

LOVE RANCH 8 OFF LOCATION FLOWLINE RELEASE

**PERMEABLE REACTIVE BARRIER TRENCH,
HIGH-RESOLUTION SITE CHARACTERIZATION AND DIRECT PUSH TECHNOLOGY
REMEDIAL DESIGN CHARACTERIZATION WORK PLAN**

**CECMC REM # 31518
Rio Blanco County, Colorado**

Prepared For:



**Caerus Operating, LLC
143 Diamond Avenue
Parachute, CO 81635**

Prepared by:



**Entrada Consulting Group
330 Grand Avenue, Suite C
Grand Junction, CO 81501**

May 2024

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1.0 INTRODUCTION

Entrada Consulting Group, Inc. (Entrada) was retained by Caerus Operating, LLC (Caerus) to provide groundwater monitoring and other environmental services at the Love Ranch 8 Off Location Flowline Release (Site) in Rio Blanco County, Colorado. This document presents the Work Plan to install a permeable reactive barrier (PRB) trench, and to conduct a high-resolution site characterization (HRSC) investigation of soil and groundwater conditions at the Site. The approximate center of the Site is located at latitude 39.891270 and longitude -108.292690, approximately 22 miles southwest of the town of Meeker, Colorado.

The objectives of this Work Plan are to fill in data gaps from past investigations, to quantify the nature and extent of source area and residual hydrocarbon impacts to soil and groundwater. Additionally, the results of this investigation will be used to design the future site remediation in-situ injection program.

The Love Ranch 8 Off-Location Flowline Release is located in Rio Blanco County, Colorado (SWNW, Section 9, Township 2 South, Range 97 West) near the northeastern edge of the Piceance Basin, a large structural basin in the Uinta-Piceance geologic province of Colorado and Utah consisting of sandstones and siltstones, containing reserves of coal, natural gas, and oil shale.

Piceance Creek flows from south to north in this valley toward its confluence with the White River approximately nine miles north of the Site. Piceance Creek is a meandering perennial stream. The Site is in a high altitude semi-arid region, and runoff is generally associated with snowmelt or summertime short-duration, high-intensity thunderstorms. Maximum flows in Piceance Creek typically occur during spring snowmelt runoff with peak flow commonly occurring in April - May of each year and lowest flow in the fall, typically in October - November.

In addition to Piceance Creek, there is also a small irrigation ditch to the west of the creek in the valley near where the Site is located. The ditch is used by a local rancher for irrigation. The valley is irrigated to allow for cattle grazing.

Groundwater can be as shallow as a few feet below ground surface (bgs) in the central part of the valley near Piceance Creek. Groundwater depth varies by at least a few feet seasonally as evidenced from historical depth readings from Site monitoring wells and piezometers. The groundwater flow direction is generally to the north-northwest in the vicinity of the site, generally similar to the Piceance Creek flow direction.

Previous studies have been unable to confirm whether Piceance Creek is a gaining or losing stream in the area of the Site or whether this could vary seasonally.

2.0 PHASE 1 - PRB TRENCH INSTALLATION

A permeable reactive barrier interceptor trench will be installed between (or above) the point of release (POR) and the west bank of Piceance Creek where a hydrocarbon sheen has continually been identified since the release occurred. The proposed trench location is shown on **Figure 1**. Hydrocarbon impacted soils will be removed and replaced with a slurry mixture of Boss 200 and clean soil. BOS 200® is a Trap and Treat® in situ remediation technology specifically designed to degrade petroleum hydrocarbons, related solvents and oil. BOS 200® is a complete system effecting accelerated biodegradation of various organic compounds on an activated carbon platform that includes micro and macro nutrients, time release terminal electron acceptors, and a blend of facultative organisms designed to flourish within the aerobic anaerobic conditions present in the pore structure of carbon. There are no toxic byproducts such as sulfide produced.

This phase of the project will take 2 days to complete, and it is anticipated that approximately 250 pounds of BOS 200® and 250 pounds of supplemental gypsum (electron donor) will be added to the base and sidewalls of the PRB trench prior to backfill. The PRB trench will be approximately 3-feet wide, 6-feet deep and 50-feet in length.

Sorbent booms will remain in Piceance Creek, adjacent to, and down gradient of the POR until hydrocarbon sheen is no longer present. All excavated hydrocarbon impacted soil will be transported to Rio Blanco County landfill for disposal.

3.0 PHASE 2 - HRSC INVESTIGATION TECHNICAL APPROACH AND PROCEDURES

This section presents the technical approach that will be used for the HRSC investigation and procedures that will be used to further characterize the Site impacts to the vadose zone soil and groundwater. The technical approach is based on the current understanding of the Site and is intended to further define the extent of petroleum hydrocarbons both at the POR and in the area downgradient. It is anticipated that this phase of the project will take 4 days to complete.

The objectives of this investigation are to evaluate the extent of the petroleum hydrocarbon impacts across the plume, identify preferential hydraulic pathways, and provide data to assist in the evaluation of remediation options at the Site. To accomplish this, Entrada and Caerus have subcontracted Vista Geoscience, of Golden, Colorado (Vista) to perform the investigation at the Site. Vista is proposing to use a Geoprobe 7000 series direct-push rig (or equivalent) to advance its membrane interface and hydraulic profiling tool (MiHPT) at the site to map the free Phase and dissolved phase plume at and downgradient of the Site. Approximately 24 boring locations will be advanced within the expanded HRSC and remediation design characterization area to accomplish each of these tasks. The characterization area is shown on **Figure 2**. Of the two detectors on the membrane interface probe (MIP) system to be used, the

photoionization (PID) and flame ionization detector (FID) are selective to carbon/hydrogen bonds (both single chain and aromatic hydrocarbons) found in petroleum hydrocarbons. The hydraulic profiling tool (HPT) component of the MiHPT tool will provide a continuous log of the injection pressure and flow, estimate hydraulic conductivity and identify aquitards (non-porous layers). The MIP also employs the use of an electrical conductivity (EC) dipole to aid in soil classification. The combination of the systems and the interpretation of the data will aid in determining where contaminants are moving and where they are bound up in tighter soils. A copy of the Vista Overview of HRSC and Subsurface Imaging Tools is provided in **Appendix A**. The specification sheets for the BOS 200® remediation agent are included in **Appendix B**.

Once the subsurface imaging is complete, Vista will use the direct-push Geoprobe rig to collect confirmation sampling and complete groundwater monitoring well installations. The soil sampling will be collected using the Geoprobe brand DT22 Dual-Tube sampling tube for continuous core soil sampling. Vista will use its 4.5-inch solid stem augers (SSA) to complete the well installations. A total of up to three new monitoring wells will be installed based on the results of the additional HRSC data.

3.1 Health and Safety Plan and Job Safety Analysis

The Project Health and Safety Plan (HASP) identifies potential hazards associated with the drilling and sampling activities and includes a map to the Pioneers Medical Clinic, Meeker, Colorado and Grand River Health, Rifle, Colorado. Additionally, the HASP contains the Job Safety Analysis (JSA) forms for driving to jobsite, contractor supervision, environmental sampling, and drilling and monitoring well installation.

A copy of the HASP will be kept onsite during all field activities. Entrada will conduct daily health and safety “tailgate” meetings prior to the initiation of any field activities. A daily analysis of work activities will also be conducted to evaluate potential safety risks associated with the drilling activities. The HASP is included in **Appendix C**.

3.2 Site Subsurface Soil Investigation Technical Approach

Subsurface soil samples will be acquired during drilling activities for the potential installation of up to three new monitoring wells at the Site. These samples will be collected inside plastic sleeves by direct-push method using the Geoprobe rig. The locations of the new monitoring wells will be identified based on the results of the HRSC investigation and at the discretion of the on-site geologist.

3.2.1 Subsurface Soil Sampling Procedures

Subsurface soil samples will be collected either continuously or at a minimum of every five feet depending on subsurface conditions, such as staining, using direct push methods or a solid stem auger (SSA) drill string in conjunction with a split-spoon sampler. The samples will be screened using a photo ionization detector (PID), which will be calibrated daily and samples

selected for analyses by the site geologist will be placed into an appropriate sample container for submission to the laboratory. The samples selected for laboratory analyses will be determined by the site geologist and will be based on the olfactory, visual evidence and head space analysis using the PID. At a minimum, the soil sample with either the highest head space concentration per boring or at total depth of 20 ft-bgs or just above top of groundwater will be submitted for laboratory analysis. For head space analysis, a portion of the soil sample interval will be placed into a clean Ziploc bag, allowed to reach ambient temperature for 30 minutes and then screened using the PID. The data will be recorded in the site logbook and on the lithologic log form.

