



June 23, 2025

Mr. Dan Alexander
Story Distributing Company
1612 Gold Avenue
Bozeman, Montana 59715

Delivered via email: dana@redtailmt.com

**SUBJECT: 2025 Remedial Investigation Work Plan
Casey's Corner #12, 5550 US Highway 312, Billings, Montana
DEQ Facility ID 56-00062; Release 5134, Work Plan 35057**

Dear Mr. Alexander:

Tetra Tech, Inc. (Tetra Tech) is pleased to submit this work plan to conduct a remedial investigation (RI) into the release discovered at Casey's Corner #12 located at 5550 US Highway 312, Billings, Yellowstone County, Montana (Figure 1). This work plan has been prepared in response to a request from Jonathan Love of the Montana Department of Environmental Quality (MDEQ) in correspondence dated June 16, 2025 (MDEQ, 2025).

BACKGROUND INFORMATION

The Five Corners Quick Stop (Site), located at 5550 US Highway 312 near Billings, Montana, is currently used as a convenience store with gasoline and diesel fuel distribution (Figure 2). The Site has been an operating fuel station since about 1977. Unleaded and premium gasoline are currently stored in a 2-compartment 12,000-gallon underground storage tank (UST), and #2 diesel fuel and dyed diesel fuel are stored in a 2-compartment 12,000-gallon UST. The USTs are located south of the building and distributed through underground piping to two dispenser islands in front of building. This UST system was installed in June 2016 and replaces the original UST system installed in 1977. The original fuel system consisted of two 10,000-gallon gasoline USTs located in the same area as the current USTs.

Petroleum release #5134 was reported to MDEQ on April 19, 2016, by Kirk Brumfield of Marketing Specialties, Inc. (MSI) due to a sheen on the groundwater observed during removal of the original gasoline USTs. The release was confirmed by soil and groundwater analytical results for gasoline-range petroleum hydrocarbons.

Previous Investigations and Corrective Actions

During the 2016 UST removal, Resource Technologies, Inc. (RTI) personnel went to the site to evaluate site conditions following reports of soil and groundwater impacts encountered during UST removal (Resource Technologies, Inc., 2017). A product sheen was observed on the surface of the groundwater which was encountered in the southeast corner of the excavation at a depth of approximately 11 feet. Black soil staining was observed beneath the USTs after they were removed. Approximately 200 cubic yards of soil was removed from the excavation and stockpiled on plastic sheeting on-site for later disposal.

RTI collected a sample of the groundwater from the excavation and submitted it to the laboratory for volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) analyses. MSI collected soil samples beneath the USTs that were analyzed for VPH and EPH as required by the UST removal permit. Multiple VPH constituents in the groundwater sample exceeded their respective Montana Tier 1 Risk- Based Screening Levels (RBSLs; MDEQ, 2018). Only the benzene concentration in two soil samples (ST-1 and NT-1) exceeded RBSLs. Trace levels of VPH constituents were detected in the sample collected from the stockpiled soil (Resource Technologies, Inc, 2017).

Hanser's Remediation hauled the stockpiled soil to the Yellowstone Soil Treatment facility near Billings. Eleven loads of material were disposed of at the landfarm during May 5-6, 2016.

Summary of Site Conditions

Surface conditions consist of asphalt or concrete paving with some grass landscaped areas to the southeast along the highway and to the northwest behind the store building. Based on observations during the 2016 UST removal, there is approximately 10 to 12 feet of silty clay overlying alluvial gravel. The published surface geologic formation in the vicinity of the Site is the alluvial gravel, terrace level 3 (Qat3), consisting of cobble and pebbles with minor amounts of sand and silt (Lopez, 2000).

The observed depth to groundwater in the UST excavation was approximately 11 feet below ground surface (bgs). Based on published groundwater information, groundwater flow is expected to be in an east-northeasterly direction towards the Yellowstone River which is located over three miles east of the Site (Hutchinson, 1983).

