March 6, 2025

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

Delivered via email: abell@circlek.com

SUBJECT: Revised Groundwater Monitoring Work Plan
Holiday Station Store #267, 1700 10th Avenue South, Great Falls, Montana
MDEQ Facility I.D. No. 07-08065; Leak ID #2597; WP ID# 35001
Circle K #2746267
Tetra Tech Project No.: 117-8153011A

Dear Mr. Bell:

Tetra Tech, Inc. (Tetra Tech) is pleased to submit this work plan for groundwater monitoring at former Holiday Station Store #267, 1700 10th Avenue South, Great Falls, Montana (Figures 1 and 2). This work plan was prepared in response to a request from Donnie McCurry of the Montana Department of Environmental Quality (MDEQ) in correspondence dated January 28, 2025 (DEQ, 2025). In this correspondence, Mr. McCurry made the following requests:

- *Monitor groundwater at the facility by gauging fluid levels and collecting groundwater samples from select monitoring wells. Collect groundwater samples by low-flow sampling according to DEQ's Groundwater Sampling Guidance found under the Guidance dropdown at the PTCS webpage.*

- *Analyze groundwater samples for petroleum constituents as required by the Montana Risk- Based Corrective Action Guidance for Petroleum Releases.*

- *Coordinate initial sampling with Laura Alvey (lalvey@mt.gov) of DEQ's Groundwater Remediation Program. That program would like to have select wells sampled for Volatile Organic Compounds. Those samples would need to be submitted under a different chain-of- custody with a different charge number.*

- *Validate all laboratory analytical data using DEQ's Data Validation Summary Form (DVSF) found online under the Guidance dropdown at the PTCS webpage.*

- *Discuss ongoing WP tasks and results with DEQ's project manager; submit written agreed- upon WP modifications as required to complete the WP objectives.*

- *Prepare and submit an Interim Data Submittal (IDS) for each interim groundwater monitoring event. The IDS is expected to include the discussion, data, tables, and figures described in the Groundwater Monitoring Work Plan and Report Guidance for Petroleum Releases found under the Guidance dropdown at the PTCS webpage.*

Prepare and submit one Groundwater Monitoring Report detailing the method and results of all groundwater monitoring events completed under this WP. The Groundwater Monitoring Report is expected to include at a minimum the following:

- *Use the report format found under the Guidance dropdown at the PTCS webpage.*
- *Discussion of the monitoring method results, deviations from the approved work plan, assessment of attenuation rates (onsite and offsite), recommendations, and conclusions.*
- *Cumulative groundwater data tables.*
- *Updated site features and potentiometric surface maps.*
- *An updated Release Closure Plan (RCP) based on the monitoring results.*
- *Append groundwater monitoring field forms, laboratory analytical data, completed DVSFs, and the updated RCP.*
- *Submit WP and reports electronically following the PTCS submittal requirements found under the Guidance dropdown at the PTCS webpage.*

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 former Holiday StationStore #267 site was a retail fueling facility from the early 1960s until 2001. In 1995, petroleum hydrocarbon impacted soil was discovered in the adjacent Montana Department of Transportation (MDT) 10th Avenue South right-of-way (Maxim Technologies, 1995). Subsequent investigations by Maxim Technologies, Inc. (Maxim) identified the areal extent of petroleum hydrocarbon impacts as extending from the former Holiday site, bounded by 17th Street to the west and the Carriage Trade Cleaners property to the east, and as far north as 10th Alley South (Figure 1). At 10th Alley South, the Holiday plume was believed to mix with a separate petroleum hydrocarbon plume emanating from Keith's Country Store, which is located to the northwest across 17th Street (Maxim Technologies, 2005). In 1999, approximately 8,000 cubic yards of petroleum hydrocarbon impacted soil were excavated from the MDT right-of-way to the north of the former Holiday site (Maxim Technologies, 2000), and in June 2001, an additional 3,000 cubic yards of impacted soil were excavated from the former Holiday site itself (Maxim Technologies, 2002), effectively removing the source area associated with the former Holiday StationStore #267 (Figure 2).

