzene concentration was reduced to 5 µg/L, and on September 20, 2025, the benzene concentration was 0.88 µg/L. No other VPH constituents were above respective RBSLs (DEQ, 2024b) on September 20, 2025, for any of the facility’s groundwater monitoring wells. No gasoline constituents were identified in tap water samples collected in April 2025, and it appears that no permeation of the water line by gasoline compounds is occurring (Pioneer, 2026).

Pioneer recommended performing another year of semi-annual groundwater monitoring to continue to monitor the effectiveness of the treatment fluid application. Montana DEQ found this recommendation to be appropriate and issued Work Plan Request #35150 on June 1, 2026 (DEQ,

2026). This work plan details the tasks required to complete the objectives outlined in Work Plan Request #35150.

2 OBJECTIVES OF THE GROUNDWATER MONITORING WORK PLAN

The objective of this groundwater monitoring work plan is to monitor the effectiveness of the treatment fluid application completed at the site in 2024 and propose additional work to resolve Release #253, if needed.

The scope of the work will include semi-annual groundwater monitoring of seven facility groundwater monitoring wells (MW-01, MW-02, MW-03, MW-04, MW22-01, MW22-02, and MW22-03) and reporting. The work will include the following tasks:

- Task 1 – Project Management and Planning
- Task 2 – Semi-Annual Groundwater Monitoring
- Task 3 – Reporting

Task 1 – Project Management and Planning

Task 1 includes managing, scheduling, organizing, and planning the work, including the tasks below:

- Generating a work plan
- Coordinating site work
- Coordinating activities of owners, regulators, and the analytical testing laboratory
- Updating the site-specific health and safety plan to complete the work
- Conducting planning meetings with the owners and DEQ project manager, as deemed necessary by DEQ project manager

Pioneer will update the site-specific health and safety plan and complete the work as approved by Montana DEQ. Regarding scheduling, Pioneer will manage, schedule, and supervise all work to ensure it is completed as proposed and in a timely manner.

Task 2 –Semi-Annual Groundwater Monitoring

Pioneer will collect groundwater samples from all seven facility monitoring wells (MW-01, MW-02, MW-03, MW-04, MW22-01, MW22-02, and MW22-03) for each of the two proposed monitoring events. Based on the timing this work plan, Pioneer anticipates the first groundwater monitoring event will be completed in the late summer or early fall of 2026. The first event will represent low groundwater conditions for the site. The second event will be completed in the spring of 2027 and will represent high groundwater conditions. For each event, we will gauge and purge the wells and collect groundwater samples.

Prior to groundwater sample collection, Pioneer will gauge each of the seven groundwater monitoring wells for depth to water and the presence of light non-aqueous phase liquid (LNAPL). Each well will be gauged using an electronic interface probe capable of detecting water or LNAPL hydrocarbons to within 0.01 foot. If a well does not contain LNAPL, then the team will collect

groundwater samples from the well. If LNAPL is detected, the team will not collect any samples from the LNAPL-impacted well, will note the conditions in a logbook, and notify DEQ's project manager.

The groundwater samples will be collected according to low-flow sampling techniques (DEQ, 2018). To ensure representative groundwater samples are collected, Pioneer will purge the monitoring wells and monitor the intrinsic bioremediation indicators (IBIs) and allow them to stabilize during the purging process prior to sample collection. The collected IBIs are considered stable when there are three consecutive temperature readings within plus or minus 1 degree Celsius, three consecutive pH readings within plus or minus 0.1, three consecutive dissolved oxygen readings within plus or minus 10%, three consecutive specific conductance readings within plus or minus 3%, three consecutive oxidation reduction potential readings within plus or minus 10 millivolts, and three consecutive turbidity readings within plus or minus 10%. To complete groundwater sampling in accordance with DEQ's low-flow sampling guidance, the wells will be gauged at each field parameter monitoring interval with a water level meter to ensure excessive drawdown (plus or minus 0.3 foot) does not occur prior to sampling.

Pioneer will collect the groundwater samples with a peristaltic pump and disposable tubing and transfer the samples to the appropriate laboratory containers. New, decontaminated containers will be supplied by the laboratory prior to sample collection. Groundwater samples from the seven on-site monitoring wells will be submitted for laboratory analysis of VPH. Pioneer will collect one VPH field duplicate during each sample event. Each sample container will be preserved as directed by the laboratory, labeled, and packaged on ice. The samples will be delivered to Energy Laboratories, Inc. in Billings, Montana. Chain of custody documentation will accompany the samples.

