PIONEER TECHNICAL SERVICES

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February 13, 2025

Mr. Patrick Skibicki
Environmental Scientist
Tanks, Brownfields, and Federal Facilities Bureau
Montana Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

RE: Groundwater Monitoring Work Plan for the Petroleum Release at the Former Davey Motors Company, 44 North 5th Street, Columbus, Stillwater County, Montana
Facility ID #48-06438, TREADs ID #28590, Release #3900, Work Plan 34997

Owner/ Responsible Party:	Estate of Gene Davey c/o Mark Davey 251 Deer Haven Dr., Ponte Vedra Beach, FL 32082	**Consultant/ Work Plan Preparer:**	Pioneer Technical Services, Inc. Robyn Sargent, CHMM 2310 Broadwater Ave, Suite 1 Billings, MT 59102 rsargent@pioneer-technical.com

Dear Mr. Skibicki:

On behalf of the Estate of Gene Davey, Pioneer Technical Services, Inc. (Pioneer) is submitting this Groundwater Monitoring Work Plan for the Davey Motors Company facility (Site). As requested in correspondence from the Montana Department of Environmental Quality (DEQ) dated January 21, 2025, our scope of work and associated proposed costs are below. The location and layout of the subject facility are shown on Figure 1, Location and Vicinity Map, and Figure 2, Site Map, in Attachment 1.

PROPOSED SCOPE OF SERVICES

The scope of the work will include semi-annual groundwater monitoring from existing groundwater monitoring well PH-1 and reporting. The scope of work will be conducted for the Site to further demonstrate natural attenuation of the dissolved-phase petroleum hydrocarbon plume for Release #3900. 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:

- Coordinating Site work.
- Preparing the work plan.
- Scheduling personnel.
- Coordinating activities of owners, regulators, and the analytical testing laboratory.
- Preparing a Job Risk Assessment (JRA) to complete the work.
- Conducting planning meetings with the owner and DEQ project manager, as deemed necessary by DEQ project manager.

We will prepare a JRA to document a safety plan and complete the work as approved by Montana DEQ. Related to scheduling, we 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 personnel will collect groundwater samples from existing monitoring well PH-1 during two monitoring events (high water event and low water event). For each event, we will gauge and purge the well and collect groundwater samples. The high water event will occur in early summer and the low water event will occur in late fall.

Prior to groundwater sample collection, we will gauge each of the six existing groundwater monitoring wells (PH-1, MW-1, MW-3, MW22-01, MW22-02, and MW22-03) for the depth to groundwater and 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 feet. If the well does not contain LNAPL, the team will collect a groundwater sample from PH-1. 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 the DEQ project manager.

The groundwater samples will be collected in accordance with low flow sampling techniques. To ensure representative groundwater samples are collected, we will monitor the water quality parameters for the following intrinsic bioremediation indicators and allow them to stabilize during the purging process prior to sample collection: temperature (plus or minus 3%), pH (equal to or less than 0.1), dissolved oxygen (plus or minus 10%), specific conductivity (plus or minus 3%), oxidation reduction potential (plus or minus 10 millivolts), and turbidity (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 that excessive drawdown (plus or minus 0.3 foot) does not occur prior to sampling.

We 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 will be submitted for laboratory analysis of volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) screen. In addition, as requested, the sample will also be analyzed for volatile organic compounds using Environmental Protection Agency (EPA) Method 8260D and polycyclic aromatic hydrocarbons (PAHs)

using EPA Method 8270. We will collect one field duplicate during each sampling event. Per a conversation with the DEQ on February 6, 2025, the duplicate sample collected during the June 2025 sampling event will only be analyzed for VPH. During the November 2025 sampling event, the duplicate sample will only be analyzed for PAHs. 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. If the EPH screen result for a given groundwater sample is greater than 1,000 micrograms per liter, the sample will be submitted for EPH fractionation without PAHs. For this work plan, we are assuming that half of the samples will require EPH fractionation. Chain of custody documentation will accompany the samples.

Purge water generated during the sampling activities will be infiltrated into the grassy areas available at the Site in accordance with Montana DEQ standards.

