



November 26, 2025

Mr. Blair Rollins
QB Energy Operating LLC
143 Diamond Avenue
Parachute, CO 81635

via email

**Subject: Love Ranch Mid-Point Station Release
Site Investigation Report – 2025 Q4
ECMC Location ID: 470699
ECMC Release ID: 491498
Rio Blanco County, Colorado**

Mr. Rollins,

Entrada Consulting Group Inc. (Entrada) was contracted by QB Energy Operating LLC (QB Energy) to conduct site investigation and collect soil samples in response to a release from a flange on a produced water transport pipeline on the Parachute Water System at the Love Ranch Mid-Point Station (also known as the Love Ranch Pig Launcher).

The Parachute Water System is identified in the Colorado Energy and Carbon Management Commission (ECMC) database by Location ID 470699. The release and response is documented in the ECMC database under Spill/Release ID 491498. The point of release (POR) was recorded by Entrada personnel at 39.89384680 latitude by -108.29482831 longitude (WGS84).

This report summarizes site investigation activities and sample analytical results from September 29. A site diagram is included as **Figure 1**.

INITIAL SITE INVESTIGATION

Entrada personnel were on site on September 29, 2025, to conduct field screening and collect a release characterization soil sample from the vicinity of the POR. All excavation was completed prior to arrival.

When Entrada arrived at the Site, standing water from a recent precipitation event was observed in the excavation and in the field north of the release. One (1) water sample was collected from within the excavation near the point of release: 20250929-LOVE RANCH PIG LAUNCHER (MOI). The crew on site removed the water from the excavation prior to field screening and sample collection.

Soil from the sidewalls and base of the excavation was examined for indications of hydrocarbon impacts (e.g. staining, odor) and field screened for volatile organic compounds (VOCs) using a handheld photoionization detector (PID) equipped with a 10.6 eV lamp. No staining or odor was

observed, and the maximum VOC concentration recorded was just 2.5 parts per million (ppm) at the POR.

One (1) release characterization soil sample was collected from directly beneath the POR at 9 feet below ground surface (ft-bgs): 20250929-LOVE RANCH PIG LAUNCHER (POR)@9.

Entrada personnel returned to the Site on October 30, 2025, to collect a representative composite sample from the excavation stockpile. The composite sample was comprised of five (5) grab samples collected from random locations at least 1 foot beneath the surface of the stockpile. The grab samples were blended thoroughly to create the final composite sample for laboratory analysis: 20251030-LOVE RANCH LAUNCHER-(Stock)@1.

SOIL ANALYTICAL RESULTS

The release characterization soil sample and stockpile composite sample were collected into glass jars, sealed, labeled, placed into an ice-filled cooler for preservation, and submitted to Elevation Diagnostics in Aurora, CO, for the following analyses:

- 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 8015D
- TPH – gasoline range organics (TPH-GRO [C6-C10]) by EPA Method 8260
- Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene by EPA Method 8270
- Polycyclic aromatic Hydrocarbons (PAHs)(CECMC Table 915-1) by EPA Method 8270
- Electrical Conductivity (EC) by USDA Method 60
- Sodium adsorption ratio (SAR) by EPA Method 6020B
- pH by EPA Method 9045D
- Metals (CECMC Table 915-1) by EPA Method 6020B
 - Hot-water soluble Boron by Boron Hot Water Extraction
 - Arsenic by EPA Method 6020B
 - Hexavalent chromium by EPA Method 7199

Laboratory analytical results are presented in **Tables 1 and 2** along with ECMC Table 915-1 Cleanup Concentrations, Protection of Groundwater Soil Screening Level (PGSSL) concentrations, and Soil Suitability for Reclamation (SSR) standards for comparison. Results in exceedance of these standards are summarized below.

- Electrical Conductivity (EC) was reported above the SSR limit of 4 in sample 20251030-LOVE RANCH LAUNCHER-(Stock)@1 at 4.26.
- Sodium Adsorption Ratio (SAR) was reported above the SSR limit of 6 in sample 20250929-LOVE RANCH PIG LAUNCHER (POR)@9 at 25.45 and in sample 20251030-LOVE RANCH LAUNCHER-(Stock)@1 at 12.89.
- pH was reported in exceedance of the SSR limit of 8.3 in sample 20250929-LOVE RANCH PIG LAUNCHER (POR)@9 at 9.16
- Arsenic was reported in exceedance of the PGSSL concentration of 0.26 milligrams per kilogram (mg/kg) in sample 20250929-LOVE RANCH PIG LAUNCHER (POR)@9 at 4.24 mg/kg and in sample 20251030-LOVE RANCH LAUNCHER-(Stock)@1 at 5.38 mg/kg.