Task 3 –Reporting

Pioneer will prepare and submit a groundwater monitoring report according to *Montana Groundwater Monitoring Work Plan and Report Guidance for Petroleum Releases* (DEQ, 2021) following the second monitoring event. The groundwater monitoring report will detail the methods and results of the 2026 and 2027 groundwater monitoring events. The report will follow DEQ's report format and include the following:

- Updated facility maps illustrating locations of utilities, former fuel systems, site buildings, locations of petroleum source material areas, receptors including underground utilities, and locations of groundwater monitoring wells
- Tables summarizing field data and cumulative laboratory analytical data for groundwater collected from all facility monitoring wells
- Laboratory analytical reports for groundwater samples
- Field sample data sheets and related field data
- Data interpretation and recommendations relevant for further remediation and/or closure plan for the release

- Data validation documentation using DEQ's data validation summary forms
- An updated Release Closure Plan

3 COST ESTIMATES

The cost estimate to perform this scope of work is included in Attachment 2.

4 SCHEDULE

We can begin work on this project within 30 days following receipt of Montana DEQ approval, which is expected sometime in the summer of 2026. The project, as described in this work plan, will last up to 12 months. Therefore, the final report will be issued 45 days after the spring 2027 sampling event.

5 REFERENCES

- DEQ, 1991. Underground Storage Tank 30-Day Leak Report Follow-up Form. Montana Department of Health and Environmental Sciences Solid and Hazardous Waste Division (now Montana Department of Environmental Quality Waste Management and Remediation Division). January 1991.
- DEQ, 2018. Groundwater Sampling Guidance. Montana Department of Environmental Quality Contaminated Site Cleanup Bureau. DEQ-WMRD-GWM-1. March 6, 2018. Helena, Montana 59601.
- DEQ, 2021. Montana Groundwater Monitoring Work Plan and Report Guidance for Petroleum Releases. Montana Department of Environmental Quality. March 2021.
- DEQ, 2022. Additional Corrective Action Work Plan Required for the Petroleum Release at Hardin Auto Co., 416 North Center Street, Hardin, Big Horn County, Montana, Facility ID #0206445 (TID 17791), Release #253, Work Plan #34540. April 5, 2022.
- DEQ, 2024a. Correspondence Re: Additional Corrective Action Work Plan Required for Petroleum Release at Hardin Auto Co., 416 North Center Street, Hardin, Big Horn County, Montana; Facility ID 02-06445 (TID 17791), Release 253, Work Plan ID 34873. From Montana Department of Equality to Tonya House. May 17, 2024.
- DEQ, 2024b. Montana Risk-Based Corrective Action Guidance for Petroleum Releases. Montana Department of Environmental Quality. February 2024. Available at https://deq.mt.gov/files/Land/StateSuperFund/Documents/rbca/Update/Final%20RBCA%202024%20Update_Compiled%20PDF.pdf.
- DEQ, 2026. Work Plan Requested to Monitor Petroleum-Contaminated Media at the Hardin Auto Co., 416 North Center Street, Hardin, Big Horn County, Montana; Facility ID 02-06445 (TID 17791), Release 253, Work Plan ID 35150. Montana Department of Environmental Quality. June 1, 2026.
- HydroSolutions, 2016. Report of Additional Remedial Investigation Former Hardin Auto Company, 416 North Center Avenue, Hardin, Big Horn County, Montana, MDEQ Facility ID #02-06445, MDEQ Release #253, Work Plan #10249, Task Order #06, approved on June 7, 2016. HydroSolutions, Inc. December 30, 2016.
- Pioneer, 2021. Additional Correction Action Plan (CAP) Hardin Auto, 416 North Center Street, Hardin, MT, Facility ID #02-06445, TID #17791, Release #253, WP ID #34279. Prepared by Pioneer Technical Services, Inc. March 15, 2021.
- Pioneer, 2022a. Groundwater Monitoring Report – Hardin Auto; 416 North Center Street, Hardin, MT; Facility ID #02-06445, TID #17791, Release #253, WP ID #34279. Prepared by Pioneer Technical Services, Inc. January 5, 2022.

Pioneer, 2022b. Remedial Investigation Report for a Petroleum Release at Hardin Auto Co., 416 North Center Street, Hardin, Big Horn County, Montana; Facility ID #02-06445, Release #253, Work Plan ID #34540. Prepared by Pioneer Technical Services, Inc. December 23, 2022.

Pioneer, 2023. Groundwater and Vapor Intrusion Monitoring Report for a Petroleum Release at the Hardin Auto Company, Facility ID #02-06445, Release #253, Work Plan ID #34540. Prepared by Pioneer Technical Services, Inc. June 20, 2023.

Pioneer, 2026. Cleanup Report: Hardin Auto Company, 416 North Center Street, Hardin, Big Horn County, Montana, Facility ID #02-06445, TID #17791, Release #253, Work Plan ID #34873. Prepared by Pioneer Technical Services, Inc. January 23, 2026.