In November 2006, a soil vapor extraction (SVE) system consisting of three piping sections placed in trenches was installed beneath the Taco Treat restaurant property to the north of the former Holiday StationStore #267. Over the first year of system operation, the concentration of volatile organic compounds (VOCs) measured at the output stack decreased from an initial concentration of 705 parts per million (ppm) in January 2007 to a concentration of 45 ppm in December 2007 (Tetra Tech, 2008). The system operated continuously through August 2010. However, due to the accumulation of groundwater in the SVE system and potential freeze up problems the system has not operated continuously since 2010.

In August 2010 and July 2012, site wide groundwater sampling events were conducted at the site. The results from these events demonstrated that high concentrations of dissolved-phase petroleum hydrocarbons persist in the vicinity of 10th Alley South but have continually declined in the suspected source area (Tetra Tech; 2010, 2012).

Groundwater monitoring events were conducted September 2015 (Tetra Tech, 2015) and September 2021 (Tetra Tech, 2021). Results from these monitoring events indicated continued

MDEQ risk-based screening levels (RBSLs) exceedances in groundwater analyzed from monitoring wells along 10th Alley South. Groundwater samples analyzed from monitoring wells located along 10th Avenue South were below RBSLs during the 2015 and 2021 sampling events (Tetra Tech 2021).

A Phase II Sampling and Analyses Plan (SAP) was requested by the MDEQ in a letter dated February 4, 2022. The purpose of the SAP was for additional remedial investigation of petroleum impacts to soil and groundwater and the potential impacts downgradient of monitoring well HGF-9S. Results of the remedial investigation activities were summarized in in the Final Environmental Summary Report for the Emerald City Casino and Carriage Trade Cleaners properties for the Great Falls Development Authority (Hygienex and Big Sky Civil and Environmental, 2024). Exceedances of MDEQ's RBSLs were observed in soil vapor and groundwater samples collected for the Phase II ESA. Recommendations from the Phase II ESA included the installation of a vapor mitigation system or vapor barrier if redevelopment is completed on the property and that the DEQ consider additional groundwater monitoring.

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. Monitoring wells located on the former Taco Treat, Emerald City Casino and Carriage Trade Cleaners properties may be buried, damaged, or destroyed from demolition activities that occurred in 2023. An inventory of monitoring wells that cannot be located or that may have been destroyed during demolition will be developed during the groundwater monitoring events.

- Depth to groundwater will be collected from monitoring wells:

GHB-3S	GHB-4s	GHB-7s	GHB-8s
GHB-9s	GHB-44s	GHB-46s	GHB-47s
GHB-48s	GHB-49s	GHB-52s	GHB-56s
GHB-57s	GHB-58s	HGF-2sA	HGF-3s
HGF-4s	HGF-5s	HGF-6s	HGF-9s
HGF-16s	HGF-17s	HGF-18s	HGF-19s
MW-1	MW-2	MW-3	

- Depth to groundwater will be measured in each monitor well (Figure 2) using an electronic oil/water level interface device. The device will be decontaminated between wells using a *Liquinox*® soap solution, a deionized water rinse, and a final deionized water rinse.
- Groundwater samples will be collected from monitoring wells:

HGF-6s	HGF-9s	HGF-15s
GHB-7s	GHB-9s	MW-1
MW-2	MW-3	

- One groundwater sample will be collected from each monitor well listed above using a peristaltic pump and disposable polyethylene tubing. The "GHB" wells have 1-inch casing diameters which requires a narrow sampling device such as the peristaltic pump. Samples will be collected using low flow method. Field parameters including dissolved oxygen, oxidation-reduction potential, pH, specific conductivity, turbidity, and temperature will be recorded during purging. Purged groundwater will not be collected.
- One duplicate sample will be collected from a well with presumed petroleum hydrocarbon impacts. 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.
- The groundwater samples will be preserved according to laboratory method, placed in ice filled coolers and transported to Energy Laboratories in Billings, Montana for analysis of volatile petroleum hydrocarbons (VPH) using the Massachusetts Department of Environmental Protection (MDEP) methods, using EPA Method 8011, and 1,2-dichloroehtane using EPA Method 8260.
- Tetra Tech will coordinate with Ms. Laura Alvey of the DEQ's Remediation Program for analyzing samples from select wells for VOCs using EPA Method 8260. These samples will be submitted for laboratory analyses under a separate COC.