Additionally, to assist with the interpretation of the HRSC detector response and the data generated by the use of the MIP, undisturbed offset continuous soil cores will be advanced adjacent to select probe locations on up to four discrete locations. Multiple soil samples will be collected across each core including areas with or without response in the adjacent log boring. The Geoprobe Dual-Tube coring system will be used to collect these continuous cores. The onsite geologist will characterize the cores, collect subset soil samples for PID headspace, and also submit samples of interest to the laboratory for analysis.

At a minimum, a single sample will be collected from the soil borings to be completed as monitoring wells and from the four HRSC offset continuous soil cores for laboratory analysis. The soil boring samples will be designated as 'Boring Number-Date-Depth'. Each sample for laboratory analysis will be identified by the boring number, depth, date and time of the sample collection, requested analyses and initials of the sampler. The samples will be placed in an ice-chilled cooler immediately for transport under chain-of-custody protocol to the laboratory.

The split spoon sampler, or similar sampling tools, will be decontaminated prior to the collection of each sample. Drilling and sampling equipment will be thoroughly cleaned prior to initiation of drilling activities and in between each boring location at the site. Decontamination procedures for the soil sampling device will include a wash with an Alconox (or similar) detergent solution, a fresh water rinse, and air-drying if possible. The drilling equipment will be cleaned between each boring with a high-pressure steam cleaner. All soil borings not completed as a monitoring well, will be sealed and plugged with hydrated bentonite chips upon completion of each boring.

3.2.2 Monitoring Well Installation Procedures

Subsurface soil samples will be collected for observations of soil classification and potential impacts (discoloration, staining, odors, sheen) and vapor analyses from each well bore either continuously or at a minimum of every five feet depending on subsurface conditions. The borings for the wells will be advanced using an SSA drill rig. Head space screening will be conducted on representative soil samples from the borings by placing the soil into a clean Ziploc

bag, allowing it to reach ambient temperatures for 30 minutes and then screening the sample using the PID. The data will be recorded in the site logbook and on the lithologic log form. The headspace screening will be used to characterize the hydrocarbon vapor distribution in the vadose soil at the soil.

The monitoring wells will be constructed using 10 feet of 2-inch diameter, Schedule 40 polyvinyl chloride (PVC) with 0.010-inch factory slotted screen and 2-inch diameter blank PVC casing extending approximately three feet above the ground surface. The screen will be placed at least two feet above the observed top of groundwater. A sand pack consisting of 10-20 mesh graded silica sand will be placed in the annular space around the screened interval and brought to 2 feet above the top of the screen. Hydrated bentonite granules or bentonite chips will be used to seal the well annular space above the sand pack within two to three feet of the ground surface. The well casing will be capped using a 2-inch diameter lockable J-plug. The PVC casing will extend to approximately two to three feet above the ground surface and will have a locking metal protective casing installed in concrete over the PVC well casing.

The locations of the wells and the relative elevation of the top of the PVC casing of each monitoring well will be surveyed by to an accuracy of ± 0.01 ft. The ground surface in the area of the well will also be surveyed to ± 0.1 ft. Upon the completing of site monitoring activities the wells will be plugged and abandoned according to state regulations.

3.2.3 Well Development Procedures

In order to ensure that well water is not stagnant or impacted by drilling activities and formation water is present in the well, development of the newly installed wells will be conducted on each of the wells. Well development no sooner than 24 hours after installation in order to allow for sufficient time for the bentonite and/or cement grout to cure. The initial, post-drilling development process will include the removal of groundwater with a minimum of three casing volumes. Prior to well development, the static water level, total well depth, pH, temperature and specific conductance will be measured from each well and recorded in the logbook. The initial well development process will be performed using a disposable bailer or a submersible pump. The well will be developed using surge and bail techniques to set the sand pack and remove as much sediment as possible from the well. Development will continue using a bailer or submersible pump until the water being removed from the well appears clear and/or the field parameters are within 10 percent of the initial readings. The water evacuated from the wells during development will be placed in onsite storage tanks for disposal.

3.3 Analytical Program

Groundwater samples will be analyzed for the following parameters by the indicated methods:

- Benzene, Toluene, Ethylbenzene and Xylenes (BTEX), Naphthalene, 1,2,4-Trimethylbenzene, and 1,3,5-Trimethylbenzene by EPA Method 8260B
- Total dissolved solids (TDS) by EPA Method 2540 C-2011
- Chloride and Sulfate by EPA Method 9056A

Soil samples will be analyzed for the following parameters by the indicated methods:

- Total Petroleum Hydrocarbons – diesel range organics (TPH-DRO [C10-C28]) and Total Petroleum Hydrocarbons – oil range organics (TPH-ORO [C28-C36]) by U.S. Environmental Protection Agency (EPA) Method 8015M
- TPH – gasoline range organics (TPH-GRO [C6-C10]) by EPA Method 8015D/GRO
- Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene by EPA Method 8260B
- Polycyclic aromatic Hydrocarbons (PAHs)(CECMC Table 915-1) by EPA Method 8270C-SIM
- pH by EPA Method 9045D
- Metals (CECMC Table 915-1) by EPA Method 6010B
- Hexavalent chromium by EPA Method 7199A
- Hot-water soluble Boron by EPA Method 6010B-NE493, Ch 2
- Arsenic by EPA Method 6020
- Electrical Conductivity (EC) by EPA Method 9050Amod
- Sodium adsorption ratio (SAR) by USDA Method H60

3.4 Report

The results of the PRB trench installation, the additional HRSC investigation, and sampling of soil and groundwater for laboratory analysis will be presented in a report for submittal to the Colorado Energy & Carbon Management Commission (CECMC).

FIGURES

Figure 1:
Proposed BOS200
Remediation Trench
Location

CLIENT: Caerus Operating
SITE: Love Ranch 8
SWNW, S9, T2S, R97W
Rio Blanco County, Colorado

Vista Project No.: 24031
Date Drafted: 5/10/2024
Drafted by: JVF
Map Source: Digitized Google Earth Image
Coordinate System: Colorado North State Plane (feet)
Datum: NAD83

