TETRA TECH

May 06, 2026

Mr. Anthony Bell
Circle K Stores, Inc.
1100 Situs Court, Suite 100
Raleigh, NC 27606

Delivered via email: abell@circlek.com

SUBJECT: Work Plan to Monitor Petroleum-Contaminated Media
Circle K Store 2746275, 105 Broadwater Avenue, Billings, Montana
MDEQ Facility I.D. No. 56-08063; Petroleum Release No. 1814; WP ID# 35175
Tetra Tech Project No.: 117-082722-26001

Dear Mr. Bell:

Tetra Tech, Inc. (Tetra Tech) is pleased to submit this work plan for groundwater monitoring at the Circle K Store #2746275 located at 105 Broadwater Avenue, Billings, Montana (Figures 1 and 2). This work plan was prepared in response to a request from Jonathan Love of the Montana Department of Environmental Quality (MDEQ) in correspondence dated April 10, 2026 (MDEQ, 2026).

The following work plan presents a brief discussion of the site's history and the proposed scope of work to meet the MDEQ request.

BACKGROUND

The Holiday Station Store #275 facility is located at 105 Broadwater Avenue, west of downtown Billings, Montana (Figures 1 and 2). The site is in a residential neighborhood except for a laundromat located southeast of the site. The facility consists of the main store building, an underground storage tank (UST) basin, and two rows of dispenser islands. The site is located on alluvial silt, clays, and gravels of Quaternary age, deposited as part of the Yellowstone River system (Lopez, 2022). The groundwater depth at the site is an average of 13 feet below ground surface (bgs) and flows to the east (Tetra Tech, 2024).

A petroleum hydrocarbon release was first detected in a private well owned by Emil Orlando (Figure 2) north of the site in late 1992. A soil vapor extraction system was installed on-site in 1994 and operated until February 1999. Three USTs were removed from the site on July 10 and 11, 1995. An estimated 549 pounds of hydrocarbons were removed during this period (Delta, 2002).

Monitoring wells MW-4, MW-6 through MW-8, air sparge points AS-3, AS-4, and soil vapor extraction point SV-2 were abandoned in February 2002 (Figure 2). Wells AS-1, AS-2, and SV-2 were destroyed during a fire and subsequent reconstruction at the site in 2001 and 2002 (Tetra Tech, 2009).

A groundwater monitoring event was performed in 2011 which indicated a stable plume with decreasing hydrocarbon concentration trends (Tetra Tech, 2011).Benzene was observed above the MDEQ Risk-Based Screening Level (RBSL) in a groundwater sample collected from monitoring well MW-5 during the July 2011 groundwater sampling event (Tetra Tech, 2011). No other VPH constituents were observed above RBSLs in samples collected during that sampling event. Monitoring well MW-5 was destroyed between July 2011 and February 2024.

Two monitoring wells, BPGP86A and BPGP86B, are located on the eastern border of the property (Figure 2) and are associated with a Federal Superfund site, the Billings PCE plume.

A Remedial Investigation was performed in 2024 to determine the extent and magnitude of the petroleum impacts to soil and groundwater affected by the release number 1814 and to fill data gaps from previous investigations. Monitoring wells MW-9 through MW-12 were installed on October 10 and 11, 2023. VPH constituents were not observed above RBSLs in the soil samples submitted for laboratory analyses from these monitoring wells (Tetra Tech, 2024a).

Groundwater monitoring wells MW-3 and MW-9 through MW-12 were sampled on February 1, 2024. One VPH constituent, C5-C8 aliphatics, exceeded the MDEQ RBSL in the sample collected from well MW-9. VPH results from samples collected from the remaining wells did not exceed MDEQ RBSLs during this sampling event (Tetra Tech, 2024a).

A groundwater monitoring event was performed on May 21, 2024. Light non-aqueous phase liquid (LNAPL) was observed at a thickness of approximately 0.37 feet in monitoring well MW-9. VPH constituents were not observed above RBSLs in the groundwater samples collected from wells MW-3 and MW-10 through MW-12. Based on the observance of LNAPL in well MW-9, a suspected release was reported to the MDEQ on May 21, 2024. Tank tightness testing was performed on May 29, 2024. No issues were found during the tank tightness testing. The cause of the release was suspected to be from a tank overfill during fuel deliveries. A 30-day report was submitted to the MDEQ on August 30, 2024 (Tetra Tech 2024b).