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 guidelines. It is anticipated that one data validation will be completed for this project.

REPORTING

An Interim Data Submittal will be prepared and submitted following completion of the first groundwater monitoring event and validation of laboratory data. 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, the report will include updates to the RCP 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 Rocky Mountain Oil Company, MDEQ, and the obligation letter from the Montana Petroleum Tank Release Compensation Board (MPTRCB). 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 MPTRCB.

AUTHORIZATION

This work will be conducted in accordance with the terms and conditions of the Master Consulting Services Agreement between Rocky Mountain Oil Company and Tetra Tech, Inc. dated March 28, 2017. This work plan may be accepted by signing the attached *Work Authorization #* (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. Donnie McCurry (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

Jake Conver, PE
Senior Project Manager

SAM/JC

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cc: Donnie McCurry-MDEQ, Helena dmccurry@mt.gov

Attachments: Figures
Attachment A: Cost Estimate
Attachment B: Work Authorization #23

REFERENCES

Hygienix, LLC and Big Sky Civil and Environmental, 2024. Final Environmental Summary Report: Limited Phase II ESA: Building Materials Investigation, Vapor Intrusion Assessment and Subsurface Investigation, Emerald City Casino and Carriage Trade Cleaners, 1701 and 1703 10th Avenue South, Great Falls, Montana. Prepared for Great Falls Montana Economic Development. February 12.

Maxim Technologies, Inc., 1995. 10th Avenue South Preconstruction Investigation, 20th Street to Warden Bridge, Great Falls, Montana, Task Order No. 118, F 60-2(25)93, Control No. 1311. Prepared for Montana Department of Transportation, Hazardous Waste Section, Environmental Services, Helena, Montana. September.

Maxim Technologies, Inc., 2000. 1999 10th Avenue South Soil Excavation and May 2000 Soil Investigation Results, Holiday StationStore #267, Great Falls, Montana. Prepared for Rocky Mountain Oil Company, Minneapolis, Minnesota. November.

Maxim Technologies, Inc., 2002. 2001 Subsurface Investigation Report, Holiday StationStore #267, 1700 10th Avenue South, Great Falls, Montana. Prepared for Rocky Mountain Oil Company, Minneapolis, Minnesota. February.

Maxim Technologies, 2005. January 2005 Additional Subsurface Investigation Report, Holiday StationStore #267, 1700 10th Avenue South, Great Falls, Montana, Facility ID 07-08065, Release #2597. April 27.

Tetra Tech, 2008. 2007 Annual SVE System Operations Report, Former Holiday Station Store #267. Unpublished document submitted to Mr. Bruce Anthony. February 28.

Tetra Tech, 2010. August 2010 Groundwater Monitoring Report, Former Holiday StationStore #267. Submitted to Mr. Bruce Anthony. July 6.