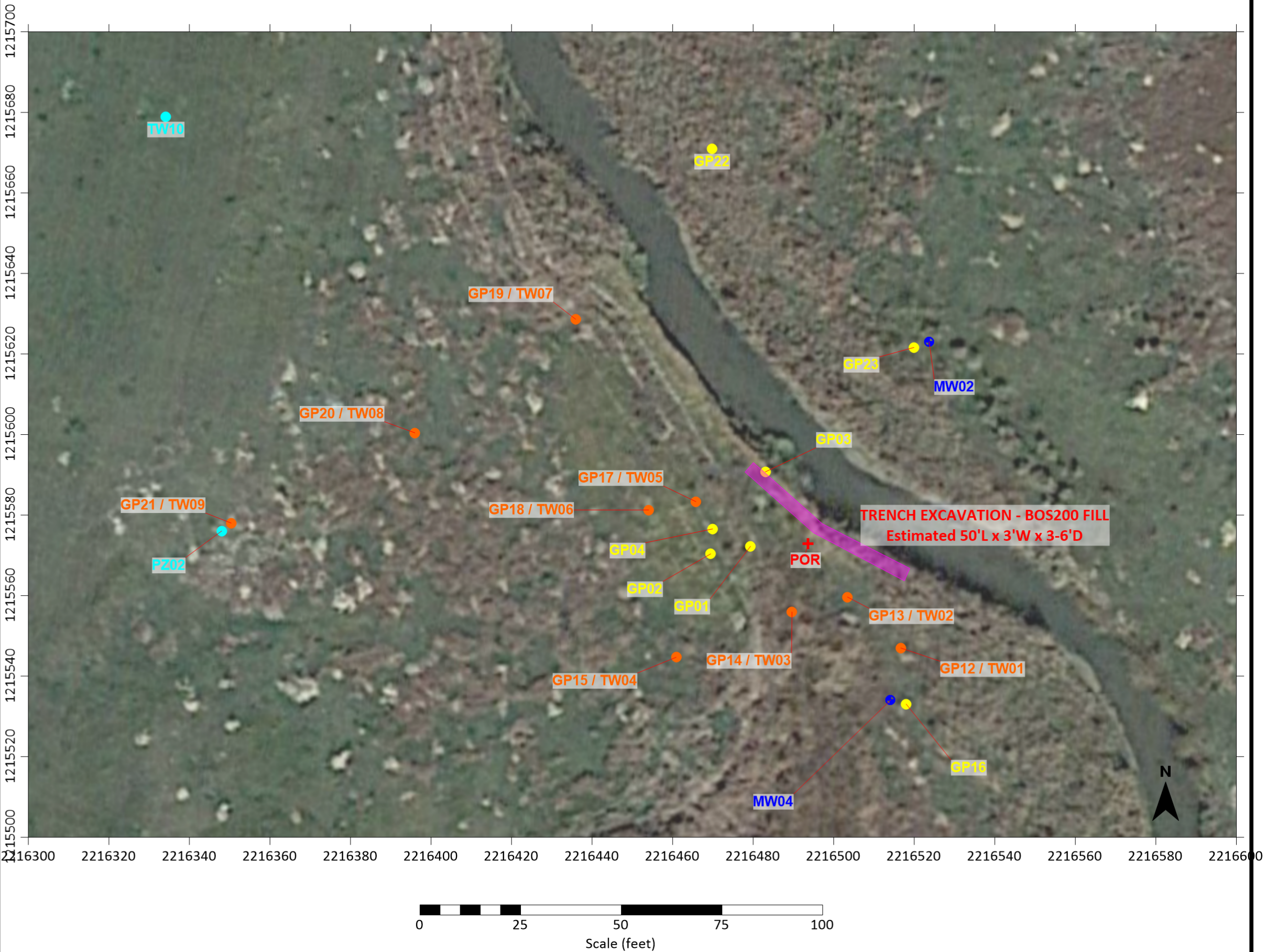
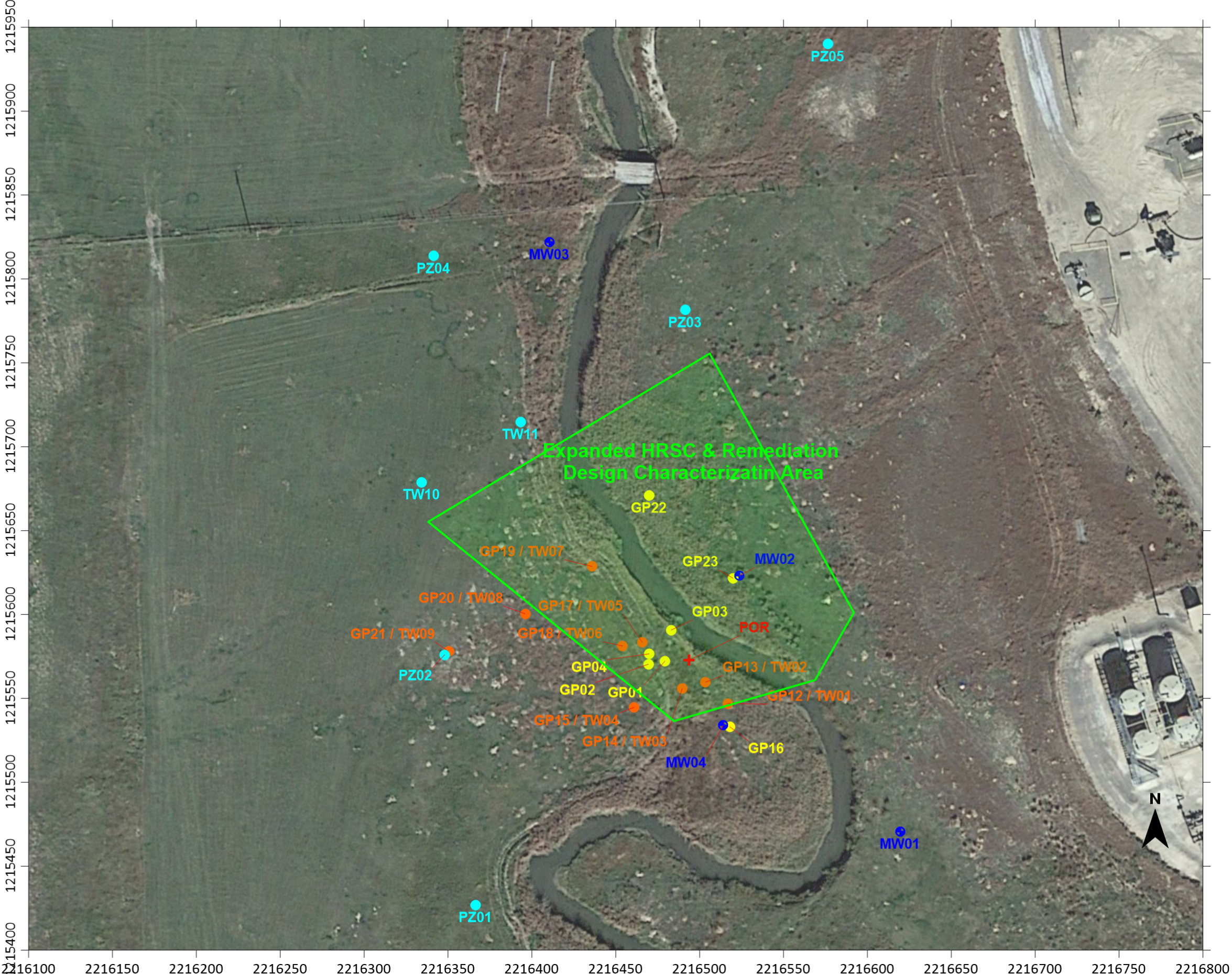


Figure 2:
Expanded HRSC &
Remediation Design
Characterization Area with
Previous Boring Locations

CLIENT: Caerus Operating
SITE: Love Ranch 8
SWNW, S9, T2S, R97W
Rio Blanco County, Colorado

Vista Project No.: 24031
Date Drafted: 5/13/2024
Drafted by: JVF
Map Source: Digitized Google Earth Image
Coordinate System: Colorado North State Plane (feet)
Datum: NAD83



APPENDIX A

Overview of High-Resolution Site Characterization (HRSC) & Subsurface Imaging Tools

Vista GeoScience

Direct-Push Technology

All Geoprobe® Dual-Technology Direct Push/Auger Rigs

- Dual Technology Rigs (DPT + Auger)
- Rubber Track Mounted, Wireless Remote Control
- Models 7822DT, 7730DT, 7720DT, 6610DT
- 48,000# pull-back, 36,000# Downforce
- GH60 Series 32Hz DPT hammers, w/ Rotary
- Concrete Coring
- 150' Sampling Depths
- 3-4,000 ft-lb Auger
- Heavy Duty DPT push-rod, 1.5", 1.75", 2.25", 3.25"
- Hollow Stem Auger 2.25", 3.25" 4.25" ID
- Solid Stem Auger 3.5", 4.5" OD
- Winch for inner tool and auger drilling
- Small foot-print with large capabilities
- Limited Angle Drilling

Limited Access DPT Rigs

- Track Mounted Rigs, Geoprobe 54DT
- Dolly Mounted 8R Geoprobe (<8 foot clearance)
- Tight access areas, or inside buildings/basements

Soil

- DT-22 Dual-Tube Continuous Soil Coring (2.25"OD)
- DT-32 Dual-Tube Continuous Soil Coring (3.25"OD)

Groundwater

- SP-16 Discrete Ground Water Sampler
- SP-22 Dual-Tube Soil & Ground Water Profiling
- Monitoring Wells: 0.5" to 4.0" monitoring,
- Dual-Tube or HSA Installation of Monitor Wells
- Pre-Packed Well Screens: 0.5" to 2"

Soil Gas

- Post-Run Tubing (PRT), Vertical Profiling
- Nested Vapor Wells: (Up to 150')
- Landfill Tier-2 NMOC Testing Tools, per EPA Method

Injection Tooling

- Custom Built Top-Down, Side-Port Tools
- Pressure Activated Valves
- Straddle Packers for Bedrock Applications
- Bentonite Packed Borehole Injection Methods
- High Pressure/High Flow Pumps, Digital Monitoring





In-Situ Remediation Technologies Overview

An Experienced Provider

Due to the proliferations of many new in-situ treatment chemicals and bio-amendments, *In-Situ Remediation* methods have been replacing conventional Ex-Situ methods at many sites. These methods include *In-Situ Chemical Oxidation (ISCO)*, *In-Situ Chemical Reduction (ISCR)*, *In-Situ Bio-Remediation (ISBR)*, *Surfactant Flushing*, or a combination of multiple methods. Vista GeoScience conducted the first chemical injections in the Rocky Mountain region in the early 1990's and has conducted in-situ projects from coast to coast ever since. Most recently, Vista acquired the *Clean-Inject®* mixing and injection system which has improved slurry reagent injections in most types of lithology with precise high-pressure placement, greatly increasing the effectiveness of all in-situ treatments. Working closely with our clients and chemical vendors, we provide expertise in characterization specifically for in-situ remediation design.

