July 1, 2026

Mr. Ron Nye
County Commissioner
PO Box 278
Virginia City, MT 59755

Delivered via email:

Prepared by Brandon Kingsbury
Tetra Tech, Inc.
828 Great Northern Blvd
Floor 3
Helena, MT 59601

SUBJECT: Remedial Investigation Work Plan, V2.1
Soil Boring, Well Installation, Groundwater Monitoring, and Soil Vapor Sampling
107 E 3rd Ave, Twin Bridges, Montana
DEQ Facility ID 28-02588 (TID 24584); Release 764, Work Plan 35166
Tetra Tech Project Number 103S9998

Dear Mr. Nye:

Tetra Tech, Inc. (Tetra Tech) is pleased to submit this work plan to conduct a remedial investigation (RI) to investigate the release at 107 3rd Street, Twin Bridges, Montana Figure 1). This work plan has been prepared in response to a request from Eric Krueger of the Montana Department of Environmental Quality (DEQ) in correspondence dated March 17, 2026 (MTDEQ, 2026). In this correspondence, DEQ made the following requests:

- Review the cumulative data for the Release and compare concentrations of petroleum compounds in soil and groundwater to their respective risk-based screening levels (RBSLs) listed in DEQ's Risk-Based Corrective Action Guidance.

- Use the data and locations of compounds that exceed their respective RBSLs to plan the additional investigation, cleanup, and monitoring work necessary to move your Release towards resolution.

In accordance with this request, Tetra Tech has developed a scope of work to fully investigate the extent and magnitude of petroleum contamination in soils, soil vapor, and groundwater based on the review of several reports from previous sampling events and excavations.

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

FACILITY HISTORY/RELEASE BACKGROUND AND FACILITY CONDITIONS

The Madison County Road Shop facility occupies a 0.15-acre parcel of land, located at the intersection of East 3rd Avenue and South Madison Street in Twin Bridges, Madison County, Montana (Figures 1 and 2). Geographic coordinates of the approximate center of the Site are latitude 45.544 degrees north and longitude -112.330 degrees west. The site is surrounded by primarily commercial and single-family residence properties located centrally within Twin Bridges. The property is currently used as a storage space by the County and is otherwise unoccupied. The source of the release is located within this parcel, however, based on historical investigation at the site contamination extends beyond the parcel into the surrounding parcels and right-of-way of East 3rd Avenue and South Madison Street.

A petroleum hydrocarbon release was first detected in contaminated soils during the closure and removal of two underground storage tanks (UST) from the site in February 1990 (Facility ID 28-02588, TID 24584, Release 764). Between 1991 and 2001, 15 groundwater monitoring wells were installed and sampled on a quarterly basis in the vicinity of the Madison County Road Shop building to assess the extent of contamination in soil and groundwater. Additionally, five exploratory test pits were dug within the area of the former USTs to a depth of up to 5.5 feet below ground surface (bgs) from which soil samples were collected to determine the outer extents of the contamination zone. As a part of this soil investigation, approximately 300 cubic yards of petroleum contaminated soils were excavated from the area around the two former USTs from July 8 to 9, 1992. In April 1993, four additional soil boreholes were advanced within the area of the former USTs to further assess the extent of contamination within soil at the site. Elevated levels of benzene, toluene, ethylbenzene, and total petroleum hydrocarbons were identified in soil and groundwater immediately north and east of the road shop building as part of these historical monitoring and sampling events (Figures 5 and 6). Additional soil volumes were excavated in the following years from around the former tank basin area, with approximately 500 cubic yards of soil excavated in November 1993 and approximately 225 cubic yards excavated in September 1998. The release was never completely remediated and some petroleum impacted media was left in place, and the full extent of contamination was only preliminary defined. Data collected over the course of this investigation was last reviewed in 2006 in a report written by RAM Environmental LLC, and since then wells have not been sampled or maintained.

In February of 2026 Tetra Tech visited the site to inventory any existing monitoring wells. Two wells were discovered on the subject property or surrounding properties, but none of the wells are in a condition where they are able to be rehabilitated.

The following sections summarize Tetra Tech's proposed scope of work and schedule to complete the requested tasks. The Montana *Remedial Investigation Guidance for Petroleum Releases Workplan & Report Preparation Cost Considerations, Groundwater Monitoring and Sampling Unit Cost Worksheets*, and the *Cost Estimate Breakdown* are provided in Attachment A.

WORK PLAN OBJECTIVES

The primary objective of this work plan associated with the proposed remedial investigation to complete soil sampling and groundwater monitoring and sampling is to define the extent and magnitude of petroleum contamination. Specific goals include:

- Assessment of any additional source mass remaining in soils. Criteria includes an evaluation of soil data against DEQ Tier 1 direct contact commercial, direct contact construction, and leaching to groundwater screening levels.
- Obtaining water level measurements to determine trends in seasonal water level elevations and flow directions.
- Assess concentrations of VPH, EPH, and lead scavengers to determine the extent and magnitude of contaminants of concern in groundwater based on seasonal variations. Criteria includes comparing data to risk-based screening levels and human health standards.
- Assess concentrations of VPH, EPH, and lead scavengers to determine attenuation of contaminants of concern in groundwater based on seasonal variations. Criteria includes an evaluation of cumulative groundwater data and how these data relate to data obtained through this scope of work.
- Provide recommendations and create the release closure plan to reflect remedial alternatives that will bring the release to closure. Newly collected data and previously collected data will be compiled and the RCP will be updated with alternatives following the second sampling event to bring the release to closure based on effectiveness or reliability, implement ability, safety, effects on public health and the environment, cost, advantages vs disadvantages, and time to completion.

SCOPE OF WORK

This project's general scope of work includes installing up to nine soil borings and completing five of the borings as groundwater monitoring wells. One of the additional borings will be converted to a soil-vapor probe adjacent to the northeast corner of the shop building. After the monitoring well installation and development, static water levels will be measured, and groundwater samples will be collected from all monitoring wells on site semi-annually. A remedial investigation report (RIR) will be prepared, including completing the Release Closure Plan (RCP). The following details describe the methods to be used for this investigation:

SUBSURFACE INVESTIGATION

- Advance 9 soil borings via direct push drilling to 15 feet below ground surface.
- Install up to five monitoring wells in select boring to assess petroleum impacts to groundwater.
- Log soil borings and obtain soil samples during the installation of the monitoring wells. Soils will be classified using the Unified Soil Classification System by either an environmental engineer, geologist, or environmental scientist.