SCOPE OF WORK

This project's general scope of work is as follows:

GROUNDWATER MONITORING

Tetra Tech will conduct two groundwater monitoring events at the facility site. The sampling events will be scheduled to capture high and low groundwater conditions. The following table summarizes the scope of work for the two groundwater monitoring events.

Task Description	Monitoring Well/Parameter List
Depth to Groundwater Measurements	MW-3, MW-9, MW-10, MW-11, and MW-12
Monitoring Wells to be Sampled	MW-3, MW-9, and MW-11 (1 duplicate sample)
Water Quality Stabilization Parameters	• pH, • Temperature, • Dissolved Oxygen, • Specific Conductivity, • Oxygen Reduction Potential, and • Turbidity
Laboratory Analyses	• VPH by Montana Method MADEP • Dissolved Ferrous Iron by Method E200.8 • Dissolved Manganese by Method E200.8 • Sulfate by Method E300.0 • Nitrates/Nitrites by Method E353.2 • Methane by Method 8015M

The following methods will be used for collecting static water level measurements and groundwater sampling:

- Each monitoring well will be purged using the low-flow, slow-purge pumping method, with a submersible bladder pump or a peristaltic pump, and dedicated polyethylene tubing. During purging, field instruments will analyze the water for pH, temperature, dissolved oxygen, specific conductivity, oxidation-reduction potential, and turbidity. Purge water will be containerized by the *Disposal of Untreated Water from the Monitoring Wells Flow Chart* and disposed of appropriately following receipt of laboratory results (MDEQ, 2015). The pump will be decontaminated between wells using a Liquinox® solution followed by a triple rinse technique. Additionally, a new bladder or tubing will be installed between sampling each well.
- A groundwater sample from each monitoring well will be collected using a submersible bladder pump or peristaltic pump and dedicated polyethylene tubing. Groundwater samples will be analyzed for VPH using the Montana Method based on the Massachusetts Department of Environmental Protection (MADEP) methods (MDEQ, 2024). Groundwater samples will also be analyzed for intrinsic biodegradation indicators (IBIs). The IBIs include dissolved ferrous iron (Method E200.8), dissolved manganese (Method E200.8), sulfate (Method E300.0), nitrates/nitrites (nitrate plus nitrite as nitrogen; Method E353.2), and methane (SW8015 Modified). One duplicate sample will be collected from a well with presumed petroleum hydrocarbon impacts during each sampling event. Also, a trip blank will accompany the sample cooler during sampling and shipment. The duplicate and trip blank samples will be analyzed for the same constituents as the natural samples.

DATA VALIDATION

The analytical data package will include a summary report that cross-references the sample identification with the laboratory identification and identifies variations from standard operating procedures; laboratory analytical results; quality control data, which may include but is not limited to surrogate recoveries, initial and continuing calibration blanks and spikes, method blanks, laboratory control blanks, laboratory spikes, and matrix spike and matrix spike duplicates; FID chromatograms; chain of custody form(s); and a sample receipt checklist. Additionally, data validation will be included with the groundwater monitoring report and will follow MDEQ's data validation guideline as per https//deq.mt.gov/Portals/112/Land/StateSuperfund/Documents/DataValidationReport.pdf. It is anticipated that one data validation will be completed for this project.

REPORTING

A Groundwater Monitoring Report will be prepared and submitted to MDEQ after the second groundwater monitoring event and validation of laboratory data. This report will present the field and analytical results of both groundwater monitoring events and compare laboratory analytical results to MDEQ RBSLs. Conclusions and recommendations detailing site conditions, and the extent and magnitude of the plume will be discussed, along with a to-scale map presenting necessary site information. Additionally a Release Closure Plan (RCP) will be prepared to evaluate the potential path for closure of the release.