- Barium was reported above the PGSSL concentration of 82 mg/kg in sample 20250929-LOVE RANCH PIG LAUNCHER (POR)@9 at 247.4 mg/kg and in sample 20251030-LOVE RANCH LAUNCHER-(Stock)@1 at 280.2 mg/kg.
- The concentration of hexavalent chromium was below the laboratory reportable detection limit (RDL) of 0.080 mg/kg in both samples. The PGSSL threshold is 0.00067 mg/kg.
- Selenium was reported above the PGSSL concentration of 0.26 mg/kg in sample 20250929-LOVE RANCH PIG LAUNCHER (POR)@9 at 2.98 mg/kg and in sample 20251030-LOVE RANCH LAUNCHER-(Stock)@1 at 2.94 mg/kg.

All other results were in compliance with ECMC Table 915-1 standards. Laboratory analytical reports and chain-of-custody documentation are included along with this report as attachments to the form.

WATER ANALYTICAL RESULTS

The rainwater sample from the excavation was collected into appropriate containers, sealed, labeled, placed into an ice filled cooler for preservation, and submitted to Elevation Diagnostics in Aurora, CO. Out of an abundance of caution, the sample was submitted for the expanded list of analytes outlined in Rule 909.j. with the exception of radium. This report will review the results as they pertain to Table 915-1 Groundwater Cleanup concentrations, including:

- 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

Laboratory analytical results are presented in Table 3 along with ECMC Table 915-1 Groundwater Cleanup concentrations for comparison. Results in exceedance of these standards are summarized below.

- Sulfate was reported above the cleanup concentration of 250 mg/L in sample 20250929-LOVE RANCH PIG LAUNCHER (MOI) at 518.69 mg/L.

BACKGROUND ANALYTICAL

The Love Ranch 8 Off-Location Flowline Release remediation project (REM #31518) is located 1000 feet southeast of the Love Ranch Mid-Point Station. Based on site investigation, analytical results, and statistical analyses reported in the fourth quarter of 2024, the ECMC approved the following modified thresholds for select inorganic analytes in soil:

- EC: 12.0988
- SAR: 41.635
- pH: 9.78
- Arsenic: 21.36 mg/kg
- Barium: 607.34 mg/kg
- Hexavalent Chromium: 0.14 mg/kg
- Selenium: 6.94 mg/kg

Based on analytical results from upgradient monitoring well MW19 in the fourth quarter of 2024, a background sulfate concentration in the groundwater was established at 2375.4875 mg/L and a background TDS concentration was established at 5110 mg/L.

Please see Form 27 Supplemental #404033800, Site Investigation Report #404044998, and Statistical Analysis Report #404044999 for complete details.

CONCLUSIONS AND RECOMMENDATIONS

Analytical results for the release characterization soil sample reported SAR, pH, arsenic, barium, and selenium above ECMC Table 915-1 PGSSLs. The concentration of hexavalent chromium was below the laboratory RDL of 0.08 mg/kg. No organic constituents of concern were reported above ECMC Table 915-1 Protection of Groundwater thresholds, with most concentrations below their respective laboratory RDLs.

Analytical results for the rainwater sample collected from the excavation was in compliance with all Table 915-1 Groundwater Cleanup concentrations for organic compounds. Sulfate concentration was elevated above the Table 915-1 limit, but was well within the range observed in the groundwater monitoring program at REM #31518 upgradient of this Site.

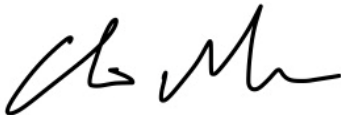
Based on field observations and analytical results presented herein, Entrada recommends that QB Energy:

- Request ECMC approval to utilize soil background values for EC, SAR, pH, arsenic, barium, hexavalent chromium, and selenium established at the adjacent Love Ranch 8 Off-Location Flowline Release remediation project #31518 (Form 27 #404033800).
- Request ECMC approval to utilize groundwater background levels for TDS and sulfate established at the up-gradient Love Ranch 8 Off-Location Flowline Release remediation project #31518 (Form 27 #404033800).
- Request ECMC approval for no further action on spill/release #491498.

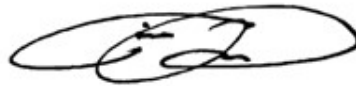
We appreciate the opportunity to assist QB Energy Operating LLC. Please contact us at (970) 270-2986 if you have any questions.