SCOPE OF WORK

This scope of work was developed to fulfill the DEQ requirements presented earlier in this document. The following details describe the methods used for this investigation:

Subsurface Investigation

- Prepare a site-specific health and safety plan prior to the initiation of any on-site activities.
- Conduct an underground utility locate using the Montana 24-hour Utility Notification Center. A private utility locate will also be employed to locate utilities within the proposed soil boring areas. During this activity, an initial search of domestic wells will be conducted. The monitoring wells will be assessed for condition to determine if repairs are necessary.
- Drill five soil borings using direct push or hollow-stem auger drilling techniques in the area indicated on Figure 2. Exact locations will be determined after on-site assessment of site-specific access, underground utility locates, and safety concerns. The borings will be drilled to a depth of approximately 20 feet bgs to assess petroleum hydrocarbon impacts down to and below the soil-groundwater interface. The approximate depth of 20 feet bgs was used for cost estimating purposes.
- Collect soil samples from each borehole continuously and log each sample for soil type, density, moisture content, color, and evidence of petroleum hydrocarbon staining and odor.
- Each sample will be screened for petroleum hydrocarbon impacts using visual observations of staining, odor, and standard headspace screening techniques with a flame-ionization detector (FID) or photoionization detector (PID).
- Soil samples will be collected from the zone of greatest petroleum impacts (as identified during field screening), and from the top of the saturated zone in each of the borings.

However, if impacts are not observed in the soil column, then only the sample from the groundwater interface will be collected for laboratory analysis. For cost estimation purposes it is assumed that two soil samples will be collected from each boring. Each soil sample will be placed in clean laboratory-supplied containers and submitted to Energy Laboratories in Billings, Montana. The soil samples will be analyzed for VPH and EPH screen using the Massachusetts Department of Environmental Protection method (MDEP, 2008). In accordance with DEQ guidance, if the EPH concentration in soil exceeds 200 milligrams per kilogram (mg/kg), then an EPH fractionation analysis is required (MDEQ, 2018).

- Impacted drill cuttings, as identified by field screening, will be containerized on site within 55-gallon drums. A soil sample will be collected from the containerized soil and submitted for laboratory analysis of VPH and EPH per landfill disposal requirements.

Monitor Well Installation

- Each soil boring will be completed as a monitor well with 2-inch diameter Schedule 40 PVC materials. The well screen casing will be 0.020 slot size well screen and installed from five feet to approximately 20 feet bgs. A threaded cap will be installed on the bottom of the screen casing. Silica sand, size 10/20 will be placed in the boring annulus from the base of the boring to four feet bgs. Bentonite chips will be placed from the top of the screen to two feet bgs. The monitor well will be completed with an 8-inch diameter flush-mount steel protector concreted in place. The top of the PVC casing will be fitted with 2-inch diameter water-tight locking plug.
- Each monitoring well will be developed using a surge block and water pumping technique. The well will be surged and pumped until the pumped water is sediment free and clear. Development water will be containerized in accordance with the Disposal of Untreated Water from Monitoring Wells Flow Chart and disposed of appropriately following receipt of laboratory results (MDEQ, 2015).
- The vertical elevation and horizontal location of each new monitor well PVC casing will be surveyed by and overseen by licensed engineer or conducted by a licensed surveyor to an accuracy of 0.01 feet and mean sea level datum.

Groundwater Monitoring

- The first groundwater monitoring event will be conducted after a minimum of two-week stabilization period since conducting the well development.
- Depth to groundwater will be measured for each monitor well using an electronic oil/water interface meter. The meter will be decontaminated between each well measurement using Liquinox® soap solution and clean potable water rinse.
- Each monitor will be purged with low-flow slow-purge pumping method using a peristaltic pump and new polyethylene tubing. During purging, the water will be analyzed for pH, temperature, dissolved oxygen, specific conductivity, oxidation-reduction potential, and turbidity using field instruments. Purge water will be containerized in accordance with the MDEQ Disposal of Untreated Water from Monitoring Wells Flow Chart and disposed of appropriately following receipt of laboratory results (MDEQ, 2015).
- A groundwater sample will be collected from each monitor well using a peristaltic pump and new polyethylene tubing. Groundwater samples will be analyzed for VPH and EPH using the MDEP methods. In accordance with DEQ guidance, if the EPH concentration in water exceeds 1,000 micrograms per liter (µg/L), then an EPH fractionation analysis is required (DEQ, 2018).

Data Validation

Each 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 and spikes, and matrix spike and matrix spike duplicates, FID chromatograms, chain of custody form(s), and a sample receipt checklist.

Additionally, as indicated below, a data validation will also be included with the investigation report and will follow DEQ's data validation guideline as per <https://deq.mt.gov/Portals/112/Land/StateSuperfund/Documents/DataValidationReport.pdf>. It is anticipated that two separate data validations will need to be completed for this project.