SCHEDULE AND BUDGET

Tetra Tech will schedule this work within three business days upon receiving formal authorization by Circle K Stores, Inc. and the MDEQ. The work described above will be conducted on a unit cost basis per attached cost estimate (Attachment A). This site is eligible for reimbursement through the Montana Petroleum Tank Release Compensation Board (PTRCB).

AUTHORIZATION

This work will be conducted in accordance with the terms and conditions of the Master Consulting Services Agreement between Holiday Companies and Tetra Tech, Inc. dated March 28, 2017. This work plan may be accepted by signing the attached *Work Authorization #29* (Attachment B) and returning a copy to our Billings office. If you have questions or comments regarding this work plan, please call us at (406) 248-9161. For your convenience we have forwarded a copy of this work plan to Mr. Jonathan Love (MDEQ).

We appreciate the continuing opportunity to provide Circle K with consulting services and look forward to hearing from you. Please call if you have any questions or comments regarding this work plan.

Sincerely,

Tetra Tech, Inc.

Steven A. Marie, PE
Senior Engineer

Jacob Conver, P.E.
Senior Engineer

SAM/JC

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cc: Jonathan Love-MDEQ, Billings jonathan.love@mt.gov

Attachments: Figures
Attachment A: Cost Estimate
Attachment B: Work Authorization #29

REFERENCES

Delta Environmental Consultants, Inc., 2002. 2001 Annual Ground Water Monitoring Report Holiday Companies Store No. #275. Report submitted to the Montana Department of Environmental Quality. February 12.

Lopez, 2002. Geologic Map of the Billings 30' x 60' Quadrangle, Montana. Montana Bureau of Mines and Geology Geologic Map Series No. 59. Butte, Montana.

Montana Bureau of Geology, 2024. Online at (http://mbmggwic.mtech.edu/). Accessed July 4, 2024.

MDEP, 2008a. Massachusetts Department of Environmental Protection (MADEP), 2008. Method for Determination of Volatile Petroleum Hydrocarbons (VPH). Revision 1.1. May.

MDEP, 2008b. Massachusetts Department of Environmental Protection (MADEP), 2008. Method for Determination of Extractable Petroleum Hydrocarbons (EPH). Revision 1.1.

MDEQ 2019. Circular DEQ-7 Montana Numeric Water Quality Standards. June.

MDEQ, 2024. Montana Risk-Based Corrective Action Guidance for Petroleum Releases. Montana Department of Environmental Quality. February.

MDEQ, 2023. Approval of Work Plan, dated April 6, 2023, for the Petroleum Release at Circle K Store 2746275, 105 Broadwater Avenue, Billings, Yellowstone County, Montana; Facility ID 56-08063 (TID 30212), Release 1814, Work Plan 34668. May26.

MDEQ, 2026. Work Plan Requested to Monitor Petroleum-Contaminated Media at the Circle K Store 2746275, 105 Broadwater Avenue, Billings, Yellowstone County, Montana; Facility ID 56-08063 (TID 30212), Release 1814, Work Plan 35175. April 10.

Tetra Tech, 2011. AR-01 Abbreviated Report Form with required attachments for Holiday Store #275. December 7.

Tetra Tech, 2023. Remedial investigation Work Plan. Holiday StationStore 275 (Circle K Store 2746275). 105 Broadwater Avenue, Billings, Yellowstone County, Montana. DEQ Facility ID 56-08063; Release 1814, Work Plan 34668. Tetra Tech Project Number 117-8153015. April 6.

Tetra Tech, 2024. Remedial Investigation Report. Circle K Store 2746275 (Former Holiday 275), 105 Broadwater Avenue, Billings, Yellowstone County, Montana. DEQ Facility ID 56-08063, Release 1814, Work Plan 34668. July 29.

Tetra Tech, 2024. Petroleum Release Notification – 30 Day Form. Circle K Store 2746275, 105 Broadwater Avenue, Billings, Yellowstone County, Montana. DEQ Facility ID 56-08063. August 30.