Sincerely,

ENTRADA CONSULTING GROUP



Christopher Mace
Senior Geologist



Tim Dobransky
Principal Scientist

Attachments:

Figure 1 – Site Diagram

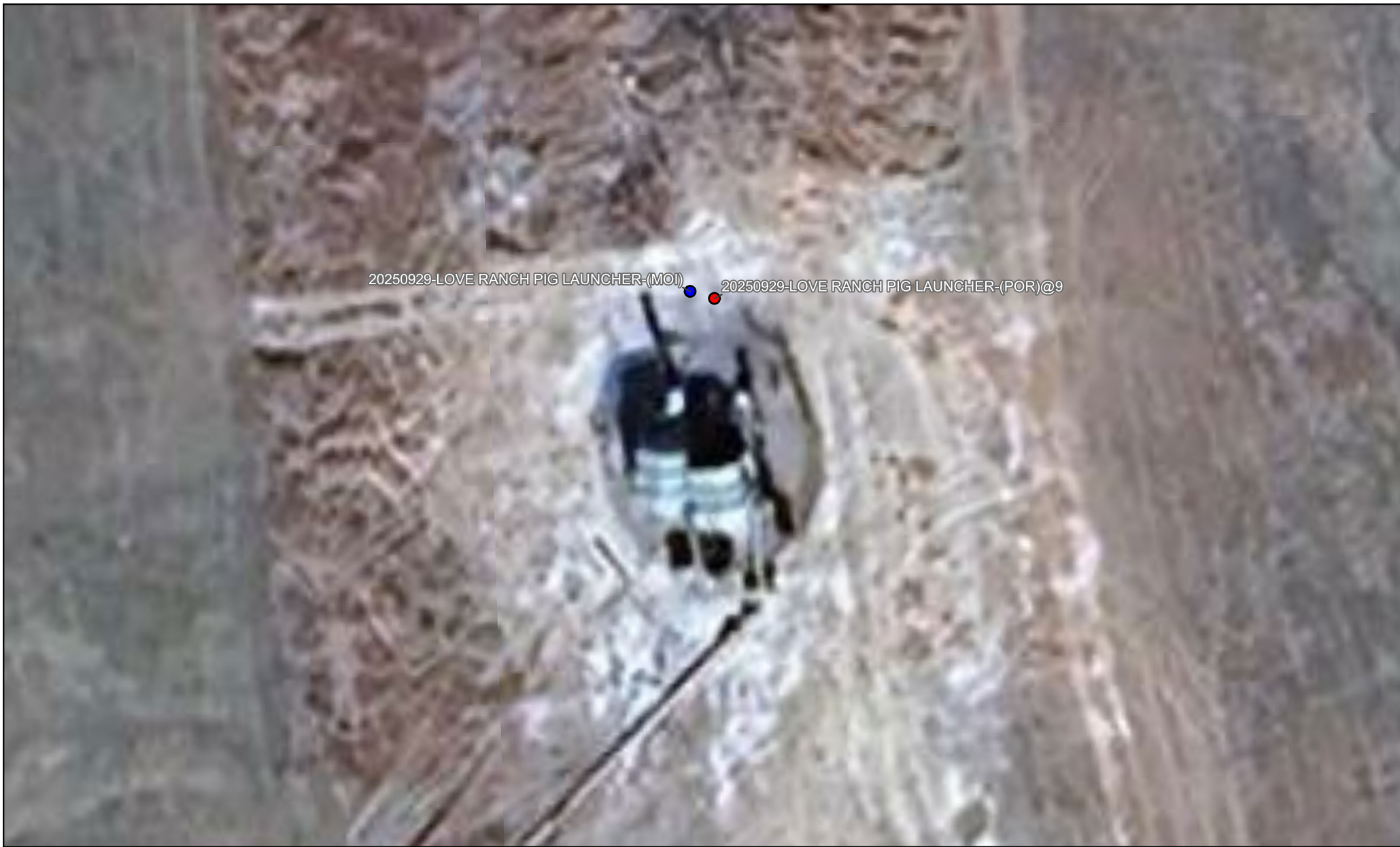
Table 1 – Soil Analytical Results – Organic

Table 2 – Soil Analytical Results – Inorganic

Table 3 – Water Analytical Results

Photographic Log

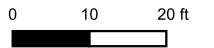
FIGURES



20250929-LOVE RANCH PIG LAUNCHER-(MOI)