Remedial Investigation Report Preparation

Tetra Tech will prepare a Remedial Investigation Report (RIR) presenting findings and conclusions of the soil and groundwater investigations, and groundwater monitoring activities. The report will include results from field screening activities, figures depicting site features and well locations, well completion details and logs, summary of soil sampling results, groundwater elevations, groundwater potentiometric surface map, groundwater flow direction and gradient, summary of groundwater analytical results, discussion on vertical and aerial extent of impacts based on the investigation data. Tetra Tech will also prepare a Release Closure Plan (RCP), which will be appended to the RIR, to evaluate the potential for closure of the release.

SCHEDULE AND COSTS

The above tasks will be initiated following receipt of project authorization by Story Distributing, MDEQ, and the Montana Petroleum Tank Release Compensation Board. Estimated project costs are shown on the Cost Estimate in Attachment A. Drilling contractor bids are included in Attachment B.

PROPOSAL AUTHORIZATION

This work will be conducted in accordance with the terms and conditions of the Master Consulting Services Agreement between Story Distributing Company and Tetra Tech, Inc. dated September 11, 2014. Should you find this work plan acceptable, please sign the Work Authorization #7 included in Attachment C and return a signed copy to our Billings, Montana office. If you have questions or comments regarding this work plan, don't hesitate to call us at (406) 248-9161. For your convenience, we have forwarded a copy of this work plan to MDEQ for their review. We appreciate the opportunity to provide you with environmental consulting services.

Sincerely,

Tetra Tech, Inc.



Paul E. Lemire
Environmental Geologist



Jake Conver
Project Manager

I:\N-S\Story Distributing Company\117-8300006 - Casey's Corner #12 Remed Inv\05-Deliverables\2022 RI Work Plan\Casey's Corner #12 Shepherd RI Work Plan June 2025.docx

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

Figures

Attachment A: Estimated Cost

Attachment B: Drilling Contractor Bid Sheets

Attachment C: Work Authorization #7

REFERENCES

Hutchinson, R.D., 1983. Yellowstone River Valley, South-Central Montana, Changes in the shallow ground-water resources near Billings, August 1986-1978. Montana Bureau of Mines and Geology, Hydrogeologic Map 6. Butte, Montana.

Lopez, D.A., 2000. Geologic Map of the Billings 30' X 60' Quadrangle, Montana. Montana Bureau of Mines and Geology Geologic Map Series 59. Butte, Montana.

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

MDEQ, 2015. Disposal of Untreated Purge Water from Monitoring Well. July 27.

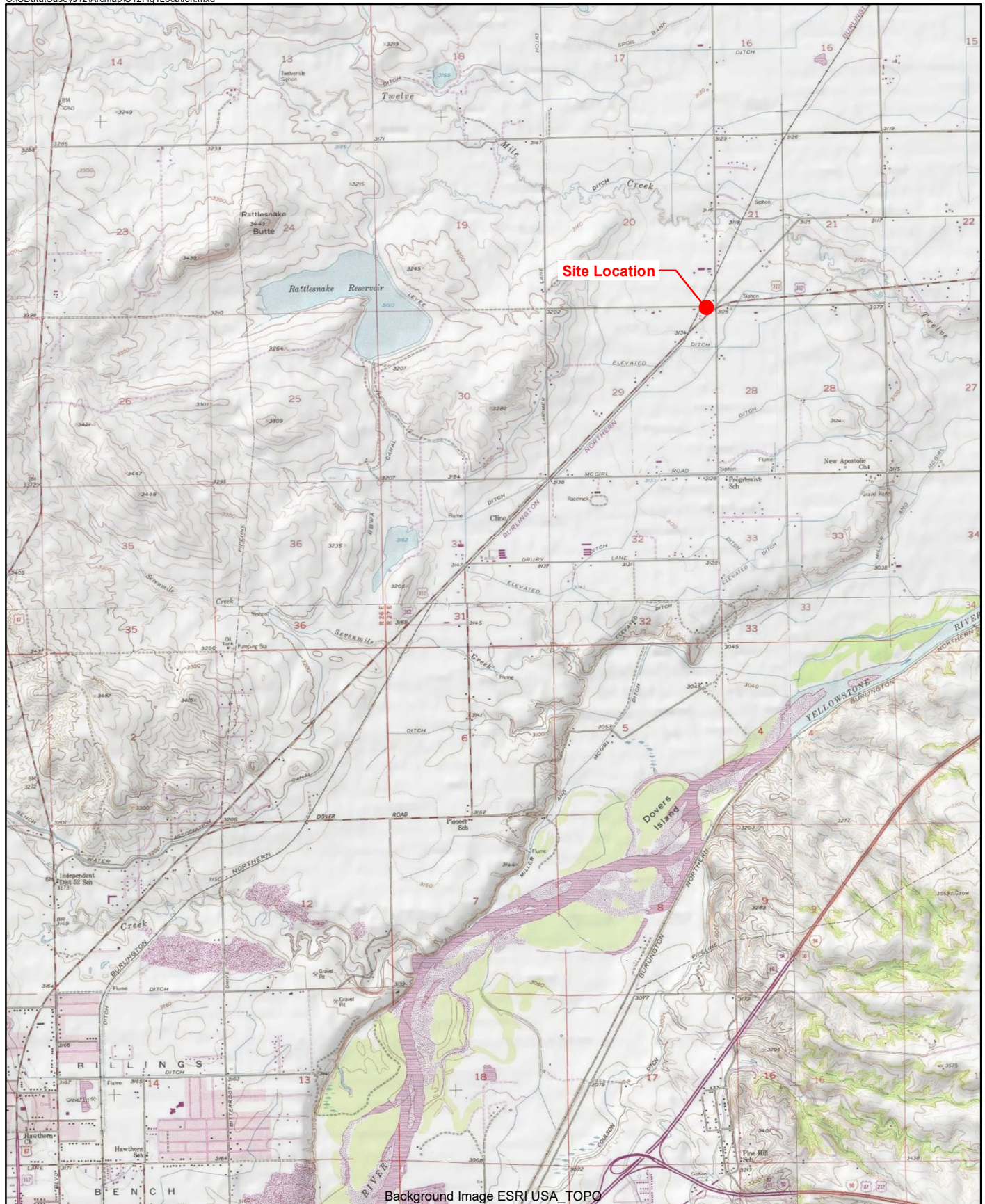
MDEQ, 2018. Montana Tier 1 Risk-Based Corrective Action Guidance for Petroleum Releases. May.