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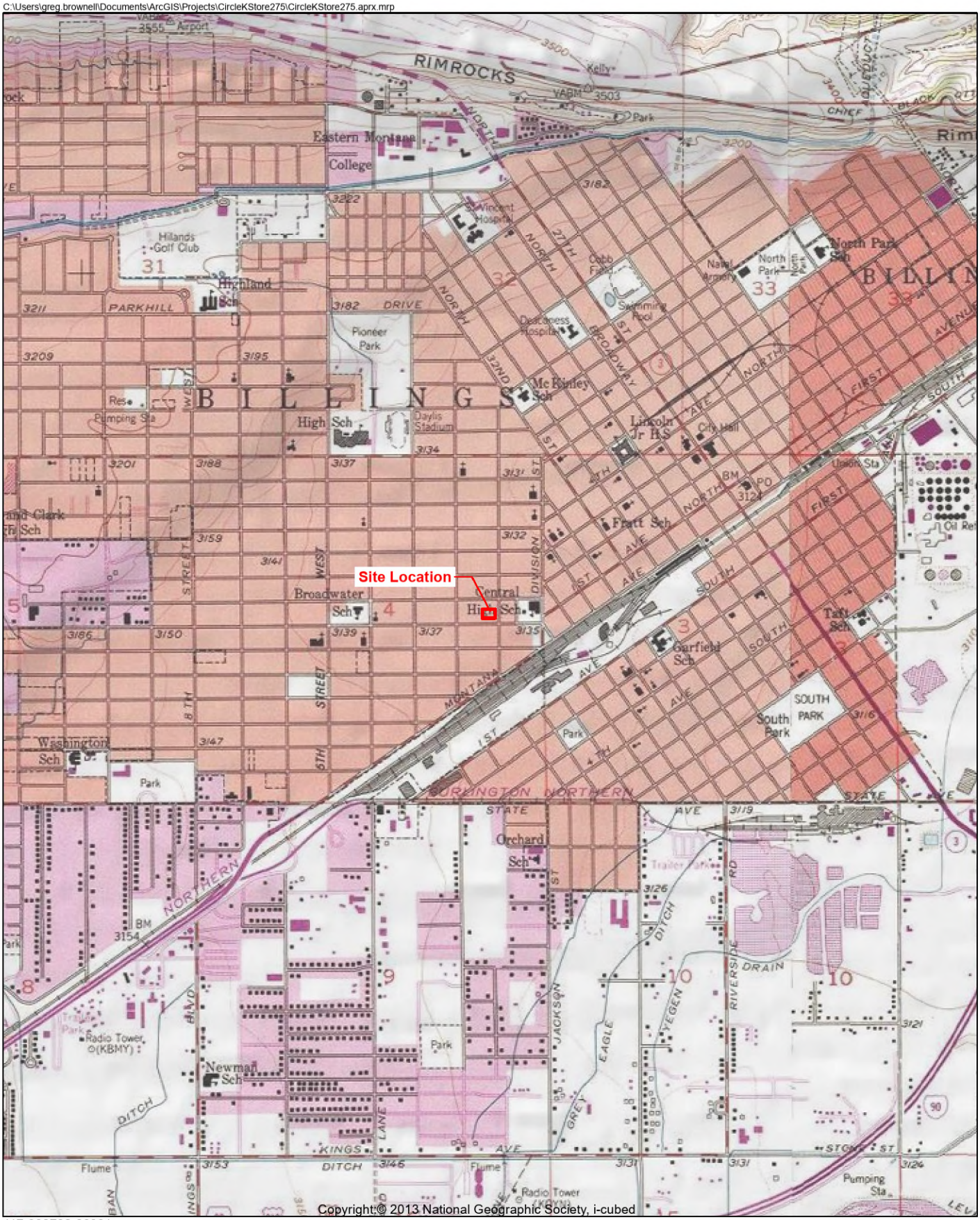
FIGURES

C:\Users\greg.brownell\Documents\ArcGIS\Projects\CircleKStore275\CircleKStore275.aprx.mrp