- 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. Once utilities are located, Tetra Tech will map the location of the utilities and provide discussion regarding potential impacts to the utility corridors, if applicable.
- The soil borings will be installed using direct-push drilling techniques to approximately 15 feet or until competent bedrock is encountered as described in figure 4. Exact locations will be determined after an assessment of site-specific access, underground utility locates, and safety. To assess petroleum hydrocarbon impacts, soil borings will be continually logged to a depth of approximately 15 feet below ground surface (bgs). Drilling bids are presented in Attachment B. The total depth for each boring shall be 15 feet. If additional contamination is observed at the terminus of each boring, additional drilling may be required to fully investigate the vertical extent of contamination. One boring, completed as a vapor probe will be advanced to 15 feet and backfilled to approximately 6 feet to accommodate a near-slab vapor probe. The soil vapor boring will also be logged, screened, and sampled for contamination.
- Soil samples will be collected from each borehole continuously and logged 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 photo-ionization detector (PID).
- Up to three soil samples will be collected from each soil boring for laboratory analysis to characterize risks to receptors. Samples will be collected to evaluate direct contact commercial exposure in surface soils, if contamination is present based on PID readings in excess of 50 ppm, and/or visual, and olfactory observations. Direct contact construction risk will be evaluated in subsurface soils for samples collected at depths between 2 and 10 feet bgs. Leaching risk will be evaluated by sampling the most impacted interval based on maximum observed impacts as noted above. If no contamination is present, then a sample may only be collected at the soil-groundwater interface. Sample locations may change based on site-specific information during the investigation to adequately define risk to receptors. If any borings are installed in previously excavated clean materials only native soil samples will be submitted to the lab for analysis. Each soil sample will be placed in clean laboratory-supplied containers and submitted to Energy Laboratories in Helena, Montana. The soil samples will be analyzed for volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) screen using the Massachusetts Department of Environmental Protection method. Per MDEQ guidance, if the EPH concentration in the soil exceeds 200 milligrams per kilogram (mg/Kg), then an EPH fractionation analysis is required (MDEQ, 2018). For QA/QC purposes, one field duplicate will be collected at a frequency of 1 duplicate per every 20 natural samples or per batch if the total amount of samples is less than 20. For cost-estimating purposes, it will be assumed that four soil samples will also be analyzed for EPH fractionation. Additionally, soil samples will be submitted to the analytical laboratory for 1,2 Dichloroethane using EPA method 8260b and for Ethylene dibromide using EPA method 8011.

- Impacted drill cuttings, as identified by field screening with a PID result in excess of 50 ppm or containing visual and olfactory signs of contamination, 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, EPH, and Resource and Conservation and Recovery Act (RCRA) total metals per landfill disposal requirements.

MONITORING WELL INSTALLATION

- Five select soil borings will be completed as monitoring wells with two-inch diameter Schedule 20 PVC materials. Each well will be installed with a screened interval from 2 to approximately 12 feet bgs. Figure 4 provides locations of proposed monitoring wells.
- Each monitoring well will be developed using a surging and water pumping technique. The well will be purged until the pumped water is sediment free. Turbidity will be monitored periodically during development with an initial turbidity reading and a final turbidity reading. Wells will be considered developed based on a turbidity measurement of 20 NTU or less, or best achievable result. Development water will be containerized and disposed of 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 latitude, longitude, and vertical elevation of each new monitoring well top of casing will be surveyed by and overseen by a licensed engineer or conducted by a licensed surveyor to an accuracy of 0.01 feet above mean sea level.

GROUNDWATER MONITORING

- Groundwater monitoring will be conducted semi-annually. Groundwater monitoring events are expected to occur during the summer of 2026 and fall of 2026 to correspond to seasonal low and high groundwater. Due to timing of this work plan, the high monitoring event may be postponed until May or June of 2027 to correspond to high groundwater conditions as indicated though periodic monitoring of the USGS station along the Jefferson River at Twin Bridges Montana. For cost-estimating purposes, it is assumed that five monitoring wells will be sampled during each semi-annual event. The locations of each well are displayed in Figure 4.
- Depth to groundwater will be measured from each monitoring well using a decontaminated electronic oil/water interface meter. The meter will be decontaminated between each well measurement using Liquinox® soap solution and clean potable water rinse.
- To allow for equilibration with the aquifer, wells will be allowed to sit for at least 24 hours prior to sampling. Each monitoring well will be purged with low-flow, slow-purge pumping method using a either a submersible bladder pump or peristaltic pump and dedicated polyethylene tubing. If a bladder pump is used, a fresh, sterile bladder will be used for each well. During purging, a sond with flow-through cell will analyze the water for pH, temperature, dissolved oxygen, specific conductivity, oxidation-reduction potential, and turbidity. Water level will be recorded during each field reading to assess drawdown. Should draw down exceed 0.3 feet, purging will be discontinued and the well will be allowed to recharge. The decision to sample will be based on the stability of field parameters, which is reflective of formation conditions. Criteria for determining stabilization of field parameters are

presented in the attached standard operating procedure and a definition of stabilization of each parameter is provided in table 1:

Table 1: Stabilization Criteria

Water Quality Indicator Parameter	Stabilization Range
pH	± 0.1 units
Specific Conductance	± 3%
Dissolved Oxygen (DO)	± 10%
Turbidity	± 10%
Oxidation/Reduction Potential (ORP)	± 10 millivolts

- Purge 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 pump will be decontaminated between wells using a Liquinox solution followed by a triple rinse technique. Additionally, a new bladder will be installed between each well.
- One groundwater sample will be collected from each monitoring well and one QA/QC field duplicate sample will be collected for each of the two groundwater monitoring events. All groundwater samples will be analyzed for Massachusetts method VPH and EPH. 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 (MTDEQ, 2024). For cost estimating purposes it is assumed that eight water samples will be analyzed for EPH fractions, including four samples per event.
- Lead scavengers will be analyzed for all monitoring wells. Lead scavenger analysis includes ethylene dibromide (EDB) via EPA method 8011 and 1,2 dichloroethane (DCA) via EPA method 8260.