MDEQ, 2021. Second Request for Implementation of the Initial Remedial Investigation Correction Action Plan dated April 24, 2017, for the Petroleum Release at the Casey's Corner Store #12 (former Five Corners Quick Stop), 5550 US HWY 312, Billings, Yellowstone County, Montana; Facility ID 56-00062 (TID 29688), Release 5134, Work Plan 10585. Letter from Mr. Jonathan Love (MDEQ) to Mr. Jon E. Doak, Doak & Associates PC dated October 21.

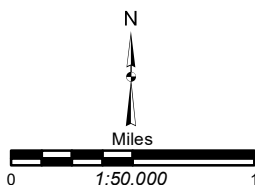
Resource Technologies, Inc., 2017. Standardized Initial RI Corrective Action Plan, Five Corners Quick Stop, 5550 US Highway 312, Billings, Montana. Facility ID 56-00062, Release 5134, Work Plan 10585. Prepared for Stockton Oil Company, Billings, Montana. April 24.



FIGURES



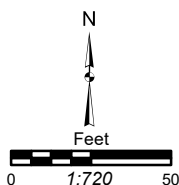
Proposal
2/1/2022



Site Location Map
Casey's Corner #12
5550 US Highway 312
Yellowstone County, Montana
Figure 1



Proposal
2/28/2022



- Release Location
- Proposed Monitor Well

Proposed Monitor Well Locations
Casey's Corner #12
5550 US Highway 312
Yellowstone County, Montana
Figure 2



ATTACHMENT A

ESTIMATED COST

ATTACHMENT A - COST ESTIMATE
Remedial Investigation Work Plan
Casey's Corner #12, Shepherd, Montana
June 23, 2025