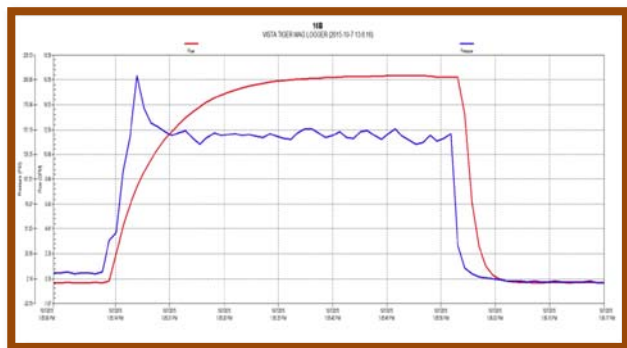


Vista does not sell or endorse any specific remediation product, but is experienced and approved with the delivery and injection of all types of products and the different systems required to apply them including: *activated carbon, persulfates, permanganates, oxygen supplements, emulsified oils, lactates, nutrients, peroxides, iron (ZVI) slurries, and bacteria augmentation*, just to name a few.

Custom Mixing, Pumping, and Delivery Systems

Vista found out early on in the injection business that a wide variety of product types and site conditions requires a wide variety of injection system designs. Pump and mixing system design vary greatly depending on the volume required, injection pressures, corrosivity or reactivity of the product, viscosity, etc.. Therefore, we offer many types of pumps with pressure ratings ranging from 150 to 2000psi, and flow rates from 2 to 50 gallons per minute. Any number of portable mixing tanks can be arranged on support trucks and trailers, or setup on the site itself, depending on the access and logistical requirements at a given site. Our systems are designed to be flexible and can accommodate the varied site conditions and access issues we may encounter.

Vista has re-designed injection tooling and application methods resulting in improved vertical and lateral distribution of the treatment compounds, resulting in better contact with the contaminants. It's a Contact Sport! A wide variety of Direct-Push Technology (DPT) delivery systems are available to inject at depths up to 150'. In tight soils or bedrock formations where hydraulic fracturing is required, we use DPT or open boreholes with Straddle-Packer Technologies and *hold a license to provide*



these patented methods. Our experienced staff can advise you on the advantages of *Bottom-Up or Top-Down methods*, helping to determine which will provide the best product contact and what parameters are critical to the success of the application. In cases where re-injection is anticipated, we may also recommend installing *permanent injection wells*, discrete or nested, PVC or steel construction.

Real-Time Pressure and Flow monitoring instruments are included on all injection systems to monitor performance and subsurface behaviors of the injection.

NEW!

Clean-Inject™ Remediation System



**High-Pressure High-Flow
Slurry Injection Systems**



Our unique **Clean-Inject® System** provides a self-contained, powerful mixing and injection system for many types of powdered reagents, such as activated carbons, oxidants, and other materials that require suspended slurry and precise injection methods in order to optimize their performance. Super sacks of reagents can be used and are pumped directly into the mixing tank eliminating unnecessary exposure to personnel and the surrounding property.

When combined with our **Surgical Injection Tooling**, this cost saving system allows precise placement of most slurry material at

narrow depth intervals. High pressure and high flow rate pumps can overcome formations of all types from tight clays and claystone bedrocks to loose unconsolidated sands and gravels that are common problems for other types of pumping systems typically used for slurries. The injection tooling and methods have also been optimized to reduce surfacing, keeping material in the contaminated and saturated formation where it is needed.

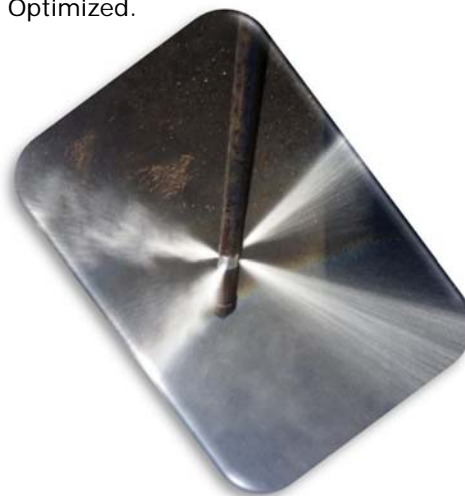
With top-down injection methods, the amount of material injected can be varied by as tight as one foot intervals

Clean-Inject System Specifications

System design	Clean-Inject®
Injection flow rate	Up to 35 gallons per minute
Injection pressure	Up to 1,200 psi
Pump type	5 diaphragm, positive displacement
Injection pump horsepower	30 hp, variable frequency drive; 0-1150 rpm
Pump compatibility	Stainless steel with Viton diaphragms
Blended injectate measuring	Float system
Mixing tank	200 to 300 gallons, stainless steel
Bulk carbon handling	1,000 lb. super sacks
Powder weighing system	Load cell, 5000 lb. capacity, 0.1 lb. accuracy
Mixing tank additive provisions	18" manway + liquid additive (oxidizers,
On-board fresh water storage	500 gallon
Fresh water transfer rate	50 – 80 gpm
Fresh water inlet	3/4" threaded water supply or 2" camlock
Fresh water filtration	Y strainer, mesh straining element
Bulk powder transfer system	Double diaphragm
Dust suppression system	Clean-Inject® proprietary, e-type, passive vent
Water supply requirements	≥ 10 gpm (recommended)
Power requirements	70 kva, 460 volt, 3-phase
On-board compressed air supply	7.5-10 hp screw or reciprocating compressor
On-board fresh water wash down	50-80 gpm
Operating environment	All conditions: rain, freezing, wind, snow



from the top of the contaminated interval to the bottom utilizing expensive reagents more efficiently and ensuring their effectiveness. Combined with better Remedial Design Characterization (RDC) and best the practices, treatment placement and coverage is now Optimized.



APPENDIX B

BOS 200® Technical Specifications

Remediation Products Inc.

BOS 200®

REMEDIATION PRODUCTS INC.

Primary Use

In Situ Petroleum
Hydrocarbon Remediation

Treatment Mechanism

Trap & Treat® - Complete
System Supporting Biological
Degradation of Petroleum
Hydrocarbons

Delivery Methods

RPI-Approved Direct Push or
Packer Injection. Direct
Application via Soil Mixing or
Trenching



BOS 200® Product Description

BOS 200® is a Trap & Treat® in situ remediation technology specifically designed to degrade petroleum hydrocarbons, related solvents, and oils. BOS 200® is a complete system effecting accelerated biodegradation of various organic compounds on an activated carbon platform that includes micro and macro nutrients, time release terminal electron acceptors, and a blend of facultative organisms designed to flourish within the aerobic to anaerobic conditions present in the pore structure of the carbon. It has been demonstrated to be effective with LNAPL, fuel oxygenates, alcohols, glycols, and cyclic ethers. No toxic byproducts such as sulfide are produced. The product is insensitive to groundwater geochemistry and is effective under aerobic and anaerobic conditions and over a broad range of pH. High salinity and TDS of 30,000 ppm are also not detrimental to performance.

BOS 200® Product Applications

The product is typically mixed with water to create a slurry that can be applied using a variety of techniques including: Direct push injection, soil mixing techniques, and trenching. It is commonly employed in plume wide treatment including treatment of LNAPL source, mid, and downgradient plume regions. Plume area treatment is normally accomplished using slurry injection across the impacted thickness at a number of points located using a triangular grid pattern. Effective barriers can be constructed by injection using a tight point grid layout or through trenching or soil mixing. The product is also routinely used to treat excavation residuals by spraying slurry into the pit with subsequent mixing into the shallow soils of the excavation floor. Specialized injection techniques have been developed to address a variety of lithologic settings, including bedrock. BOS 200® has been successfully applied on hundreds of sites in North America and Europe since 2002 including convenience stores, bulk terminals, pipelines, natural gas wellhead and compressor station sites, industrial, DOE, and DOD. Case studies can be found on RPI's website at www.trapandtreat.com.

RPI Group

RPI Group is comprised of Remediation Products, Inc. (RPI) and a group of select remediation contractors that employ a three-pronged approach to ensure success: High density soil and groundwater sampling to support detailed conceptual site model development, expert design, and proven installation techniques to ensure distribution of the BOS 200® in the targeted intervals. The RPI Quality Assurance Laboratory located in Golden, CO provides cradle to grave analytical support throughout the project at no charge to the client. AST Environmental (AST) acts as RPI's Distributor & Training Affiliate for the installation contractors. A list of the contractors can be found at www.trapandtreat.com.

APPENDIX C

Health and Safety Plan



Health and Safety Plan

Project #: 023-046

This Health and Safety Plan (HASP) is intended to provide health and safety guidelines for project field work meeting the following criteria:

- Minimal likelihood of chemical exposure
- Minimal physical hazards present
- No use of subcontractors
- Short duration (less than 14 consecutive days)

The Project Manager should review this HASP with all ECG project personnel and maintain the HASP in project files. No H&S Team review is required.