VAPOR SAMPLING

- A near-slab soil vapor probe will be installed, if warranted based on observed contamination based on visual, olfactory, or PID readings in excess of 100 ppm within vertical and lateral screening distances per Montana's Vapor Intrusion Guide (MTDEQ 2021). Per the guidance, if dissolved-phase contamination or impacted soil is encountered within 30 lateral feet of the structure or a greater distance based on a utility corridor providing a preferential pathway, then soil gas vapor intrusion may be an exposure pathway. For the vertical component, if contaminated soil or dissolved-phase contamination is within 8 feet of the structure, then there may also be a risk to soil gas vapor intrusion. Also, if free product is encountered within 15 vertical feet of the structure then there may be vapor intrusion risk. If any of these conditions are met, then a vapor probe boring will be advanced to a maximum depth of 15 feet bgs and backfilled to 6 feet. This depth is selected to be reflective of a near-slab/sub-slab scenario, and based on the presence of very shallow groundwater, which could complicate sampling, the vapor probe may be completed at a shallower depth. Based on an assessment of historical

information, a vapor probe will likely be installed as part of this scope of work.

- A vapor probe with a discrete sampling interval of 6" will be installed to a depth of 5 to 6 feet bgs in soil boring SB-02-26, located nearest the road shop building foundation. The soil boring will be advanced to a total of 15 feet to evaluate risks to all receptors. Soils will be logged and sampled in this boring similar to all other borings, however, the soil boring will be backfilled to accommodate a vapor probe at a shallower depth. The vapor probe will only be completed if conditions are viable for sampling of soil vapor in accordance with DEQ's Montana Vapor Intrusion Guide (MTDEQ 2021).
- The vapor probe will be constructed of rigid ¾ inch HDPE pipe coupled to a reducer bushing, which will accommodate a stainless-steel vapor pin. The vapor pin will be sealed within the bushing with Teflon tape and encased with a slotted and threaded 6" length of ¾ inch pipe and 1" outer diameter perforated cap. The discrete sample interval will be encased in glass beads or silicate sand and the overlying interval will be sealed with hydrated bentonite to the ground surface. The surface of the slab around the sealed penetration will be packed with cloth saturated with difluoroethane to test the integrity of the seal.
- The vapor pin will have a dedicated polyethylene sample tube, which will be attached to two 6-liter summa cannisters via rigid sample T at each sample event. A parent sample and duplicate sample will be collected at least 24 hours after installation to allow equilibration with the subsurface environment.
- Soil gas samples will be collected as grab samples once at the time of installation of the vapor pin. Results of this sampling event will determine if additional monitoring and sampling will be required. Samples will be sent to Pace Analytical laboratory for analysis via TO-15 SIM and Massachusetts method APH. The lead scavengers EDB and DCA and the tracer difluoroethane (DFA) will be included in the TO-15 analysis. DFA (100% purity) will be used as a tracer as a more cost-effective alternative to helium. The subsurface environment that the soil samples will be collected in consists of loose river gravels and sands with significant pore space that is anticipated to contain substantial amounts of soil vapor, which lowers the likelihood of losing critical gas volume to leaks in surface seals. As discussed in the Interstate Technology Regulatory Council (ITRC) Vapor Intrusion Pathway Guide, a concentration of tracer of 100 $\mu g/m^3$ corresponds to a 0.1% leak, assuming a starting concentration equal to the vapor pressure of the compound or a 1% leak if the starting concentration is only 10% of the vapor pressure (ITRC 2007).

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, data validation will be included with the investigation report and will follow DEQ's

data validation guidelines. Tetra Tech will prepare a DEQ data validation summary form (MTDEQ 2018) for each analytical batch of samples. It is anticipated that four separate data validations will need to be completed for this project. One for soil sampling data and one for each of the two groundwater monitoring events, and one possibly for the soil vapor samples.

REMEDIAL INVESTIGATION REPORT PREPARATION

Tetra Tech will prepare a RIR presenting findings and conclusions, 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, a summary of soil sampling results, groundwater elevations, groundwater potentiometric surface map, groundwater flow direction and gradient, a summary of groundwater analytical results, and discussion on the vertical and aerial extent of impacts based on the investigation data. A discussion on impacts to receptors will be provided in the report including impacts to utilities, corridors, wells, indoor air, surface and subsurface soil, and groundwater. Tetra Tech will also prepare a RCP, which will be appended to the RIR, to evaluate the potential for closure of the release. The RCP will be updated following the second round of groundwater monitoring.

SCHEDULE AND BUDGET

Tetra Tech will initiate this work upon receiving authorization from Madison County and approval from the MDEQ. Tetra Tech anticipates based on drill rig availability that field work will commence between August 15 and September 15, 2026 with low groundwater sampling coinciding potentially with the end of the September field event, or later in the fall should the Twin Bridges local hydrograph suggest lower groundwater at a later date. The Spring 2027 high groundwater monitoring event will occur between May 15 and June 15 to coincide with seasonally high groundwater conditions. Based on lab turnaround times, Tetra Tech anticipates completion of the final report by July 30, 2027. The work described above will be conducted on a unit cost basis per the attached *Montana Remedial Investigation Guidance for Petroleum Releases Workplan & Report Preparation Cost Considerations, Groundwater Monitoring and Sampling Unit Cost Worksheets*, and *Cost Estimate Breakdown* included in Attachment A.

AUTHORIZATION

The work described in this plan will be conducted per the terms and conditions in the Master Services Agreement between Madison County and Tetra Tech. A separate Task Order will be provided for review and execution to cover the scope of work as detailed in this work plan. If you have questions or comments regarding this work plan, don't hesitate to call us at (406) 437-9869. For your convenience, we have forwarded a copy of this work plan to DEQ for their review. We will not begin this work until we have approval from DEQ. We appreciate the opportunity to provide you with environmental consulting services.

Sincerely,

Tetra Tech, Inc.

Brandon Kingsbury, PG
Project Manager

Cc: Eric Krueger, MTDEQ, eric.krueger@mt.gov

Enclosures

Figures
Attachment A: Cost Estimates
Attachment B: Drilling Bids
Attachment C: Standard Operating Procedures

REFERENCES

Interstate Technology and Regulatory Council (ITRC), 2007. Vapor Intrusion Pathway: A Practical Guideline. January.