ITEM	QUANTITY	RATE	UNITS	COST
Work Plan Preparation				
Remedial Investigation Work Plan	1	1,430.00	unit cost	\$ 1,430.00
Subtotal				\$ 1,430.00
Project Management				
Project Manager	5	170.00	per hour	\$ 850.00
Staff Scientist	18	147.00	per hour	\$ 2,646.00
Administtration	1	80.00	per hour	\$ 80.00
Clerical	1	60.00	per hour	\$ 60.00
Subtotal				\$ 3,636.00
Underground Utility Locating				
Private Utility Locating Service	1	2,200.00	LS	\$ 2,200.00
Staff Scientist (investigate existing site conditinons)	4	147.00	per hour	\$ 588.00
7% Subcontractor markup	2,200.00	0.07	project	\$ 154.00
Subtotal				\$ 2,942.00
Soil Boring and Monitor Well Installation				
Drilling subcontractor (Enviroprobe)	1	7,318.00	each	\$ 7,318.00
Subcontractor Markup 7%	7,318.00	0.07	project	\$ 512.26
Subtotal				\$ 7,830.26
Waste Disposal & Miscellaneous				
FID meter rental	16	18.50	per hour	\$ 296.00
Drums for impacted soils and purge water	5	100.00	per drum	\$ 500.00
Waste Disposal Contractor (soil)	1	800.00	LS est.	\$ 800.00
Purge Water Disposal	2	600.00	per drum	\$ 1,200.00
Subcontractor Markup 7%	2,000.00	0.07	project	\$ 140.00
Landfill Special Waste disposal fee	1	70.00	per ton	\$ 70.00
Subtotal				\$ 3,006.00
Tetra Tech Soil Soil Boring & Monitor Well Oversight				
Staff Scientist (oversight)	25	147.00	per hour	\$ 3,675.00
Well development	5	250.00	per well	\$ 1,250.00
Subtotal				\$ 4,925.00
Surveying				
Senior Engineer/Licensed Surveyor (review and process survey data)	2	\$ 188.00	per hour	\$ 376.00
Senior Technician - Survey monitoring wells - 2 personnel	4	\$ 112.00	per hour	\$ 448.00
Survey equipment rental- (GNSS base station and rover, digital level, stadia rods, and tripods)	1	\$ 300.00	per day	\$ 300.00
Subtotal				\$ 1,124.00
Groundwater Monitoring (two events)				
Groundwater Monitoring Setup	4	105.30	per day	\$ 421.20
PTRCB sampling fee	10	10.00	per well	\$ 100.00
Groundwater Monitoring	10	220.00	per well	\$ 2,200.00
Subtotal				\$ 2,721.20
Laboratory Analysis w/Fee				
Laboratory Analysis (Soil)				
VPH analysis	10	155.00	each	\$ 1,550.00
EPH analysis	10	83.00	each	\$ 830.00
EPH analysis fractions	10	170.00	each	\$ 1,700.00
Laboratory Analysis (Groundwater - 2 events)				
VPH analysis	10	155.00	each	\$ 1,550.00
EPH analysis	10	83.00	each	\$ 830.00
Environmental Impact Fee	2	15.00	project	\$ 30.00
Sample Disposal Fee	20	3.00	per sample	\$ 60.00
Subtotal				\$ 6,550.00
Mobilization				
Boring and Well Install mobililzation	110	2.71	per mile	\$ 298.10
Groundwater Monitoring mobillization	55	2.42	per mile	\$ 133.10
Utility locating	55	2.42	per mile	\$ 133.10
Survey	55	2.42	per mile	\$ 133.10
Subtotal				\$ 697.40
Remedial Investigation Reporting				
Remedial Investigation Report (RIR-01)	1	3,690.00	lump sum	\$ 3,690.00
Release Closure Plan (RCP)	1	1,650.00	lump sum	\$ 1,650.00
Data Validation	8	147.00	per hour	\$ 1,176.00
Subtotal				\$ 6,516.00
TOTAL				\$ 41,377.86

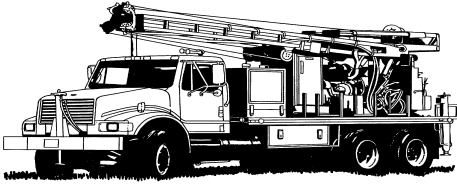
Notes: ls est. = Lump sum estimate



ATTACHMENT B

DRILLING CONTRACTOR BID SHEETS

HAZTECH Drilling, Inc.



P.O. Box 30622
Billings, MT 59107
Phone: 406-606-1470 or 800-359-1502
Cell: 406-698-9858
Email: mthaztech@gmail.com

Proposal

TO: Tetra Tech, Inc.
ATTN: Paul Lemire
7100 Commercial Ave., Suite 4
Billings, MT 59101
Ph-406-248-9181

DATE: 4/28/2025
Update
PROJECT: Casey's Corner
Shepard, MT

Description:

5-20' wells with 15' of .020 screen and flush mount covers. TERMS: Net 30 Days

	UNITS EST.	UNIT PRICE	AMOUNT EST.
*****	*****	*****	*****
Mob/ Demob, Per Mile	40	\$6.00	\$240.00
Support Truck, Per Day	2	\$150.00	\$300.00
Auger Drilling, Per Ft	100	\$35.00	\$3,500.00
Well Installation, Per Ft	100	\$42.50	\$4,250.00
Flush Mount Covers, Each	5	\$125.00	\$625.00
Drums, Each	0	\$125.00	\$0.00

ESTIMATED TOTAL:			\$8,915.00

Notes:

- 1) Client is responsible to clear location of utilities.
- 2) Client is responsible for disposal of drill cuttings.
- 3) Client will be invoiced only the amounts used.
- 4) We assume that site is accessible by truck mount drill rig.