20250929-LOVE RANCH PIG LAUNCHER-(POR)@9

● Soil Sample Location ● Water Sample Location



1:300

NAD83(2011) / UTM zone 12N

Location ID: 470699
Release ID: 491498
Remediation ID: N/A
Project No: 025-560
Author: C. Mace
Date: 2025-10-13

**Produced Water Transfer System
Love Ranch Mid Point Station Release
Site Diagram
2025-09-29**

SWNW Sec 09, T2S, R97W, 6th PM
Rio Blanco County, CO



330 Grand Avenue, Suite C
Grand Junction, CO 81501
970-549-1015



143 Diamond Avenue
Parachute, CO 81635
970-285-2600



Fig. 1

TABLES



TABLE 1

LOVE RANCH MID-POINT STATION
 QB ENERGY OPERATING LLC
 RIO BLANCO COUNTY, CO

ECMC TABLE 915-1 PROTECTION OF GROUNDWATER SOIL SCREENING LEVEL
 SOIL ANALYTICAL RESULTS - ORGANIC

| Sample Name | Type | Date | Report | ANALYTE | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------------------------|------------|--------|-------------|---------|---------|---------|---------|---------|--------------|---------------|-----------|-----------|--------------|------------|-------------------|----------------------|----------------------|----------------|----------|----------------------|--------------|----------|----------------------|---------------------|---------------------|-------------|----------|----------|--------|
| | | | | TPH (Total) | TPH-CRO | TPH-DRO | TPH-ORO | Benzene | Toluene | Ethylbenzene | Total Xylenes | 1,2,4-TMB | 1,3,5-TMB | Acenaphthene | Anthracene | Benz(a)anthracene | Benzo(b)fluoranthene | Benzo(k)fluoranthene | Benzo(e)pyrene | Chrysene | Dibenz(a,h)anthracen | Fluoranthene | Fluorene | Indene(1,2,3-cd)Pyre | 1-Methylnaphthalene | 2-Methylnaphthalene | Naphthalene | Pyrene | | |
| 915-1 PROTECTION OF GW | 915-1 RESIDENTIAL SOIL | UNITS | | 500 | 500 | 500 | 500 | 0.0026 | 0.69 | 0.78 | 9.9 | 0.0081 | 0.0087 | 0.55 | 5.8 | 0.011 | 0.3 | 2.9 | 0.24 | 9 | 0.096 | 5.9 | 0.54 | 0.98 | 0.006 | 0.019 | 0.0038 | 1.3 | | |
| | | | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | | |
| 20250929-LOVE RANCH PIG LAUNCHER (POR)#9 | POR | 2025-09-29 | 6941 | <200.278 | 0.278 | <100.00 | <100.00 | <0.0015 | <0.0016 | <0.0014 | <0.0043 | <0.0016 | 0.0034 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.00313 | <0.010 | <0.00306 | <0.010 |
| 20251030-LOVE RANCH LAUNCHER-(Stock)#1 | Stockpile | 2025-10-30 | 7627 | <200.223 | <0.223 | <100.00 | <100.00 | <0.0015 | <0.0016 | <0.0014 | <0.0043 | <0.0016 | <0.0015 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.010 | <0.00313 | <0.010 | <0.00306 | <0.010 | |

Notes:
 Bold with silver highlight: Exceeds RSSLs
 Bold with blue highlight: Exceeds POGs
 "<" (as in, less than laboratory reporting detection limit)