117-082722-26001
4/28/2026

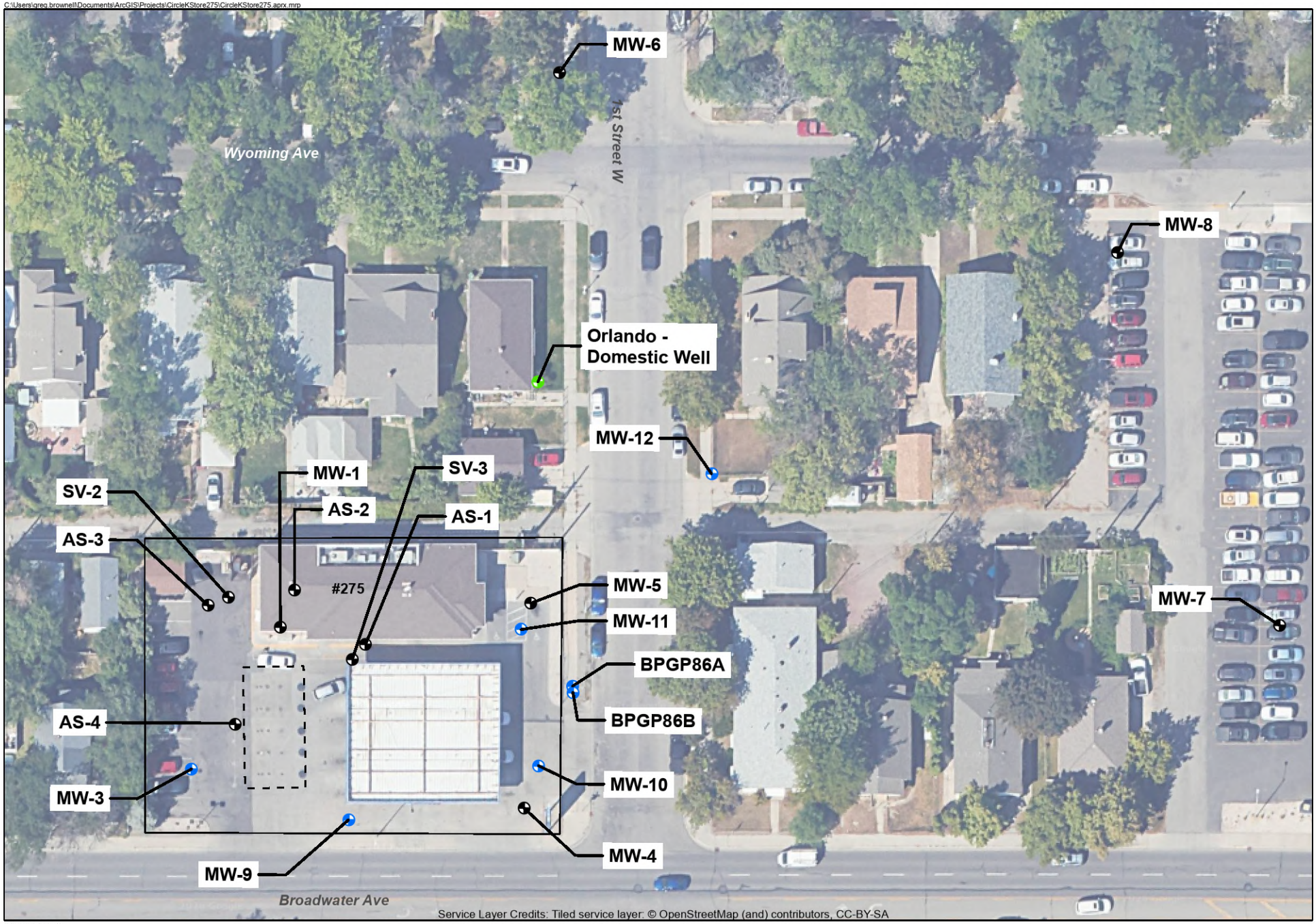
N

Feet
0 1:24,000 2,000

Approximate Parcel Boundary

Location Map
Circle K Store 2746275
105 Broadwater Avenue
Billings, Montana
Figure 1

C:\Users\greg.brownell\Documents\ArcGIS\Projects\CircleKStore275\CircleKStore275.aprx.mrp



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4/28/2026

N

Feet

0 1:720 60

Existing Well
Domestic Well
UST Basin
Abandoned Or Destroyed Well
Approximate Parcel Boundary

Site Map
Circle K Store 2746275
105 Broadwater Avenue
Billings, Montana
Figure 2