Task 3 – Reporting

Groundwater Monitoring Report and Release Closure Plan (RCP). It should be noted that an Interim Data Submittal has not been requested and will not be prepared as part of this work plan. However, Pioneer will email the June 2025 laboratory report to Montana DEQ following receipt.

Following the fall sampling event, Pioneer will prepare and submit a Groundwater Monitoring Report in accordance with *Montana Groundwater Monitoring Work Plan and Report Guidance for Petroleum Releases* (DEQ, 2021). The Groundwater Monitoring Report will detail the method and results of both the June 2025 and November 2025 groundwater monitoring events completed under this work plan. The report will follow the Montana DEQ report format and include the following:

- Facility maps illustrating locations of utilities, former fuel systems, Site buildings, locations of petroleum source material areas, receptors including underground utilities, locations of groundwater monitoring wells, and potentiometric surface maps.
- Tables summarizing field data and cumulative laboratory analytical data for groundwater samples.
- Laboratory analytical reports for the 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 Data Validation Summary Forms.
- A completed RCP.

COST ESTIMATES

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

SCHEDULE

We can begin work on this project within 30 days following receipt of Montana DEQ approval, which is expected sometime in the spring of 2025. The project, as described in this work plan, will last up to 8 months. Therefore, the final report will be issued 45 days after the late fall 2025 sampling event, in January or February 2026.

REFERENCES

DEQ, 2021. Montana Groundwater Monitoring Work Plan and Report Guidance for Petroleum Releases. Montana Department of Environmental Quality. Draft March 2021.

If you have any questions about this project or the proposed scope of work, please call me at (406) 206-7066 or email me at rsargent@pioneer-technical.com.