TABLE 2

LOVE RANCH MID-POINT STATION
 QB ENERGY OPERATING LLC
 RIO BLANCO COUNTY, CO

ECMC TABLE 915-1 PROTECTION OF GROUNDWATER SOIL SCREENING LEVEL
 SOIL ANALYTICAL RESULTS - INORGANIC

| | | | | EC | SAR | pH | Boron | Arsenic | Barium | Cadmium | Chromium VI | Copper | Lead | Nickel | Selenium | Silver | Zinc |
|--|-----------|------------|--------|-------------|--------------|-------------|-------|-------------|--------------|---------|------------------|--------|-------|--------|-------------|--------|-------|
| ANALYTE | | | | 4 | 6 | 8.3 | 2 | 0.29 | 82 | 0.38 | 0.00067 | 46 | 14 | 26 | 0.26 | 0.8 | 370 |
| 915-1 PROTECTION OF GW | | | | 4 | 6 | 8.3 | 2 | 0.68 | 15000 | 71 | 0.3 | 3100 | 400 | 1500 | 390 | 390 | 23000 |
| 915-1 RESIDENTIAL SOIL | | | | 4 | 6 | 8.3 | 2 | 0.68 | 15000 | 71 | 0.3 | 3100 | 400 | 1500 | 390 | 390 | 23000 |
| UNIT | | | | mmhos/cm | No Unit | SU | mg/L | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Name | Type | Date | Report | | | | | | | | | | | | | | |
| 20250929-LOVE RANCH PIG LAUNCHER (POR)@9 | POR | 2025-09-29 | 6941 | 2.21 | 25.45 | 9.16 | 1.03 | 4.24 | 247.4 | 0.18 | <0.080 | 11.51 | 10.11 | 12.01 | 2.98 | <0.25 | 51.61 |
| 20251030-LOVE RANCH LAUNCHER-(Stock)@1 | Stockpile | 2025-10-30 | 7627 | 4.26 | 12.89 | 8.27 | 0.98 | 5.38 | 280.2 | 0.21 | <0.08 | 12.16 | 10.82 | 14.91 | 2.94 | <0.25 | 46.53 |

Notes:

Bold with silver highlight: Exceeds RSSLs

Bold with blue highlight: Exceeds POGs

"<" (as in, less than laboratory reporting detection limit)



TABLE 3

LOVE RANCH MID-POINT STATION
 QB ENERGY OPERATING LLC
 RIO BLANCO COUNTY, COLORADO

ECMC TABLE 915-1
 GROUNDWATER ANALYTICAL RESULTS

| | | | | Benzene | Toluene | Ethylbenzene | Total Xylenes | Naphthalene | TDS | Chloride | Sulfate |
|--|------|------------|-------------------|----------|---------|--------------|---------------|-------------|------|----------|---------------|
| ANALYTE | | | | 0.005 | 1 | 0.7 | 10 | 0.14 | | 250 | 250 |
| 915-1 WATER | | | | | | | | | | | |
| UNITS | | | | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| Sample Name | Type | Date | Report | <0.00100 | 0.00217 | <0.00100 | 0.00281 | 0.00077 | 1470 | 101.65 | 518.69 |
| 20250929-LOVE RANCH PIG LAUNCHER (MOI) | MOI | 2025-09-29 | 6642 / 6643 /7700 | | | | | | | | |

Notes:

Bold with blue highlight: Exceeds Water Standards
 "<" (as in, less than laboratory reporting detection limit)

PHOTOGRAPHIC LOG


PHOTOGRAPHIC LOG

| | | |
|--|--|---|
| <p>Site: Love Ranch Mid-Point Station</p> | <p>Project: Love Ranch Pig Launcher Release</p> | <p>Project Number: 025-560</p> |
| <p>Date: 2025-09-29</p> <p>Description: Water pooled in field. View looking west.</p> |  | |
| <p>Date: 2025-09-29</p> <p>Description: Water pooled in field. View looking southeast.</p> |  | |

| | | |
|--|--|---|
| <p>Site: Love Ranch Mid-Point Station</p> | <p>Project: Love Ranch Pig Launcher Release</p> | <p>Project Number: 025-560</p> |
| <p>Date: 2025-09-29</p> <p>Description: Pig Launcher. View looking south.</p> |  | |
| <p>Date: 2025-09-29</p> <p>Description: Pig Launcher and excavation. View looking southeast.</p> |  | |

| | | |
|---|--|---|
| <p>Site: Love Ranch Mid-Point Station</p> | <p>Project: Love Ranch Pig Launcher Release</p> | <p>Project Number: 025-560</p> |
| <p>Date: 2025-09-29</p> <p>Description: Pipe and flange. View looking east.</p> |  | |
| <p>Date: 2025-09-29</p> <p>Description: Flange, POR sample location. View looking east.</p> |  | |

| | | |
|---|--|---|
| <p>Site: Love Ranch Mid-Point Station</p> | <p>Project: Love Ranch Pig Launcher Release</p> | <p>Project Number: 025-560</p> |
| <p>Date: 2025-09-29</p> <p>Description: Water sample location. View looking west.</p> |  | |
| <p>Date: 2025-09-29</p> <p>Description: Water in trench. View looking southwest.</p> |  | |

| | | |
|--|---|---|
| <p>Site: Love Ranch Mid-Point Station</p> | <p>Project: Love Ranch Pig Launcher Release</p> | <p>Project Number: 025-560</p> |
| <p>Date: 2025-09-29</p> <p>Description: Stockpile. View looking northwest.</p> |  | |