Administrative Information	Project Name: Love Ranch 8 Off Location Release #023-046			Site Name & Location: Love Ranch 8 Off Location Release, Piceance Creek, Colorado								
	Client Contact and Phone: Blair Rollins – Caerus Operating, LLC 970.640.6919											
	Health & Safety Plan Date: 05/13/2024				Revision Number and Date:							
	Field Work Start Date: 05/22/2024 – PRB Trench/HRSC Inv.				Parking Instructions:							
	Project Manager: Tim Dobransky				Client Manager: Tim Dobransky							
Site/Project General Information An asterisk (*) indicates that a completed Risk Assessment checklist must be completed and attached to this document.	Site Type (check all applicable boxes)											
	<input checked="" type="checkbox"/> Remote Facility*			<input checked="" type="checkbox"/> Active O&G Facility			<input type="checkbox"/> Mine					
<input type="checkbox"/> Railroad			<input type="checkbox"/> Industrial			<input type="checkbox"/> Residential						
<input type="checkbox"/> Unsecured			<input type="checkbox"/> AST Product Storage			<input type="checkbox"/> Other (specify)						
Main Site Hazards (check all applicable boxes; complete Job Hazard Analysis to further define hazard controls)												
<input checked="" type="checkbox"/> Heat/Cold Stress			<input type="checkbox"/> Biological Hazards			<input type="checkbox"/> High Noise			<input checked="" type="checkbox"/> Slips/Trips/Falls			
<input type="checkbox"/> Work Over 6' High			<input checked="" type="checkbox"/> Extreme Weather			<input checked="" type="checkbox"/> Hand/Portable Power Tools			<input checked="" type="checkbox"/> Heavy Equipment in Use			
<input checked="" type="checkbox"/> Petroleum Hydrocarbon			<input checked="" type="checkbox"/> Wildlife			<input type="checkbox"/> Other (specify)			<input type="checkbox"/> Other (specify)			
Personal Protective Equipment and Safety Supplies Req = Required Rec = Recommended NA = Not Applicable	Equipment			Req	Rec	NA	Equipment			Req	Rec	NA
	Steel Toe Boots			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hard Hat			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Long Sleeve Shirt & Pants			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Safety Glasses with Side Shields			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Hearing Protection			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other: FRC Clothing			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Supplies			Req	Rec	NA	Supplies			Req	Rec	NA
	First Aid Kit			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fire Extinguisher			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eyewash Solution			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Water/Sports Drink			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Communication Plan Required when ECG employees work alone	Contacts			Mobile Phone:			Other Phone:		Contact Frequency/Workday			
	Primary Tim Dobransky			970.270.2986					NA			
	Alternate Chris Mace			817.304.4941					NA			

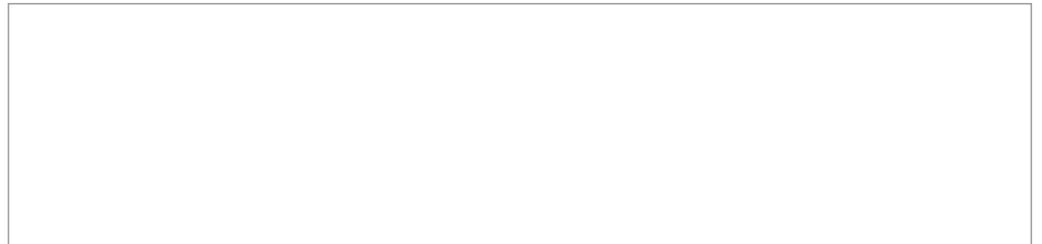
Safety Event Reporting	<p>ALL WORK-RELATED INCIDENTS MUST BE REPORTED. FOR ALL MEDICAL EMERGENCIES, CALL 911 OR THE LOCAL EMERGENCY NUMBER.</p> <p>For ALL non-emergency incidents resulting in injury or illness, you must:</p> <ul style="list-style-type: none"> • Give appropriate first aid care to the injured or ill individual and secure the scene. • Immediately notify the Project Manager. • Clients may have their own procedures which we may need to follow.
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Emergency Contacts	Name and Address of Nearest Hospital: Pioneers Medical Center, 100 Pioneers Medical Center Drive, Meeker, CO 81641			
	Hospital/Ambulance Phone Number: (970) 878-5047			
	See attachment		On-site emergency procedures (alarms, evacuation routes, shelter, etc.): Personnel in the Exclusion Zone will be within sight of the Project Manager and all personnel will be assigned a cell phone. Personnel will muster upwind at the project entry gate.	
	Other Contact Information			
	Agency	Contact Name	Location	Phone Number
	Client Contact	Blair Rollins	143 Diamond Avenue Parachute, CO	970.640.6919
	Police Dept			911
	Fire Dept			911
Local Facility Contact	Tim Dobransky	Grand Junction, CO	970.270.2986	
Project Manager	Tim Dobransky	Grand Junction, CO	970.270.2986	
Field Safety Officer	Tim Dobransky	Grand Junction, CO	970.270.2986	

Acknowledgement	I have read, understood, and agree with the information set forth in this HASP and will follow guidance in the plan and in the ECG Health and Safety manual. I understand the training and medical monitoring requirements for conducting activities covered by this HASP and have met these requirements.		
Printed Name (list ECG personnel on-site during any phase of project)	Signature	Organization	Date
Tim Dobransky		ECG	
Chris Mace		ECG	
Approvals	Project Manager: Tim Dobransky		Date:
	Other:		Date:

- A** 25371 County Road 5, Rifle, CO 81650, United States
- B** Pioneers Medical Center-ER, 100 Pioneers Medical Center Dr, Meeker, CO 81641

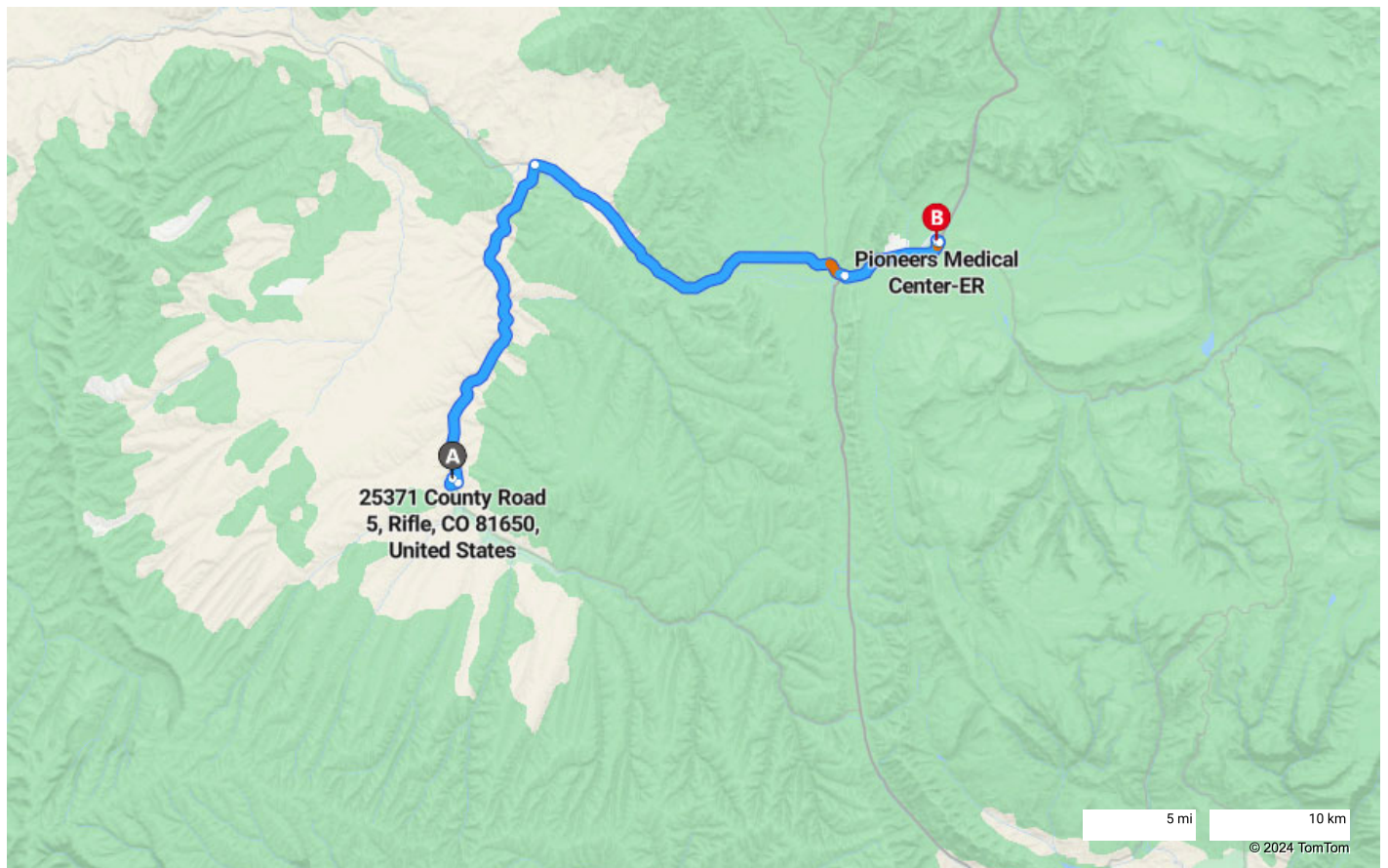
49 min , 40.0 miles
Light traffic
Via County Road 5, CO-64
· Local roads