Montana Bureau of Mines and Geology, 2007. Geologic Map of Montana, #62, Edition 1.0. Virgina City Montana, Montana.

MTDEQ, 1999. Petroleum Release Section 30-Day Release Report, Facility ID 07-00090, Release 3334, Noons 572. January.

MTDEQ, 2018. Waste Management and Remediation Division Data Validation Summary Form. Version 1.3.0. January.

MTDEQ, 2015. Disposal of Untreated Purge Water from Monitoring Wells. Flow Chart prepared by MDEQ. July 27.

MTDEQ, 2024. Montana Risk-Based Corrective Action Guidance for Petroleum Releases. February.

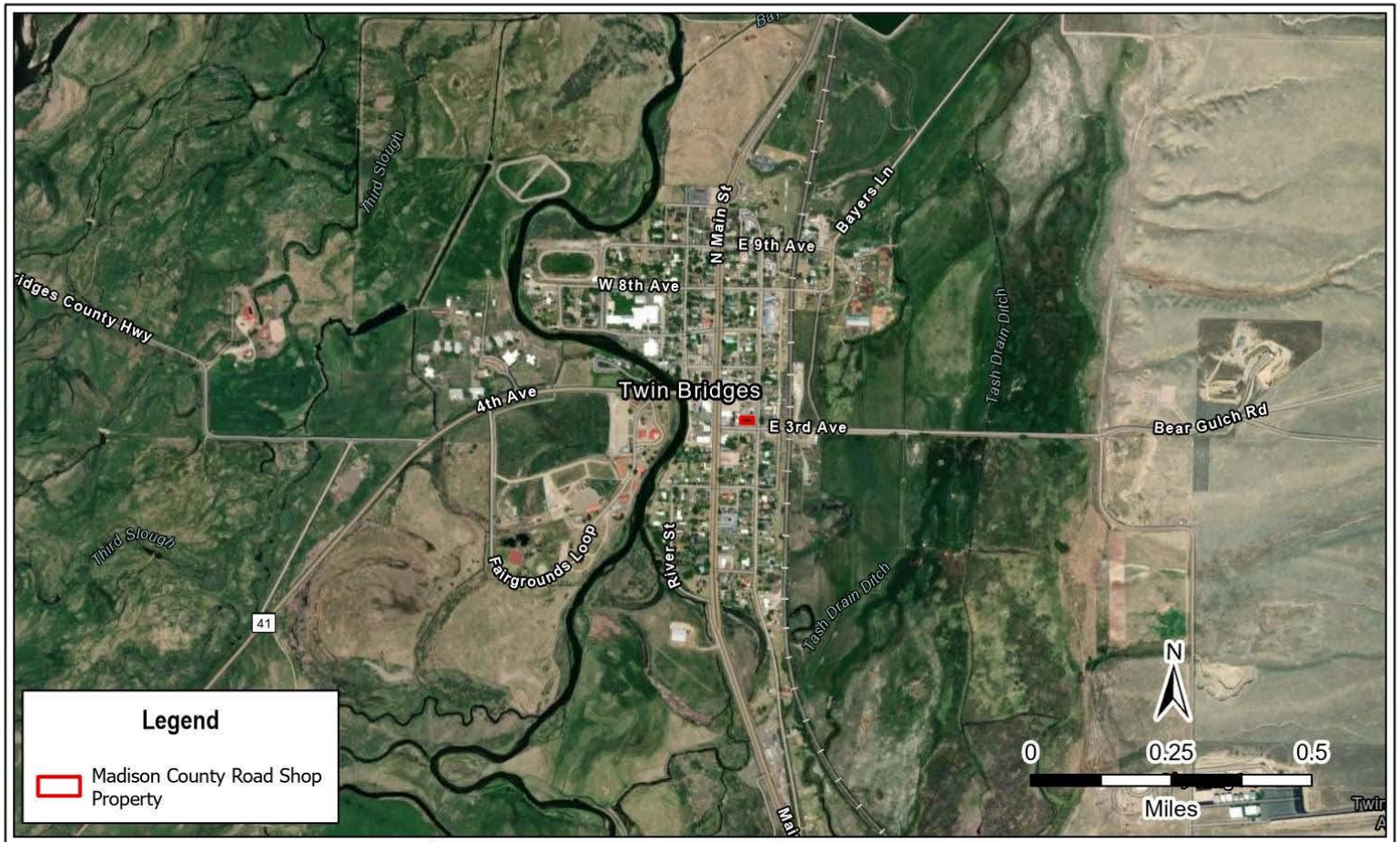
MTDEQ, 2021. Montana Vapor Intrusion Guide. Montana Department of Environmental Quality. September.

MTDEQ, 2026. Work Plan Requested to Investigate Petroleum-Contaminated Media at the Madison County Shop, Madison Street (NW Corner of Third Avenue and Madison Street), Twin Bridges, Madison County, Montana; Facility ID 28-02588 (TID 24584), Petroleum Release 764, Work Plan 35166

TETRA TECH

FIGURES

TETRA TECH



Notes:

DEQ
Montana Department of Environmental Quality

TETRA TECH

Analyst: M. Zilinsky
Date: 2/24/2026

Madison County Road Shop
Remedial Investigation

Twin Bridges, Madison County, Montana

Figure 1
Site Location

Path: C:\Users\MISIA.ZILINSKY\Documents\ArcGIS\Projects\Madison County Shop\Madison County Shop.aprx

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Notes:

DEQ
Montana Department of Environmental Quality

TETRA TECH

Analyst: M. Zilinsky
Date: 2/24/2026

Madison County Road Shop Remedial Investigation

Twin Bridges, Madison County, Montana

Figure 2
Site Vicinity

Path: C:\Users\MISIA.ZILINSKY\Documents\ArcGIS\Projects\Madison County Shop\Madison County Shop.aprx