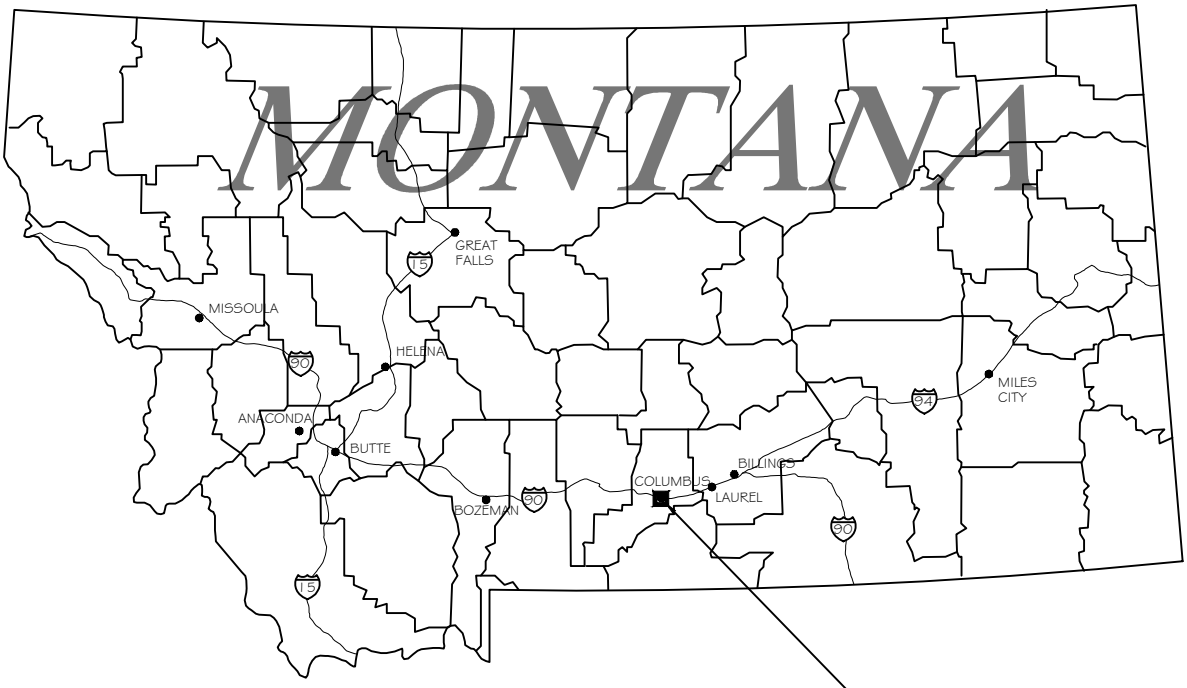
Sincerely,

Robyn Sargent, CHMM.
Principal Scientist

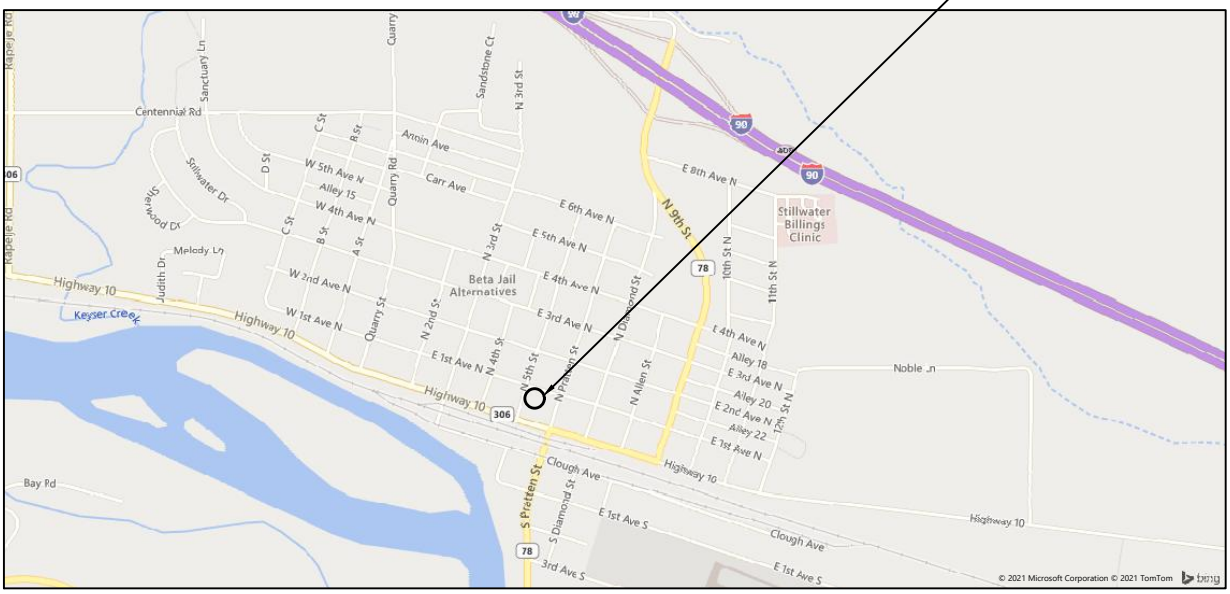
Attachment 1: Figures
Attachment 2: Cost Estimate

cc: Mark Davey, 251 Deer Haven Dr., Ponte Vedra Beach, FL 32082
Tonya House, Beartooth Ford
Charlie Peterson, P.G., Program Manager, Pioneer Technical Services, Inc.

ATTACHMENT 1
FIGURES



PROJECT LOCATION



SITE VICINITY MAP

DAVEY MOTORS COMPANY FACILITY
44 NORTH 5TH STREET
COLUMBUS, MT 59019

DEQ FACILITY ID: 48-06438
RELEASE NUMBER: 3900
WORK PLAN NUMBER: 34695

DISPLAYED AS:
COORD SYS/ZONE: MSP
DATUM: NA
UNITS: INTL FT
SOURCE: PIONEER/BING

SCALE IN FEET
0 1000 2000

FIGURE 1

PIONEER TECHNICAL SERVICES, INC.

DAVEY MOTORS COMPANY FACILITY LOCATION AND VICINITY MAP

DATE: 4/2023

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DAVEY MOTORS COMPANY FACILITY
44 NORTH 5TH STREET
COLUMBUS, MT 59019

DEQ FACILITY ID: 48-06438
RELEASE NUMBER: 3900
WORK PLAN NUMBER: 34695

N

DISPLAYED AS:
COORD SYS/ZONE: MSP
DATUM: NA
UNITS: INTL FT
SOURCE: PIONEER/BING

SCALE IN FEET
0 50 100

FIGURE 2

PIONEER TECHNICAL SERVICES, INC.