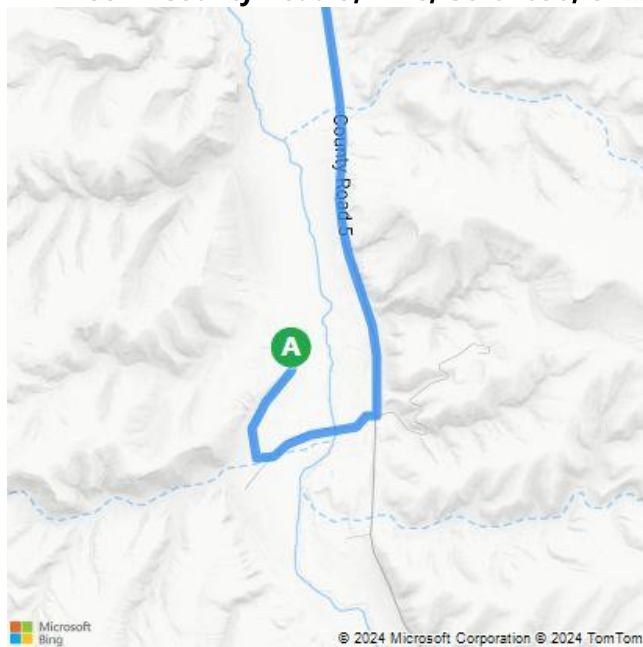
- A** 25371 County Road 5, Rifle, CO 81650, United States

↑	1.	Depart and head toward County Road 5 / County Hwy-5	0.8 mi
↩	2.	Turn left onto County Road 5 / County Hwy-5	16.8 mi, 19 min
↗	3.	Turn right onto CO-64 / Highway 64	17.2 mi, 18 min
↩	4.	Turn left onto CO-13 / Highway 13	4.9 mi
↩	5.	Turn left onto Pioneers Medical Center Dr	489 ft
↘	6.	Turn right to stay on Pioneers Medical Center Dr	433 ft
↩	7.	Turn left	259 ft
	8.	Arrive at destination The last intersection before your destination is Pioneers Medical Center Dr	

- B** Pioneers Medical Center-ER



A 25371 County Road 5, Rifle, CO 81650, Un...



B Pioneers Medical Center-ER, 100 Pioneers ...



These directions are subject to the Microsoft® Service Agreement and are for informational purposes only. No guarantee is made regarding their completeness or accuracy. Construction projects, traffic, or other events may cause actual conditions to differ from these results. Map and traffic data © 2024 TomTom.

A 25371 County Road 5, Rifle, CO 81650, United States

58 min , 45.6 miles

B Grand River Health Rifle, 501 Airport Rd, Rifle, CO 81650

Light traffic

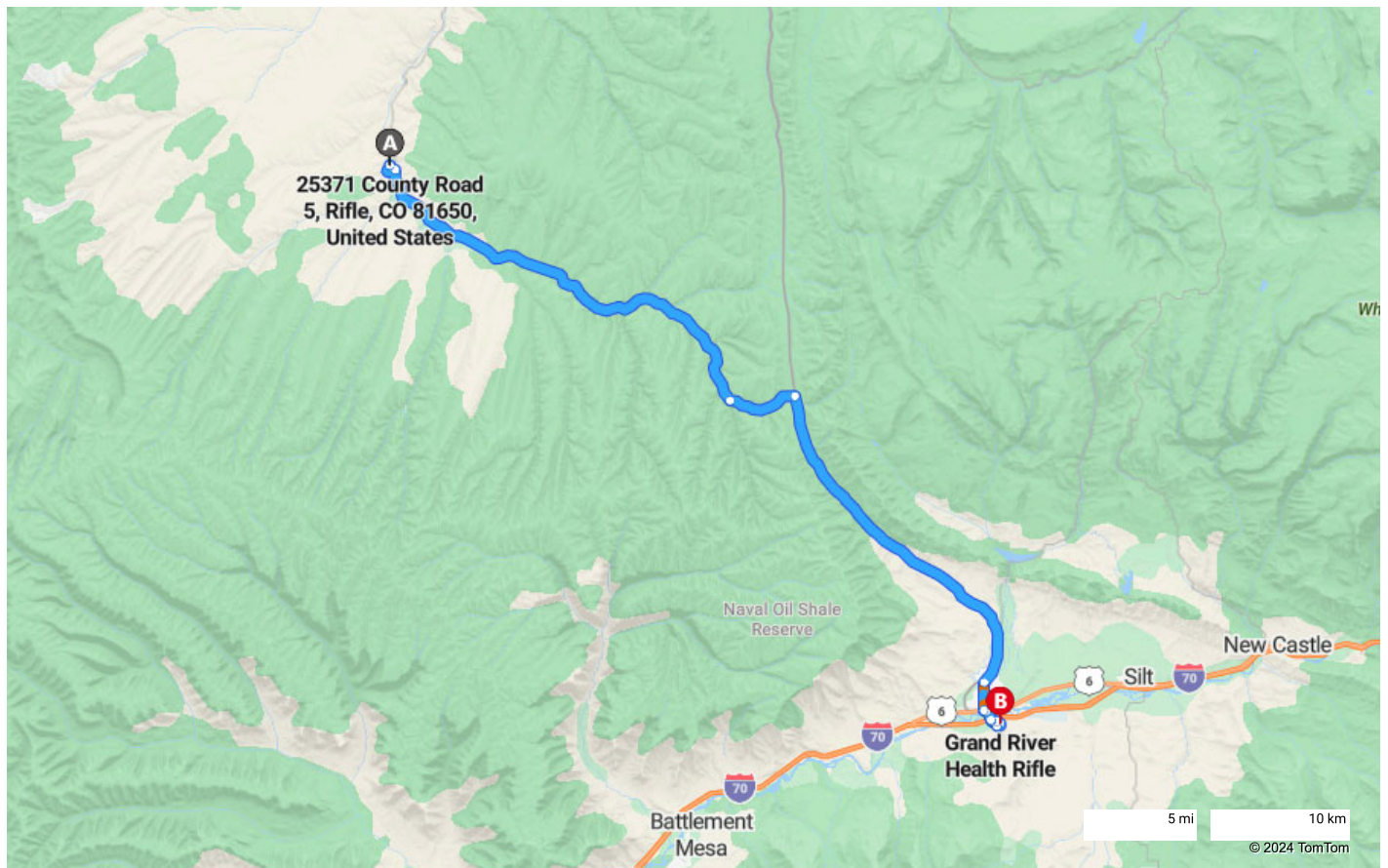
Via County Road 5, CO-13

· Local roads

**A** 25371 County Road 5, Rifle, CO 81650, United States

↑	1.	Depart and head toward County Road 5 / County Hwy-5	0.8 mi
↗	2.	Turn right onto County Road 5 / County Hwy-5	21.4 mi, 24 min
↑	3.	Keep straight to get onto County Road 5	3.3 mi
↗	4.	Turn right onto CO-13 / Highway 13	17.4 mi, 19 min
↑	5.	Continue on Railroad Ave	1.3 mi
↑	6.	Road name changes to S Railroad Ave	0.1 mi
↑	7.	Road name changes to Taugenbaugh Blvd	0.5 mi
↻	8.	At the roundabout, take the 1st exit	308 ft
↻	9.	At the roundabout, take the 3rd exit for Blacktail Dr / County Hwy-346	0.3 mi
↘	10.	Turn right to stay on Megan / County Hwy-346	0.2 mi
↙	11.	Turn left	0.3 mi
	12.	Arrive at your destination on the left The last intersection before your destination is Megan / County Hwy-346	

B Grand River Health Rifle



A 25371 County Road 5, Rifle, CO 81650, Un...



B Grand River Health Rifle, 501 Airport Rd, ...