Attachment 1

Figures

Figure 1. Location and Vicinity Map

Figure 2. Site Map



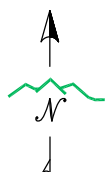
**PROJECT
LOCATION**



SITE VICINITY MAP

DEQ FACILITY ID: 02-06445
RELEASE NUMBER: 253
WORK PLAN NUMBER: 35150

HARDIN AUTO COMPANY
416 NORTH CENTER STREET
HARDIN, MONTANA



DISPLAYED AS:
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UNITS: INT. FEET
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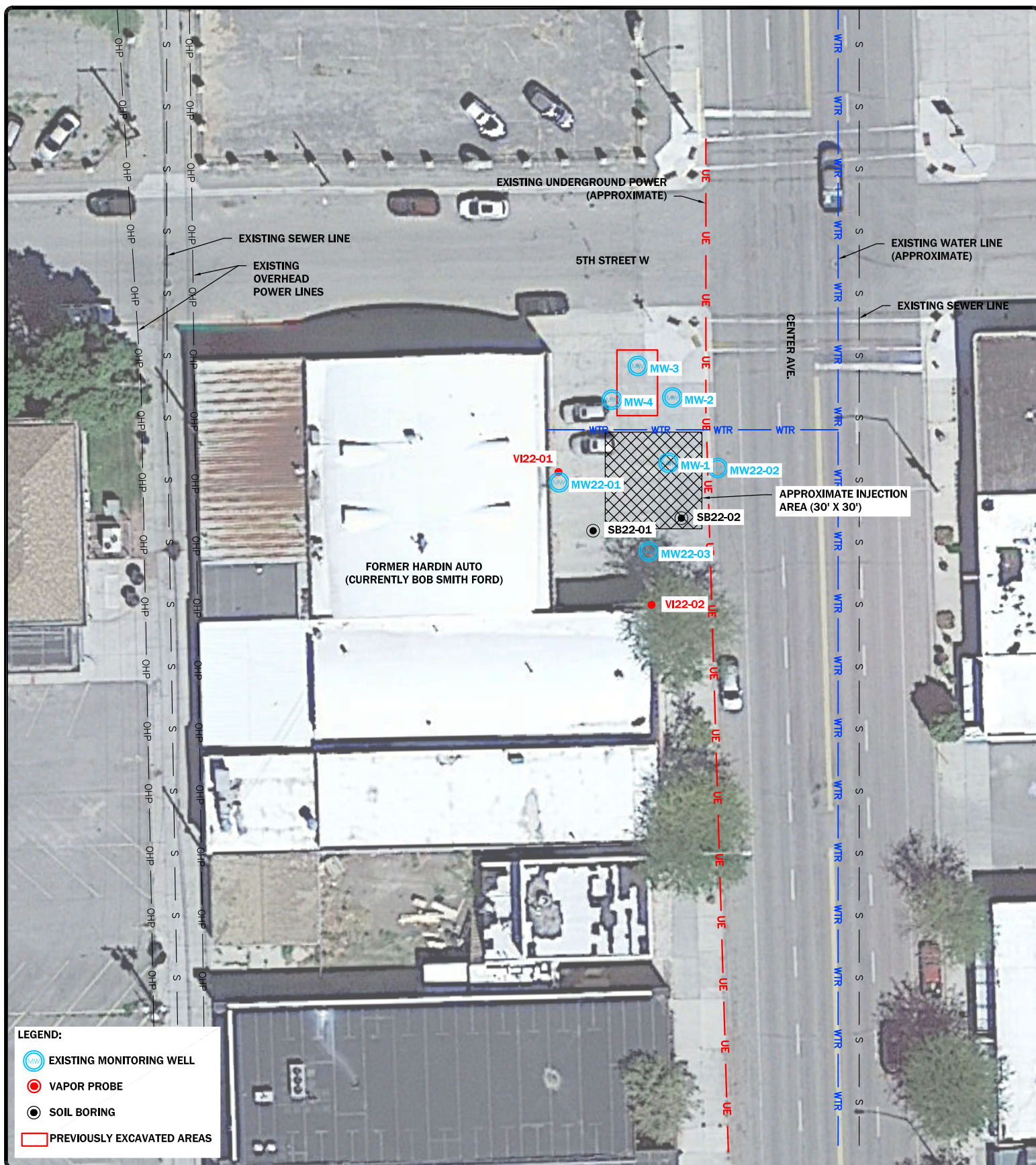
FIGURE 1



(406) 545-4805

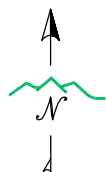
LOCATION AND VICINITY
MAP
HARDIN AUTO COMPANY

DATE: JUNE 2026



DEQ FACILITY ID: 02-06445
 RELEASE NUMBER: 253
 WORK PLAN NUMBER: 35150

HARDIN AUTO COMPANY
 416 NORTH CENTER STREET
 HARDIN, MONTANA



DISPLAYED AS:
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 DATUM: MSP
 UNITS: INT. FEET
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SCALE IN FEET
 0 20 40



FIGURE 2

SITE MAP
 HARDIN AUTO
 COMPANY

DATE: JUNE 2026