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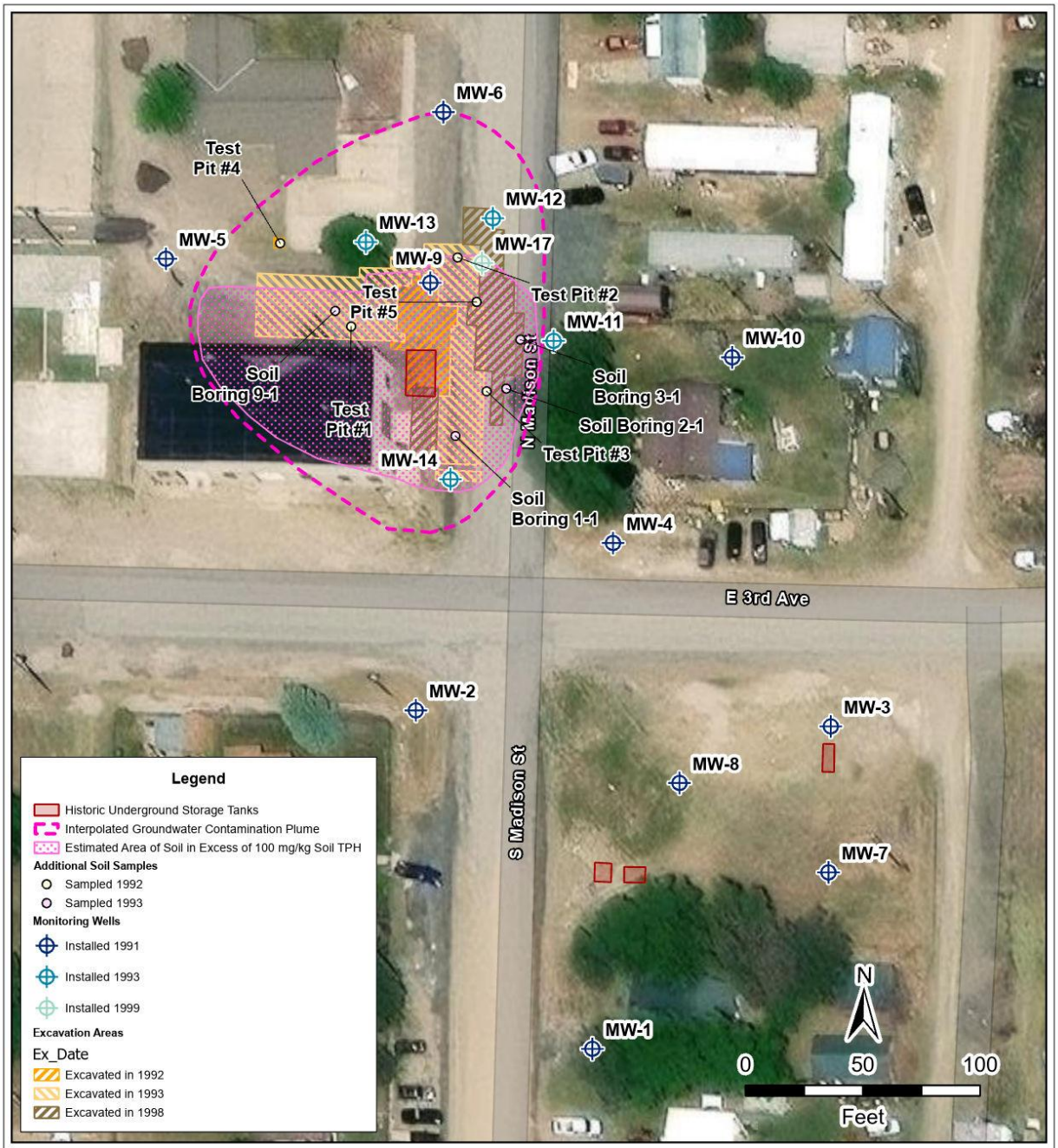