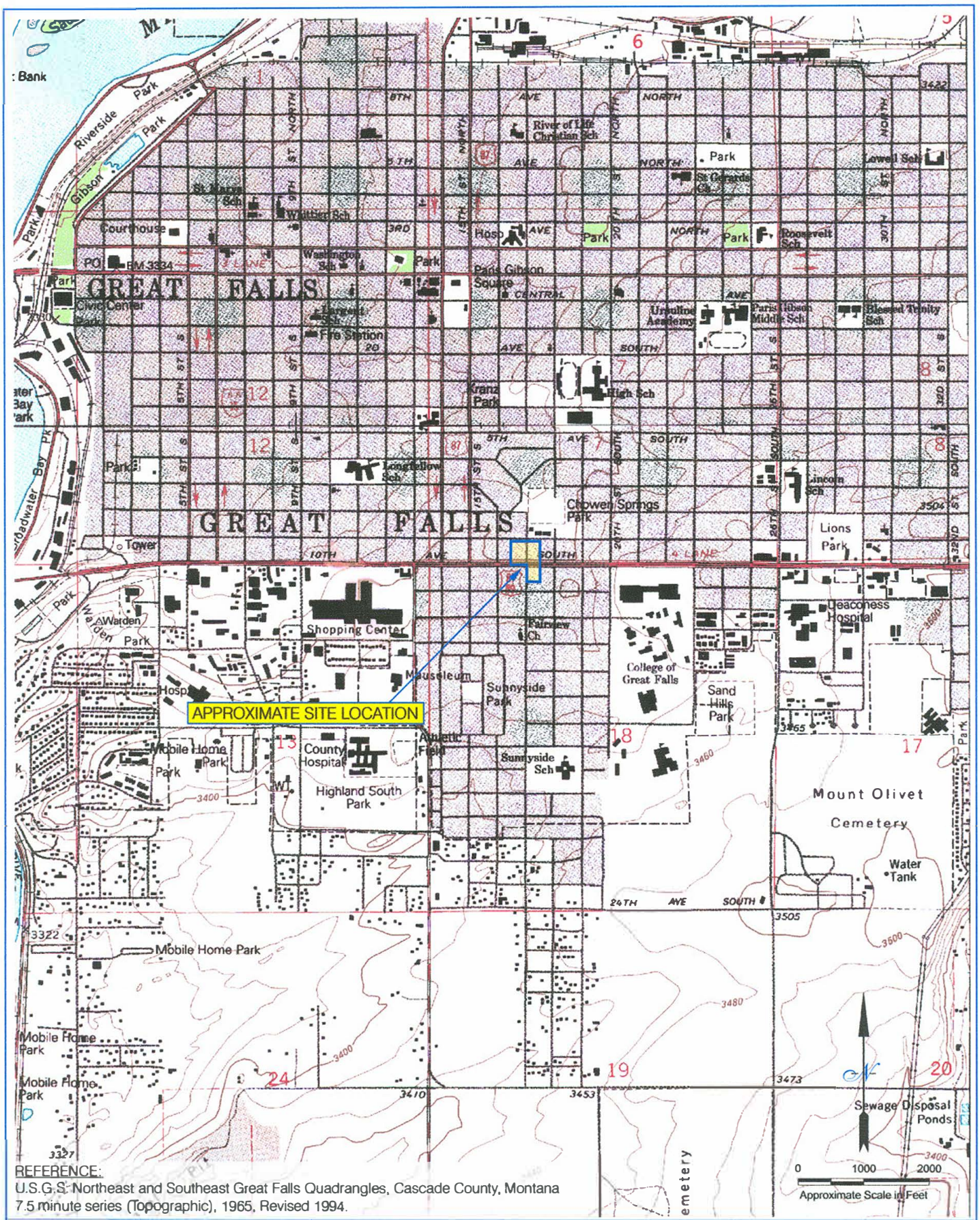
Tetra Tech, 2012. July 2012 Groundwater Monitoring Report Former Holiday StationStore #267. Submitted to Mr. Bruce Anthony. September 20.

Tetra Tech, 2015. September 2015 Groundwater Monitoring Report; AR-01 Former Holiday Station Store # 267. Submitted to Ms. Camie Pederson. October 30.

Tetra Tech, 2021. Additional Corrective Action Work Plan Holiday Station Store # 267, 1700 10th Avenue South, Great Falls, Montana. Submitted to Mr. Alan Cubberley. April 2.

TETRA TECH

FIGURES



REFERENCE:
U.S.G.S. Northeast and Southeast Great Falls Quadrangles, Cascade County, Montana
7.5 minute series (Topographic), 1965, Revised 1994.

SITE LOCATION MAP

Former Holiday StationStore #267
Great Falls, Montana

DATE: 2/25/2025	DRAWN BY: MGK
REVIEWED: PEL	APPROX. SCALE: 1" = 2000'
PROJ. NO.: 117-8153011A	FIGURE NO.: 1

C:\DRAWING FILES\ENVIRO\9731039A Holi 267\For lit phase\DECEMBER 2007\W del taco-Monitoring Well Locations F2.dwg

1616 JONES/PADGETT

1620 BURCHAM

1624 TATARKA

17th STREET

1704 MARTIN

1708

171

RESIDENTIAL LOT (JONES/PADGETT)

RESIDENTIAL LOT (BURCHAM)

RESIDENTIAL LOT (TATARKA)

VACANT LOT (TACO TREAT)

RESIDENTIAL LOT (MARTIN)