DAVEY MOTORS COMPANY FACILITY SITE MAP

DATE: 4/2023

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ATTACHMENT 2
COST ESTIMATE

Petroleum Tank Release Compensation Board
STATE OF MONTANA
P.O. Box 200902 • Helena, MT 59620-0902 • (406) 444-9710

Groundwater Monitoring and Sampling Unit Cost Worksheet

7/28/2022 | Cost Estimate Expl. | Work Plan Tasks | Unit Cost Worksheet | Help

Contractor Information

Company Name:	Pioneer Technical Services, Inc.		
Address:	2310 Broadwater Avenue, Suite 1		
City, State, Zip:	Billings, Montana 59102		
Cost Estimator/Print Name:	Robyn Sargent	Phone:	406-206-7066
Signature:	Robyn Sargent	Date:	2/13/2025

Project Information

Site Name:	Former Davey Motors Company	Facility ID#	48-06438
Address:	44 North 5th Street	Release #	3900
City:	Columbus, Montana	WP ID#	34695
		Treads ID#	28590

Petroleum Tank Release Compensation Board
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7/28/2022

Groundwater Monitoring and Sampling Summary Sheet

Cost Estimate Expl. | Work Plan Tasks | Unit Cost Worksheet | Help

Monitoring Well Details

	Total Number of Wells at Site
12	Number of Fluid Level Measurements Only (2)
2	Number of Wells to be Monitored/Sampled (4-11)
	Average Well Casing Diameter (inches)
	Average Depth to Groundwater (ft)
	Average Depth of Wells (ft)

Sampling Method

☑	Low-Flow
X	Low Yield Aquifer
	No Purge
☐	Other (please specify)

of Events - Monitoring/Sampling Interval

Estimated Start Date: 6/1/2025

1	Semi-Annual
	Annual
	Bi-Annual
	Other

2 Total Events

2	< 25 ft total depth
	25 - 50 ft total depth
	50 - 75 ft total depth
	75 - 100 ft total depth
2	Total

Sampling Instrument

X	Peristaltic Pump
	Bladder Pump
☐	Submersible Pump
☐	Bailer
☐	Other (please specify)

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7/28/2022

Cost Estimate Explanations

[1] Mobilization/Demobilization: Includes all travel time, preparation time, and vehicle use costs (vehicle mileage) to transport equipment, materials, and personnel to and from the site location. More than one mobilization per event will require justification and pre-approval by the DEQ-PTCS and Board staffs. This item should be on a per mile unit rate.

[2] Fluid Level Measurements: Includes all costs (labor, equipment, materials, and well consumables) to measure fluid depth, collect other groundwater information from well, and decontaminate equipment. The well gauging costs should be on a per well basis and does not include purging and sampling of the well.

[3] Groundwater Monitoring Preparation/Setup/Cleanup: Includes all on-site labor costs to unload, setup, and calibrate monitoring equipment prior to initiation of groundwater monitoring activities, and all on-site labor costs to load and secure equipment and samples prior to leaving the site.

[4] Groundwater Monitoring - Peristaltic: Includes all costs (labor, equipment, materials, and well consumables) using a peristaltic pump to monitor, purge, sample groundwater, decontaminate equipment, take water level measurements, and handle contaminated purge water (DEQ understands this to mean disposal of groundwater to the ground surface according to the Disposal of Untreated Purge Water from Monitoring Wells flowchart dated 7/27/2015. If purge water must be containerized and/or treated in a different manner, additional scope and budget may be required.) Groundwater sampling to be conducted using a low-flow method. The cost should be on a per well basis.

[5] Groundwater Monitoring - Bladder: Includes all costs (labor, equipment, materials, and well consumables) using a bladder pump to monitor, purge, sample groundwater, decontaminate equipment, take water level measurements, and handle contaminated purge water (DEQ understands this to mean disposal of groundwater to the ground surface according to the Disposal of Untreated Purge Water from Monitoring Wells flowchart dated 7/27/2015. If purge water must be containerized and/or treated in a different manner, additional scope and budget may be required.) Groundwater sampling to be conducted using a low-flow method. The cost should be on a per well basis.