Notes:
See Figures 6 and 7 for historic soil and groundwater analytical data

DEQ
Montana Department of Environmental Quality

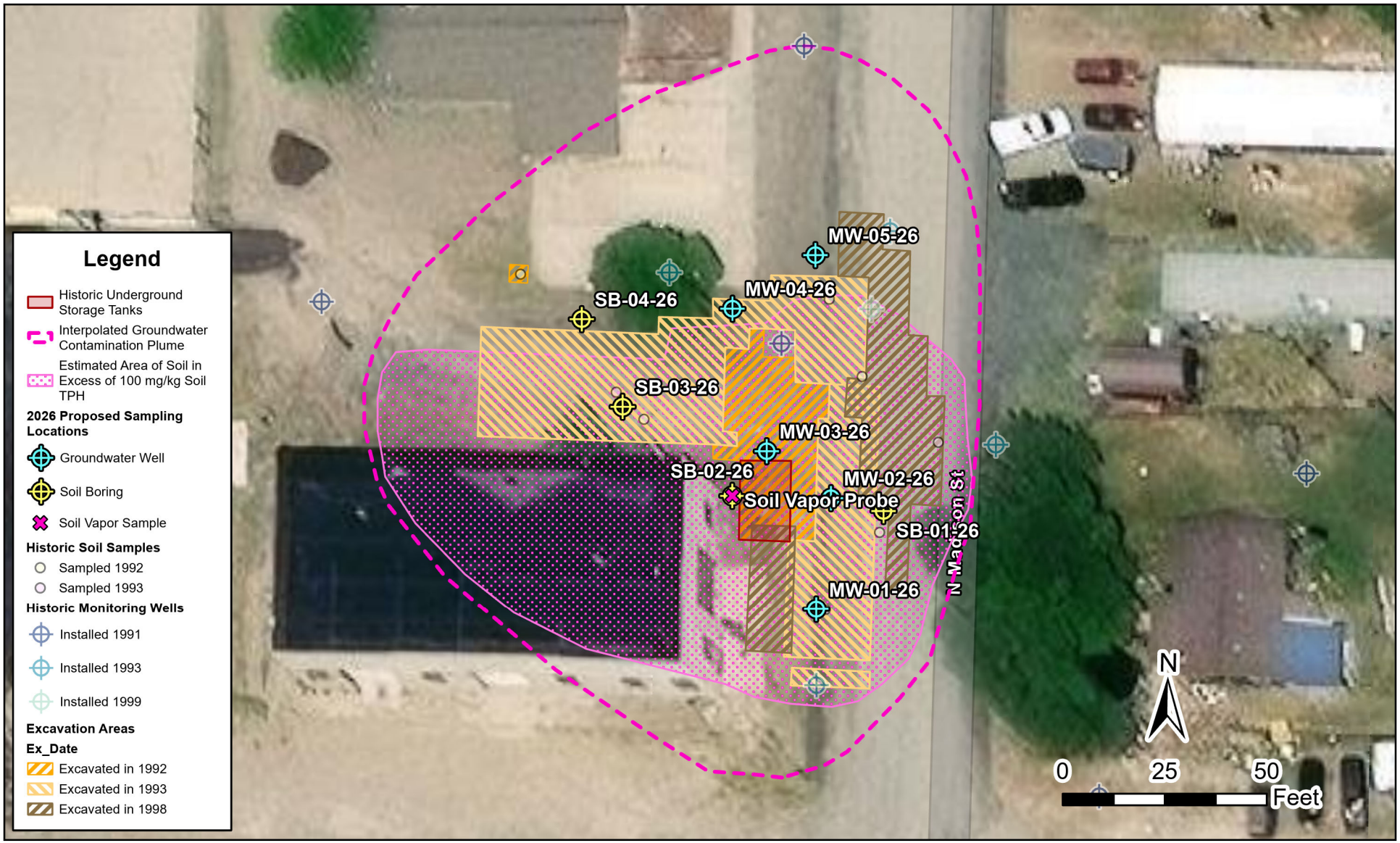
TETRA TECH

Analyst: M. Zilinsky
Date: 3/30/2026

Madison County Road Shop Remedial Investigation

Twin Bridges, Madison County, Montana

Figure 3
Historic Site Investigation Features



Notes:

- Soil borings drilled to 15 feet below ground surface
- Groundwater wells installed in select soil borings to 13 feet below ground surface, screened from 2 to 10 feet below ground surface
- Interpolated groundwater contamination plume and estimated area of soil contamination based off of historic soil and groundwater data that is over 20 years old. Because of this, the contamination plume likely looks different now and boreholes have been planned accordingly.

DEQ Montana Department of Environmental Quality

TETRA TECH

Analyst: M. Zilinsky
Date: 2/24/2026

Madison County Road Shop Remedial Investigation

Twin Bridges, Madison County, Montana

Figure 4
2026 Proposed Sample Locations

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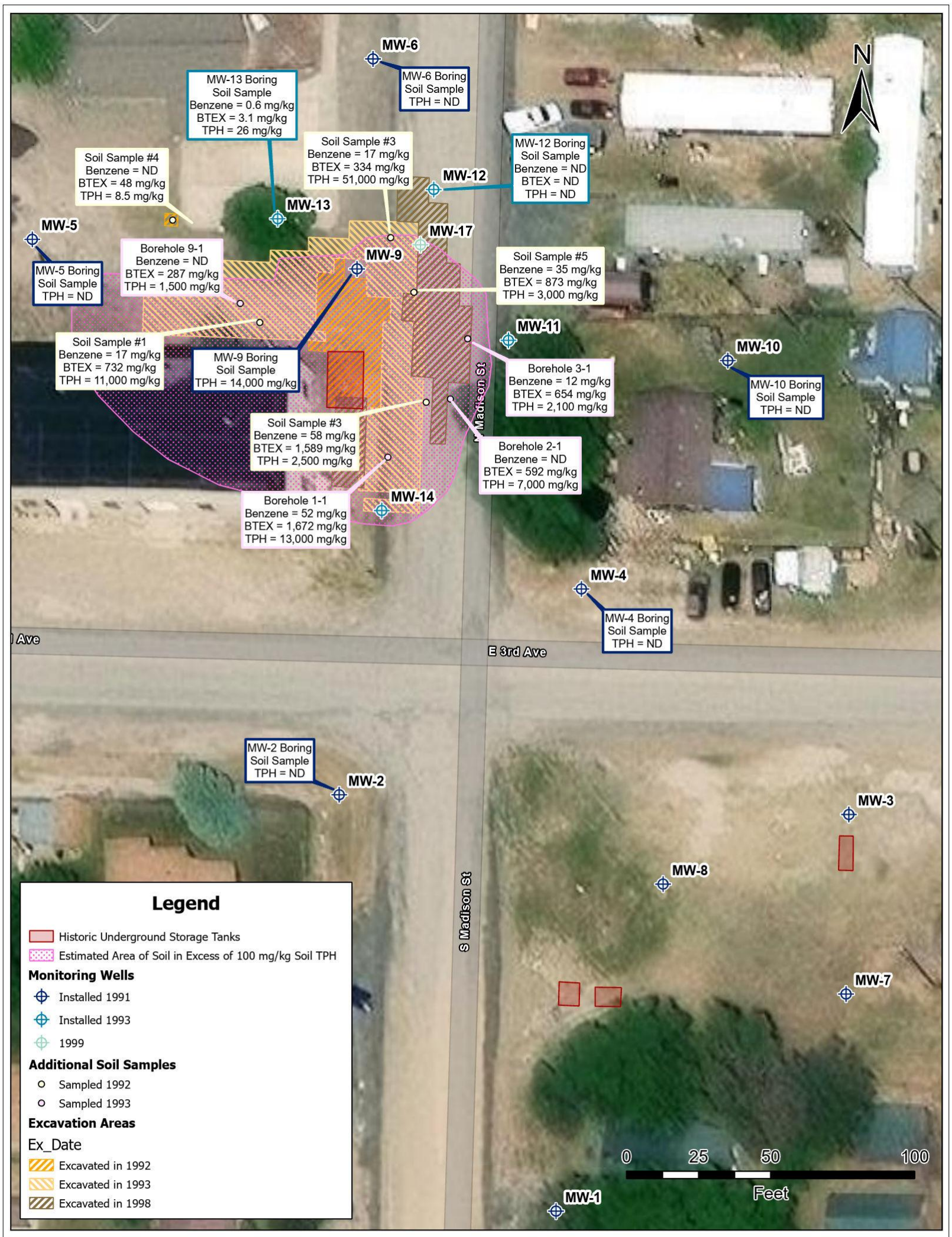
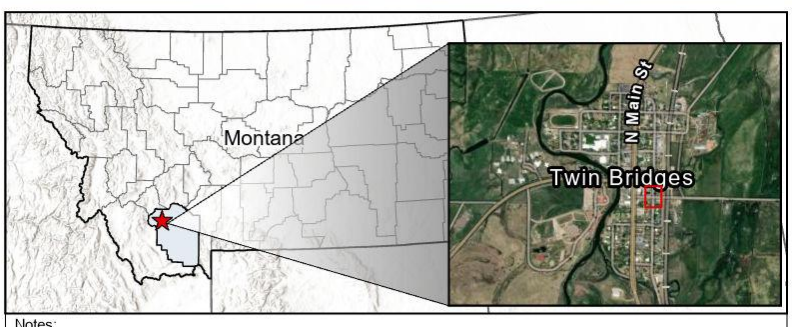