THE NATURAL HEALTH CLINIC

RESIDENTIAL LOT

HGF-5s

GHB-57s

HGF-4s

SVE BLOWER

GHB-51s

HGF-18s

TRASH SHED

HGF-19s

WET-6

WET-5

WET-4

WET-3

WET-2

GHB-47s

10th ALLEY SOUTH

(ALLEY)

GHB-48s

GHB-49s

GHB-50s

GHB-44s

GHB-45s

GHB-46s

GHB-54s

MW-11

GHB-56s

MW-10

GHB-52s

WET-7

HGF-6s

GHB-9s

GHB-55s

GARAGE

GHB-58s

MW-9

MW-3

TTV-2

DRIVE

MW-1

HGF-16s

HGF-15s

(NORTH)

GHB-7s

HGF-17s

MW-5

MW-4

TTV-1

MW-2

HGF-7s

KEITHS COUNTRY STORE

UNDERGROUND STORAGE TANKS

MW-8

GHB-8s

MW-3

MW-2

FORMER TACO TREAT

(BUILDING)

Former Carriage Trade Cleaners

DRIVE

DISPENSER ISLANDS

MW-7

(SOUTH)

GHB-3s

GHB-4s

MW-6

MW-1

FH

HGF-9s

DRIVE

DRIVE

10th AVENUE SOUTH

MDT EXCAVATION EXTENTS

LEGEND

HGF-15s — MONITOR WELL d = DEEP; s = SHALLOW

TTV — HORIZONTAL SVE WELL

TTV-2 — HORIZONTAL SVE WELL

SVE TRENCH

NG — NATURAL GAS

SD — STORM DRAIN

SS — SANITARY SEWER

W — WATER LINE

W — ABANDONED WATER LINE

AND — STORM SEWER

MANHOLE

FH — FIRE HYDRANT

PHASE II ESA MONITORING WELL

0 25' 50'

Approximate Scale In Feet

FH

DRIVE

HGF-3d

HGF-3S

HGF-2s-A

HGF-2d

FORMER DISPENSERS

SITE EXCAVATION EXTENTS

FORMER UST BASIN

BANK

DRIVE

HGF-14d

17th STREET

11th ALLEY SOUTH

MONITOR WELL LOCATIONS

Holiday StationStore #267
Great Falls, Montana

DRAWN:	APPROXIMATE SCALE:	FIGURE NO.
MGK	1"=40'	2
REVIEWED:	DATE:	PROJECT NO.
PEL	12/13/2007	9731039

TETRA TECH

ATTACHMENT B

Work Authorization #23

TETRA TECH

WORK AUTHORIZATION

TO: Circle K Stores, Inc.

FROM: Tetra Tech, Inc.

WORK AUTHORIZATION NO.: 23

PROJECT TITLE: *Groundwater Monitoring Work Plan - Holiday StationStore #267*

PROJECT LOCATION: *Former Holiday Station Store 267, 1700 10th Avenue South, Great Falls, Montana*

Pursuant to the terms and conditions of the Master Consulting Services Agreement dated *March 28, 2017*, this Work Authorization hereby authorizes *Tetra Tech* to perform the specific services and under the particular conditions set forth herein:

1. **SCOPE OF WORK:** *Per the Scope of Work attachment hereto.*
2. **COMPENSATION:** *Presented in Attachment A of the Work Plan.*
3. **BILLING SCHEDULE:** *Monthly*
4. **TIME FOR COMMENCEMENT:** *March 2025 following receipt of project authorization by Circle K Store, Inc. and MDEQ.*
5. **TIME FOR COMPLETION:** *June 2026.*
6. **REPORTING REQUIREMENTS:** *Groundwater Monitoring Report upon completion of tasks.*
7. **OTHER PROVISIONS:** *None*

Upon execution of this Work Authorization, Client and Tetra Tech agree to be bound by and comply with all the terms and conditions contained in the above-referenced Consulting Services Agreement, except as modified by the specific terms and conditions, if any, contained herein.

APPROVED AND ACCEPTED BY:

Circle K Stores, Inc. (Client)	Tetra Tech, Inc. (Consultant)
Signed: _____	Signed: 
Name: _____	Name: Steven Marie
Title: _____	Title: Senior Engineer
Date: _____	Date: 03/06/2025