[6] Groundwater Monitoring – No Purge: Includes all costs (labor, equipment, materials, and well consumables) to monitor, sample groundwater, decontaminate equipment, and take water level measurements.The cost should be on a per well basis.

(7) Groundwater Monitoring – Low Yield Modifier: Includes all additional on-site labor costs associated with groundwater well purging, monitoring, and sampling of wells which are low yield / low production. Low yield is defined as a monitoring well that is not capable of adequate groundwater production at the median low-flow purging rate of 200 ml/min without exhibiting drawdown in excess of DEQ guidelines. The cost should be on a per well basis.

[8] Groundwater Monitoring – IBI Modifier: Includes all additional labor costs necessary for collection of groundwater samples for IBI analyses. The cost should be on a per well basis.

[9] Groundwater Monitoring - Filters: Includes the costs (materials) for the use of a filter during collection of groundwater samples for the analysis of dissolved metals. The cost should be presented on a per well basis.

(10) Contaminated Purge Water - Offsite Disposal: Includes the costs (labor, equipment, and materials) for containerizing, handling, shipping, and disposal or treatment of purge water that cannot be disposed of on the ground surface according to the Disposal of Untreated Purge Water from Monitoring Wells flowchart dated July 27, 2015. This cost should be presented on a per work plan basis.

[11] Duplicate Sample Modifier: Includes the costs (labor and materials) for the collection of a duplicate groundwater sample. The duplicate groundwater sample is to be collected using the same method (e.g., low-flow) and using the same sampling tool as the field groundwater sample. This cost should be on a per duplicate basis.

[12] Laboratory Analysis: Includes all laboratory costs for all wells, for duration of work plan. It is realized that some laboratory analyses will not be conducted for every event and that the well sampling frequency may change.

[13] PTRCB Sampling Fee: Includes all costs related to management of the sample including: sample container, cooler, packing, shipping, handling, sample preservation, and office related handling charges. The Sample is defined as the laboratory ID number on the laboratory invoice. Unusual cost can be reimbursed by presenting clear and convincing evidence to the board staff and receiving approval by the board staff prior to costs being incurred.

[14] Groundwater Monitoring Report Preparation – Base Cost: Includes all costs (labor and materials) for preparation of a base-level groundwater monitoring report. The base-level report documents one monitoring event, including monitoring and sampling of up to 10 sampling points (sum of total monitoring wells, tap samples, etc.), cumulative groundwater data tables, updated site figures showing well locations, a groundwater flow map, COC isocontour figures, analytical data, and completed data validation and summary form(s), and report submittal, including all office related costs, per report. (link to DEQ's reference guide that is currently in progress)

[15] Groundwater Monitoring Report Preparation – Interim Data Submittal: Includes all costs (labor and materials) for preparation of a base-level groundwater monitoring interim data submittal. The interim data submittal documents one monitoring event, including monitoring and sampling of up to 10 sampling points (sum of total monitoring wells, tap samples, etc.), cumulative groundwater data tables, a groundwater flow map, COC isocontour figures, well purging record, analytical data, and completed data validation and summary form(s), and report submitttal, including all office related costs, per report. (link to DEQ's reference guide that is currently in progress)

[16] Groundwater Monitoring Report Preparation – IBI Modifier: Includes all costs (labor and materials) for addition of IBI data tables, IBI data evaluation, and IBI data discussion sections to the base-level groundwater monitoring report. The cost should be presented on a per report basis. (link to DEQ's reference guide that is currently in progress)

[17] Groundwater Monitoring Report Preparation – Additional Wells Modifier: Includes all costs (labor and materials) for addition of monitoring and sampling data, data evaluation, and discussion sections to the base-level groundwater monitoring report for events including monitoring and sampling of more than 10 sampling points per event (sum of total monitoring wells, tap samples, etc. collected per event). The cost should be presented on a per report basis (only one of this modifier is allowed per report).

[18] Release Closure Plan (RCP) Preparation: Includes all costs (labor and materials) for preparation or updating of a DEQ PTCS RCP. The cost should be presented on a per report basis.