Notes:
BTEX = Benzene + Toluene + Ethylbenzene + Xylenes
TPH = Total Petroleum Hydrocarbons
ug/L = micrograms per liter
mg/L = milligrams per liter
ND = Non-detect

DEQ
Montana Department of Environmental Quality

TETRA TECH

Analyst: M. Zilinsky
Date: 3/30/2026

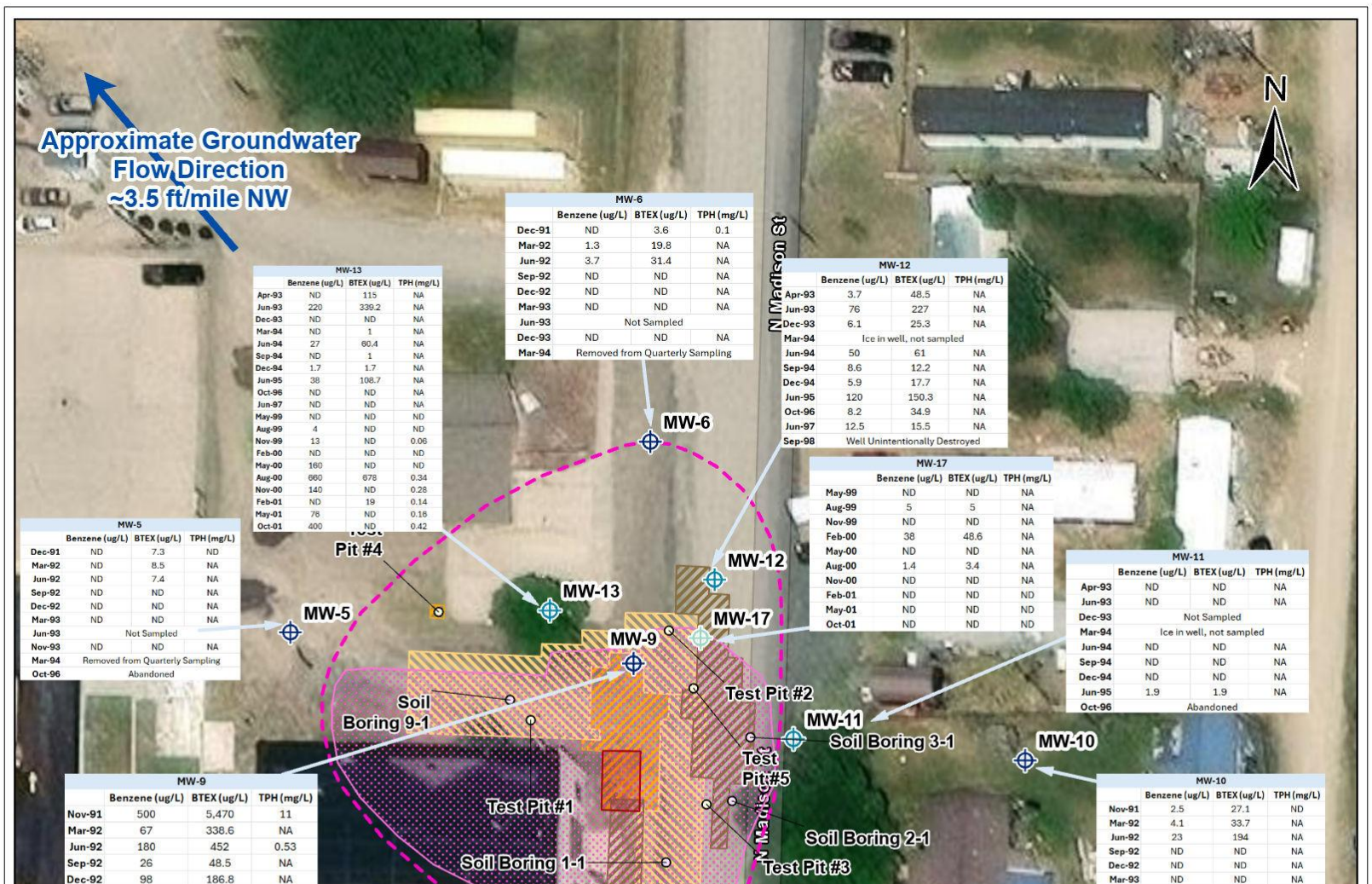
Madison County Shop

Historic Remedial Investigations

Twin Bridges, Madison County, Montana

Figure 5
Historical Soil Sampling Analytical Results

TETRA TECH



MW-6

	Benzene (ug/L)	BTEX (ug/L)	TPH (mg/L)
Dec-91	ND	3.6	0.1
Mar-92	1.3	19.8	NA
Jun-92	3.7	31.4	NA
Sep-92	ND	ND	NA
Dec-92	ND	ND	NA
Mar-93	ND	ND	NA
Jun-93	Not Sampled		
Dec-93	ND	ND	NA
Mar-94	Removed from Quarterly Sampling		

MW-13

	Benzene (ug/L)	BTEX (ug/L)	TPH (mg/L)
Apr-93	ND	115	NA
Jun-93	220	339.2	NA
Dec-93	ND	ND	NA
Mar-94	ND	1	NA
Jun-94	27	60.4	NA
Sep-94	ND	1	NA
Dec-94	1.7	1.7	NA
Jun-95	38	108.7	NA
Oct-96	ND	ND	NA
Jun-97	ND	ND	NA
May-99	ND	ND	ND
Aug-99	4	ND	ND
Nov-99	13	ND	0.06
Feb-00	ND	ND	ND
May-00	160	ND	ND
Aug-00	660	678	0.34
Nov-00	140	ND	0.28
Feb-01	ND	19	0.14
May-01	76	ND	0.16
Oct-01	400	ND	0.42