Proposal By: Paul Bray

Olympus Technical Services, Inc. Cost Estimate				Date:	4/28/2025
<div>Client: Tetra Tech</div> <div>Project Name: Casey's Corner - Shepherd, MT - Well Installation</div> <div>Olympus Project/Proposal No.: C3203</div>					
				ODC	14%
Project Management		Quantity	Unit	Rate	Cost
Project Management		1	LS	\$500.00	\$500.00
Project Management Subtotal:					\$500.00
Mobilization		Quantity	Unit	Rate	Cost
Drill Rig		88	Mile	\$6.76	\$594.88
Support Vehicle		88	Mile	\$4.97	\$437.36
Mobilization Subtotal:					\$1,032.24
Drilling		Quantity	Unit	Rate	Cost
Soil Borings		100	foot	\$19.00	\$1,900.00
Well Install		100	foot	\$52.00	\$5,200.00
Drilling Subtotal:					\$7,100.00
Comments/Notes:					
1. Public utility locate, staff scheduling, creating HASP				Subtotal	\$8,037.36
2. 2 mobilizations of 2-man crew to Shepherd, Montana					
3. Complete 5 borings to 20 feet each w/ continuous sampling				Contingency	0.0% \$0.00
4. Install 5 wells, screened 5-20 feet bgs					
5. Surface completions including flushmount monuments				GRAND TOTAL	\$8,037.36

Estimated Costs for Soil Borings & Monitoring Well Installation

Tetra Tech - Casey's Corner #12

5550 U.S. Highway 312, Shepherd, MT

Submitted to Paul Lemire via email: paul.lemire@tetrattech.com

4.25.25

TASK	Unit Cost	Units	Total Cost
Mobilization			
Mobilization - Truck, Rig, Trailer (per mile)	\$4.75	104	\$494.00
Mobilization - Support Truck (per mile)	\$3.75	104	\$390.00
	Sub Total		\$884.00
Monitoring Well Installation			
Soil Boring / Well Drilling (per foot)	\$26.00	100	\$2,600.00
Well Construction (per foot, includes all labor & materials)	\$32.00	100	\$3,200.00
Flushmount Monuments (includes all labor and materials)	\$100.00	5	\$500.00
	Sub Total		\$6,300.00
Per Diem			
Per Diem (Food, 2-person crew)	\$33.50	4	\$134.00
	Sub Total		\$134.00
Total Estimated Cost			\$7,318.00

WCEC will meet all requirements detailed in the attached in the Tetra Tech email request. Alterations from the scope or changes in responsibilities of Tetra Tech and WCEC from those included in the email request may result in additional project charges at the above rates. Assumptions: Borings are specified in same locations as monitoring wells.



ATTACHMENT C

WORK AUTHORIZATION #7



WORK AUTHORIZATION

TO: Story Distributing Company

FROM: Tetra Tech, Inc.

WORK AUTHORIZATION NO.: 7

PROJECT TITLE: *Remedial Investigation Work Plan*

PROJECT LOCATION: *Casey's #12, 5550 US Highway 312, Billings, Montana*

Pursuant to the terms and conditions of the Consulting Services Agreement dated *September 11, 2014*, this Work Authorization hereby authorizes *Tetra Tech, Inc.* to perform the specific services and under the particular conditions set forth herein:

1. **SCOPE OF WORK:** *Remedial Investigation*
2. **COMPENSATION:** *Presented in Attachment A. Total of \$41,378.00.*
3. **BILLING SCHEDULE:** *Monthly*
4. **TIME FOR COMMENCEMENT:** *Activities will be scheduled upon signature by Story Distributing, approval from MDEQ and Montana Petroleum Tank Release Compensation Board.*
5. **TIME FOR COMPLETION:** *November 2025*
6. **REPORTING REQUIREMENTS:** *Report in electronic format.*
7. **OTHER PROVISIONS:** *None*

Upon execution of this Work Authorization, Client and Tetra Tech agree to 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:

Story Distributing Company
(Client)

Tetra Tech, Inc.
(Consultant)

Signed: _____

Signed: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Phone: _____