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Job Safety Analysis Worksheet		Date: May 13, 2024
Title of Job/Operation: Driving to Jobsite		Review Date: 5/13/2024
Employee Name and Job Title: Tim Dobransky (Senior Project Scientist), Chris Mace (Project Scientist)		Analyst/ Date: 5/13/2024
Approved By: John Lohner		Approval Date: 5/13/2024
Personal Protective Equipment Recommended or Required: Sun glasses (as needed), seat belt		
Sequence of Basic Job Steps	Potential Accidents or Hazards	Recommended Safe Job Procedures
Schedule Vehicle	NA	<ul style="list-style-type: none"> • Reserve vehicle and allow time for the trip
Inspect Vehicle	Slip, trips, and falls (FS) (FW)	<ul style="list-style-type: none"> • Shoes with non-skid soles
Load Vehicle	Overexertion (O)	<ul style="list-style-type: none"> • Lift small loads, take multiple trips • Use proper lifting techniques • Do not store materials or samples in the driver compartment
Fuel and Maintenance	Fumes, Fire, breakdown (E)	<ul style="list-style-type: none"> • Check fuel, oil, tires, lights, breaks, windshield washer fluid • Locate emergency shut off switch when fueling • No smoking while fueling • Adjust seat and mirrors
Determine Route	Lost, Rush to jobsite (O)	<ul style="list-style-type: none"> • Map out directions prior to start of trip
Drive to Site	Adverse Weather (E)	<ul style="list-style-type: none"> • Check weather conditions • Ensure good tread on tires • Delay trip during adverse weather conditions if possible • Remove frost and snow from the vehicle • Listen to local weather broadcasts • Adjust speeds for the weather conditions • Drive with lights on
	Fatigue (O)	<ul style="list-style-type: none"> • Get ample rest prior to the trip • Take short breaks • At the onset of drowsiness, stop and take a short nap
	Mechanical (CB) (CW)	<ul style="list-style-type: none"> • Maintain the mechanical integrity of the vehicle • Check for leaks
	Human Factor (CB) (CW)	<ul style="list-style-type: none"> • Use defensive driving skills • Stay aware of other vehicles • Wear seatbelt • Follow driving laws • Do not talk or text on cell phone while driving • Avoid being rushed and allow ample time for the trip • Leave proper distance you and the next driver • Accessional look 8 vehicles ahead
	Road emergency/vehicle breakdown (CB) (CW)	<ul style="list-style-type: none"> • Keep vehicle maintained and up-to-date • Keep tools and spare tire in vehicle • Recommended carrying a fire extinguisher, first aid kit, flashlight, jumper cables, first aid kit, cell phone, blanket, water, emergency food, shovel and SPOT GIS beacon

*Codes for Potential Hazards:

Struck By (SB)		Caught On (CO)		Fall To Below (FB)
Struck Against (SA)		Caught In (CI)		Overexertion (O)
Contacted By (CB)		Caught Between (CBT)		Exposure (E)
Contact With (CW)		Fall - Same Level (FS)		

Job Safety Analysis Worksheet		Date: May 13, 2024
Title of Job/Operation: Contractor Supervision		Log Number:
Employee Name and Job Title: Tim Dobransky / Chris Mace		Analyst/ Date: 5/13/2024
Division/Bureau/Section:		Approved By/ Date: 5/13/2024
Personal Protective Equipment Recommended or Required: Hard hat, safety glasses, safety shoes, fire resistant clothing, hearing protection, sunscreen, bug repellent, protective gloves.		
Sequence of Basic Job Steps	Potential Accidents or Hazards	Recommended Safe Job Procedures
Prepare for site visitation	STF	Prepare listing of emergency phone numbers, both on and offsite; complete appropriate training before going on site. Provide appropriate person in district office you itinerary. Familiarize yourself with site prior to visit.
Calibrate Equip.	Exposure to Calgas	Review Equipment manuals. Follow OSHA guidance.
Load Vehicle Fuel Vehicle	Lifting injury Exposure to Fumes	Follow OSHA guidance Employ safe fueling standards. Avoid contact with fuel and fumes.
Drive to/from site	Traffic accidents	Buckle up; Use defensive driving tactics, Obey traffic laws, and keep vehicle in safe operating condition. Observe General Order 7 (EVOC).
Assess the Site	STF	Be alert, watch where you make your steps, wear safety shoes.
Ground Proof Incident	Chemical contact (liquid and vapor), Fire/Explosion/Reactivity, Heat and Severe Weather.	Wear proper PPE, Snake Boots, Insect Repellent, Seek Shelter from Storms, Take Breaks, Monitor conditions, Engineer safeguards apply foam ventilate.
Establish RP action	Hostile RP	Use communication Skills/Buddy System Task contractor if no RP action.
Contractor Oversight Supervise container Removal Enforce Site Safety Plan	Chemical exposure (liquid and vapor), Fire/Explosion/Reactivity, Heat and Weather, Heavy Equipment/Objects	Avoid chemical exposure, wear proper PPE, snake Boots, Insect repellent, Take breaks, Wear hat, Seek shelter from storms, Engineer safeguards, monitor worker safety, proceed/cease operation.
Supervise soil or spill excavation	Chemical exposure (liquid and vapor), Heavy Equipment, STF at open excavations, Overhead/underground Utilities (water, sewer, electric), Heat and Weather.	Avoid chemical exposure, Wear proper PPE, Sunscreen, and Bug repellent, Be alert, Stay safe distance, Wear hard hat/steel toed boots, Drink fluids, Take breaks.
Supervise Sampling Operation	Chemical exposure, Heat and Weather	Avoid chemical exposure, Wear proper PPE, sunscreen, wear hat seek shelter from storms.
Secure Waste/Package for	Chemical exposure and Cleaning	Avoid chemical exposure, Wear

Transport	Solvents	proper PPE.
Exit site Supervise labeling and securing of containers. Follow DOT Guide for labels and placards. Complete DEP documentation.	Shifting containers can leak	Block all containers

*Codes for Potential Hazards:

Struck By (SB)		Caught On (CO)		Fall To Below (FB)
Struck Against (SA)		Caught In (CI)		Overexertion
Contacted By (CB)		Caught Between (CBT)		Exposure (E)
Contact With (CW)		Fall - Same Level (FS)		

Job Safety Analysis Worksheet		Date: 5/13/24
Title of Job/Operation: Environmental Sampling		Log Number:
Employee Name and Job Title: Tim Dobransky / Chris Mace (Project Scientists)		Analyst/ Date: 5/13/24
Division/Bureau/Section:		Approved By/ Date: 5/13/24
Personal Protective Equipment Recommended or Required: Hard hat, safety glasses, steel-toed/shank safety shoes, hearing protection, fire resistance clothing, leather gloves and nitrile/latex gloves, safety cones (as needed).		
Sequence of Basic Job Steps	Potential Accidents or Hazards	Recommended Safe Job Procedures
Prepare for site visit Identify site/activity PPE needs; Check contents of PPE equipment bag for complete inventory.	N/A	Obtain and review site HASP from contractor; familiarize self w/site prior to visit; know contaminants of concern and properties, locations of suspected contaminant areas. Have proper training completed, and identify appropriate PPE needs. Provide itinerary to supervisor, or periodically check in w/office. MAP LOCATION OF NEAREST EMERGENCY MEDICAL FACILITY EQUIPPED TO HANDLE CHEMICAL EXPOSURES AND MEDICAL EMERGENCIES.
Carry and load sample coolers and other equipment.	(FS) Trip/fall (OE) back injury from improper lifting	Use a handcart; use the elevator; employ proper ergonomics; get help from a coworker to carry and load coolers and other equipment.
Proceed to vehicle/travel to and from site	(SB) Moving vehicles on road or in parking areas (SB) Traffic hazards	<u>Be attentive</u> when crossing traffic and walking with parking areas. <u>Map route</u> to site; have area map available; follow defensive driving practices; Perform quick vehicle inspection for obvious items such as tire inflation, wind shield wipers, sufficient gas to get to destination; Make certain procedures regarding accidents, injuries, vehicular break downs or roadside emergencies are available in vehicle.
Initial site arrival- Check in at the Williams Main Control Room Assess site conditions Be aware of site security/Secure work area	(E) Weather conditions	<u>Heat</u> - know the signs of heat stroke, have fluids available at site, take frequent rest breaks; <u>Sun</u> - keep body protected, wear sunscreen when not sampling, wide brimmed hat or hardhat;