MW-12

	Benzene (ug/L)	BTEX (ug/L)	TPH (mg/L)
Apr-93	3.7	48.5	NA
Jun-93	76	227	NA
Dec-93	6.1	25.3	NA
Mar-94	Ice in well, not sampled		
Jun-94	50	61	NA
Sep-94	8.6	12.2	NA
Dec-94	5.9	17.7	NA
Jun-95	120	150.3	NA
Oct-96	8.2	34.9	NA
Jun-97	12.5	15.5	NA
Sep-98	Well Unintentionally Destroyed		

MW-17

	Benzene (ug/L)	BTEX (ug/L)	TPH (mg/L)
May-99	ND	ND	NA
Aug-99	5	5	NA
Nov-99	ND	ND	NA
Feb-00	38	48.6	NA
May-00	ND	ND	NA
Aug-00	1.4	3.4	NA
Nov-00	ND	ND	NA
Feb-01	ND	ND	ND
May-01	ND	ND	ND
Oct-01	ND	ND	ND

MW-11

	Benzene (ug/L)	BTEX (ug/L)	TPH (mg/L)
Apr-93	ND	ND	NA
Jun-93	ND	ND	NA
Dec-93	Not Sampled		
Mar-94	Ice in well, not sampled		
Jun-94	ND	ND	NA
Sep-94	ND	ND	NA
Dec-94	ND	ND	NA
Jun-95	1.9	1.9	NA
Oct-96	Abandoned		

MW-5

	Benzene (ug/L)	BTEX (ug/L)	TPH (mg/L)
Dec-91	ND	7.3	ND
Mar-92	ND	8.5	NA
Jun-92	ND	7.4	NA
Sep-92	ND	ND	NA
Dec-92	ND	ND	NA
Mar-93	ND	ND	NA
Jun-93	Not Sampled		
Nov-93	ND	ND	NA
Mar-94	Removed from Quarterly Sampling		
Oct-96	Abandoned		

MW-9

	Benzene (ug/L)	BTEX (ug/L)	TPH (mg/L)
Nov-91	500	5,470	11
Mar-92	67	338.6	NA
Jun-92	180	452	0.53
Sep-92	26	48.5	NA
Dec-92	98	186.8	NA
Mar-93	140	297	NA
Jun-93	74	117.9	NA
Nov-93	Well Damaged During Excavation		

MW-10

	Benzene (ug/L)	BTEX (ug/L)	TPH (mg/L)
Nov-91	2.5	27.1	ND
Mar-92	4.1	33.7	NA
Jun-92	23	194	NA
Sep-92	ND	ND	NA
Dec-92	ND	ND	NA
Mar-93	ND	ND	NA
Jun-93	ND	ND	NA
Dec-93	Removed from Quarterly Sampling		
Oct-96	Abandoned		

MW-14

	Benzene (ug/L)	BTEX (ug/L)	TPH (mg/L)
Apr-93	4.1	7.4	NA
Jun-93	8.7	27.5	NA
Dec-93	2.6	5.5	NA
Mar-94	7.4	14.6	NA
Jun-94	7.6	11.7	NA
Sep-94	ND	ND	NA
Dec-94	0.9	ND	NA
Jun-95	2.2	5.7	NA
Oct-96	Abandoned		

MW-4

	Benzene (ug/L)	BTEX (ug/L)	TPH (mg/L)
Nov-91	ND	4.6	ND
Feb-92	ND	ND	NA
Jun-92	2.2	18.1	NA
Sep-92	ND	ND	NA
Dec-92	ND	ND	NA
Mar-93	ND	ND	NA
Jun-93	ND	ND	NA
Dec-93	Removed from Quarterly Sampling		

MW-2

	Benzene (ug/L)	BTEX (ug/L)	TPH (mg/L)
Nov-91	ND	ND	ND
Mar-92	2.5	44.7	NA
Jun-92	12	92.3	NA
Sep-92	ND	ND	NA
Dec-92	ND	ND	NA
Mar-93	ND	ND	NA
Jun-93	Removed from Quarterly Sampling		
Nov-93	Abandoned		

Legend

- Historic Underground Storage Tanks
- Interpolated Groundwater Contamination Plume
- Estimated Area of Soil in Excess of 100 mg/kg Soil TPH

Monitoring Wells

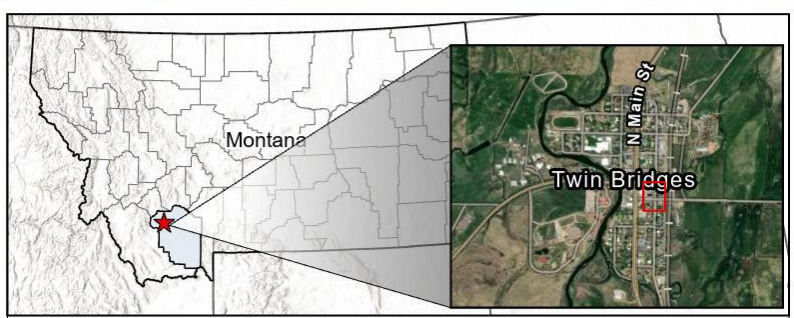
- Installed 1991
- Installed 1993
- Installed 1999

Additional Soil Samples

Year
- Sampled 1992
- Sampled 1993

Excavation Areas

Ex_Date
- Excavated in 1992
- Excavated in 1993
- Excavated in 1998



Notes:
BTEX = Benzene + Toluene + Ethylbenzene + Xylenes
TPH = Total Petroleum Hydrocarbons
ug/L = micrograms per liter
mg/L = milligrams per liter
ND = Non-detect
NA = Analyte not assessed for

DEQ Montana Department of Environmental Quality

TETRA TECH

Analyst: M. Zilinsky
Date: 3/30/2026

Madison County Shop

Historic Remedial Investigations

Twin Bridges, Madison County, Montana

Figure 6
Historical Water Sampling Analytical Results