Walk about site	<p>(SB) Traffic</p> <p>Irritated site owner Dangerous surroundings</p> <p>(BIO) Animals(dogs, cows, horses), snakes, stinging insects</p> <p>(CW) Chemical release areas</p> <p>(E) Vapors</p>	<p><u>Inclement conditions</u>- seek covered, secure shelter; <u>Extreme cold</u>- layered clothing, gloves, hat, etc.</p> <p><u>Be alert</u>, secure area from through traffic w/safety cones, tape and signs; wear site/activity appropriate PPE.</p> <p><u>Be courteous and diplomatic</u>. Do not enter site unless accompanied by another inspector or site personnel.</p> <p>Identify areas where biohazards may lurk, plan escape route in advance.</p> <p>Wear site/action appropriate PPE. Be familiar w/site plan, ID areas of contamination. Survey site for areas of discoloration, puddles, dead or stressed vegetation; Stay reasonably clear of such areas.</p> <p>Identify escape route, position self-upwind, and evacuate immediately if/when strong odors or irritation noted.</p>
Collecting soil gas samples	<p>(E) Encountering electric and gas utility lines, chemical vapors</p> <p>(E) Loud noise (OE) Muscle and soft tissue injury (SB) Flying debris while probing</p>	<p>Before probing, have all utilities located; Identify escape route, position self upwind, evacuate immediately if/when strong odors or irritation noted.</p> <p>Wear site/activity appropriate PPE; use proper ergonomics if driving probes into ground by hand.</p>
Collecting soil samples	<p>(E) Encountering electric and gas utility lines, chemical vapors, contaminated media</p> <p>(E) Loud noise</p> <p>(BIO) Stinging insects</p> <p>(FS) Slip/trip hazards</p>	<p>Have all utilities located; Identify escape route, position self upwind, evacuate immediately if/when strong odors or irritation noted; Wear site/activity appropriate PPE/ wear site/activity appropriate PPE; monitor atmosphere with applicable equipment.</p> <p>Use caution when opening monitor well protective covers, watch for biting insects.</p> <p>BE ALERT; position pumps and</p>

	(OE) Muscle and soft tissue injury	other sampling equipment in an orderly and safe fashion. Use proper ergonomics when positioning and lifting pumps and bailers.
Icing (reicing) sample coolers, transporting coolers and other equipment back to laboratory	(FS) Slip hazard (OE) Muscle and back injury	Use due care when draining water from coolers, use proper ergonomics when lifting and moving coolers and other equipment.
Site exit	(CW) Contaminated vehicle	Wash hands promptly. Contaminated PPE (Booties, tyvek, and latex gloves) should be disposed on-site. Remove boots and soiled clothing for secure storage in trunk; decontaminate as soon as possible. Update exposure log
Drive home or to next site	(SB) Traffic hazards	FOLLOW "TRAVEL TO SITE" PROCEDURES.

*Codes for Potential Hazards:

Struck By (SB)		Caught On (CO)		Fall To Below (FB)
Struck Against (SA)		Caught In (CI)		Overexertion
Contacted By (CB)		Caught Between (CBT)		Exposure (E)
Contact With (CW)		Fall - Same Level (FS)		

Job Safety Analysis Worksheet		Date: 5/13/24
Title of Job/Operation: Drilling and Monitoring Well Installation		Review Date: 5/13/24
Employee Name and Job Title: Tim Dobransky, Chris Mace (Project		Analyst/ Date: 5/13/24
Approved By: John Lohner		Approval Date: 5/13/24
Personal Protective Equipment Recommended or Required: Hardhat, safety shoes with steel toes, eye protection, leather gloves, protective clothing, snow ice/ice cleats, FRC (fire resistant clothing), hearing protection, chemical-resistant clothing		
Sequence of Basic Job Steps	Potential Accidents or Hazards	Recommended Safe Job Procedures
Drill rig and support vehicle inspections	Slips, trips and falls (FS) (FW)	<ul style="list-style-type: none"> Wear shoes with non-skid soles Follow DOT guidelines for inspection, documentation and mitigation/repair of vehicle mechanical and hydraulic systems
Commuting to and from jobsite	Exposure to vehicles and traffic (SB)	<ul style="list-style-type: none"> Review <u>Driving JSA</u> Be attentive to vehicle traffic Give vehicles and heavy equipment the right-of-way Avoid standing between vehicles.
Arrival at site; Check in at main control room; Assess site conditions; Review site emergency procedures with Prime Contractor	Slips, trips and falls (FS) (FW)	<ul style="list-style-type: none"> Observe surroundings Avoid muddy, wet, icy, and slippery areas Attend Prime Contractor's Hazcom meetings Attend Prime Contractor's daily safety tailgate meetings
Drill rig set up	Underground utilities and aboveground utilities (CW)	<ul style="list-style-type: none"> Activate the "One Call" system before you drill Verify underground utilities locations Do not mast up within 20 feet of any overhead utility lines Chock rig tires Keep hands and feet away from pinch points on rig Check and fasten all connection points
Drilling operations	Slips, trips and falls (FS) (FW) Hoists (SB) Augers, drill stems, and hammer (SB) (CBT) Lifting loads (OE) Flying objects (SB)	<ul style="list-style-type: none"> Establish exclusion/safe working zone 20 feet behind working end of rig Check function of the ESD (emergency shut-off device) Securely attach hoists to object being lifted to avoid dropping Keep hands away from rotating parts Inspect and maintain guards over motors Use mechanical systems for lifting Keep working area clean of debris and drilling equipment
Drilling operations (continued)	Use of hand augers: Slips, trips and falls (FS) (FW) Lifting loads (OE)	<ul style="list-style-type: none"> Observe surroundings Avoid muddy, wet, icy, and slippery areas Use auger extraction mechanical systems Wear leather gloves
	Exposure to other onsite heavy construction equipment (SB)	<ul style="list-style-type: none"> Observe surroundings Avoid muddy, wet, icy, and slippery areas Give vehicles and heavy equipment the right-of-way Make eye contact with equipment operator when near equipment Wear high-visibility traffic safety vest

Exposure to confined spaces (E)	<ul style="list-style-type: none"> • <u>Do not enter the confined space.</u> Notify the area Team Leader and the Corporate Safety and Health officer for instruction
Strains and sprains (OE)	<ul style="list-style-type: none"> • Use proper lifting techniques • Use rig hoist systems for lifting rods, augers, drill stems • Do not lift greater than 50 pounds without the assistance of another person or mechanical means • Carry small manageable loads rather than one large load • Stretch and warm-up prior to testing soil or concrete • Inspect tools before each use, discard or tag damaged tools • Use tools according to the manufacture's specifications
Biological hazards (e.g. bees, wasps, mosquitoes, rodents, birds and, snakes) (E)	<ul style="list-style-type: none"> • Identify allergies of co-workers, use mosquitoes repellent on exposed skin surfaces during active mosquito season • Avoid areas of accumulated animal and bird droppings • Avoid contact with spiders • Snakes and insects including areas of habitation
Environmental (E)	<ul style="list-style-type: none"> • Review MSDS if available • Identify the hazardous material exposure and determine the level of personal protective equipment necessary for protection • Wear the proper personal protective equipment appropriate for exposure conditions before sampling • Store chemical samples in appropriate containers.
Fire (CB) (CW)	<ul style="list-style-type: none"> • Locate fire extinguishers • Wear FRC on sites where highly flammable materials are present • Store flammables in approved containers • Review site emergency action plans and procedures • Refuel engines in safe areas, wear rubber gloves, ground containers as necessary
Heat stress and sunburns (E)	<ul style="list-style-type: none"> • Drink ample fluids before and during work avoiding caffeinated drinks • Wear sunscreen of at least sun protection factor (SPF) of 30 on exposed skin areas • Wear loose clothing, and avoid working in the heat of the day
Cold stress (E)	<ul style="list-style-type: none"> • Drink ample fluids before and during work avoiding caffeinated drinks • Wear winter clothing and gloves • Dress in loose layers of dry clothing with wool underneath and water proof top layer • Avoid getting wet • Change clothing immediately if you get wet • Take warm-up breaks and avoid consuming caffeine drinks
Noise (E)	<ul style="list-style-type: none"> • Use hearing protection as appropriate (Note that the hearing protection device must have a noise reduction rating such that the noise is attenuated below 85 dBA) Refer to the Olsson Noise Exposure Awareness Program
Contamination (E)	<ul style="list-style-type: none"> • Attend Prime Contractor's Hazcom meetings review the site-specific Health and Safety Plan (HASP)

		<ul style="list-style-type: none"> • Wash hands promptly, dispose of contaminated PPE (booties, latex or nitrile gloves) • Follow the Olsson Hazard Assessment for PPE Program
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*Codes for Potential Hazards:

Struck By (SB)		Caught On (CO)		Fall To Below (FB)
Struck Against (SA)		Caught In (CI)		Overexertion (OE)
Contacted By (CB)		Caught Between (CBT)		Exposure (E)
Contact With (CW)		Fall - Same Level (FS)		